APPENDIX J
TRAFFIC AND CIRCULATION

APPENDIX J1
TRAFFIC IMPACT ANALYSIS REPORT

TRAFFIC IMPACT ANALYSIS

1625 MAGNOLIA AVENUE

MONROVIA, LOS ANGELES COUNTY, CALIFORNIA

This Traffic Impact Analysis has been prepared under the supervision of
Donson H. Liu, T.E.

Signed _____

LSA

May 2018

TRAFFIC IMPACT ANALYSIS

1625 MAGNOLIA AVENUE

MONROVIA, LOS ANGELES COUNTY, CALIFORNIA

Submitted to:

Trammell Crow Residential
5790 Fleet Street, Suite 140
Carlsbad, California 92008

Prepared by:

LSA
20 Executive Park, Suite 200
Irvine, California 92614
(949) 553-0666

Project No. MMF1701

LSA

May 2018

EXECUTIVE SUMMARY

LSA has prepared the following Traffic Impact Analysis (TIA) to identify any traffic impacts that could result from the development of 432 apartment dwelling units (DU) and 4 live/work units (a total of 436 DU) at 1625 Magnolia Avenue in Monrovia. The existing site for the 1625 Magnolia Avenue Project (project) includes 53,717 square feet (sf) of industrial use, 30,000 sf of automobile-sales use, and two single-family detached housing units. The project will replace the existing structures and construct 432 apartment DUs and 4 live/work units. Access to the project site will be provided via a full-access driveway along Evergreen Avenue between Mayflower Avenue and Magnolia Avenue, and a full-access driveway along Magnolia Avenue between Evergreen Avenue and Pomona Avenue.

This study focuses on the daily, a.m. peak hour (one hour between 7:00 a.m. to 9:00 a.m.), and p.m. peak hour (one hour between 4:00 p.m. to 6:00 p.m.) levels of service (LOS) at 10 intersections. Project impacts were determined based on analysis of the following scenarios:

1. Existing condition;
2. Existing plus project condition;
3. Cumulative year (2020) condition; and
4. Cumulative year (2020) plus project condition.

The study also analyzed the California Department of Transportation (Caltrans) ramp intersections using *Highway Capacity Manual* (HCM 6th Edition, Transportation Resources Board 2016) methodology. The ramp intersection analysis is not part of the City of Monrovia's (City) TIA guidelines, but is included for Caltrans disclosure purposes.

A future year 2035 roadway link analysis has been performed consistent with the City of Monrovia's (City) *Traffic Study for the Proposed Amendment to the Land Use and Circulation Elements of the Monrovia General Plan* (General Plan Traffic Study, 2007). Daily traffic forecasts are estimated for a 2035 year horizon to reflect General Plan build out. The forecast roadway segment impacts were determined based on a comparison of these forecasts to theoretical daily capacities of General Plan arterials in the study area. Scenarios included are:

5. Future year 2035 condition; and
6. Future year 2035 plus project condition.

The project incorporates design features to accommodate pedestrian circulation on site. Pedestrian traffic is accommodated via sidewalks throughout the site that connect to the public street system. On-street (Class III) bicycle routes are available along Magnolia Avenue.

Transit facilities are accessible from the project site within a 0.25-mile (mi) radius. Metro bus stops are provided at the northeast and southwest corners of Mayflower Avenue/Duarte Road, and at the northwest and southeast corners of Magnolia Avenue/Duarte Road. The Metro Gold Line Station is southeast of the project site, within a 0.20 mi walk. The project site and the train station are accessible via sidewalk and crosswalk connections.

California has been preparing to move away from vehicle delay and LOS analysis as the primary measure of effectiveness for California Environmental Quality Act (CEQA) transportation analysis, and is switching to vehicle miles traveled (VMT). VMT is a measure of the number of miles traveled by vehicles within a specified region for a specific time period. A VMT analysis has been provided for disclosure purposes.

Based on the results of this TIA, the project can be implemented without creating significant impacts to the performance of the studied intersections or roadway segments, with the exception of the intersection of Magnolia Avenue/Evergreen Avenue and the intersection of Myrtle Avenue/Central Avenue and the Interstate 210 (I-210) westbound ramps. In order to mitigate the impact at the intersection of Magnolia Avenue/Evergreen Avenue, the centerline for the northern and southern legs of the intersection will be restriped and moved 2 feet to the west, to allow for de-facto northbound right-turns. In order to mitigate the impact at the intersection of Myrtle Avenue/Central Avenue and the I-210 westbound ramps, the intersection can be restriped from a shared southbound through-right lane and a southbound through lane to an exclusive southbound right-turn lane and two southbound through lanes. The center median on the southern leg of Myrtle Avenue at the intersection may require minor modifications. The City of Monrovia is in the process of studying an area-wide Transportation Impact Fee that would allow new development to pay a trip fee to assist in project mitigation. If this program is adopted prior to the final entitlement of the proposed project, the project may be asked to participate in the program rather than implement the improvement at Myrtle Avenue/Central Avenue and the I-210 westbound ramps.

Also included in this analysis is a future programmatic scenario of up to 518 apartment DUs that looks at the potential development over the balance across the entire block. Based on the results of this program scenario, the 518-unit potential development could be implemented in the future year 2035 condition without creating significant impacts to the performance of the studied roadway segments.

TABLE OF CONTENTS

FIGURES AND TABLES

FIGURES

TABLES

LIST OF ABBREVIATIONS AND ACRONYMS

ADT	average daily traffic
CalEEMod	California Emissions Estimator Model
CEQA	California Environmental Quality Act
City	City of Monrovia
DU	dwelling unit/dwelling units
EB	eastbound
EBL	eastbound left
ft	foot/feet
General Plan Traffic Study	*Traffic Study for the Proposed Amendment to the Land Use and Circulation Elements of the Monrovia General Plan* (City of Monrovia 2007)
HCM	Highway Capacity Manual
I-210	Interstate 210
ICU	intersection capacity utilization
LOS	level of service
mi	mile/miles
NDS	National Data and Surveying Services
Project	1625 Magnolia Avenue Project
sf	square foot/square feet
TIA	Traffic Impact Analysis
v/c	volume-to-capacity
VMT	vehicle miles traveled
WB	westbound
WBL	westbound left

INTRODUCTION

LSA has prepared this Traffic Impact Analysis (TIA) to identify any traffic impacts that could result from the planned development of 432 apartment dwelling units (DU) and 4 live/work units (a total of 436 DU) at 1625 Magnolia Avenue in Monrovia. This TIA for the 1625 Magnolia Avenue Project (project) was prepared in accordance with the applicable sections of the City of Monrovia's (City) *General Plan Circulation Element* (adopted by the City on January 15, 2008, and amended on November 6, 2012) and guidance through discussions with the City traffic engineer.

PROJECT SITE

Figure 1 shows the project site location. The project includes the demolition of existing structures (53,717 square feet [sf] of industrial use, 30,000 sf of automobile-sales use, and two single-family detached housing units) and construction of 432 apartment DUs and 4 live/work units.

The project site is bound by Evergreen Avenue to the north, the Metro Gold Line light rail to the south, scattered residential units and Mayflower Avenue to the west, and Magnolia Avenue to the east. Access to the project site will be provided via a full-access driveway along Evergreen Avenue between Mayflower Avenue and Magnolia Avenue, and a full-access driveway along Magnolia Avenue between Evergreen Avenue and Pomona Avenue. Both full-access driveways will have one inbound lane and one outbound lane. Figure 2 shows the project site plan.

Study Area Boundary

As illustrated in Figure 1, the study area includes the following intersections:

1. Mayflower Avenue/Diamond Street-Evergreen Avenue (unsignalized)
2. Mayflower Avenue/Duarte Road (signalized)
3. Project Driveway 1/Evergreen Avenue (unsignalized)
4. Magnolia Avenue/Huntington Drive (signalized)
5. Magnolia Avenue/Evergreen Avenue (unsignalized)
6. Magnolia Avenue/Project Driveway 2 (unsignalized)
7. Magnolia Avenue/Duarte Road (signalized)
8. Myrtle Avenue/Central Avenue-Interstate 210 (I-210) Westbound (WB) Ramps (signalized)
9. Myrtle Avenue/Evergreen Avenue-I-210 Eastbound (EB) Ramps (signalized)
10. Myrtle Avenue/Duarte Road (signalized)
11. Myrtle Avenue/Huntington Drive (signalized)
12. Magnolia Avenue/Central Avenue (unsignalized)

PERFORMANCE CRITERIA

Intersection Criteria

The intersection capacity utilization (ICU) methodology was used to determine the peak-hour operations at signalized intersections within the study area. The ICU methodology compares the volume-to-capacity (v/c) ratios of conflicting turn movements at an intersection, sums these critical conflicting v/c ratios for each intersection approach, and determines the overall ICU. The resulting

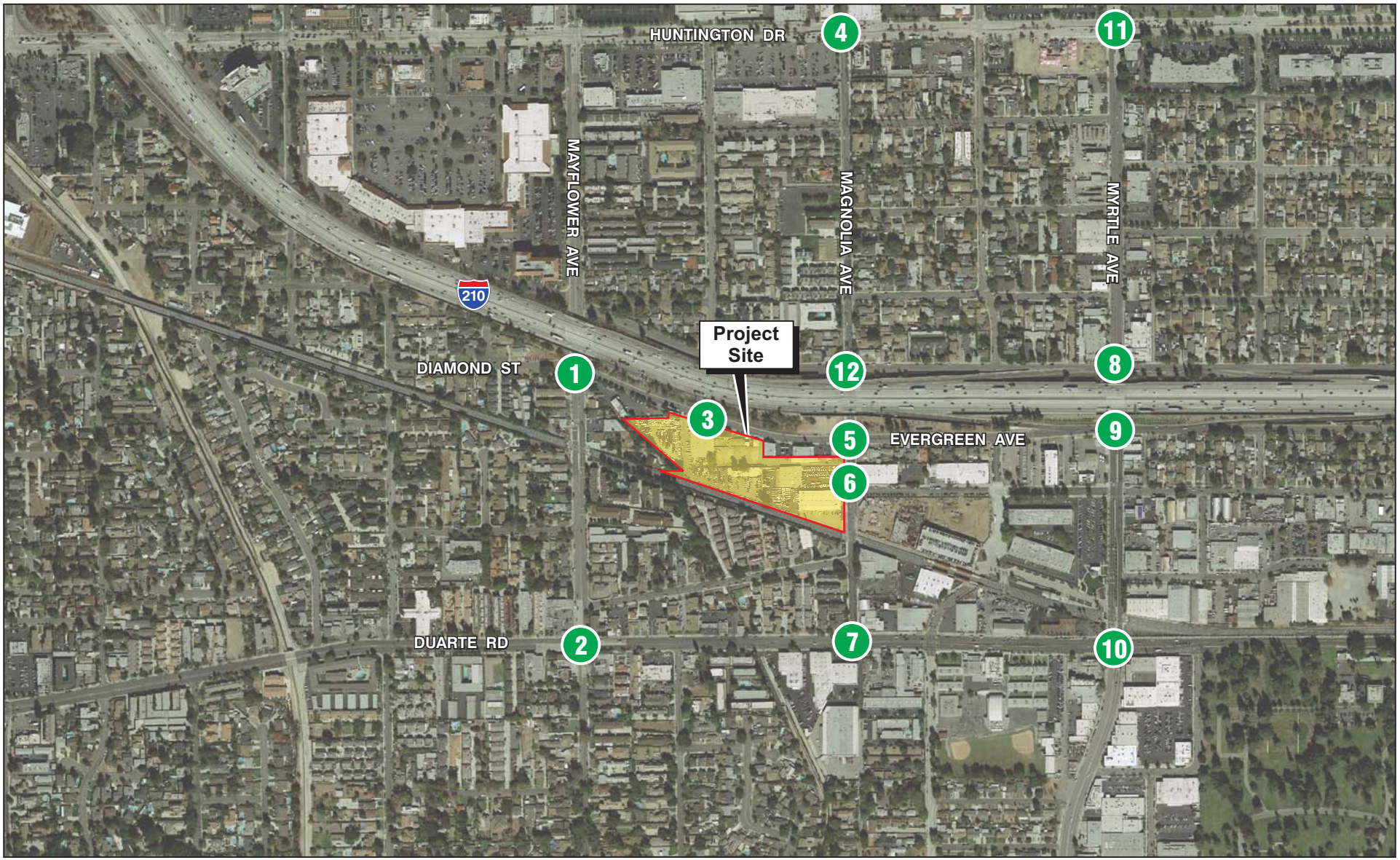


FIGURE 1

LSA

LEGEND

- Project Site
- # - Study Area Intersection

N

0 350 700

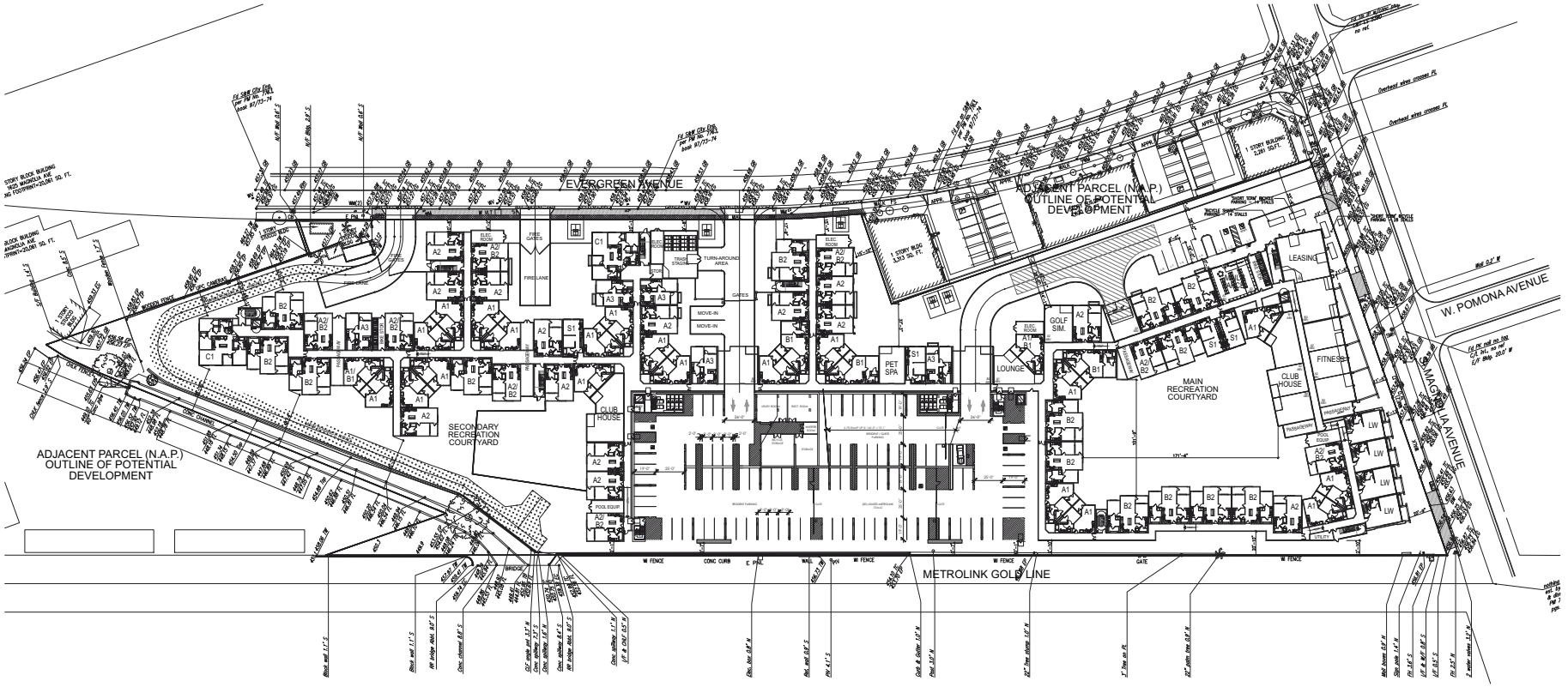
FEET

SOURCE: Google Earth

1625 Magnolia Avenue

Project Location and Study Area Intersections

I:\MMF1701\G\Location.cdr (5/10/2018)



LSA

FIGURE 2

N

0 90 180

FEET

SOURCE: Architects Orange

1625 Magnolia Avenue

Site Plan

I:\MMF1701\G\Site Plan.cdr (5/10/2018)

ICU is expressed in terms of level of service (LOS), where LOS A represents free-flow activity and LOS F represents overcapacity operation. Parameters set by the City for ICU calculations, including lane capacity, right-turn treatment, and clearance interval, are incorporated in the analysis.

According to the City's *General Plan Circulation Element* (2012), LOS at an intersection is considered to be unsatisfactory when the ICU exceeds 0.90 (LOS D) within the City, except at locations where LOS F conditions currently exist. The relationship of ICU to LOS is demonstrated in the following table.

Levels of Service	ICU
A	0.00–0.60
B	0.61–0.70
C	0.71–0.80
D	0.81–0.90
E	0.91–1.00
F	> 1.00

Source: *Highway Capacity Manual* (Transportation Research Board 2016).
ICU = intersection capacity utilization

Based on discussion with the City traffic engineer, a project impact occurs when the intersection in question exceeds the acceptable LOS of E or F, or the impact of the development results in an increase of 0.04 or greater for LOS C, 0.03 or greater for LOS D, 0.02 or greater for LOS E, or 0.01 or greater for LOS F. Project mitigation will be required back to acceptable levels, or baseline, if the baseline ICU is greater than 0.90.

In addition to the ICU methodology of calculating signalized intersection LOS, the *Highway Capacity Manual* (HCM 6th Edition, Transportation Resources Board 2016) methodology was used to determine the LOS at unsignalized study area intersections and signalized intersections at freeway interchanges. The HCM unsignalized and signalized intersection methodology looks at delay (in seconds per vehicle), as opposed to capacity, as the measure of effectiveness. The resulting delay is expressed in terms of LOS, much like the ICU methodology. The relationship of delay to LOS is illustrated in the following table.

Levels of Service	Signalized Intersection Delay (seconds)	Unsignalized Intersection Delay (seconds)
A	≤10.0	≤10.0
B	>10.0 and ≤20.0	>10.0 and ≤15.0
C	>20.0 and ≤35.0	>15.0 and ≤25.0
D	>35.0 and ≤55.0	>25.0 and ≤35.0
E	>55.0 and ≤80.0	>35.0 and ≤50.0
F	>80.0	>50.0

Source: *Highway Capacity Manual* (Transportation Research Board 2016).

This study, consistent with City guidelines, evaluates traffic impacts based on ICU methodology. The HCM methodology is another method to evaluate operational conditions at signalized intersections, and takes into consideration signal timing and can calculate queue lengths at turn lanes. HCM methodology is also required by the California Department of Transportation (Caltrans) to analyze Caltrans ramp intersections. Acceptable LOS for Caltrans intersections is considered to be LOS D or better.

Based on a discussion with the City Traffic Engineer, the Caltrans significant impact criteria specified in the *SANTEC/ITE Guidelines for Traffic Impact Studies in the San Diego Region* (San Diego Regional Traffic Engineers Council/ITE 2000) are used. These criteria identify a significant impact at a Caltrans ramp intersection when the intersection operates at unsatisfactory LOS, and the impact of the development results in an increase of at least 2 seconds of delay. All HCM analysis for this study has been developed using Synchro (Version 10.1) software.

Roadway Segment Criteria

A future year 2035 roadway link analysis has been performed consistent with the City's *Traffic Study for the Proposed Amendment to the Land Use and Circulation Elements of the Monrovia General Plan* (General Plan Traffic Study, 2007). The future year 2035 roadway link v/c ratios were determined using the City's theoretical daily capacity of 9,000 vehicles per lane for primary arterials, secondary arterials, and collector streets. Facility types for studied roadways were taken from the City's *General Plan Circulation Element* (2012). The roadway segments of Huntington Drive and Myrtle Avenue are classified as primary arterials, Duarte Road is classified as a secondary arterial, and the segments of Mayflower Avenue, Magnolia Avenue, and Evergreen Avenue are classified as collector streets.

The City has established the maximum desirable daily LOS for specific facility types, shown in the following table.

Type of Street	Maximum Desirable Daily LOS and v/c
Primary Arterial	LOS D (v/c ≤0.90)
Secondary Arterial	LOS Mid-D (v/c ≤0.85)
Collector Street	LOS C (v/c ≤0.80)
Local Street	LOS A (v/c ≤0.60)

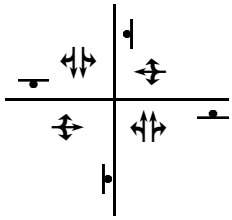
Taken from the City of Monrovia's *General Plan Circulation Element* (2012)
LOS = level of service
v/c = volume-to-capacity ratio

A project impact occurs when the roadway link in question exceeds the acceptable LOS and the project-related traffic increases the daily traffic by 2.5 percent or more.

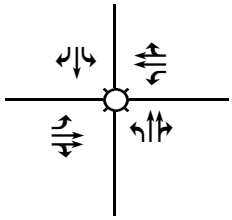
EXISTING (2017) CONDITIONS

Existing Site Uses

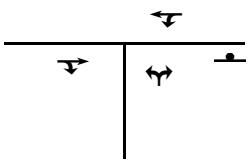
The existing site currently includes 53,717 sf of industrial use, 30,000 sf of automobile sales use, and two single-family detached housing units. These uses will be replaced by the proposed 432 apartment DUs and 4 live/work units. In order to take the existing site traffic into account, 24-hour counts were taken at the shared driveways of the existing facilities. The 24-hour driveway counts were obtained from National Data and Surveying Services (NDS). Appendix A provides the existing driveway count data. Figure 3 illustrates existing lane configurations.



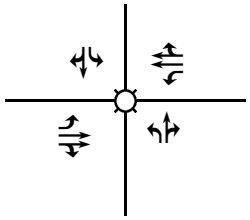
1 Mayflower Ave/Evergreen Ave



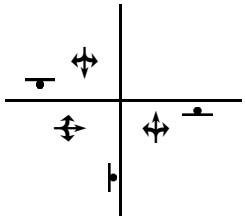
2 Mayflower Ave/Duarte Rd



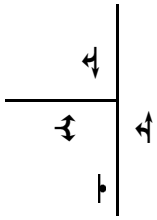
3 Project Dwy 1/Evergreen Ave



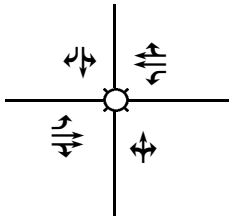
4 Magnolia Ave/Huntington Dr



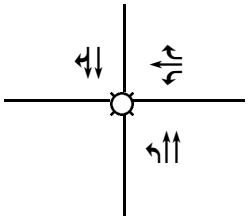
5 Magnolia Ave/Evergreen Ave



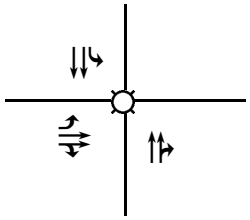
6 Magnolia Ave/Project Dwy 2



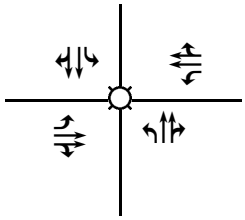
7 Magnolia Ave/Duarte Rd



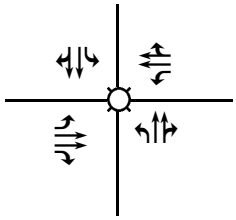
8 Myrtle Ave/Central Ave-I-210 WB



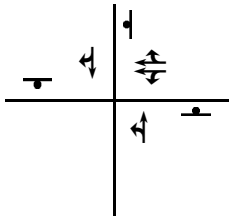
9 Myrtle Ave/Evergreen Ave-I-210 EB



10 Myrtle Ave/Duarte Rd



11 Myrtle Ave/Huntington Dr



12 Magnolia Ave/Central Ave

LSA

FIGURE 3

Legend

Signal

Stop Sign

1625 Magnolia Avenue

Existing Intersection Geometrics

Existing Baseline Traffic Volumes and LOS

Peak-hour intersection turn volumes and roadway segment average daily traffic (ADT) volumes for the study area intersections and roadway segments were obtained from the City and collected for LSA by NDS. All counts used in this traffic study were conducted on a Tuesday, Wednesday, or Thursday. Counts were collected at the time the initial TIA was prepared between 2016 and 2017.

The project application was filed after the TIA was started, and a period of time passed between the completion of the TIA and the processing of the project. The original counts must be factored up to account for any potential changes that occurred between the time the counts were taken and the beginning of 2018. A regional ambient growth rate of 0.82 percent per year was added to the existing traffic volumes to escalate the counts to the year 2018. This growth rate was obtained from the Los Angeles County *Congestion Management Program* (Appendix D, Exhibit D-1, 2010), for regional statistical area (RSA) 25. The growth rate per year was calculated from the growth of year 2015 to year 2020. Figure 4 presents the existing a.m. peak-hour (one hour between 7:00 a.m. to 9:00 a.m.) and p.m. peak-hour (one hour between 4:00 p.m. to 6:00 p.m.) turn-movement volumes at the study area intersections. Appendix A provides the existing count data.

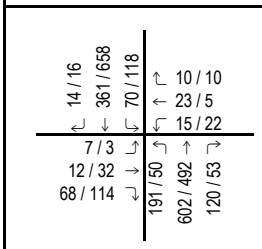
The intersection of Myrtle Avenue/Duarte Road operates concurrently with a Metro Gold Line train crossing at the north leg of the intersection. LSA staff observed the train crossing times on June 20, 2017, recording the duration of when the train crossing gates moved down to when the gates completely opened. The train was observed to add approximately 20 percent of delay to the intersection per hour (approximately 12 minutes per hour). The train crossing adds delay to only conflicting movements and partially overlaps with the standard intersection loss time of 10 percent per hour (approximately 6 minutes per hour). However, to present a conservative analysis, the train crossing loss time was analyzed to affect the entire intersection. This loss time percentage is calculated by adding the total train loss time to the standard intersection loss time, for a total of 30 percent, and is reflected in the intersection analysis for Myrtle Avenue/Duarte Road.

Table A summarizes the results of the existing a.m. and p.m. peak-hour LOS analysis. As previously discussed, the ICU methodology was used to determine the LOS at signalized study area intersections, and HCM methodology was used to determine the LOS at unsignalized study area intersections and the freeway ramp intersections. As shown in Table A, all study area intersections currently operate at satisfactory LOS.

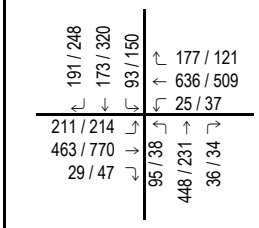
PROPOSED PROJECT TRAFFIC

Trip Generation

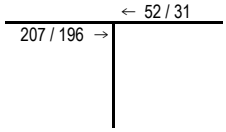
Trip generation calculations for the project were based on the daily and peak-hour trip rates taken from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9th Edition (2012), shown in Table B. It is noted that the ITE recently published a 10th edition of this *Trip Generation Manual*. The trip rates for apartment use are greater in the 9th edition than the 10th edition. At the direction of City staff, the 9th edition rates were used for a more conservative assessment. Based on discussions with the City traffic engineer, vehicle trip generation has been reduced by 20 percent for trip credits based on transit use. The trip credits based on transit use accounts for the project site's



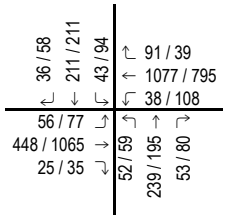
1 Mayflower Ave/Evergreen Ave



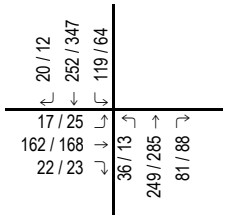
2 Mayflower Ave/Duarte Rd



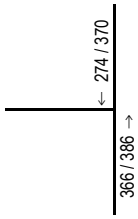
3 Project Dwy 1/Evergreen Ave



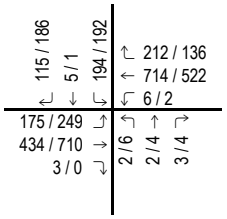
4 Magnolia Ave/Huntington Dr



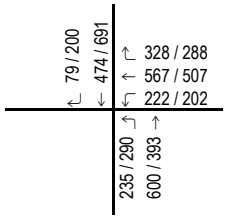
5 Magnolia Ave/Evergreen Ave



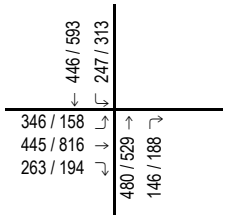
6 Magnolia Ave/Project Dwy 2



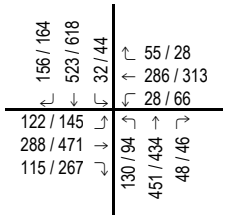
7 Magnolia Ave/Duarte Rd



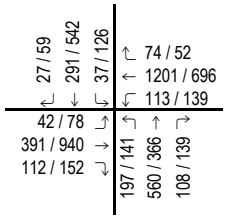
8 Myrtle Ave/Central Ave-I-210 WB



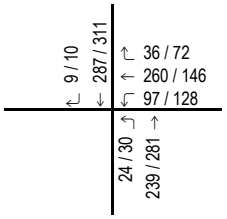
9 Myrtle Ave/Evergreen Ave-I-210 EB



10 Myrtle Ave/Duarte Rd



11 Myrtle Ave/Huntington Dr



12 Magnolia Ave/Central Ave

LSA

FIGURE 4

Legend

123 / 456 AM / PM Volume

1625 Magnolia Avenue

Existing Peak-Hour Volumes

P:\MMF1701\figures\Fig-04 Existing Volumes.xls\Figure (5/10/2018)

Table A: Existing LOS Summary

	Intersection	Existing			
		AM Peak Hour		PM Peak Hour	
		ICU/HCM	LOS	ICU/HCM	LOS
1	*Mayflower Avenue/Diamond Street-Evergreen Avenue (unsignalized)*	*22.6*	*C*	*19.7*	*C*
2	Mayflower Avenue/Duarte Road	0.695	B	0.654	B
3	*Project Driveway 1/Evergreen Avenue (unsignalized)*	*N/A*	-	*N/A*	-
4	Magnolia Avenue/Huntington Drive	0.709	C	0.742	C
5	*Magnolia Avenue/Evergreen Avenue (unsignalized)*	15.5	C	18.2	C
6	*Magnolia Avenue/Project Driveway 2 (unsignalized)*	*N/A*	-	*N/A*	-
7	Magnolia Avenue/Duarte Road	0.628	B	0.591	A
8	Myrtle Avenue/Central Avenue-I-210 WB Ramps	0.774	C	0.877	D
9	Myrtle Avenue/Evergreen Avenue-I-210 EB Ramps	0.671	B	0.835	D
10	Myrtle Avenue/Duarte Road	0.776	C	0.875	D

EB = eastbound, WB = westbound
I-210 = Interstate 210
ICU = intersection capacity utilization ratio
LOS = level of service
N/A = not applicable; driveway does not currently exist
HCM = Highway Capacity Manual delay (seconds per vehicle)

Table B: Trip Generation Summary

Land Use	Size	Unit	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates[1]									
Apartment		DU	6.65	0.10	0.41	0.51	0.40	0.22	0.62
Office		TSF	11.03	1.37	0.19	1.56	0.25	1.24	1.49
Office Trip Generation[2]	*2.185*	*TSF*	*24*	*3*	*0*	*3*	*1*	*3*	*4*
Workspace Trip Rate per Unit[3]		*DU*	*6.00*	*0.75*	*0.00*	*0.75*	*0.25*	*0.75*	*1.00*
Residential Trip Rate per Unit[4]		*DU*	*4.32*	*0.07*	*0.27*	*0.33*	*0.26*	*0.14*	*0.40*
Live/Work Unit[5]		DU	10.32	0.82	0.27	1.08	0.51	0.89	1.40
Project Trip Generation									
Apartment	432	DU	2,873	43	177	220	173	95	268
Live/Work Unit[6]	4	DU	41	3	1	4	2	4	6
Trip Credits for transit (20%)[7]			*583*	*9*	*36*	*45*	*35*	*20*	*55*
Subtotal			**2,331**	**37**	**142**	**179**	**140**	**79**	**219**
Existing Trip Generation									
Existing Uses[8]			393	25	11	36	8	17	25
Net Trip Generation			**1,938**	**12**	**131**	**143**	**132**	**62**	**194**

1 Trip rates referenced from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9th Edition (2012).
2 Office trip generation calculated from the total office space in the live/work units.
3 Workspace trip rate per unit is based on total workspace divided by the number of live/work units.
4 Residential trip rate is calculated by multiplying the apartment trip rate with the residential ratio in the live/work unit. The ratio is 65% residential space/ 35% office space.
5 Blended trip rate is calculated by taking the sum of the Workspace Trip Rate and Residential Trip Rate.
6 Live/Work peak-hour trips use the calculated Live/Work Unit trip rates.
7 Based on local observations from City of Monrovia staff, the trip generation rate has been adjusted by 20 percent.
8 Existing Uses taken from 24-hour driveway counts.
ADT = average daily traffic, DU = dwelling unit

proximity to the Metro Gold Line Station, as well as four bus stations at Mayflower Avenue/Duarte Road and Magnolia Avenue/Duarte Road.

As Table B indicates, the existing land uses generate 393 trips per day, including 36 trips during the a.m. peak hour (25 inbound and 11 outbound) and 25 trips in the p.m. peak hour (8 inbound and 17 outbound). The project trips, with transit use, will result in a net project trip generation of 2,331 trips per day, including 179 trips in the a.m. peak hour (37 inbound and 142 outbound) and 219 trips in the p.m. peak hour (140 inbound and 79 outbound). The total net trip generation will add 1,938 trips per day, including 143 trips in the a.m. peak hour (12 inbound and 131 outbound) and 194 trips in the p.m. peak hour (132 inbound and 62 outbound).

Trip Distribution and Assignment

Trip distribution for the project was based on the project's location in relation to local and regional transportation facilities and origins/destinations, along with input and concurrence from the City Traffic Engineer. Figure 5 shows the trip distribution for the project. Figure 6 displays the resulting project trip assignment for study area intersections.

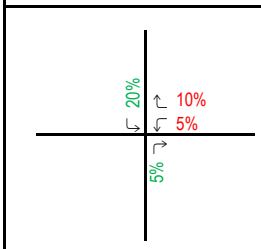
Existing Baseline and Plus Project Traffic Volumes and LOS

To demonstrate the effect that the project would have on the study area intersections in the existing condition, an existing plus project LOS analysis was prepared. This analysis assumes that the existing land uses are removed and replaced by the proposed project of 432 apartment DUs and 4 live/work units. Figure 7 displays the existing plus project peak-hour volumes for the study area intersections. The existing and plus project LOS worksheets are provided in Appendix B. A summary of existing and plus project intersection LOS is presented in Table C, which indicates all study area intersections currently operate at satisfactory LOS. With the addition of the project in the existing setting, all study area intersections would continue to operate at satisfactory LOS. The increase in ICU does not exceed the threshold of significance at any of the intersections; therefore, the project can be implemented in the existing setting with no significant peak-hour intersection impacts.

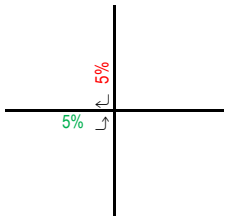
CUMULATIVE (2020) CONDITIONS

To present a cumulative (2020) traffic condition, a regional ambient growth rate was determined and traffic volumes for the related projects in the vicinity were developed, which were added to the existing traffic counts.

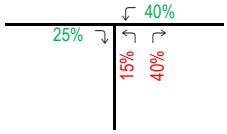
To reflect regional growth in the study area, a growth rate of 0.82 percent per year (total of 1.64 percent) was calculated from the growth of year 2015 to year 2020 for RSA 25 and was added to the existing (2018) traffic volumes. This growth rate was obtained from the Los Angeles County *Congestion Management Program* (Appendix D, Exhibit D-1, 2010). A list of cumulative projects was provided by the City of Monrovia Planning Division (Appendix C). Significant projects located near the proposed project were analyzed as cumulative projects and are illustrated on Figure 8. Table D shows the cumulative projects and their respective trip generations. It should be noted that there are a total of fifteen cumulative projects listed in Appendix C. Of these fifteen projects, only seven have the ability to measurably affect traffic within the study area. The remaining eight projects were



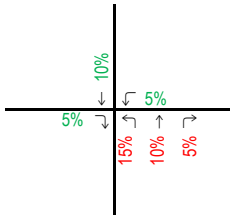
1 Mayflower Ave/Evergreen Ave



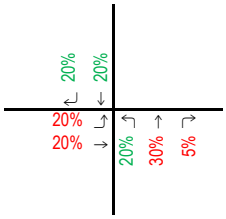
2 Mayflower Ave/Duarte Rd



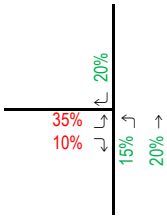
3 Project Dwy 1/Evergreen Ave



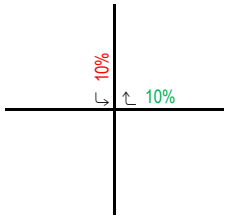
4 Magnolia Ave/Huntington Dr



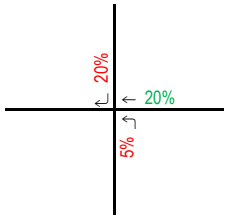
5 Magnolia Ave/Evergreen Ave



6 Magnolia Ave/Project Dwy 2

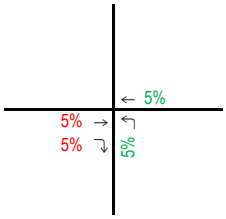


7 Magnolia Ave/Duarte Rd

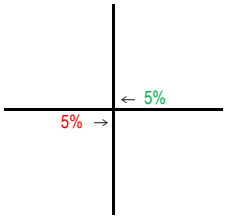


8 Myrtle Ave/Central Ave-I-210 WB

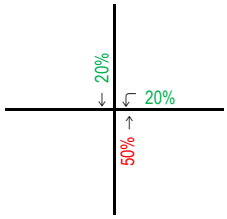
9 Myrtle Ave/Evergreen Ave-I-210 EB



10 Myrtle Ave/Duarte Rd



11 Myrtle Ave/Huntington Dr



12 Magnolia Ave/Central Ave

LSA

FIGURE 5

Legend

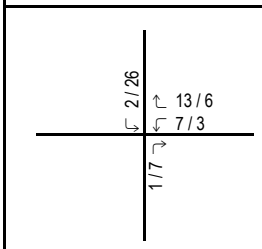
% Project Trip Distribution Percentages

Inbound Trip Distribution

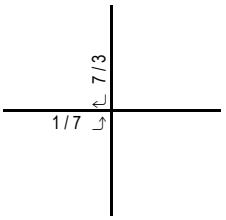
Outbound Trip Distribution

1625 Magnolia Avenue

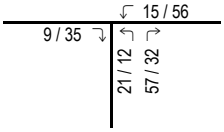
Project Trip Distribution



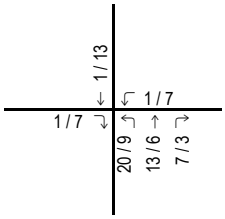
1 Mayflower Ave/Evergreen Ave



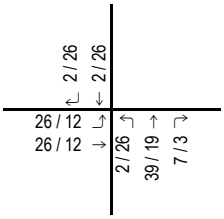
2 Mayflower Ave/Duarte Rd



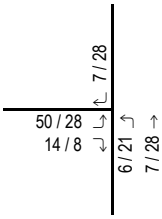
3 Project Dwy 1/Evergreen Ave



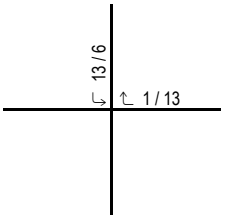
4 Magnolia Ave/Huntington Dr



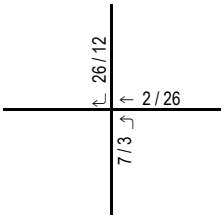
5 Magnolia Ave/Evergreen Ave



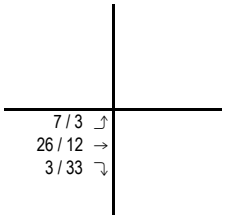
6 Magnolia Ave/Project Dwy 2



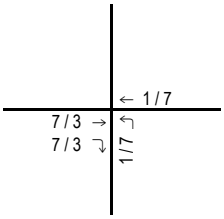
7 Magnolia Ave/Duarte Rd



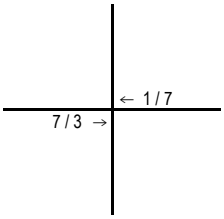
8 Myrtle Ave/Central Ave-I-210 WB



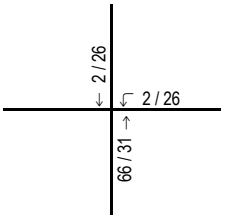
9 Myrtle Ave/Evergreen Ave-I-210 EB



10 Myrtle Ave/Duarte Rd



11 Myrtle Ave/Huntington Dr



12 Magnolia Ave/Central Ave

LSA

FIGURE 6

Legend

123 / 456 AM / PM Volume

1625 Magnolia Avenue
Project Trip Assignment

P:\MMF1701\figures\Fig-06 Project Trip Assignment.xls\Figure (5/10/2018)

1 Mayflower Ave/Evergreen Ave

	14 / 16	↱ 23 / 16
	361 / 658	← 23 / 5
7 / 3 ↱	72 / 144	↰ 22 / 25
12 / 32 →	191 / 50	602 / 492 → 121 / 60
68 / 114 ↴		

2 Mayflower Ave/Duarte Rd

	198 / 251	↱ 177 / 121
	173 / 320	← 636 / 509
212 / 221 ↱	93 / 150	↰ 25 / 37
463 / 770 →	95 / 38	448 / 231 → 36 / 34
29 / 47 ↴		

3 Project Dwy 1/Evergreen Ave

		← 52 / 31
		↰ 15 / 56
207 / 196 →	21 / 12	57 / 32 →
9 / 35 ↴		

4 Magnolia Ave/Huntington Dr

36 / 58	212 / 224	43 / 94 ↱ 91 / 39
		← 1077 / 795
56 / 77 ↱		↰ 39 / 115
448 / 1065 →	72 / 68	252 / 201 → 60 / 83
26 / 42 ↴		

5 Magnolia Ave/Evergreen Ave

22 / 38	254 / 373	119 / 64
43 / 37 ↱		
188 / 180 →	38 / 39	288 / 304 → 88 / 91
22 / 23 ↴		

6 Magnolia Ave/Project Dwy 2

7 / 28	274 / 370	
50 / 28 ↱		
14 / 8 ↴	6 / 21	373 / 414 →

7 Magnolia Ave/Duarte Rd

115 / 186	5 / 1	207 / 198 ↱ 213 / 149
		← 714 / 522
175 / 249 ↱		↰ 6 / 2
434 / 710 →	2 / 6	2 / 4 → 3 / 4
3 / 0 ↴		

8 Myrtle Ave/Central Ave-I-210 WB

105 / 212	474 / 691	↱ 328 / 288
		← 569 / 533
		↰ 222 / 202
	242 / 293 ↱	600 / 393 →
	↴	

9 Myrtle Ave/Evergreen Ave-I-210 EB

446 / 593	247 / 313	
353 / 161 ↱		
471 / 828 →	480 / 529	146 / 188 →
266 / 227 ↴		

10 Myrtle Ave/Duarte Rd

156 / 164	523 / 618	32 / 44 ↱ 55 / 28
		← 287 / 320
122 / 145 ↱		↰ 28 / 66
295 / 474 →	131 / 101	451 / 434 → 48 / 46
122 / 270 ↴		

11 Myrtle Ave/Huntington Dr

27 / 59	291 / 542	37 / 126 ↱ 74 / 52
		← 1202 / 703
42 / 78 ↱		↰ 113 / 139
398 / 943 →	197 / 141	560 / 366 → 108 / 139
112 / 152 ↴		

12 Magnolia Ave/Central Ave

9 / 10	289 / 337	↱ 36 / 72
		← 260 / 146
		↰ 99 / 154
	24 / 30 ↱	305 / 312 →
	↴	

LSA

FIGURE 7

Legend

123 / 456 AM / PM Volume

1625 Magnolia Avenue

Existing Plus Project Peak-Hour Volumes

Table C: Existing Baseline and Existing Plus Project LOS Summary

	Intersection	Existing				Plus Project				Peak-Hour Δ ICU/HCM		Significant Impact?
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour				
		ICU/HCM	LOS	ICU/HCM	LOS	ICU/HCM	LOS	ICU/HCM	LOS	AM	PM	
1	*Mayflower Avenue/Diamond Street-Evergreen Avenue (unsignalized)*	*22.6*	*C*	*19.7*	*C*	*23.8*	*C*	*22.1*	*C*	*1.2*	*2.4*	No
2	Mayflower Avenue/Duarte Road	0.695	B	0.654	B	0.696	B	0.659	B	0.001	0.005	No
3	*Project Driveway 1/Evergreen Avenue (unsignalized)*	*N/A*	-	*N/A*	-	*10.3*	*B*	*10.3*	*B*	-	-	No
4	Magnolia Avenue/Huntington Drive	0.709	C	0.742	C	0.722	C	0.754	C	0.013	0.012	No
5	*Magnolia Avenue/Evergreen Avenue (unsignalized)*	*15.5*	*C*	*18.2*	*C*	*19.2*	*C*	*25.8*	*D*	*3.7*	*7.6*	No
6	*Magnolia Avenue/Project Driveway 2 (unsignalized)*	*N/A*	-	*N/A*	-	*14.8*	*B*	*17.1*	*C*	-	-	No
7	Magnolia Avenue/Duarte Road	0.628	B	0.591	A	0.636	B	0.598	A	0.008	0.007	No
8	Myrtle Avenue/Central Avenue-I-210 WB Ramps	0.774	C	0.877	D	0.788	C	0.898	D	0.014	0.021	No
9	Myrtle Avenue/Evergreen Avenue-I-210 EB Ramps	0.671	B	0.835	D	0.680	B	0.849	D	0.009	0.014	No
10	Myrtle Avenue/Duarte Road	0.776	C	0.875	D	0.777	C	0.881	D	0.001	0.006	No

Δ = change
EB = eastbound
I-210 = Interstate 210
ICU = intersection capacity utilization ratio
HCM = Highway Capacity Manual delay (seconds per vehicle)
LOS = level of Service
N/A = not applicable; driveway does not currently exist
WB = westbound

Table D: Cumulative Project Trip Generation Summary

	Land Use	Size	Unit	ADT	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Trip Rates[1]										
Apartment			DU	6.65	0.10	0.41	0.51	0.40	0.22	0.62
High-Turnover Restaurant			TSF	127.15	5.95	4.86	10.81	5.91	3.94	9.85
Coffee/Donut Shop without Drive-Through Window[2]			TSF	818.58	52.72	50.66	103.38	22.88	22.87	45.75
Shopping Center			TSF	42.70	0.60	0.36	0.96	1.78	1.93	3.71
General Light Industrial			TSF	6.97	0.81	0.11	0.92	0.12	0.85	0.97
Cumulative Trip Generation*										
1	MODA Apartments	261	DU	1,302	20	80	100	78	43	121
2[3]	High-Turnover Restaurant	12.617	TSF	1,203	56	46	102	56	37	93
	Coffee/Donut Shop without Drive-Through Window	2.165	TSF	1,329	86	82	168	37	37	74
	Shopping Center	2.675	TSF	86	1	1	2	4	4	8
	Brewery Manufacturing[4]	3.477	TSF	18	2	0	2	1	2	3
3	Duarte Road Apartments[5]	296	DU	925	-10	80	70	66	7	73
4	Station Square Apartments	280	DU	1,397	21	86	107	84	46	130
5	1601 Myrtle Avenue Apartments	103	DU	514	8	32	40	31	17	48
6	Towneplace Suites Hotel	109	Rooms	891	34	24	58	34	31	65
7	1110-1212 Fifth Avenue Apartments	154	DU	1,024	15	63	78	62	34	96
			Trip Generation	**8,689**	**233**	**494**	**727**	**453**	**258**	**711**

Note: Land Use Code (110) - General Light Industrial
Land Use Code (220) - Apartment
Land Use Code (932) - High-Turnover (Sit-Down) Restaurant
Land Use Code (936) - Coffee/Donut Shop without Drive-Through Window
Land Use Code (820) - Shopping Center

[1] Trip rates referenced from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9th Edition (2012).
[2] ADT for Coffee/Donut Shop without Drive-Through Window is not available. The ADT was taken from the related land use 937 - Coffee/Donut Shop with Drive-Through Window.
[3] Cumulative project #2 is the Lumber Yard project.
[4] Brewery Manufacturing land use was analyzed with the General Light Industrial trip rates.
[5] The net trip generation was taken from the *Duarte Road Apartments Traffic Impact Analysis* (LSA 2017).
* 25% trip credits have been taken from projects 1, 2, 4, and 5 due to their proximity to the Metro Gold Line Station.
ADT = average daily traffic
DU = dwelling unit
TSF = thousand square feet

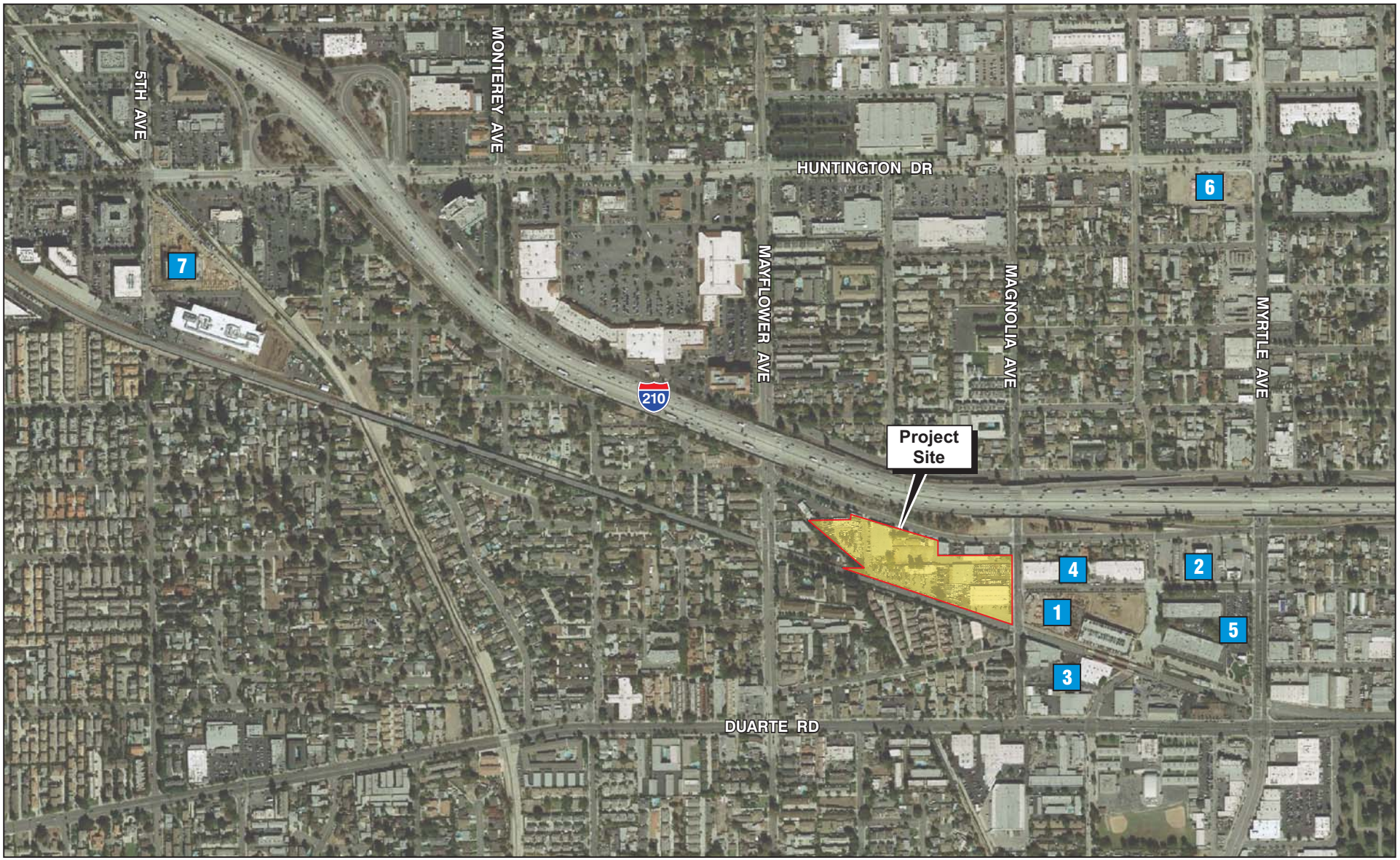


FIGURE 8

LSA

LEGEND

- Project Site

Cumulative Projects:

1 - MODA Residential Development

2 - The Lumber Yard - An Artisan Food Village

3 - Duarte Road Apartments Residential Development

4 - Station Square North Residential Development

5 - 1601 Myrtle Avenue Residential Development

6 - Towneplace Suites Hotel

7 - 1110 - 1212 Fifth Avenue Residential Development

N

0 385 770

FEET

SOURCE: Google Earth

1625 Magnolia Avenue

Cumulative Project Locations

I:\MMF1701\G\Cumulative Projects-Expanded.cdr (4/30/2018)

too far to affect traffic in the study area, or were included as part of the regional annual growth rate, due to their small project sizes.

The cumulative project trip distribution was determined based on each project's land use and location. The residential development used the same regional trip distribution as the project, due to its close proximity and similar land use type. The Artisan Food Village (The Lumberyard) regional trip distribution was distributed 15 percent to the north, 10 percent to the south, 45 percent to the west, and 30 percent to the east, favoring local routes. A 25 percent trip credit was taken for transit use. The cumulative project trip distribution for the Duarte Road Apartments project is from the Duarte Road Apartments TIA. The resulting combined trip assignment at the study intersections for the cumulative projects is provided on Figure 9.

The cumulative future condition was developed by adding ambient growth and cumulative project traffic to existing traffic volumes. The resulting cumulative (2020) peak-hour traffic volumes are shown on Figure 10. The cumulative plus project peak-hour traffic volumes are shown on Figure 11. In order to assess the project's potential impact in cumulative conditions, an analysis of future LOS was prepared for the study area intersections. This analysis assumes existing intersection geometrics. As Table E indicates, all study area intersections are anticipated to operate at satisfactory LOS during the cumulative baseline setting, with the exception of Myrtle Avenue/ Central Avenue–I-210 WB Ramps during the p.m. peak hour, Myrtle Avenue/Evergreen Avenue–I-210 EB Ramps during the p.m. peak hour, and Myrtle Avenue/Duarte Road during the p.m. peak hour. With the addition of the project in the cumulative baseline setting, all study area intersections would continue to operate at satisfactory LOS, with the exception of the previously identified deficient intersections and Magnolia Avenue/Evergreen Avenue during the p.m. peak hour. The addition of project trips will exceed the threshold of significance at the intersections of Magnolia Avenue/Evergreen Avenue and Myrtle Avenue/Central Avenue–I-210 WB Ramps. Mitigation measures to reduce the project's impact to less-than-significant levels are discussed later in this report. The LOS worksheets are included in Appendix B.

RAMP INTERSECTION ANALYSIS

Existing and Existing Plus Project Ramp Intersection Analysis

To demonstrate the effect that the project would have on the Caltrans jurisdiction ramp intersections in the existing condition, an existing plus project HCM analysis was prepared. Appendix D provides the ramp intersection HCM LOS worksheets. Table F presents a summary of existing and existing plus project ramp intersections, which indicates that all study area ramp intersections currently operate at satisfactory LOS during the a.m. and p.m. peak hours. With the addition of the project in the existing setting, all study area freeway ramp intersections would continue to operate at satisfactory LOS. Therefore, the project can be implemented in the existing setting with no significant peak-hour ramp intersection impacts.

1 Mayflower Ave/Evergreen Ave

2 Mayflower Ave/Duarte Rd
← 27 / 13
16 / 23 →

3 Project Dwy 1/Evergreen Ave

4 Magnolia Ave/Huntington Dr
6 / 18 ↓
← 21 / 28
↰ 1 / 4
31 / 27 →
6 / 14 ↲
16 / 9 ↰ ↑
21 / 9 ↱
4 / 2

5 Magnolia Ave/Evergreen Ave
13 / 37 ↓
56 / 22 → ↱
24 / 2

6 Magnolia Ave/Project Dwy 2
13 / 37 ↓
80 / 24 ↑

7 Magnolia Ave/Duarte Rd
25 / 14 ↲
-1 / 3 ↳
↱ 48 / 20
← 6 / 1
18 / 22 ↱
-1 / 5 →

8 Myrtle Ave/Central Ave-I-210 WB
18 / 4 ↲
50 / 56 ↓
↱ 7 / 7
↰ 30 / 67
121 / 59 ↰ ↑
74 / 37 ↑

9 Myrtle Ave/Evergreen Ave-I-210 EB
75 / 124 ↓
5 / 6 ↳
19 / 4 ↳
25 / 10 →
44 / 123 ↲
142 / 75 ↑ ↱
49 / 25

10 Myrtle Ave/Duarte Rd
-3 / 63 ↲
23 / 13 ↓
23 / 13 ↳
↱ 17 / 20
← -1 / 3
25 / 5 ↳
4 / 0 →
4 / 0 ↲
-1 / 3 ↰ ↑
17 / 20

11 Myrtle Ave/Huntington Dr
10 / 18 ↓
← 3 / 13
↰ 11 / 21
2 / 3 ↳
15 / 10 →
6 / 10 ↲
23 / 19 ↰ ↑
30 / 15 ↑ ↱
27 / 13

12 Magnolia Ave/Central Ave
13 / 37 ↓
56 / 22 ↑

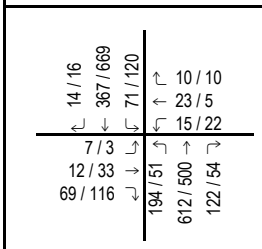
LSA

FIGURE 9

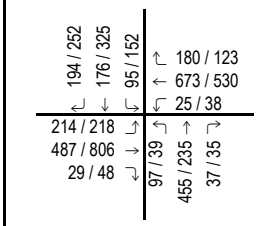
Legend

123 / 456 AM / PM Volume

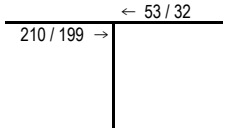
1625 Magnolia Avenue
Cumulative Project Trip Assignment



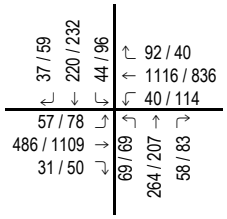
1 Mayflower Ave/Evergreen Ave



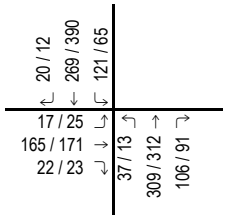
2 Mayflower Ave/Duarte Rd



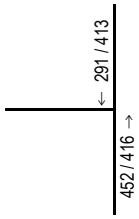
3 Project Dwy 1/Evergreen Ave



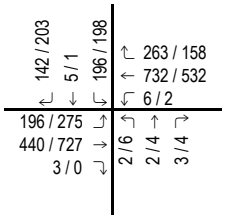
4 Magnolia Ave/Huntington Dr



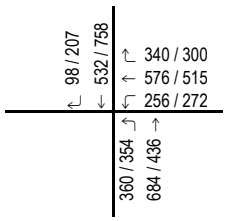
5 Magnolia Ave/Evergreen Ave



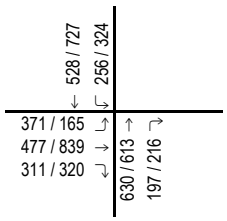
6 Magnolia Ave/Project Dwy 2



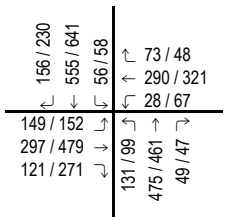
7 Magnolia Ave/Duarte Rd



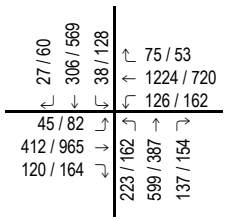
8 Myrtle Ave/Central Ave-I-210 WB



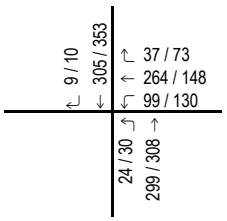
9 Myrtle Ave/Evergreen Ave-I-210 EB



10 Myrtle Ave/Duarte Rd



11 Myrtle Ave/Huntington Dr



12 Magnolia Ave/Central Ave

LSA

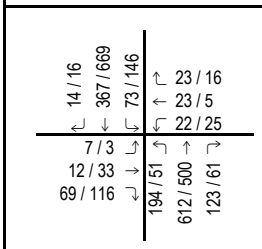
FIGURE 10

Legend

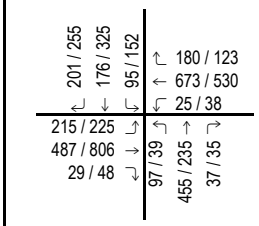
123 / 456 AM / PM Volume

1625 Magnolia Avenue

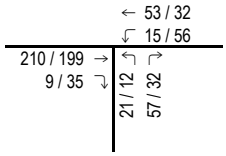
Cumulative Peak-Hour Volumes



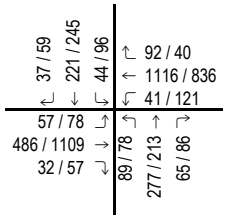
1 Mayflower Ave/Evergreen Ave



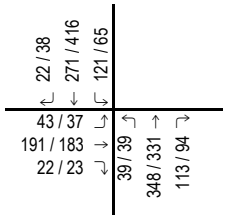
2 Mayflower Ave/Duarte Rd



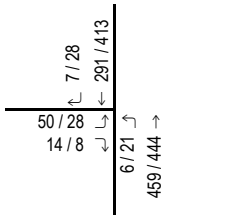
3 Project Dwy 1/Evergreen Ave



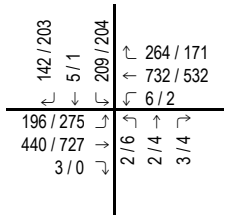
4 Magnolia Ave/Huntington Dr



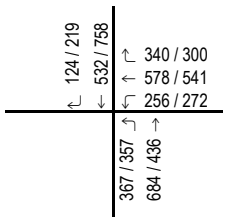
5 Magnolia Ave/Evergreen Ave



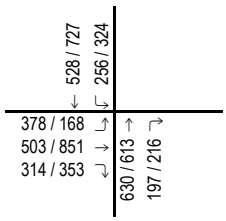
6 Magnolia Ave/Project Dwy 2



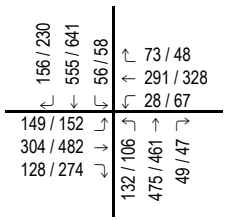
7 Magnolia Ave/Duarte Rd



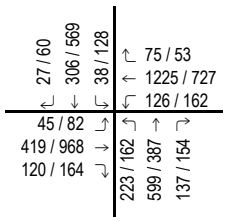
8 Myrtle Ave/Central Ave-I-210 WB



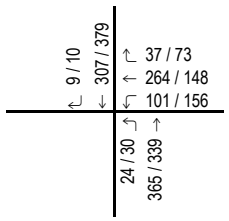
9 Myrtle Ave/Evergreen Ave-I-210 EB



10 Myrtle Ave/Duarte Rd



11 Myrtle Ave/Huntington Dr



12 Magnolia Ave/Central Ave

LSA

FIGURE 11

Legend

123 / 456 AM / PM Volume

1625 Magnolia Avenue

Cumulative Plus Project Peak-Hour Volumes

Table E: Cumulative Baseline and Cumulative Plus Project LOS Summary

	Intersection	Cumulative				Cumulative Plus Project				Peak-Hour Δ ICU/HCM		Significant Impact?
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour				
		ICU/HCM	LOS	ICU/HCM	LOS	ICU/HCM	LOS	ICU/HCM	LOS	AM	PM	
1	*Mayflower Avenue/Diamond Street-Evergreen Avenue (unsignalized)*	*23.7*	*C*	*20.6*	*C*	*25.1*	*D*	*23.2*	*C*	*1.4*	*2.6*	No
2	Mayflower Avenue/Duarte Road	0.713	C	0.668	B	0.714	C	0.672	B	0.001	0.004	No
3	*Project Driveway 1/Evergreen Avenue (unsignalized)*	*N/A*	-	*N/A*	-	*10.3*	*B*	*10.3*	*B*	-	-	No
4	Magnolia Avenue/Huntington Drive	0.742	C	0.775	C	0.754	C	0.787	D	0.012	0.012	No
5	*Magnolia Avenue/Evergreen Avenue (unsignalized)*	*19.6*	*C*	*22.6*	*C*	*27.1*	*D*	*37.7*	*E*	*7.5*	*15.1*	Yes
6	*Magnolia Avenue/Project Driveway 2 (unsignalized)*	*N/A*	-	*N/A*	-	*16.6*	*C*	*18.7*	*C*	-	-	No
7	Magnolia Avenue/Duarte Road	0.663	B	0.623	B	0.671	B	0.628	B	0.008	0.005	No
8	Myrtle Avenue/Central Avenue-I-210 WB Ramps	0.882	D	0.945	E	0.895	D	0.967	E	0.013	0.022	Yes
9	Myrtle Avenue/Evergreen Avenue-I-210 EB Ramps	0.765	C	0.923	E	0.774	C	0.937	E	0.009	0.014	No
10	Myrtle Avenue/Duarte Road	0.810	D	0.910	E	0.811	D	0.917	E	0.001	0.007	No

Note: Gray shading indicates that values exceed City of Monrovia's level of service criteria.

Δ = change
I-210 = Interstate 210
EB = eastbound
HCM = Highway Capacity Manual delay (seconds per vehicle)
ICU = intersection capacity utilization ratio
LOS = level of service
N/A = not applicable; driveway does not currently exist
WB = westbound

Table F: Existing and Existing Plus Project Ramp Intersection Summary

Intersection		Existing				Existing Plus Project				Peak-Hour Δ HCM		Significant Impact?
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour				
		HCM	LOS	HCM	LOS	HCM	LOS	HCM	LOS	AM	PM	
8	Myrtle Avenue/ Central Avenue-I-210 WB Ramps	21.4	C	33.6	C	22.2	C	36.6	D	0.8	3.0	No
9	Myrtle Avenue/ Evergreen Avenue-I-210 EB Ramps	21.9	C	30.2	C	22.1	C	32.5	C	0.2	2.3	No

Δ = change
EB = eastbound
HCM = Highway Capacity Manual delay (seconds per vehicle)
I-210 = Interstate 210
LOS = level of Service
WB = westbound

Cumulative and Cumulative Plus Project Ramp Intersection Analysis

To demonstrate the effect that the project would have on the Caltrans jurisdiction ramp intersections in the cumulative (2020) condition, a cumulative plus project HCM analysis was prepared.

Table G presents a summary of cumulative and cumulative plus project ramp intersections, which indicates all study area freeway ramp intersections are projected to operate at satisfactory LOS during the a.m. and p.m. peak hours. With the addition of the project in the cumulative setting, all study area intersections would continue to operate at satisfactory LOS. Therefore, the project can be implemented in the cumulative setting with no significant peak-hour ramp intersection impacts.

Table G: Cumulative and Cumulative Plus Project Ramp Intersection Summary

Intersection		Cumulative				Cumulative Plus Project				Peak-Hour Δ HCM		Significant Impact?
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour				
		HCM	LOS	HCM	LOS	HCM	LOS	HCM	LOS	AM	PM	
8	Myrtle Avenue/ Central Avenue-I-210 WB Ramps	38.6	D	45.1	D	41.1	D	48.8	D	2.5	3.7	No
9	Myrtle Avenue/ Evergreen Avenue-I-210 EB Ramps	27.4	C	46.8	D	28.4	C	51.8	D	1.0	5.0	No

Δ = change
EB = eastbound
HCM = Highway Capacity Manual delay (seconds per vehicle)
I-210 = Interstate 210
LOS = level of Service
WB = westbound

FUTURE YEAR 2035 CONDITIONS

A future year 2035 roadway link analysis has been performed acknowledging the City's *General Plan Traffic Study* (2007). The regional ambient growth rate (7.65 percent, 0.45 percent per year for 17 years) and traffic volumes from the related projects identified earlier in the report were applied to the existing roadway segment ADT in order to arrive at forecast 2035 conditions. The growth rate for the future year 2035 conditions was calculated from the growth of year 2015 to year 2035 for

RSA 25, obtained from the Los Angeles County *Congestion Management Program* (Appendix D, Exhibit D-1, 2010).

Project traffic added to the future year 2035 roadway link analysis uses the same trip generation and trip distribution as in the existing and cumulative conditions, based on the daily and peak-hour trip rates taken from the *Trip Generation Manual,* 9th Edition (ITE 2012), with a 20 percent trip credit based on transit use. The trip generation and trip distribution for project traffic are found in Table B and Figure 5. The project trip assignment for the studied roadway segments is shown in Table H, under Project ADT.

This analysis uses existing roadway segment lane assignments. Appendix E provides the roadway segment ADT counts, provided by the City Traffic Engineer. As Table H indicates, all study area roadway segments are anticipated to operate at satisfactory LOS during the future year 2035 baseline setting. All study area roadway segments would continue to operate at satisfactory LOS with the addition of the project traffic in the future year 2035 baseline setting. Therefore, the project can be implemented in a future year 2035 setting with no significant roadway segment impacts.

FUTURE YEAR 2035 CONDITIONS – PROGRAM SCENARIO

The 9.6-acre block where the project is located is bounded by Evergreen Avenue, Magnolia Avenue, Mayflower Avenue, and the Metro Gold Line. The entire block will undergo a General Plan Amendment and a Zoning Code Amendment. The entire block can be divided into two pieces – the project area (6.77 acres) and the remaining parcels (totaling 2.83 acres). The remaining parcels are privately owned but do not have any specific development/redevelopment plans at this time. As a result, the proposed Alexan Specific Plan project will be subject to an environmental analysis at a "project level", while the redesignation of the remaining parcels will be subject to an environmental analysis at a program level scenario.

The future program level analysis analyzes up to 518 apartment DUs using the same roadway segment analysis as the future year 2035 traffic condition. The purpose of this analysis is to examine the maximum development potential and the potential to create any circulation impacts for development over the entire block.

Trip generation calculations for the program scenario were based on the daily trip rates taken from the *Trip Generation Manual*, 9th Edition (ITE 2012). Project traffic added to the future year 2035 roadway link analysis compares 518 apartment DUs with the existing uses, with a 20 percent trip credit for transit use, for a net trip generation of 2,363 ADT. This program scenario assumes existing roadway segment geometrics and a similar trip distribution to the existing, cumulative, and future year 2035 conditions. The project trip assignment for the studied roadway segments is shown in Table I, under Project ADT.

As Table I indicates, all study area roadway segments will operate at satisfactory LOS during the potential maximum project's future year 2035 baseline setting. All study area roadway segments would continue to operate at satisfactory LOS with the addition of the 518 potential apartment DUs in the project's future year 2035 baseline setting. Therefore, the 518 potential apartment DUs can

Table H: Future Year 2035 Condition ADT Volumes and V/C Ratios

Segment #	Roadway	Segment	Capacity[1]	Future Year 2035			Future Year 2035 Plus Project				Δ v/c Ratio	Increase	Significant Impact?[3]
				ADT[2]	v/c Ratio	LOS	Project ADT	ADT[2]	v/c Ratio	LOS			
1	Duarte Road	west of Mayflower	36,000	23,900	0.67	B	96	24,000	0.67	B	0.000	0.40%	No
2		Mayflower to Magnolia	36,000	19,700	0.55	A	0	19,700	0.55	A	0.000	0.00%	No
3		Magnolia to Myrtle	36,000	19,800	0.55	A	193	20,000	0.56	A	0.010	0.98%	No
4		east of Myrtle	18,000	12,100	0.67	B	96	12,200	0.68	B	0.010	0.79%	No
5	Evergreen Avenue	Mayflower to Magnolia	18,000	2,500	0.14	A	582	3,100	0.17	A	0.030	23.12%	No
6		Magnolia to Myrtle	18,000	2,700	0.15	A	218	2,900	0.16	A	0.010	8.13%	No
7	Huntington Drive	Mayflower to Magnolia	36,000	28,600	0.80	C	193	28,800	0.80	C	0.000	0.67%	No
8		Magnolia to Myrtle	36,000	28,500	0.79	C	96	28,600	0.79	C	0.000	0.34%	No
9	Mayflower Avenue	north of Evergreen	36,000	16,900	0.47	A	291	17,200	0.48	A	0.010	1.73%	No
10		Evergreen to Duarte	36,000	16,700	0.46	A	96	16,800	0.47	A	0.010	0.58%	No
11		south of Duarte	18,000	7,900	0.44	A	0	7,900	0.44	A	0.000	0.00%	No
12	Magnolia Avenue	Huntington to Evergreen	18,000	8,100	0.45	A	678	8,800	0.49	A	0.040	8.34%	No
13		Evergreen to Duarte	18,000	7,700	0.43	A	461	8,200	0.45	A	0.020	5.97%	No
14	Myrtle Avenue	Huntington to Central	36,000	24,900	0.69	B	194	25,100	0.70	B	0.010	0.78%	No
15		Central to Duarte	36,000	24,000	0.67	B	24	24,000	0.67	B	0.000	0.10%	No
16		south of Duarte	36,000	24,100	0.67	B	96	24,200	0.67	B	0.000	0.40%	No

[1] Average daily traffic roadway segment capacity is determined as 9,000 vehicles per lane, per the City of Monrovia's *General Plan Circulation Element* (2012).

[2] Average daily traffic volume is displayed with rounding to the nearest hundredths digit. However, the v/c ratio is calculated using the unrounded volume.

[3] A significant impact occurs when when the roadway link exceeds the acceptable LOS and the project-related traffic increases the ADT by 2.5 percent or more.

Δ = change
ADT = average daily traffic
LOS = level of service
v/c = volume-to-capacity

Table I: Program Scenario Future Year 2035 Condition ADT Volumes and v/c Ratios

Segment #	Roadway	Segment	Capacity[1]	Future Year 2035			Future Year 2035 Plus Maximum Potential Project				Δ v/c Ratio	Increase	Significant Impact?[3]
				ADT[2]	v/c Ratio	LOS	Project ADT	ADT[2]	v/c Ratio	LOS			
1	Duarte Road	west of Mayflower	36,000	23,900	0.67	B	118	24,100	0.67	B	0.000	0.49%	No
2		Mayflower to Magnolia	36,000	19,700	0.55	A	0	19,700	0.55	A	0.000	0.00%	No
3		Magnolia to Myrtle	36,000	19,800	0.55	A	236	20,000	0.56	A	0.010	1.19%	No
4		east of Myrtle	18,000	12,100	0.67	B	118	12,300	0.68	B	0.000	0.97%	No
5	Evergreen Avenue	Mayflower to Magnolia	18,000	2,500	0.14	A	708	3,200	0.18	A	0.040	28.13%	No
6		Magnolia to Myrtle	18,000	2,700	0.15	A	266	2,900	0.16	A	0.010	9.93%	No
7	Huntington Drive	Mayflower to Magnolia	36,000	28,600	0.80	C	236	28,900	0.80	C	0.000	0.82%	No
8		Magnolia to Myrtle	36,000	28,500	0.79	C	118	28,600	0.79	C	0.000	0.41%	No
9	Mayflower Avenue	north of Evergreen	36,000	16,900	0.47	A	354	17,200	0.48	A	0.010	2.10%	No
10		Evergreen to Duarte	36,000	16,700	0.46	A	118	16,800	0.47	A	0.010	0.71%	No
11		south of Duarte	18,000	7,900	0.44	A	0	7,900	0.44	A	0.000	0.00%	No
12	Magnolia Avenue	Huntington to Evergreen	18,000	8,100	0.45	A	826	9,000	0.50	A	0.050	10.15%	No
13		Evergreen to Duarte	18,000	7,700	0.43	A	561	8,300	0.46	A	0.030	7.26%	No
14	Myrtle Avenue	Huntington to Central	36,000	24,900	0.69	B	236	25,100	0.70	B	0.010	0.95%	No
15		Central to Duarte	36,000	24,000	0.67	B	30	24,000	0.67	B	0.000	0.13%	No
16		south of Duarte	36,000	24,100	0.67	B	118	24,200	0.67	B	0.000	0.49%	No

[1] Average daily traffic roadway segment capacity is determined as 9,000 vehicles per lane, per the City of Monrovia's *General Plan Circulation Element* (2012).
[2] Average daily traffic volume is displayed with rounding to the nearest hundredths digit. However, the V/C ratio is calculated using the unrounded volume.
[3] A significant impact occurs when when the roadway link exceeds the acceptable LOS and the project-related traffic increases the ADT by 2.5 percent or more.

Δ = change
ADT = average daily traffic
LOS = level of service
v/c = volume-to-capacity

be implemented in the project's future year 2035 setting with no significant roadway segment impacts.

SPECIAL ISSUES

Access Analysis

Access to the 1625 Magnolia Avenue project site will be provided via two full-access driveways along Evergreen Avenue and Magnolia Avenue. Both driveways will have one lane of travel for inbound and outbound directions. HCM based intersection analysis has been utilized as the metric to evaluate the adequacy and performance of the two unsignalized driveways.

As presented previously in Tables C and E, the intersections of Project Driveway 1/Evergreen Avenue and Magnolia Avenue/Project Driveway 2 are anticipated to operate at satisfactory LOS during the a.m. and p.m. peak-hour periods in both the existing plus project and cumulative plus project scenarios.

Consistent with HCM unsignalized intersection analysis methodology, the LOS results shown in Tables C and E represent the delay in seconds for the worst affected movement, in this case the outbound left-turn movements. In the interest of assessing the performance of inbound vehicles coming off of Evergreen Avenue and Magnolia Avenue, the calculated delay values of the inbound left-turn movements are presented in Table J. As shown in the table, all inbound left-turn movements are anticipated to operate at LOS A.

Table J: Access Analysis

Intersection		Movement	Existing Plus Project				Cumulative Plus Project			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay (seconds)	LOS	Delay (seconds)	LOS	Delay (seconds)	LOS	Delay (seconds)	LOS
3	Project Driveway 1/ Evergreen Avenue	WBL	7.7	A	7.9	A	7.7	A	7.9	A
6	Magnolia Avenue/ Project Driveway 2	NBL	7.9	A	8.3	A	7.9	A	8.4	A

LOS = level of service
NBL = Northbound left
WBL = Westbound left

Right-turning vehicles entering either driveway from an uncontrolled adjacent roadway should not experience any control delay and, therefore, are not represented in Table J.

Sight Distance Analysis

Sight distance has been reviewed at both project driveways. Evergreen Avenue and Magnolia Avenue have a speed limit of 35 miles per hour (mph). The Caltrans *Highway Design Manual* (2017) recommends a corner sight distance of 385 feet (ft) for a design speed of 35 mph.

More than 385 ft of sight distance is available for the driveway along Evergreen Avenue in both directions. More than 385 ft of sight distance is available for the driveway along Magnolia Avenue in

both directions. Based on this analysis, no obstructions are anticipated for outbound project vehicles exiting onto the circulation system from the project site based on existing roadway design and the proposed site plan layout. The sight distance lines are presented in Figure 12.

Alternative Mobility Modes

The project incorporates design features to accommodate pedestrian circulation on site. Pedestrian traffic is afforded safe travel via sidewalks throughout the site that connect to the public right-of-way.

Transit facilities are accessible to and from the project site within a 0.25 mi (mi) radius. Metro bus stops are provided at the northeast and southwest corners of Mayflower Avenue/Duarte Road (Routes 264 and 267), and at the northwest and southeast corners of Magnolia Avenue/Duarte Road (Routes 264 and 267). These Metro bus routes provide transportation to the cities of Altadena, Pasadena, Arcadia, El Monte, and Duarte. The Metro Gold Line Station is southeast of the project site, within a 0.2 mi walk. The project site and the Metro Gold Line Station are accessible via the existing pedestrian connection across the street at Magnolia Avenue, north of the railroad tracks. The Metro Gold Line provides transportation from Azusa to East Los Angeles via downtown Los Angeles. Figure 13 presents the locations of the transit stations near the project site. In the vicinity of the project site, on-street (Class III) bicycle routes are indicated by the City along Magnolia Avenue in the General Plan.

Vehicle Miles Traveled Analysis

California has been preparing to move away from vehicle delay and LOS analysis as the primary measure of effectiveness for California Environmental Quality Act (CEQA) transportation analysis, and is switching to vehicle miles traveled (VMT). VMT is a measure of the number of miles traveled by vehicles within a specified region for a specific time period. The purpose of this disclosure is to provide an alternative to LOS that may be used to evaluate transportation impacts in the future. Based on the California Emissions Estimator Model (CalEEMod), the VMT calculations for apartment land use are presented in Table K. The City has not yet adopted specific criteria for VMT analysis; therefore, the estimated VMT is provided for disclosure purposes only. Because the existing uses were taken together and are indistinguishable, the existing ADT will be split based on a ratio created from the square footages of the existing uses.

FIGURE 12

LSA

LEGEND

- Project Driveway
- Corner Sight Distance
- Sight Clearance Zone

Design Speed of 35 Miles Per Hour

0 80 160
FEET

SOURCE: Google Earth

1625 Magnolia Avenue
Project Access Sight Distances

I:\MMF1701\G\Sight Distances.cdr (5/10/2018)

FIGURE 13

LSA

LEGEND

- Project Site
- Metro Gold Line Station
- Metro Bus Stop

N

0 190 380

FEET

SOURCE: Google Earth

1625 Magnolia Avenue

Transit Locations

I:\MMF1701\G\Transit Locations.cdr (6/28/2017)

Table K: Project VMT Analysis

	Trip Length (miles)	Distribution Percentage	ADT	Total
Project VMT				
Apartment Use				
Home to Work	14.7	40.2%	2,914	17,220
Home to Shopping	5.9	19.2%		3,301
Home to Other	8.7	40.6%		10,293
Total Project VMT				**30,814**
Project with Transit Credits VMT				
Apartment Use				
Home to Work	14.7	40.2%	2,331	13,775
Home to Shopping	5.9	19.2%		2,641
Home to Other	8.7	40.6%		8,234
Total Project with Transit Credits VMT				**24,650**
Existing VMT				
General Light Industrial Use				
Commercial to Commercial	8.4	28.0%	252	593
Commercial to Work	16.6	59.0%		2,468
Commercial to Non-work	6.9	13.0%		226
Subtotal of General Light Industrial Use				*3,287*
Automobile Sales Use				
Commercial to Commercial	8.4	48.0%	141	569
Commercial to Work	16.6	33.0%		772
Commercial to Non-work	6.9	19.0%		185
Subtotal of Automobile Sales Use				*1,526*
Total Existing VMT				**4,813**
VMT Comparison (Total Project VMT – Total Project with Transit Credits VMT)				**6,164**
VMT Comparison (Total Project with Transit Credits VMT – Total Existing VMT)				**19,837**

Source: California Emissions Estimator Model
ADT = average daily traffic
VMT = vehicle miles traveled

Off-Ramp Queuing Analysis

A queuing analysis was conducted using Synchro (Version 10.1) software at the I-210 eastbound and westbound off-ramps intersecting Myrtle Avenue during the a.m. and p.m. peak-hours, in order to anticipate any spill-back of vehicles from the off-ramps onto the I-210 freeway.

The I-210 eastbound off-ramp is a dual-lane ramp approximately 815 ft long (total of 1,630 ft) of queue storage. The off-ramp queuing analysis utilized the traffic volumes available at the intersection of Myrtle Avenue/Evergreen Avenue-I-210 eastbound off-ramp. The eastbound traffic data at this intersection is the sum of the I-210 eastbound off-ramp traffic and eastbound through traffic along Evergreen Avenue. This data is compared to the 95th percentile queue formed from the combined off-ramp and Evergreen Avenue volumes to the vehicle storage capacity along the off-ramp to see if the queues would not spill back onto the I-210 freeway. It should be noted that there is an additional storage length of 360 ft (dual-lane of 180 ft each) between the intersection's eastbound stop bar and the off-ramp. This distance is not accounted for in the total queue distance. The queue distance is measured from the gore point to the entrance of the ramp.

The I-210 westbound off-ramp is a single-lane ramp approximately 990 ft long of queue storage. The off-ramp queuing analysis utilized the traffic volumes available at the intersection of Myrtle Avenue/Central Avenue-I-210 westbound off-ramp. The westbound traffic data at this intersection is the sum of the I-210 westbound off-ramp traffic and westbound through traffic along Central Avenue. This data is compared to the 95th percentile queue formed from the combined off-ramp and Central Avenue volumes to the vehicle storage capacity along the off-ramp to see if the queues would not spill back onto the I-210 freeway. It should be noted that there is an additional storage length of 420 ft between the intersection's westbound stop bar and the off-ramp. This distance is not accounted for in the total queue distance. The queue distance is measured from the gore point to the entrance of the ramp.

The queuing analysis worksheets for the existing (baseline and plus project) and cumulative (baseline and plus project) settings are provided in Appendix F and presented in Tables L and M. As shown in the tables, all queues are projected to fit within the provided capacity along the I-210 eastbound and westbound off-ramps.

Table L: Existing and Existing Plus Project Off-Ramp Queue Summary

Freeway Off-Ramp	Lane Description	Vehicle Storage Capacity (ft)	Vehicle Queue Length (ft)[1]				Exceeds Capacity?
			Existing		Existing Plus Project		
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
Myrtle Avenue/Central Avenue-I-210 WB Off-Ramp	Single-Lane Ramp	990	628	751	670	865	No
Myrtle Avenue/Evergreen Avenue-I-210 EB Off-Ramp	Dual-Lane Ramp	1,630	376	468	404	490	No

[1] 95th percentile queues were calculated by the Synchro 10 software.
EB = eastbound I-210 = Interstate 210
ft = foot/feet WB = westbound

Table M: Cumulative and Cumulative Plus Project Off-Ramp Queue Summary

Freeway Off-Ramp	Lane Description	Vehicle Storage Capacity (ft)	Vehicle Queue Length (ft)[1]				Exceeds Capacity?
			Cumulative		Cumulative Plus Project		
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
Myrtle Avenue/Central Avenue-I-210 WB Off-Ramp	Single Lane Ramp	990	739	881	739	933	No
Myrtle Avenue/Evergreen Avenue-I-210 EB Off-Ramp	Dual Lane Ramp	1,630	1,504	1,220	1,504	1,578	No

[1] 95th percentile queues were calculated by the Synchro 10 software.
EB = eastbound I-210 = Interstate 210
ft = foot/feet WB = westbound

REQUIRED MITIGATION MEASURES AND/OR RECOMMENDATIONS

Based on the results of this analysis, the development of the 1625 Magnolia Avenue Project will result in a significant impact to the intersections of Magnolia Avenue/Evergreen Avenue and Myrtle Avenue/Central Avenue–I-210 WB ramps in the cumulative year horizon. The addition of project traffic exceeds City thresholds for performance at both intersections of Magnolia Avenue/Evergreen Avenue and Myrtle Avenue/Central Avenue–I-210 WB Ramps during the p.m. peak hour for the cumulative plus project scenario. Therefore, project mitigation measures are required.

In order to mitigate the impact at the intersection of Magnolia Avenue/Evergreen Avenue, the centerline for the northern and southern legs of the intersection is recommended to be restriped and moved 2 feet to the west, to allow for de-facto northbound right-turns.

The southbound travel lanes at this intersection are recommended to be re-striped from a shared southbound through-right lane and a southbound through lane to an exclusive southbound right-turn lane and two southbound through lanes. This appears to be favorable within the existing right of way without modifying the existing curb or centerline. An analysis of this improvement is prepared in Table N and indicates the intersection would operate at levels of service better than in the baseline setting. These recommended improvements are anticipated to bring the project-related difference to an acceptable threshold of significance. The mitigation LOS worksheets are provided in Appendix G.

Table N: Cumulative Plus Project Mitigation LOS Summary

Intersection		Cumulative				Cumulative Plus Project				Cumulative Plus Project with Mitigation			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS
5	Magnolia Avenue/ Evergreen Avenue (unsignalized)	*19.6*	*C*	*22.6*	*C*	*27.1*	*D*	*37.7*	*E*	*21.9*	*C*	*32.4*	*D*
8	Myrtle Avenue/Central Avenue-I-210 WB Ramps	0.882	D	0.945	E	0.895	D	0.967	E	0.850	D	0.894	D

I-210 = Interstate 210
HCM = Highway Capacity Manual
ICU = intersection capacity utilization
LOS = level of service
WB = westbound

The City of Monrovia is in the process of studying an area-wide Transportation Impact Fee that would allow new development to pay a trip fee to assist in project mitigation. If this program is adopted prior to the final entitlement of the proposed project, the project may be asked to participate in the program rather than implement the improvement at Myrtle Avenue/Central Avenue and the I-210 westbound ramps.

APPENDIX A

EXISTING INTERSECTION COUNTS

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

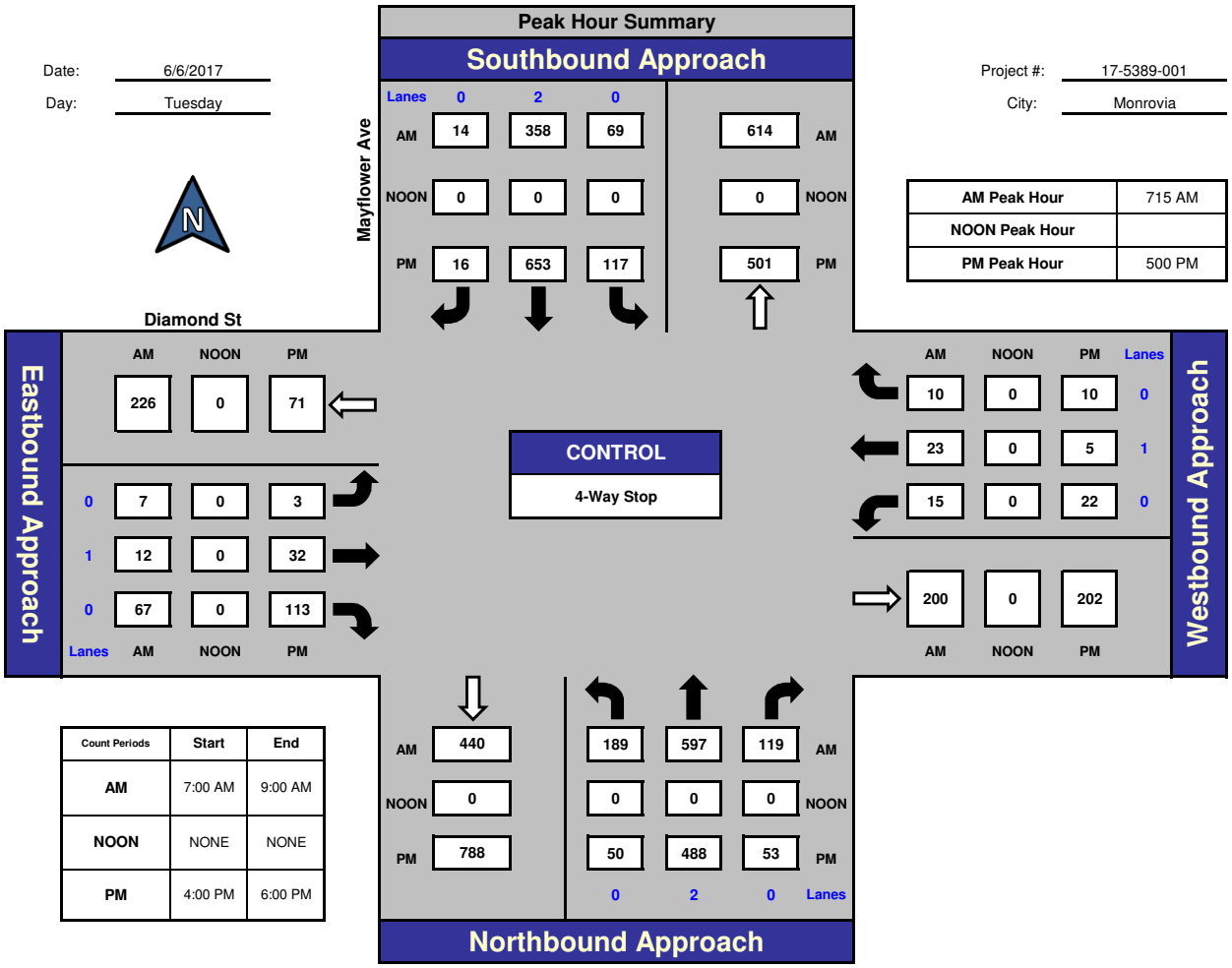
Mayflower Ave and Diamond St , Monrovia

Date: 6/6/2017

Day: Tuesday

Project #: 17-5389-001

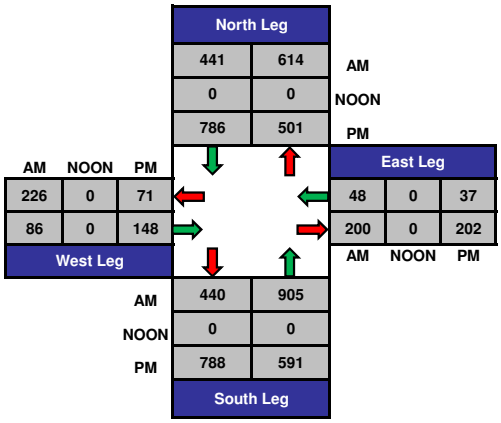
City: Monrovia



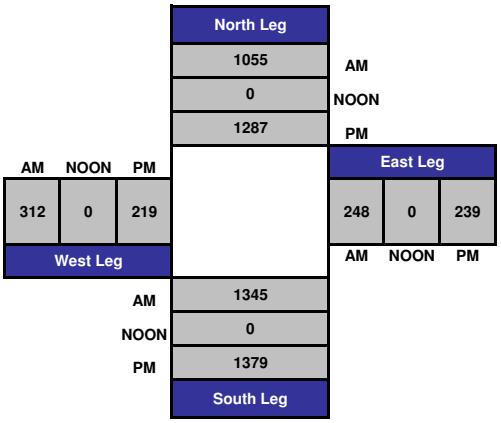
AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON	NONE	NONE
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Mayflower Ave and Duarte Rd , Monrovia

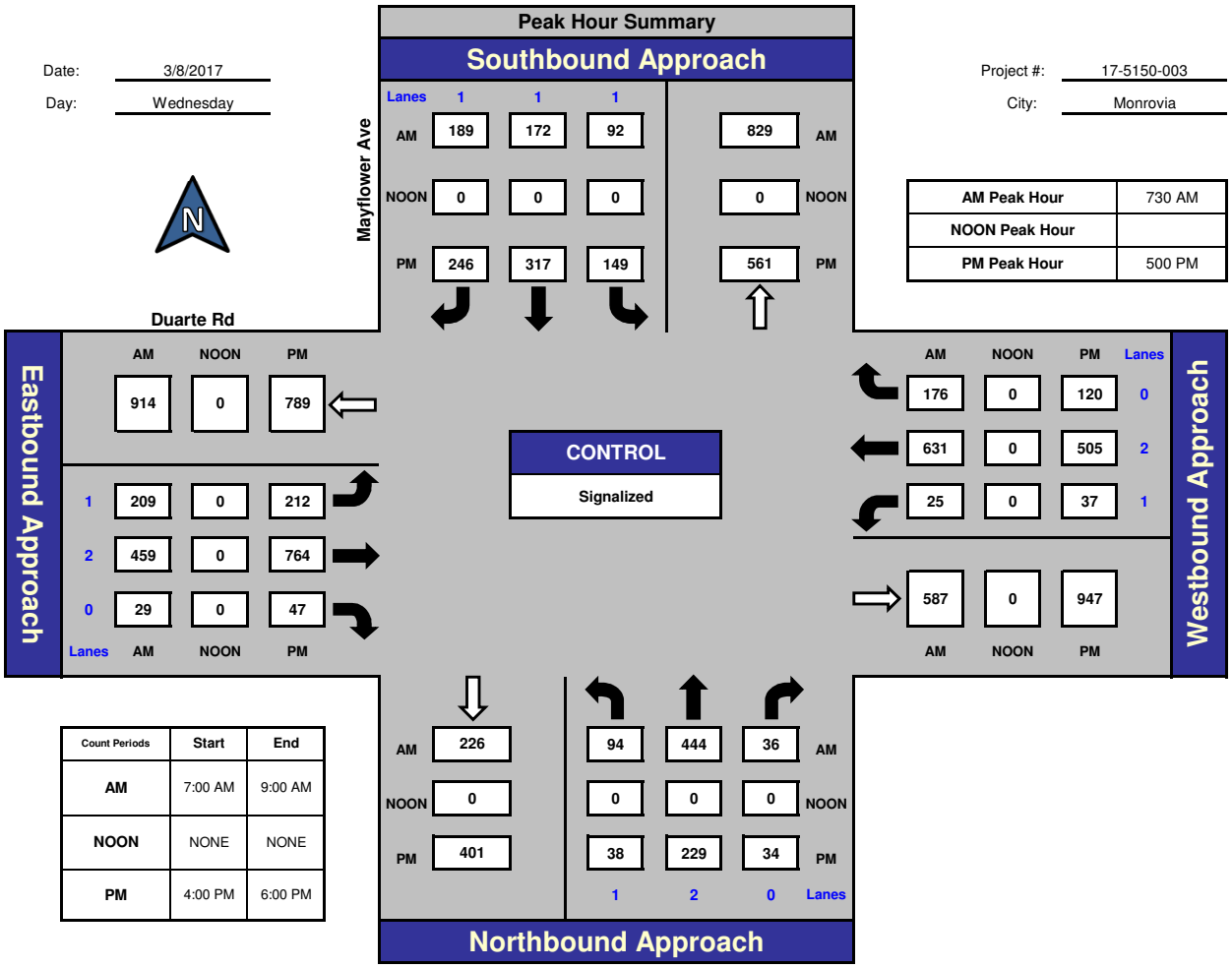
Date: 3/8/2017

Day: Wednesday

Project #: 17-5150-003

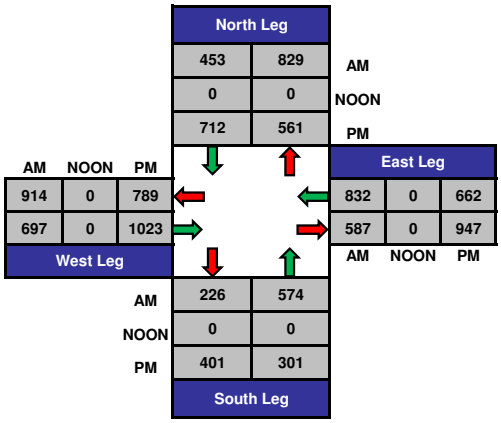
City: Monrovia

AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	500 PM

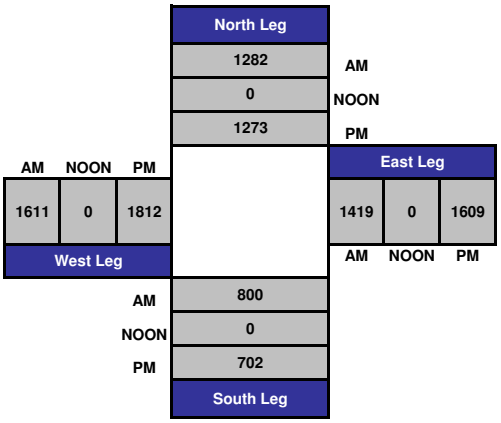


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON	NONE	NONE
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Prepared by National Data & Surveying Services

Magnolia Ave & W Huntington Dr

Peak Hour Turning Movement Count

ID: 18-05167-002
City: Monrovia

Day: Thursday
Date: 03/08/2018

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 05:00 PM - 06:00 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

Magnolia Ave — SOUTHBOUND

AM	36	211	43	0	386	AM
NOON	0	0	0	0	0	NOON
PM	58	211	94	0	311	PM

W Huntington Dr — EASTBOUND

AM	NOON	PM		
1165	0	912	⇦	
0	0	0	↶	0
56	0	77	↱	1
448	0	1065	→	2
25	0	35	↴	0
AM	NOON	PM		

CONTROL

Signalized

TEV	2369 AM	0 NOON	2816 PM
PHF	0.95		0.97

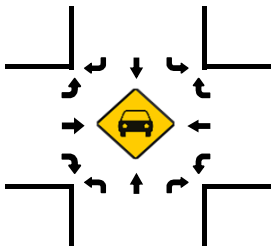
W Huntington Dr — WESTBOUND

PM	NOON	AM		
39	0	91	↰	0
795	0	1077	←	2
103	0	38	↰	1
5	0	0	↰	0
1244	0	544	⇨	
PM	NOON	AM		

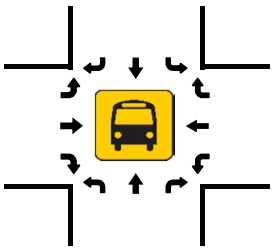
Magnolia Ave — NORTHBOUND

PM	349	0	59	195	80	PM
NOON	0	0	0	0	0	NOON
AM	274	0	52	239	53	AM

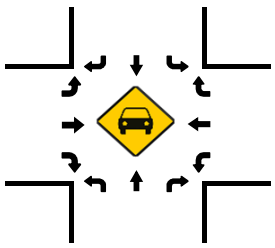
Total Vehicles (AM)



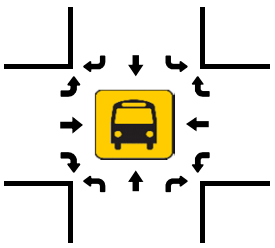
Total Vehicles (AM)



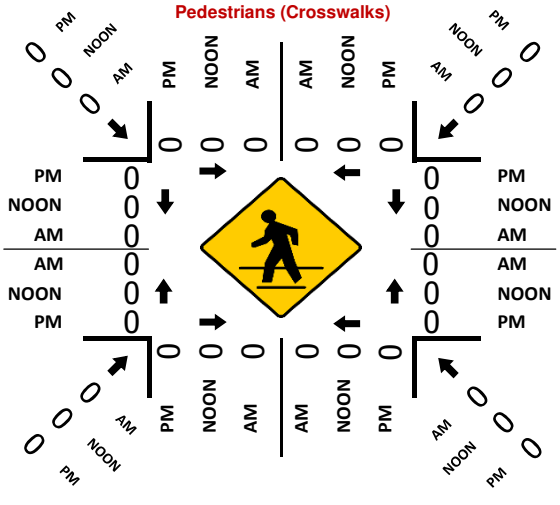
Total Vehicles (NOON)



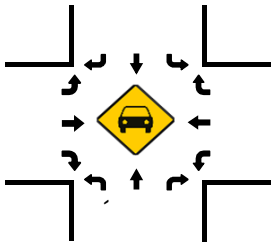
Total Vehicles (NOON)



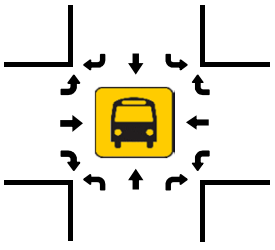
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



ITM Peak Hour Summary

Prepared by:

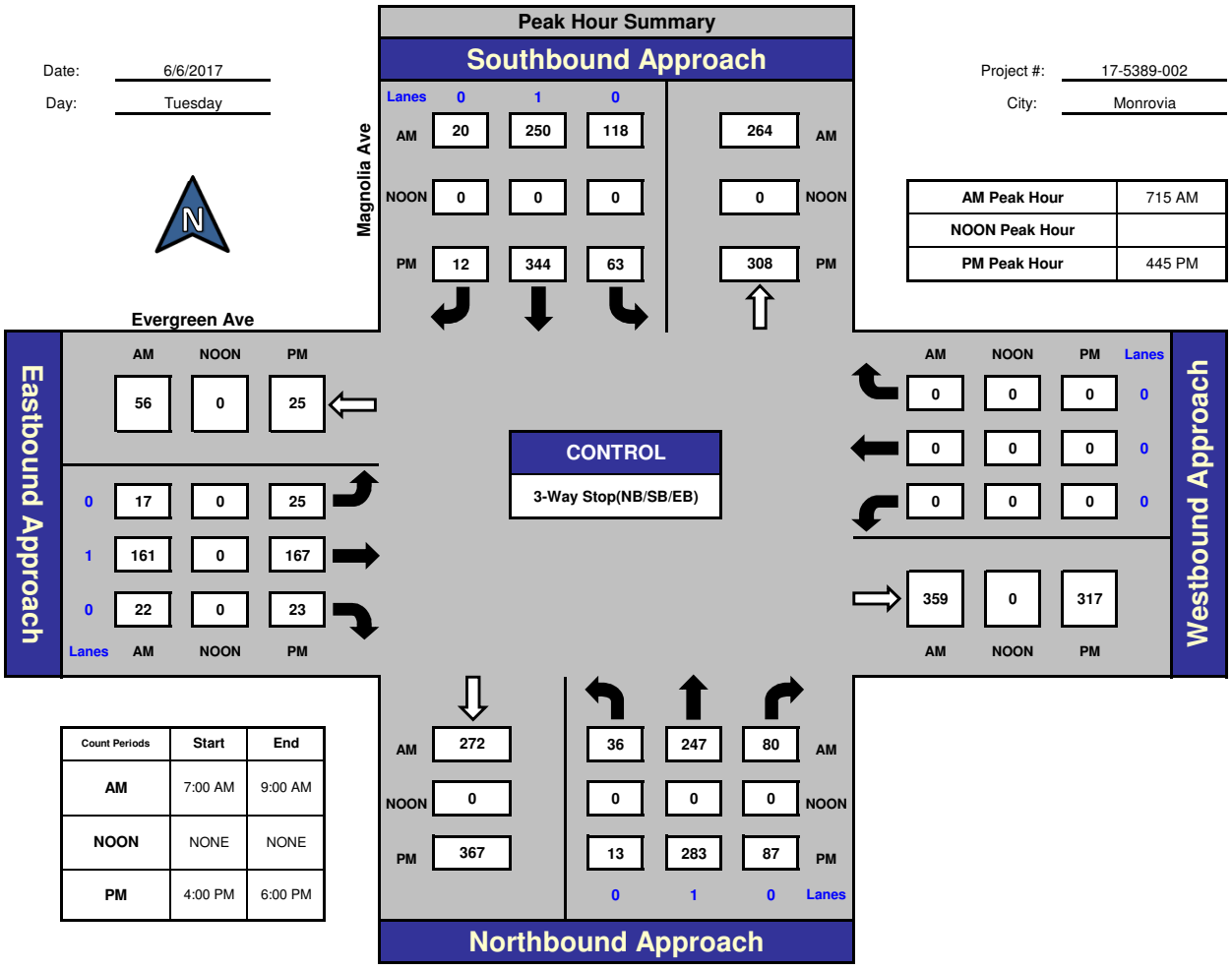
National Data & Surveying Services

Magnolia Ave and Evergreen Ave , Monrovia

Date: 6/6/2017
Day: Tuesday

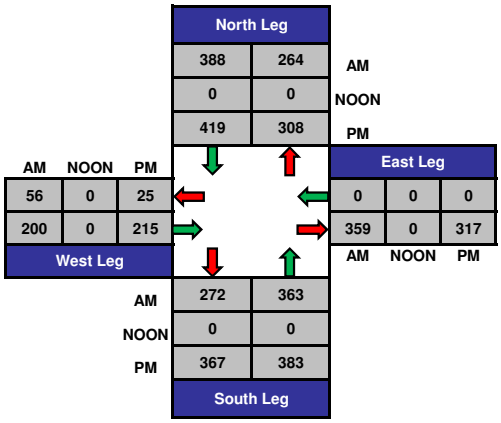
Project #: 17-5389-002
City: Monrovia

AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	445 PM

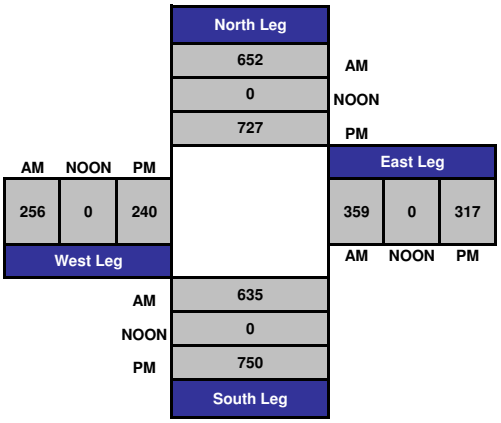


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON	NONE	NONE
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Magnolia Ave and Duarte Rd , Monrovia

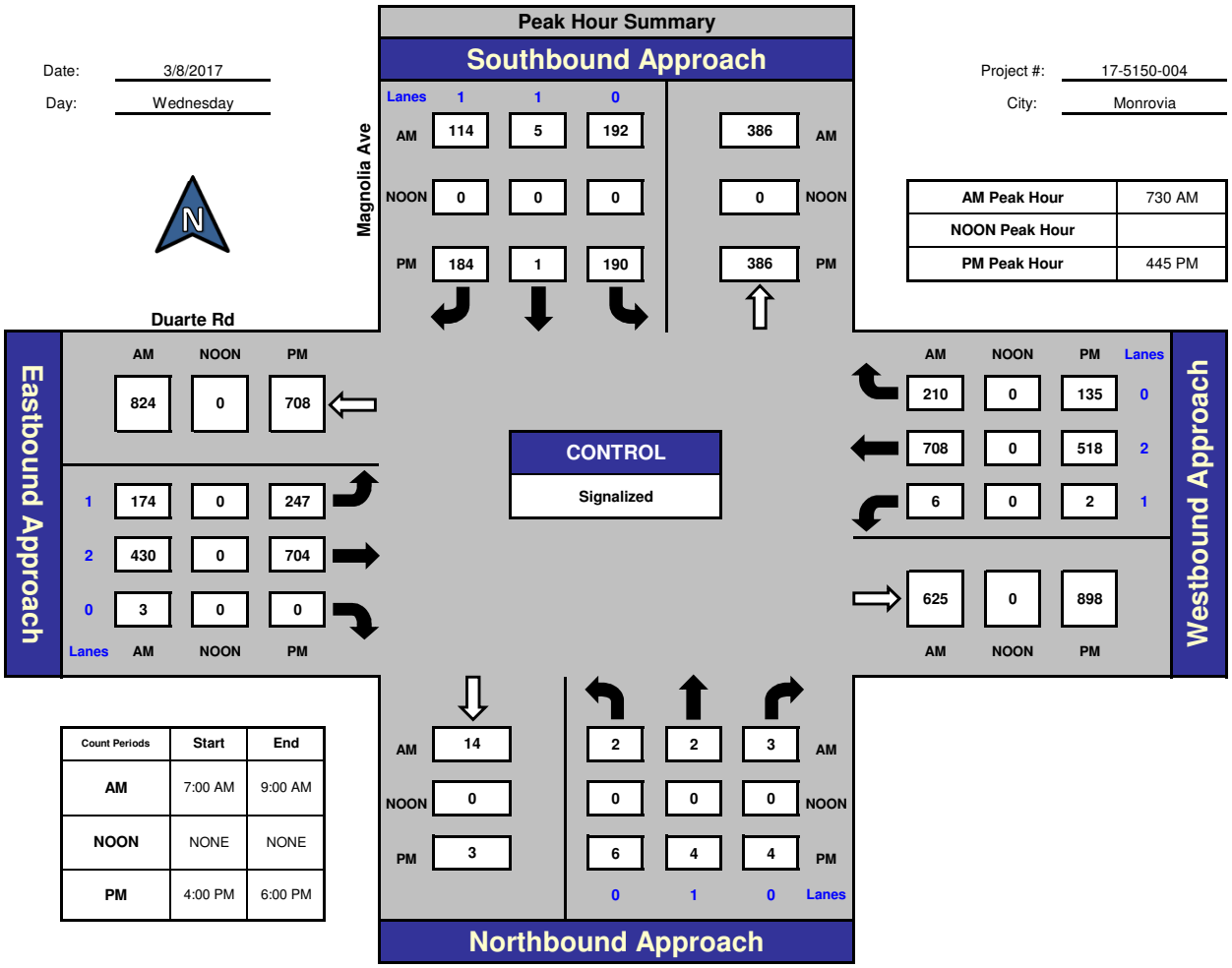
Date: 3/8/2017

Day: Wednesday

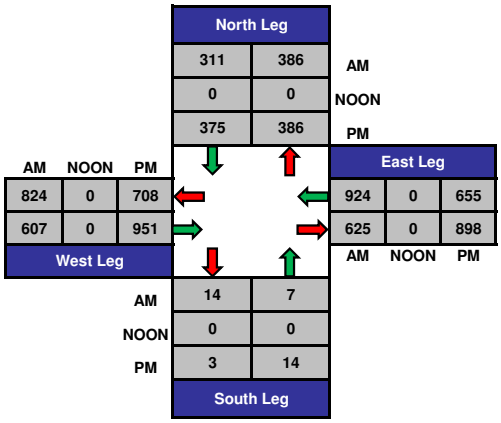
Project #: 17-5150-004

City: Monrovia

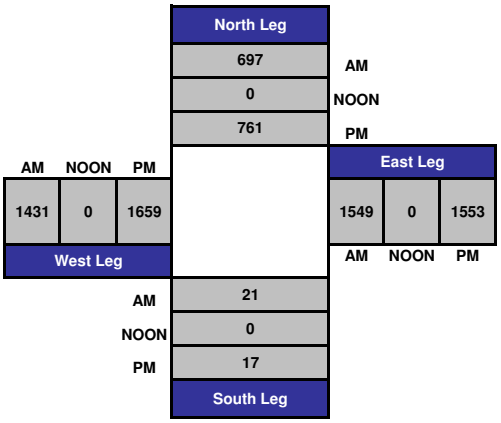
AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	445 PM



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

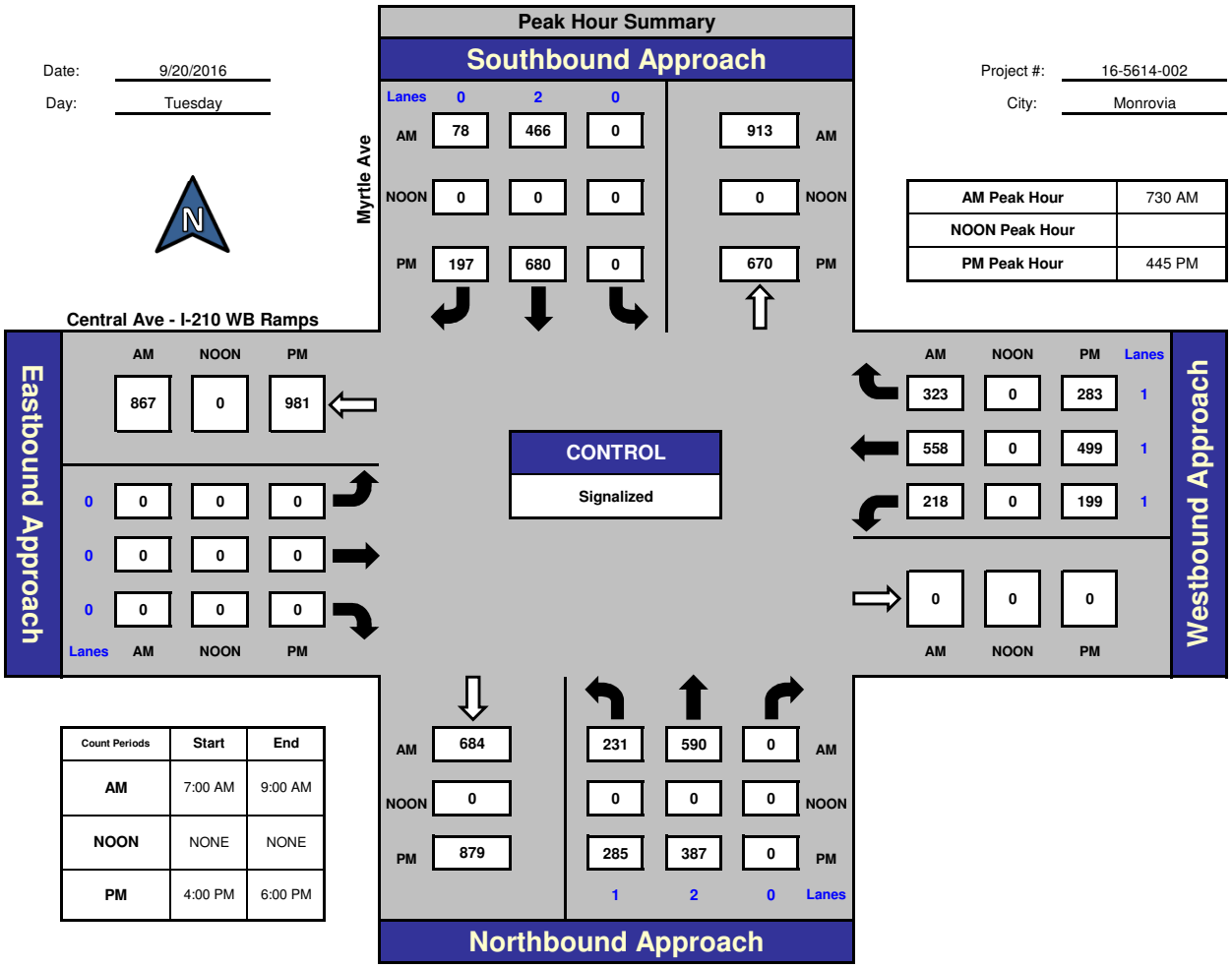
National Data & Surveying Services

Myrtle Ave and Central Ave - I-210 WB Ramps , Monrovia

Date: 9/20/2016
Day: Tuesday

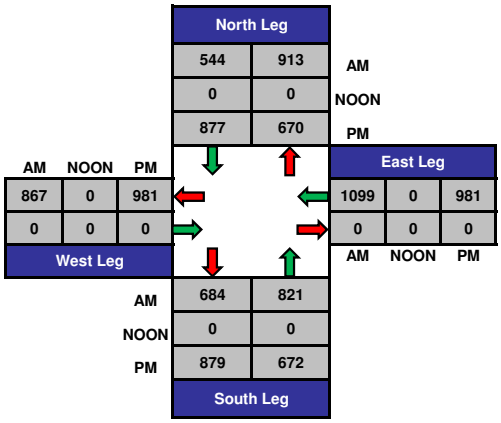
Project #: 16-5614-002
City: Monrovia

AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	445 PM

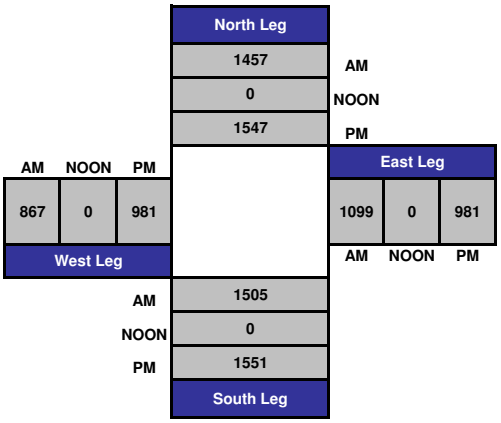


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON	NONE	NONE
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

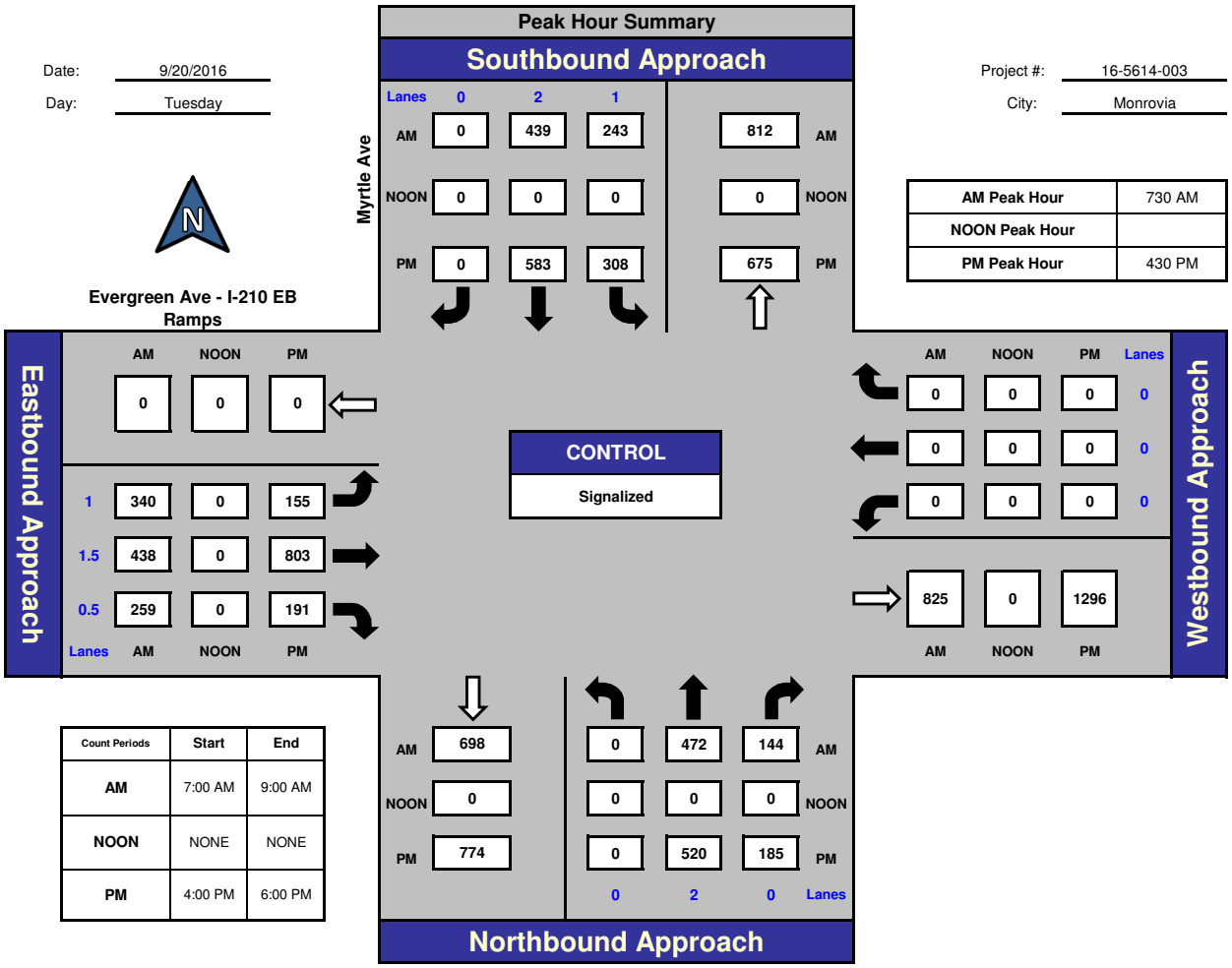
National Data & Surveying Services

Myrtle Ave and Evergreen Ave - I-210 EB Ramps , Monrovia

Date: 9/20/2016
Day: Tuesday

Project #: 16-5614-003
City: Monrovia

AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	430 PM



Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON	NONE	NONE
PM	4:00 PM	6:00 PM

Total Ins & Outs

	North Leg		
AM	682	812	AM
NOON	0	0	NOON
PM	891	675	PM

West Leg			East Leg		
AM	NOON	PM			
0	0	0	0	0	0
1037	0	1149	825	0	1296
			AM	NOON	PM

	South Leg	
AM	698	616
NOON	0	0
PM	774	705

Total Volume Per Leg

	North Leg	
AM	1494	AM
NOON	0	NOON
PM	1566	PM

West Leg			East Leg		
AM	NOON	PM			
1037	0	1149	825	0	1296
			AM	NOON	PM

	South Leg
AM	1314
NOON	0
PM	1479

Turning Movement Count Report AM

Location ID: 1
North/South: Myrtle Ave
East/West: Duarte Rd

Date: 08/18/16
City: Monrovia, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	19	80	4	1	60	7	5	83	23	22	40	22	366
7:15	30	103	4	4	73	17	7	139	20	10	41	16	464
7:30	29	119	4	6	100	17	8	88	33	34	55	40	533
7:45	29	152	7	11	60	14	12	119	34	34	95	39	606
8:00	38	139	9	7	69	19	12	99	34	38	57	19	540
8:15	36	123	5	6	72	9	11	95	31	20	72	26	506
8:30	50	101	10	4	80	12	12	131	29	21	59	36	545
8:45	49	104	13	7	66	18	7	97	28	29	64	36	518
9:00													0
9:15													0
9:30													0
9:45													0
Total Volume:	280	921	56	46	580	113	74	851	232	208	483	234	4078
Approach %	22%	73%	4%	6%	78%	15%	6%	74%	20%	22%	52%	25%	
Peak Hr Begin:	7:45												
PHV	153	515	31	28	281	54	47	444	128	113	283	120	2197
PHF	0.930			0.945			0.900			0.768			0.906

Turning Movement Count Report PM

Location ID: 1
North/South: Myrtle Ave
East/West: Duarte Rd

Date: 08/18/16
City: Monrovia, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	29	105	10	5	49	21	12	69	19	25	77	38	459
15:15	32	102	7	10	46	10	21	162	20	21	74	32	537
15:30	37	145	4	10	61	16	7	81	23	45	93	22	544
15:45	28	149	8	2	60	11	19	109	25	42	96	33	582
16:00	29	127	7	9	45	15	11	103	20	48	87	24	525
16:15	27	123	7	5	51	10	11	111	19	40	107	41	552
16:30	23	118	7	4	77	18	9	100	25	54	107	38	580
16:45	39	135	10	12	70	10	13	103	14	56	120	36	618
17:00	45	165	6	6	70	8	19	87	20	70	97	42	635
17:15	28	154	10	8	82	15	14	120	25	82	126	26	690
17:30	54	160	16	7	56	11	14	125	20	58	107	36	664
17:45	32	139	7	7	88	13	9	96	31	63	130	35	650
18:00	47	155	10	6	82	26	8	86	16	60	100	46	642
18:15	35	139	4	7	57	13	13	117	33	61	112	31	622
18:30	24	137	7	5	56	14	8	85	13	59	107	29	544
18:45	21	146	4	3	68	13	12	85	18	53	69	29	521
Total Volume:	530	2199	124	106	1018	224	200	1639	341	837	1609	538	9365
Approach %	19%	77%	4%	8%	76%	17%	9%	75%	16%	28%	54%	18%	
Peak Hr Begin:	17:15												
PHV	161	608	43	28	308	65	45	427	92	263	463	143	2646
PHF	0.883			0.879			0.887			0.928			0.959

ITM Peak Hour Summary

Prepared by:

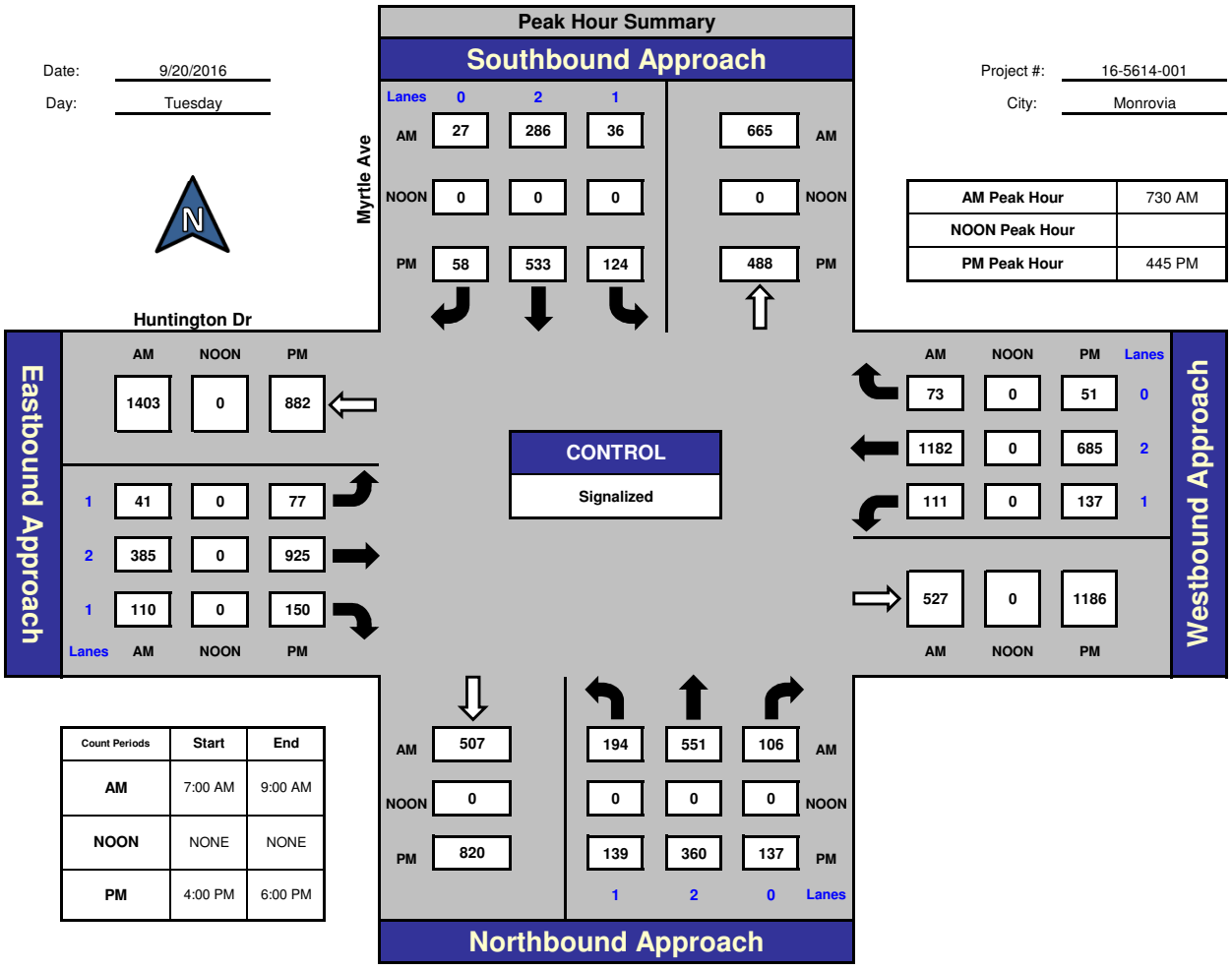
National Data & Surveying Services

Myrtle Ave and Huntington Dr , Monrovia

Date: 9/20/2016
Day: Tuesday

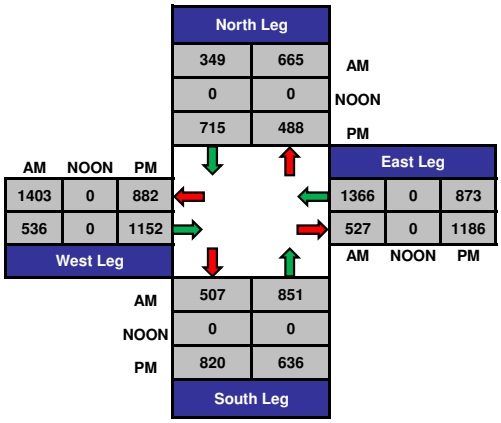
Project #: 16-5614-001
City: Monrovia

AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	445 PM

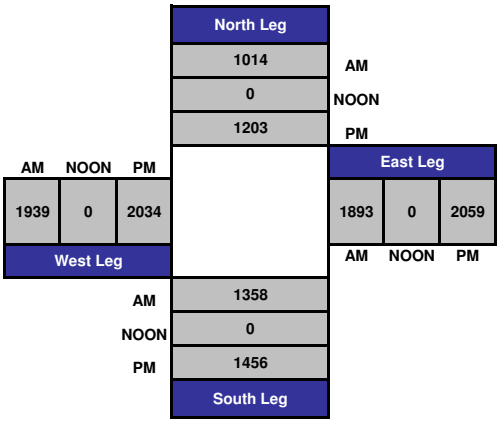


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON	NONE	NONE
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Magnolia Ave and Central Ave , Monrovia

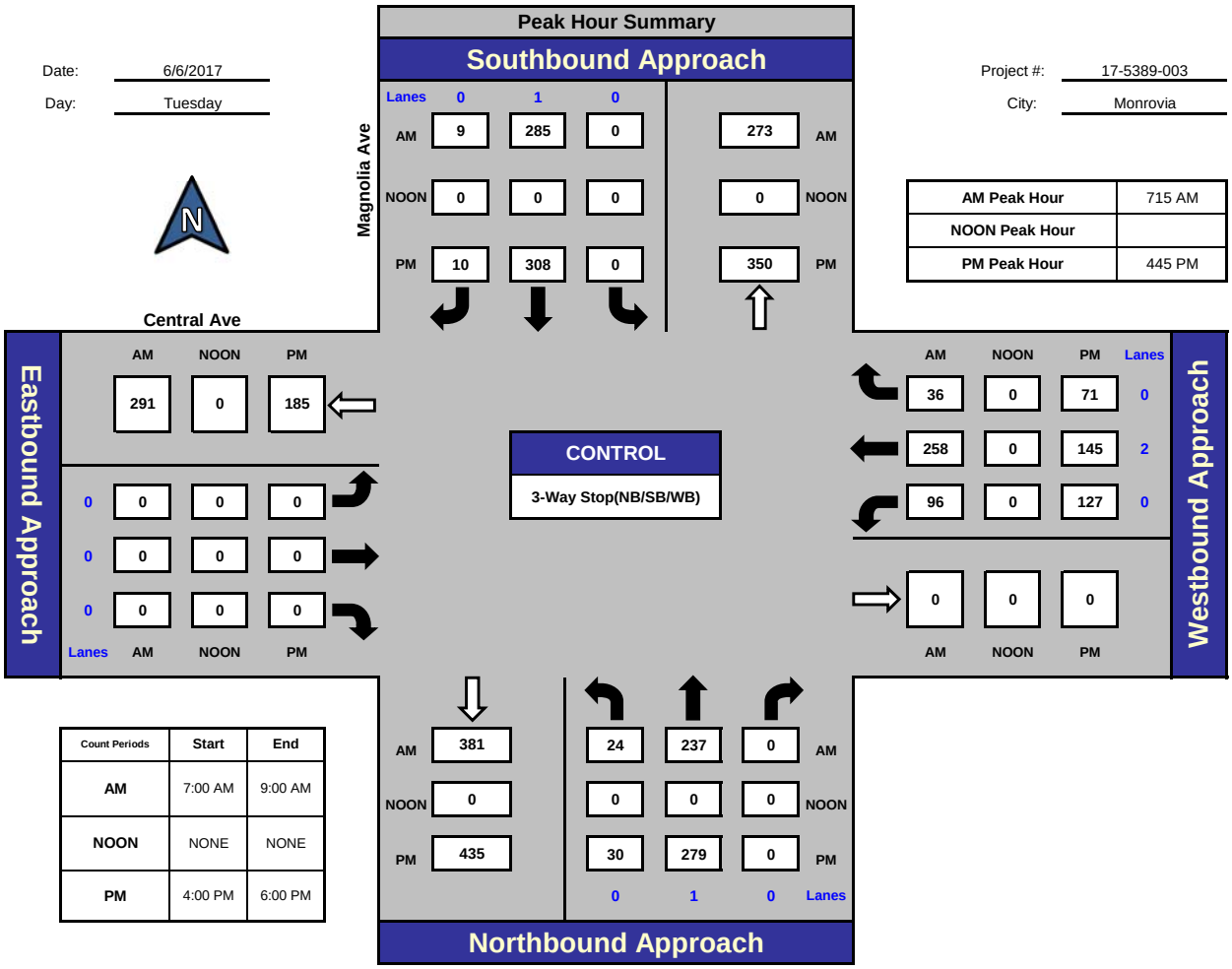
Date: 6/6/2017

Day: Tuesday

Project #: 17-5389-003

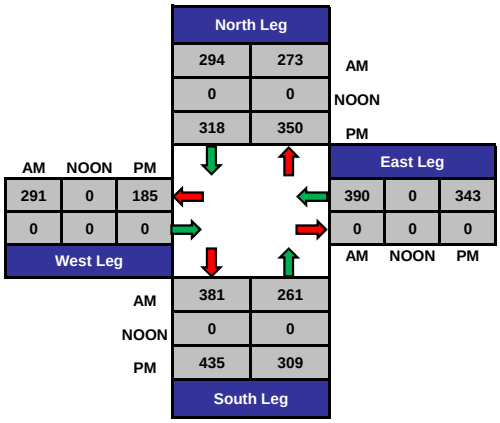
City: Monrovia

AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	445 PM

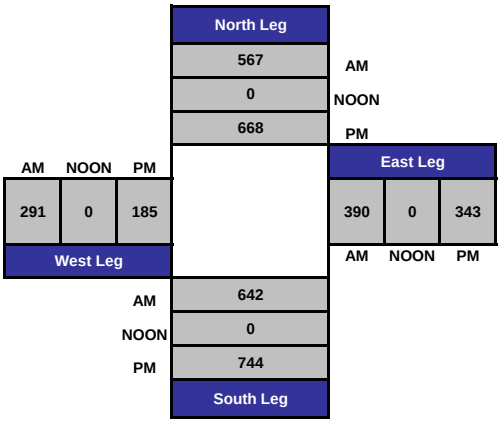


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON	NONE	NONE
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



APPENDIX B

LOS WORKSHEETS

Intersection	
Intersection Delay, s/veh	22.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	12	68	15	23	10	191	602	120	70	361	14
Future Vol, veh/h	7	12	68	15	23	10	191	602	120	70	361	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	13	74	16	25	11	208	654	130	76	392	15
Number of Lanes	0	1	0	0	1	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	10.7	10.7	28.6	14
HCM LOS	B	B	D	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	39%	0%	8%	31%	28%	0%
Vol Thru, %	61%	71%	14%	48%	72%	93%
Vol Right, %	0%	29%	78%	21%	0%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	492	421	87	48	251	195
LT Vol	191	0	7	15	70	0
Through Vol	301	301	12	23	181	181
RT Vol	0	120	68	10	0	14
Lane Flow Rate	535	458	95	52	272	211
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.873	0.696	0.168	0.1	0.486	0.366
Departure Headway (Hd)	5.874	5.476	6.38	6.921	6.42	6.227
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	615	659	562	517	561	577
Service Time	3.61	3.212	4.421	4.97	4.171	3.978
HCM Lane V/C Ratio	0.87	0.695	0.169	0.101	0.485	0.366
HCM Control Delay	36.1	19.8	10.7	10.7	15.1	12.6
HCM Lane LOS	E	C	B	B	C	B
HCM 95th-tile Q	10.1	5.6	0.6	0.3	2.6	1.7

1625 Magnolia Avenue
MMF1701
Existing AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Mayflower Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.695
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Street Name:	Mayflower Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	0 1	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	95	448	36	93	173	191	211	463	29	25	636	177
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	95	448	36	93	173	191	211	463	29	25	636	177
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	95	448	36	93	173	191	211	463	29	25	636	177
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	448	36	93	173	191	211	463	29	25	636	177
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	95	448	36	93	173	191	211	463	29	25	636	177
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.85	0.15	1.00	1.00	1.00	1.00	1.88	0.12	1.00	1.56	0.44
Final Sat.:	1600	2962	238	1600	1600	1600	1600	3011	189	1600	2503	697
Capacity Analysis Module:												
Vol/Sat:	0.06	0.15	0.15	0.06	0.11	0.12	0.13	0.15	0.15	0.02	0.25	0.25
Crit Moves:		****			****			****			****	

1625 Magnolia Avenue
MMF1701
Existing AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Magnolia Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.709
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Street Name:	Magnolia Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	52	239	53	43	211	36	56	448	25	38	1077	91
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	52	239	53	43	211	36	56	448	25	38	1077	91
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	52	239	53	43	211	36	56	448	25	38	1077	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	239	53	43	211	36	56	448	25	38	1077	91
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	52	239	53	43	211	36	56	448	25	38	1077	91
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.82	0.18	1.00	0.85	0.15	1.00	1.89	0.11	1.00	1.84	0.16
Final Sat.:	1600	1310	290	1600	1367	233	1600	3031	169	1600	2951	249
Capacity Analysis Module:												
Vol/Sat:	0.03	0.18	0.18	0.03	0.15	0.15	0.04	0.15	0.15	0.02	0.37	0.36
Crit Moves:		****			****			****			****	

Intersection	
Intersection Delay, s/veh	15.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕						↕			↕	
Traffic Vol, veh/h	17	162	22	0	0	0	36	249	81	119	252	20
Future Vol, veh/h	17	162	22	0	0	0	36	249	81	119	252	20
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	182	25	0	0	0	40	280	91	134	283	22
Number of Lanes	0	1	0	0	0	0	0	1	0	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	12.6	15.4	17.2
HCM LOS	B	C	C

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	10%	8%	30%
Vol Thru, %	68%	81%	64%
Vol Right, %	22%	11%	5%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	366	201	391
LT Vol	36	17	119
Through Vol	249	162	252
RT Vol	81	22	20
Lane Flow Rate	411	226	439
Geometry Grp	1	1	1
Degree of Util (X)	0.589	0.375	0.641
Departure Headway (Hd)	5.157	5.981	5.252
Convergence, Y/N	Yes	Yes	Yes
Cap	699	601	685
Service Time	3.196	4.029	3.289
HCM Lane V/C Ratio	0.588	0.376	0.641
HCM Control Delay	15.4	12.6	17.2
HCM Lane LOS	C	B	C
HCM 95th-tile Q	3.9	1.7	4.6

1625 Magnolia Avenue
MMF1701
Existing AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Magnolia Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.628
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Street Name:	Magnolia Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	1	0
Volume Module:												
Base Vol:	2	2	3	194	5	115	175	434	3	6	714	212
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	2	3	194	5	115	175	434	3	6	714	212
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	2	3	194	5	115	175	434	3	6	714	212
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	2	3	194	5	115	175	434	3	6	714	212
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	2	3	194	5	115	175	434	3	6	714	212
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.28	0.29	0.43	0.97	0.03	1.00	1.00	1.99	0.01	1.00	1.54	0.46
Final Sat.:	457	457	686	1560	40	1600	1600	3178	22	1600	2467	733
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.12	0.07	0.11	0.14	0.14	0.00	0.29	0.29
Crit Moves:	****			****			****			****		

1625 Magnolia Avenue
MMF1701
Existing AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Myrtle Avenue/Central Avenue - I-210 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.774
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	C

Street Name:	Myrtle Avenue						Central Avenue - I-210 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	1 0	1 0	1
Volume Module:												
Base Vol:	235	600	0	0	474	79	0	0	0	222	567	328
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	235	600	0	0	474	79	0	0	0	222	567	328
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	235	600	0	0	474	79	0	0	0	222	567	328
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	235	600	0	0	474	79	0	0	0	222	567	328
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	235	600	0	0	474	79	0	0	0	222	567	328
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.71	0.29	0.00	0.00	0.00	1.00	1.00	1.00
Final Sat.:	1600	3200	0	0	2743	457	0	0	0	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.15	0.19	0.00	0.00	0.17	0.17	0.00	0.00	0.00	0.14	0.35	0.21
Crit Moves:	****				****						****	

1625 Magnolia Avenue
MMF1701
Existing AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Myrtle Avenue/Evergreen Avenue - I-210 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.671
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Street Name:	Myrtle Avenue						Evergreen Avenue - I-210 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	480	146	247	446	0	346	445	263	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	480	146	247	446	0	346	445	263	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	480	146	247	446	0	346	445	263	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	480	146	247	446	0	346	445	263	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	480	146	247	446	0	346	445	263	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.53	0.47	1.00	2.00	0.00	1.00	1.26	0.74	0.00	0.00	0.00
Final Sat.:	0	2454	746	1600	3200	0	1600	2011	1189	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.15	0.14	0.00	0.22	0.22	0.22	0.00	0.00	0.00
Crit Moves:		****		****					****			

1625 Magnolia Avenue
MMF1701
Existing AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Myrtle Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.776
Loss Time (sec):	30	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	92	Level Of Service:	C

Street Name:	Myrtle Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	130	451	48	32	523	156	122	288	115	28	286	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	451	48	32	523	156	122	288	115	28	286	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	451	48	32	523	156	122	288	115	28	286	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	451	48	32	523	156	122	288	115	28	286	55
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	451	48	32	523	156	122	288	115	28	286	55
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.54	0.46	1.00	1.43	0.57	1.00	1.68	0.32
Final Sat.:	1600	2892	308	1600	2465	735	1600	2287	913	1600	2684	516
Capacity Analysis Module:												
Vol/Sat:	0.08	0.16	0.16	0.02	0.21	0.21	0.08	0.13	0.13	0.02	0.11	0.11
Crit Moves:	****			****			****			****		

1625 Magnolia Avenue
MMF1701
Existing AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Myrtle Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.757
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Street Name:	Myrtle Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	197	560	108	37	291	27	42	391	112	113	1201	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	197	560	108	37	291	27	42	391	112	113	1201	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	197	560	108	37	291	27	42	391	112	113	1201	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	197	560	108	37	291	27	42	391	112	113	1201	74
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	197	560	108	37	291	27	42	391	112	113	1201	74
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.68	0.32	1.00	1.83	0.17	1.00	2.00	1.00	1.00	1.88	0.12
Final Sat.:	1600	2683	517	1600	2928	272	1600	3200	1600	1600	3014	186
Capacity Analysis Module:												
Vol/Sat:	0.12	0.21	0.21	0.02	0.10	0.10	0.03	0.12	0.07	0.07	0.40	0.40
Crit Moves:		****			****			****			****	

Intersection	
Intersection Delay, s/veh	15.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	97	260	36	24	239	0	0	287	9
Future Vol, veh/h	0	0	0	97	260	36	24	239	0	0	287	9
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	117	313	43	29	288	0	0	346	11
Number of Lanes	0	0	0	0	2	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	14.4	15.1	16.3
HCM LOS	B	C	C

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	9%	43%	0%	0%
Vol Thru, %	91%	57%	78%	97%
Vol Right, %	0%	0%	22%	3%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	263	227	166	296
LT Vol	24	97	0	0
Through Vol	239	130	130	287
RT Vol	0	0	36	9
Lane Flow Rate	317	273	200	357
Geometry Grp	2	7	7	2
Degree of Util (X)	0.516	0.504	0.348	0.572
Departure Headway (Hd)	5.868	6.634	6.263	5.77
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	612	542	574	624
Service Time	3.923	4.385	4.014	3.822
HCM Lane V/C Ratio	0.518	0.504	0.348	0.572
HCM Control Delay	15.1	16	12.3	16.3
HCM Lane LOS	C	C	B	C
HCM 95th-tile Q	3	2.8	1.5	3.6

Intersection	
Intersection Delay, s/veh	19.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	32	114	22	5	10	50	492	53	118	658	16
Future Vol, veh/h	3	32	114	22	5	10	50	492	53	118	658	16
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	33	119	23	5	10	52	513	55	123	685	17
Number of Lanes	0	1	0	0	1	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	11.9	11	16.3	24.2
HCM LOS	B	B	C	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	17%	0%	2%	59%	26%	0%
Vol Thru, %	83%	82%	21%	14%	74%	95%
Vol Right, %	0%	18%	77%	27%	0%	5%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	296	299	149	37	447	345
LT Vol	50	0	3	22	118	0
Through Vol	246	246	32	5	329	329
RT Vol	0	53	114	10	0	16
Lane Flow Rate	308	311	155	39	466	359
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.547	0.535	0.277	0.078	0.8	0.601
Departure Headway (Hd)	6.392	6.18	6.416	7.278	6.183	6.016
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	561	582	559	490	582	600
Service Time	4.156	3.945	4.472	5.353	3.938	3.771
HCM Lane V/C Ratio	0.549	0.534	0.277	0.08	0.801	0.598
HCM Control Delay	16.7	15.9	11.9	11	29.3	17.5
HCM Lane LOS	C	C	B	B	D	C
HCM 95th-tile Q	3.3	3.2	1.1	0.3	7.8	4

1625 Magnolia Avenue
MMF1701
Existing PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Mayflower Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.654
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Street Name:	Mayflower Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	0 1	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	38	231	34	150	320	248	214	770	47	37	509	121
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	38	231	34	150	320	248	214	770	47	37	509	121
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	38	231	34	150	320	248	214	770	47	37	509	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	231	34	150	320	248	214	770	47	37	509	121
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	38	231	34	150	320	248	214	770	47	37	509	121
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	1.00	1.00	1.00	1.00	1.88	0.12	1.00	1.62	0.38
Final Sat.:	1600	2789	411	1600	1600	1600	1600	3016	184	1600	2585	615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.08	0.08	0.09	0.20	0.16	0.13	0.26	0.26	0.02	0.20	0.20
Crit Moves:	****			****			****			****		

1625 Magnolia Avenue
MMF1701
Existing PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Magnolia Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.742
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	C

Street Name:	Magnolia Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	59	195	80	94	211	58	77	1065	35	108	795	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	59	195	80	94	211	58	77	1065	35	108	795	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	59	195	80	94	211	58	77	1065	35	108	795	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	195	80	94	211	58	77	1065	35	108	795	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	59	195	80	94	211	58	77	1065	35	108	795	39
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.71	0.29	1.00	0.78	0.22	1.00	1.94	0.06	1.00	1.91	0.09
Final Sat.:	1600	1135	465	1600	1255	345	1600	3098	102	1600	3050	150
Capacity Analysis Module:												
Vol/Sat:	0.04	0.17	0.17	0.06	0.17	0.17	0.05	0.34	0.34	0.07	0.26	0.26
Crit Moves:		****		****				****		****		

Intersection	
Intersection Delay, s/veh	18.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	168	23	0	0	0	13	285	88	64	347	12
Future Vol, veh/h	25	168	23	0	0	0	13	285	88	64	347	12
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	191	26	0	0	0	15	324	100	73	394	14
Number of Lanes	0	1	0	0	0	0	0	1	0	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	13.7	17.6	21.1
HCM LOS	B	C	C

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	3%	12%	15%
Vol Thru, %	74%	78%	82%
Vol Right, %	23%	11%	3%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	386	216	423
LT Vol	13	25	64
Through Vol	285	168	347
RT Vol	88	23	12
Lane Flow Rate	439	245	481
Geometry Grp	1	1	1
Degree of Util (X)	0.647	0.422	0.719
Departure Headway (Hd)	5.31	6.182	5.384
Convergence, Y/N	Yes	Yes	Yes
Cap	680	579	668
Service Time	3.363	4.243	3.435
HCM Lane V/C Ratio	0.646	0.423	0.72
HCM Control Delay	17.6	13.7	21.1
HCM Lane LOS	C	B	C
HCM 95th-tile Q	4.7	2.1	6.1

1625 Magnolia Avenue
MMF1701
Existing PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Magnolia Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.591
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Street Name:	Magnolia Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1	0	0	1	1	0	1	0	1	1	0
Volume Module:												
Base Vol:	6	4	4	192	1	186	249	710	0	2	522	136
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	4	4	192	1	186	249	710	0	2	522	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	6	4	4	192	1	186	249	710	0	2	522	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	4	4	192	1	186	249	710	0	2	522	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	6	4	4	192	1	186	249	710	0	2	522	136
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.43	0.29	0.28	0.99	0.01	1.00	1.00	2.00	0.00	1.00	1.59	0.41
Final Sat.:	686	457	457	1592	8	1600	1600	3200	0	1600	2539	661
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.12	0.12	0.12	0.16	0.22	0.00	0.00	0.21	0.21
Crit Moves:	****			****			****				****	

1625 Magnolia Avenue
MMF1701
Existing PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Myrtle Avenue/Central Avenue - I-210 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.877
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	90	Level Of Service:	D

Street Name:	Myrtle Avenue						Central Avenue - I-210 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	1 0	1 0	1
Volume Module:												
Base Vol:	290	393	0	0	691	200	0	0	0	202	507	288
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	290	393	0	0	691	200	0	0	0	202	507	288
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	290	393	0	0	691	200	0	0	0	202	507	288
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	290	393	0	0	691	200	0	0	0	202	507	288
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	290	393	0	0	691	200	0	0	0	202	507	288
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.55	0.45	0.00	0.00	0.00	1.00	1.00	1.00
Final Sat.:	1600	3200	0	0	2482	718	0	0	0	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.18	0.12	0.00	0.00	0.28	0.28	0.00	0.00	0.00	0.13	0.32	0.18
Crit Moves:	****				****						****	

1625 Magnolia Avenue
MMF1701
Existing PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Myrtle Avenue/Evergreen Avenue - I-210 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.835
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	76	Level Of Service:	D

Street Name:	Myrtle Avenue						Evergreen Avenue - I-210 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	529	188	313	593	0	158	816	194	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	529	188	313	593	0	158	816	194	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	529	188	313	593	0	158	816	194	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	529	188	313	593	0	158	816	194	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	529	188	313	593	0	158	816	194	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.48	0.52	1.00	2.00	0.00	1.00	1.62	0.38	0.00	0.00	0.00
Final Sat.:	0	2361	839	1600	3200	0	1600	2585	615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.20	0.19	0.00	0.10	0.32	0.32	0.00	0.00	0.00
Crit Moves:		****		****				****				

1625 Magnolia Avenue
MMF1701
Existing PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Myrtle Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.875
Loss Time (sec):	30	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	113	Level Of Service:	D

Street Name:	Myrtle Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	94	434	46	44	618	164	145	471	267	66	313	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	94	434	46	44	618	164	145	471	267	66	313	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	94	434	46	44	618	164	145	471	267	66	313	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	94	434	46	44	618	164	145	471	267	66	313	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	94	434	46	44	618	164	145	471	267	66	313	28
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.58	0.42	1.00	1.28	0.72	1.00	1.84	0.16
Final Sat.:	1600	2893	307	1600	2529	671	1600	2042	1158	1600	2937	263
Capacity Analysis Module:												
Vol/Sat:	0.06	0.15	0.15	0.03	0.24	0.24	0.09	0.23	0.23	0.04	0.11	0.11
Crit Moves:	****			****			****			****		

1625 Magnolia Avenue
MMF1701
Existing PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Myrtle Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.757
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Street Name:	Myrtle Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	141	366	139	126	542	59	78	940	152	139	696	52
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	141	366	139	126	542	59	78	940	152	139	696	52
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	141	366	139	126	542	59	78	940	152	139	696	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	366	139	126	542	59	78	940	152	139	696	52
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	141	366	139	126	542	59	78	940	152	139	696	52
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.45	0.55	1.00	1.80	0.20	1.00	2.00	1.00	1.00	1.86	0.14
Final Sat.:	1600	2319	881	1600	2886	314	1600	3200	1600	1600	2978	222
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.16	0.08	0.19	0.19	0.05	0.29	0.10	0.09	0.23	0.23
Crit Moves:	****			****			****			****		

Intersection	
Intersection Delay, s/veh	14.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	128	146	72	30	281	0	0	311	10
Future Vol, veh/h	0	0	0	128	146	72	30	281	0	0	311	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	139	159	78	33	305	0	0	338	11
Number of Lanes	0	0	0	0	2	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	12.7	14.7	14.9
HCM LOS	B	B	B

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	10%	64%	0%	0%
Vol Thru, %	90%	36%	50%	97%
Vol Right, %	0%	0%	50%	3%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	311	201	145	321
LT Vol	30	128	0	0
Through Vol	281	73	73	311
RT Vol	0	0	72	10
Lane Flow Rate	338	218	158	349
Geometry Grp	2	7	7	2
Degree of Util (X)	0.525	0.407	0.264	0.537
Departure Headway (Hd)	5.593	6.705	6.028	5.541
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	642	537	596	649
Service Time	3.636	4.45	3.773	3.584
HCM Lane V/C Ratio	0.526	0.406	0.265	0.538
HCM Control Delay	14.7	14	10.9	14.9
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	3.1	2	1.1	3.2

Intersection	
Intersection Delay, s/veh	23.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	12	68	22	23	23	191	602	121	72	361	14
Future Vol, veh/h	7	12	68	22	23	23	191	602	121	72	361	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	13	74	24	25	25	208	654	132	78	392	15
Number of Lanes	0	1	0	0	1	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	10.9	11.1	30.5	14.4
HCM LOS	B	B	D	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	39%	0%	8%	32%	29%	0%
Vol Thru, %	61%	71%	14%	34%	71%	93%
Vol Right, %	0%	29%	78%	34%	0%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	492	422	87	68	253	195
LT Vol	191	0	7	22	72	0
Through Vol	301	301	12	23	181	181
RT Vol	0	121	68	23	0	14
Lane Flow Rate	535	459	95	74	274	211
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.888	0.711	0.17	0.141	0.498	0.372
Departure Headway (Hd)	5.981	5.581	6.487	6.873	6.534	6.338
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	604	647	552	521	552	567
Service Time	3.722	3.322	4.537	4.924	4.291	4.095
HCM Lane V/C Ratio	0.886	0.709	0.172	0.142	0.496	0.372
HCM Control Delay	38.7	20.9	10.9	11.1	15.7	12.8
HCM Lane LOS	E	C	B	B	C	B
HCM 95th-tile Q	10.5	5.9	0.6	0.5	2.8	1.7

1625 Magnolia Avenue
MMF1701
Existing Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Mayflower Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.696
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Street Name:	Mayflower Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	0 1	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	95	448	36	93	173	198	212	463	29	25	636	177
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	95	448	36	93	173	198	212	463	29	25	636	177
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	95	448	36	93	173	198	212	463	29	25	636	177
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	448	36	93	173	198	212	463	29	25	636	177
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	95	448	36	93	173	198	212	463	29	25	636	177
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.85	0.15	1.00	1.00	1.00	1.00	1.88	0.12	1.00	1.56	0.44
Final Sat.:	1600	2962	238	1600	1600	1600	1600	3011	189	1600	2503	697
Capacity Analysis Module:												
Vol/Sat:	0.06	0.15	0.15	0.06	0.11	0.12	0.13	0.15	0.15	0.02	0.25	0.25
Crit Moves:		****			****			****			****	

Intersection	
Int Delay, s/veh	2.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	207	9	15	52	21	57
Future Vol, veh/h	207	9	15	52	21	57
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	225	10	16	57	23	62

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	235	0	319	230
Stage 1	-	-	-	-	230	-
Stage 2	-	-	-	-	89	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1332	-	674	809
Stage 1	-	-	-	-	808	-
Stage 2	-	-	-	-	934	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1332	-	666	809
Mov Cap-2 Maneuver	-	-	-	-	666	-
Stage 1	-	-	-	-	798	-
Stage 2	-	-	-	-	934	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	765	-	-	1332	-
HCM Lane V/C Ratio	0.111	-	-	0.012	-
HCM Control Delay (s)	10.3	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0	-

1625 Magnolia Avenue
MMF1701
Existing Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Magnolia Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.722
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Street Name:	Magnolia Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	72	252	60	43	212	36	56	448	26	39	1077	91
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	72	252	60	43	212	36	56	448	26	39	1077	91
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	72	252	60	43	212	36	56	448	26	39	1077	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	72	252	60	43	212	36	56	448	26	39	1077	91
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	72	252	60	43	212	36	56	448	26	39	1077	91
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.81	0.19	1.00	0.85	0.15	1.00	1.89	0.11	1.00	1.84	0.16
Final Sat.:	1600	1292	308	1600	1368	232	1600	3024	176	1600	2951	249
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.19	0.03	0.15	0.16	0.04	0.15	0.15	0.02	0.37	0.36
Crit Moves:		****			****			****			****	

Intersection	
Intersection Delay, s/veh	19.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	188	22	0	0	0	38	288	88	119	254	22
Future Vol, veh/h	43	188	22	0	0	0	38	288	88	119	254	22
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	211	25	0	0	0	43	324	99	134	285	25
Number of Lanes	0	1	0	0	0	0	0	1	0	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	15.3	20.5	20.4
HCM LOS	C	C	C

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	9%	17%	30%
Vol Thru, %	70%	74%	64%
Vol Right, %	21%	9%	6%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	414	253	395
LT Vol	38	43	119
Through Vol	288	188	254
RT Vol	88	22	22
Lane Flow Rate	465	284	444
Geometry Grp	1	1	1
Degree of Util (X)	0.704	0.493	0.691
Departure Headway (Hd)	5.452	6.24	5.604
Convergence, Y/N	Yes	Yes	Yes
Cap	661	574	644
Service Time	3.516	4.308	3.668
HCM Lane V/C Ratio	0.703	0.495	0.689
HCM Control Delay	20.5	15.3	20.4
HCM Lane LOS	C	C	C
HCM 95th-tile Q	5.8	2.7	5.5

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	14	6	373	274	7
Future Vol, veh/h	50	14	6	373	274	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	15	7	405	298	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	721	302	306	0	-	0
Stage 1	302	-	-	-	-	-
Stage 2	419	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	394	738	1255	-	-	-
Stage 1	750	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	391	738	1255	-	-	-
Mov Cap-2 Maneuver	391	-	-	-	-	-
Stage 1	745	-	-	-	-	-
Stage 2	664	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.8	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1255	-	436	-	-
HCM Lane V/C Ratio	0.005	-	0.16	-	-
HCM Control Delay (s)	7.9	0	14.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.6	-	-

1625 Magnolia Avenue
MMF1701
Existing Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Magnolia Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.636
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Street Name:	Magnolia Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1	0	1	1	0	1	0
Volume Module:												
Base Vol:	2	2	3	207	5	115	175	434	3	6	714	213
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	2	3	207	5	115	175	434	3	6	714	213
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	2	3	207	5	115	175	434	3	6	714	213
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	2	3	207	5	115	175	434	3	6	714	213
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	2	3	207	5	115	175	434	3	6	714	213
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.28	0.29	0.43	0.98	0.02	1.00	1.00	1.99	0.01	1.00	1.54	0.46
Final Sat.:	457	457	686	1562	38	1600	1600	3178	22	1600	2465	735
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.13	0.07	0.11	0.14	0.14	0.00	0.29	0.29
Crit Moves:		****			****			****			****	

1625 Magnolia Avenue
MMF1701
Existing Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Myrtle Avenue/Central Avenue - I-210 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.788
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	C

Street Name:	Myrtle Avenue						Central Avenue - I-210 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	1 0	1 0	1
Volume Module:												
Base Vol:	242	600	0	0	474	105	0	0	0	222	569	328
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	242	600	0	0	474	105	0	0	0	222	569	328
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	242	600	0	0	474	105	0	0	0	222	569	328
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	242	600	0	0	474	105	0	0	0	222	569	328
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	242	600	0	0	474	105	0	0	0	222	569	328
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.64	0.36	0.00	0.00	0.00	1.00	1.00	1.00
Final Sat.:	1600	3200	0	0	2620	580	0	0	0	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.15	0.19	0.00	0.00	0.18	0.18	0.00	0.00	0.00	0.14	0.36	0.21
Crit Moves:	****				****						****	

1625 Magnolia Avenue
MMF1701
Existing Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Myrtle Avenue/Evergreen Avenue - I-210 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.680
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Street Name:	Myrtle Avenue						Evergreen Avenue - I-210 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	480	146	247	446	0	353	471	266	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	480	146	247	446	0	353	471	266	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	480	146	247	446	0	353	471	266	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	480	146	247	446	0	353	471	266	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	480	146	247	446	0	353	471	266	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.53	0.47	1.00	2.00	0.00	1.00	1.28	0.72	0.00	0.00	0.00
Final Sat.:	0	2454	746	1600	3200	0	1600	2045	1155	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.15	0.14	0.00	0.22	0.23	0.23	0.00	0.00	0.00
Crit Moves:		****		****					****			

1625 Magnolia Avenue
MMF1701
Existing Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Myrtle Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.777
Loss Time (sec):	30	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	92	Level Of Service:	C

Street Name:	Myrtle Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	131	451	48	32	523	156	122	295	122	28	287	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	131	451	48	32	523	156	122	295	122	28	287	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	131	451	48	32	523	156	122	295	122	28	287	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	131	451	48	32	523	156	122	295	122	28	287	55
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	131	451	48	32	523	156	122	295	122	28	287	55
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.54	0.46	1.00	1.41	0.59	1.00	1.68	0.32
Final Sat.:	1600	2892	308	1600	2465	735	1600	2264	936	1600	2685	515
Capacity Analysis Module:												
Vol/Sat:	0.08	0.16	0.16	0.02	0.21	0.21	0.08	0.13	0.13	0.02	0.11	0.11
Crit Moves:	****			****			****			****		

1625 Magnolia Avenue
MMF1701
Existing Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Myrtle Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.757
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Street Name:	Myrtle Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	197	560	108	37	291	27	42	398	112	113	1202	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	197	560	108	37	291	27	42	398	112	113	1202	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	197	560	108	37	291	27	42	398	112	113	1202	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	197	560	108	37	291	27	42	398	112	113	1202	74
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	197	560	108	37	291	27	42	398	112	113	1202	74
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.68	0.32	1.00	1.83	0.17	1.00	2.00	1.00	1.00	1.88	0.12
Final Sat.:	1600	2683	517	1600	2928	272	1600	3200	1600	1600	3014	186
Capacity Analysis Module:												
Vol/Sat:	0.12	0.21	0.21	0.02	0.10	0.10	0.03	0.12	0.07	0.07	0.40	0.40
Crit Moves:		****			****			****			****	

Intersection	
Intersection Delay, s/veh	17.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	99	260	36	24	305	0	0	289	9
Future Vol, veh/h	0	0	0	99	260	36	24	305	0	0	289	9
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	119	313	43	29	367	0	0	348	11
Number of Lanes	0	0	0	0	2	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	15.3	19.5	17.4
HCM LOS	C	C	C

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	7%	43%	0%	0%
Vol Thru, %	93%	57%	78%	97%
Vol Right, %	0%	0%	22%	3%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	329	229	166	298
LT Vol	24	99	0	0
Through Vol	305	130	130	289
RT Vol	0	0	36	9
Lane Flow Rate	396	276	200	359
Geometry Grp	2	7	7	2
Degree of Util (X)	0.652	0.527	0.361	0.594
Departure Headway (Hd)	5.926	6.872	6.497	5.958
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	606	524	552	603
Service Time	3.991	4.635	4.26	4.024
HCM Lane V/C Ratio	0.653	0.527	0.362	0.595
HCM Control Delay	19.5	17.1	12.9	17.4
HCM Lane LOS	C	C	B	C
HCM 95th-tile Q	4.8	3	1.6	3.9

Intersection	
Intersection Delay, s/veh	22.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	32	114	25	5	16	50	492	60	144	658	16
Future Vol, veh/h	3	32	114	25	5	16	50	492	60	144	658	16
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	33	119	26	5	17	52	513	63	150	685	17
Number of Lanes	0	1	0	0	1	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	12.1	11.2	16.9	28.4
HCM LOS	B	B	C	D

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	17%	0%	2%	54%	30%	0%
Vol Thru, %	83%	80%	21%	11%	70%	95%
Vol Right, %	0%	20%	77%	35%	0%	5%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	296	306	149	46	473	345
LT Vol	50	0	3	25	144	0
Through Vol	246	246	32	5	329	329
RT Vol	0	60	114	16	0	16
Lane Flow Rate	308	319	155	48	493	359
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.556	0.554	0.281	0.097	0.858	0.607
Departure Headway (Hd)	6.488	6.262	6.51	7.288	6.27	6.082
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	552	574	549	489	576	593
Service Time	4.26	4.034	4.571	5.368	4.033	3.845
HCM Lane V/C Ratio	0.558	0.556	0.282	0.098	0.856	0.605
HCM Control Delay	17.2	16.6	12.1	11.2	36	17.9
HCM Lane LOS	C	C	B	B	E	C
HCM 95th-tile Q	3.4	3.4	1.1	0.3	9.4	4.1

1625 Magnolia Avenue
MMF1701
Existing Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Mayflower Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.659
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Street Name:	Mayflower Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	0 1	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	38	231	34	150	320	251	221	770	47	37	509	121
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	38	231	34	150	320	251	221	770	47	37	509	121
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	38	231	34	150	320	251	221	770	47	37	509	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	231	34	150	320	251	221	770	47	37	509	121
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	38	231	34	150	320	251	221	770	47	37	509	121
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	1.00	1.00	1.00	1.00	1.88	0.12	1.00	1.62	0.38
Final Sat.:	1600	2789	411	1600	1600	1600	1600	3016	184	1600	2585	615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.08	0.08	0.09	0.20	0.16	0.14	0.26	0.26	0.02	0.20	0.20
Crit Moves:	****			****			****			****		

Intersection	
Int Delay, s/veh	2.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	196	35	56	31	12	32
Future Vol, veh/h	196	35	56	31	12	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	213	38	61	34	13	35

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	251	0	388	232
Stage 1	-	-	-	-	232	-
Stage 2	-	-	-	-	156	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1314	-	616	807
Stage 1	-	-	-	-	807	-
Stage 2	-	-	-	-	872	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1314	-	587	807
Mov Cap-2 Maneuver	-	-	-	-	587	-
Stage 1	-	-	-	-	769	-
Stage 2	-	-	-	-	872	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5.1	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	732	-	-	1314	-
HCM Lane V/C Ratio	0.065	-	-	0.046	-
HCM Control Delay (s)	10.3	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

1625 Magnolia Avenue
MMF1701
Existing Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Magnolia Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.754
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Street Name:	Magnolia Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	68	201	83	94	224	58	77	1065	42	115	795	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	68	201	83	94	224	58	77	1065	42	115	795	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	68	201	83	94	224	58	77	1065	42	115	795	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	201	83	94	224	58	77	1065	42	115	795	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	68	201	83	94	224	58	77	1065	42	115	795	39
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.71	0.29	1.00	0.79	0.21	1.00	1.92	0.08	1.00	1.91	0.09
Final Sat.:	1600	1132	468	1600	1271	329	1600	3079	121	1600	3050	150
Capacity Analysis Module:												
Vol/Sat:	0.04	0.18	0.18	0.06	0.18	0.18	0.05	0.35	0.35	0.07	0.26	0.26
Crit Moves:		****		****				****		****		

Intersection	
Intersection Delay, s/veh	25.8
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	180	23	0	0	0	39	304	91	64	373	38
Future Vol, veh/h	37	180	23	0	0	0	39	304	91	64	373	38
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	42	205	26	0	0	0	44	345	103	73	424	43
Number of Lanes	0	1	0	0	0	0	0	1	0	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	15.9	24.9	31.6
HCM LOS	C	C	D

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	9%	15%	13%
Vol Thru, %	70%	75%	79%
Vol Right, %	21%	10%	8%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	434	240	475
LT Vol	39	37	64
Through Vol	304	180	373
RT Vol	91	23	38
Lane Flow Rate	493	273	540
Geometry Grp	1	1	1
Degree of Util (X)	0.767	0.494	0.842
Departure Headway (Hd)	5.6	6.522	5.614
Convergence, Y/N	Yes	Yes	Yes
Cap	641	548	642
Service Time	3.678	4.608	3.688
HCM Lane V/C Ratio	0.769	0.498	0.841
HCM Control Delay	24.9	15.9	31.6
HCM Lane LOS	C	C	D
HCM 95th-tile Q	7.1	2.7	9.2

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	28	8	21	414	370	28
Future Vol, veh/h	28	8	21	414	370	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	9	23	450	402	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	913	417	432	0	-	0
Stage 1	417	-	-	-	-	-
Stage 2	496	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	304	636	1128	-	-	-
Stage 1	665	-	-	-	-	-
Stage 2	612	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	296	636	1128	-	-	-
Mov Cap-2 Maneuver	296	-	-	-	-	-
Stage 1	647	-	-	-	-	-
Stage 2	612	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.1	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1128	-	336	-	-
HCM Lane V/C Ratio	0.02	-	0.116	-	-
HCM Control Delay (s)	8.3	0	17.1	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

1625 Magnolia Avenue
MMF1701
Existing Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Magnolia Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.598
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Street Name:	Magnolia Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1	0	1	1	0	1	0
Volume Module:												
Base Vol:	6	4	4	198	1	186	249	710	0	2	522	149
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	4	4	198	1	186	249	710	0	2	522	149
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	6	4	4	198	1	186	249	710	0	2	522	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	4	4	198	1	186	249	710	0	2	522	149
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	6	4	4	198	1	186	249	710	0	2	522	149
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.43	0.29	0.28	0.99	0.01	1.00	1.00	2.00	0.00	1.00	1.56	0.44
Final Sat.:	686	457	457	1592	8	1600	1600	3200	0	1600	2489	711
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.12	0.12	0.12	0.16	0.22	0.00	0.00	0.21	0.21
Crit Moves:	****			****			****				****	

1625 Magnolia Avenue
MMF1701
Existing Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Myrtle Avenue/Central Avenue - I-210 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.898
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	99	Level Of Service:	D

Street Name:	Myrtle Avenue						Central Avenue - I-210 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	1 0	1 0	1
Volume Module:												
Base Vol:	293	393	0	0	691	212	0	0	0	202	533	288
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	293	393	0	0	691	212	0	0	0	202	533	288
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	293	393	0	0	691	212	0	0	0	202	533	288
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	293	393	0	0	691	212	0	0	0	202	533	288
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	293	393	0	0	691	212	0	0	0	202	533	288
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.53	0.47	0.00	0.00	0.00	1.00	1.00	1.00
Final Sat.:	1600	3200	0	0	2449	751	0	0	0	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.18	0.12	0.00	0.00	0.28	0.28	0.00	0.00	0.00	0.13	0.33	0.18
Crit Moves:	****				****						****	

1625 Magnolia Avenue
MMF1701
Existing Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Myrtle Avenue/Evergreen Avenue - I-210 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.849
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	80	Level Of Service:	D

Street Name:	Myrtle Avenue						Evergreen Avenue - I-210 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	529	188	313	593	0	161	828	227	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	529	188	313	593	0	161	828	227	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	529	188	313	593	0	161	828	227	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	529	188	313	593	0	161	828	227	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	529	188	313	593	0	161	828	227	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.48	0.52	1.00	2.00	0.00	1.00	1.57	0.43	0.00	0.00	0.00
Final Sat.:	0	2361	839	1600	3200	0	1600	2511	689	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.20	0.19	0.00	0.10	0.33	0.33	0.00	0.00	0.00
Crit Moves:		****		****				****				

1625 Magnolia Avenue
MMF1701
Existing Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Myrtle Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.881
Loss Time (sec):	30	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	115	Level Of Service:	D

Street Name:	Myrtle Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	101	434	46	44	618	164	145	474	270	66	320	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	101	434	46	44	618	164	145	474	270	66	320	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	101	434	46	44	618	164	145	474	270	66	320	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	101	434	46	44	618	164	145	474	270	66	320	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	101	434	46	44	618	164	145	474	270	66	320	28
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.58	0.42	1.00	1.27	0.73	1.00	1.84	0.16
Final Sat.:	1600	2893	307	1600	2529	671	1600	2039	1161	1600	2943	257
Capacity Analysis Module:												
Vol/Sat:	0.06	0.15	0.15	0.03	0.24	0.24	0.09	0.23	0.23	0.04	0.11	0.11
Crit Moves:	****			****			****			****		

1625 Magnolia Avenue
MMF1701
Existing Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Myrtle Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.757
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Street Name:	Myrtle Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	141	366	139	126	542	59	78	943	152	139	703	52
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	141	366	139	126	542	59	78	943	152	139	703	52
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	141	366	139	126	542	59	78	943	152	139	703	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	366	139	126	542	59	78	943	152	139	703	52
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	141	366	139	126	542	59	78	943	152	139	703	52
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.45	0.55	1.00	1.80	0.20	1.00	2.00	1.00	1.00	1.86	0.14
Final Sat.:	1600	2319	881	1600	2886	314	1600	3200	1600	1600	2980	220
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.16	0.08	0.19	0.19	0.05	0.29	0.10	0.09	0.24	0.24
Crit Moves:	****			****			****			****		

Intersection	
Intersection Delay, s/veh	16
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	154	146	72	30	312	0	0	337	10
Future Vol, veh/h	0	0	0	154	146	72	30	312	0	0	337	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	167	159	78	33	339	0	0	366	11
Number of Lanes	0	0	0	0	2	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	14	17	17.1
HCM LOS	B	C	C

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	9%	68%	0%	0%
Vol Thru, %	91%	32%	50%	97%
Vol Right, %	0%	0%	50%	3%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	342	227	145	347
LT Vol	30	154	0	0
Through Vol	312	73	73	337
RT Vol	0	0	72	10
Lane Flow Rate	372	247	158	377
Geometry Grp	2	7	7	2
Degree of Util (X)	0.596	0.475	0.273	0.6
Departure Headway (Hd)	5.767	6.925	6.226	5.726
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	625	518	575	626
Service Time	3.825	4.683	3.983	3.785
HCM Lane V/C Ratio	0.595	0.477	0.275	0.602
HCM Control Delay	17	15.8	11.3	17.1
HCM Lane LOS	C	C	B	C
HCM 95th-tile Q	3.9	2.5	1.1	4

Intersection	
Intersection Delay, s/veh	23.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	12	69	15	23	10	194	612	122	71	367	14
Future Vol, veh/h	7	12	69	15	23	10	194	612	122	71	367	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	13	75	16	25	11	211	665	133	77	399	15
Number of Lanes	0	1	0	0	1	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	10.8	10.8	30.2	14.2
HCM LOS	B	B	D	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	39%	0%	8%	31%	28%	0%
Vol Thru, %	61%	71%	14%	48%	72%	93%
Vol Right, %	0%	29%	78%	21%	0%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	500	428	88	48	255	198
LT Vol	194	0	7	15	71	0
Through Vol	306	306	12	23	184	184
RT Vol	0	122	69	10	0	14
Lane Flow Rate	543	465	96	52	277	215
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.89	0.71	0.17	0.101	0.496	0.373
Departure Headway (Hd)	5.894	5.496	6.403	6.954	6.453	6.261
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	614	656	560	515	559	573
Service Time	3.631	3.233	4.446	5.001	4.205	4.013
HCM Lane V/C Ratio	0.884	0.709	0.171	0.101	0.496	0.375
HCM Control Delay	38.5	20.6	10.8	10.8	15.4	12.7
HCM Lane LOS	E	C	B	B	C	B
HCM 95th-tile Q	10.7	5.9	0.6	0.3	2.7	1.7

1625 Magnolia Avenue
MMF1701
Cumulative AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Mayflower Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.713
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Street Name:	Mayflower Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	0 1	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	97	455	37	95	176	194	214	486	29	25	673	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	97	455	37	95	176	194	214	486	29	25	673	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	97	455	37	95	176	194	214	486	29	25	673	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	97	455	37	95	176	194	214	486	29	25	673	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	97	455	37	95	176	194	214	486	29	25	673	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.85	0.15	1.00	1.00	1.00	1.00	1.89	0.11	1.00	1.58	0.42
Final Sat.:	1600	2959	241	1600	1600	1600	1600	3020	180	1600	2525	675
Capacity Analysis Module:												
Vol/Sat:	0.06	0.15	0.15	0.06	0.11	0.12	0.13	0.16	0.16	0.02	0.27	0.27
Crit Moves:		****			****			****			****	

1625 Magnolia Avenue
MMF1701
Cumulative AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Magnolia Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.742
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	C

Street Name:	Magnolia Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	0	1 0	1	0
Volume Module:												
Base Vol:	69	264	58	44	220	37	57	486	31	40	1116	92
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	69	264	58	44	220	37	57	486	31	40	1116	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	69	264	58	44	220	37	57	486	31	40	1116	92
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	69	264	58	44	220	37	57	486	31	40	1116	92
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	69	264	58	44	220	37	57	486	31	40	1116	92
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.82	0.18	1.00	0.86	0.14	1.00	1.88	0.12	1.00	1.85	0.15
Final Sat.:	1600	1312	288	1600	1370	230	1600	3008	192	1600	2956	244
Capacity Analysis Module:												
Vol/Sat:	0.04	0.20	0.20	0.03	0.16	0.16	0.04	0.16	0.16	0.03	0.38	0.38
Crit Moves:	****			****			****			****		

Intersection	
Intersection Delay, s/veh	19.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕						↕			↕	
Traffic Vol, veh/h	17	165	22	0	0	0	37	309	106	121	269	20
Future Vol, veh/h	17	165	22	0	0	0	37	309	106	121	269	20
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	185	25	0	0	0	42	347	119	136	302	22
Number of Lanes	0	1	0	0	0	0	0	1	0	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	13.5	21.8	20.1
HCM LOS	B	C	C

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	8%	8%	30%
Vol Thru, %	68%	81%	66%
Vol Right, %	23%	11%	5%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	452	204	410
LT Vol	37	17	121
Through Vol	309	165	269
RT Vol	106	22	20
Lane Flow Rate	508	229	461
Geometry Grp	1	1	1
Degree of Util (X)	0.74	0.4	0.697
Departure Headway (Hd)	5.246	6.276	5.444
Convergence, Y/N	Yes	Yes	Yes
Cap	686	571	663
Service Time	3.296	4.34	3.496
HCM Lane V/C Ratio	0.741	0.401	0.695
HCM Control Delay	21.8	13.5	20.1
HCM Lane LOS	C	B	C
HCM 95th-tile Q	6.6	1.9	5.6

1625 Magnolia Avenue
MMF1701
Cumulative AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Magnolia Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.663
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Street Name:	Magnolia Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1	0	1	1	0	1	0
Volume Module:												
Base Vol:	2	2	3	196	5	142	195	440	3	6	732	263
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	2	3	196	5	142	195	440	3	6	732	263
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	2	3	196	5	142	195	440	3	6	732	263
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	2	3	196	5	142	195	440	3	6	732	263
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	2	3	196	5	142	195	440	3	6	732	263
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.28	0.29	0.43	0.98	0.02	1.00	1.00	1.99	0.01	1.00	1.47	0.53
Final Sat.:	457	457	686	1560	40	1600	1600	3178	22	1600	2354	846
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.13	0.09	0.12	0.14	0.14	0.00	0.31	0.31
Crit Moves:		****			****			****			****	

1625 Magnolia Avenue
MMF1701
Cumulative AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Myrtle Avenue/Central Avenue - I-210 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.882
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	92	Level Of Service:	D

Street Name:	Myrtle Avenue						Central Avenue - I-210 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	1 0	1 0	1
Volume Module:												
Base Vol:	360	684	0	0	531	98	0	0	0	255	576	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	360	684	0	0	531	98	0	0	0	255	576	340
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	360	684	0	0	531	98	0	0	0	255	576	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	360	684	0	0	531	98	0	0	0	255	576	340
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	360	684	0	0	531	98	0	0	0	255	576	340
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.69	0.31	0.00	0.00	0.00	1.00	1.00	1.00
Final Sat.:	1600	3200	0	0	2701	499	0	0	0	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.23	0.21	0.00	0.00	0.20	0.20	0.00	0.00	0.00	0.16	0.36	0.21
Crit Moves:	****				****						****	

1625 Magnolia Avenue
MMF1701
Cumulative AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Myrtle Avenue/Evergreen Avenue - I-210 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.765
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Street Name:	Myrtle Avenue						Evergreen Avenue - I-210 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	630	197	256	527	0	371	477	311	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	630	197	256	527	0	371	477	311	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	630	197	256	527	0	371	477	311	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	630	197	256	527	0	371	477	311	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	630	197	256	527	0	371	477	311	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.52	0.48	1.00	2.00	0.00	1.00	1.21	0.79	0.00	0.00	0.00
Final Sat.:	0	2438	762	1600	3200	0	1600	1937	1263	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.16	0.16	0.00	0.23	0.25	0.25	0.00	0.00	0.00
Crit Moves:		****		****					****			

1625 Magnolia Avenue
MMF1701
Cumulative AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Myrtle Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.810
Loss Time (sec):	30	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	98	Level Of Service:	D

Street Name:	Myrtle Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	131	474	49	56	555	156	149	297	121	28	290	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	131	474	49	56	555	156	149	297	121	28	290	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	131	474	49	56	555	156	149	297	121	28	290	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	131	474	49	56	555	156	149	297	121	28	290	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	131	474	49	56	555	156	149	297	121	28	290	72
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.56	0.44	1.00	1.42	0.58	1.00	1.60	0.40
Final Sat.:	1600	2900	300	1600	2498	702	1600	2274	926	1600	2564	636
Capacity Analysis Module:												
Vol/Sat:	0.08	0.16	0.16	0.04	0.22	0.22	0.09	0.13	0.13	0.02	0.11	0.11
Crit Moves:	****				****		****				****	

1625 Magnolia Avenue
MMF1701
Cumulative AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Myrtle Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.788
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	C

Street Name:	Myrtle Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	223	599	137	38	306	27	45	412	120	126	1224	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	223	599	137	38	306	27	45	412	120	126	1224	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	223	599	137	38	306	27	45	412	120	126	1224	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	223	599	137	38	306	27	45	412	120	126	1224	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	223	599	137	38	306	27	45	412	120	126	1224	75
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.63	0.37	1.00	1.84	0.16	1.00	2.00	1.00	1.00	1.88	0.12
Final Sat.:	1600	2604	596	1600	2941	259	1600	3200	1600	1600	3015	185
Capacity Analysis Module:												
Vol/Sat:	0.14	0.23	0.23	0.02	0.10	0.10	0.03	0.13	0.08	0.08	0.41	0.41
Crit Moves:		****			****			****			****	

Intersection	
Intersection Delay, s/veh	17.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	99	264	37	24	299	0	0	305	9
Future Vol, veh/h	0	0	0	99	264	37	24	299	0	0	305	9
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	119	318	45	29	360	0	0	367	11
Number of Lanes	0	0	0	0	2	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	15.6	19.5	18.6
HCM LOS	C	C	C

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	7%	43%	0%	0%
Vol Thru, %	93%	57%	78%	97%
Vol Right, %	0%	0%	22%	3%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	323	231	169	314
LT Vol	24	99	0	0
Through Vol	299	132	132	305
RT Vol	0	0	37	9
Lane Flow Rate	389	278	204	378
Geometry Grp	2	7	7	2
Degree of Util (X)	0.647	0.534	0.37	0.627
Departure Headway (Hd)	5.982	6.91	6.535	5.971
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	599	520	548	602
Service Time	4.049	4.676	4.301	4.039
HCM Lane V/C Ratio	0.649	0.535	0.372	0.628
HCM Control Delay	19.5	17.4	13.1	18.6
HCM Lane LOS	C	C	B	C
HCM 95th-tile Q	4.7	3.1	1.7	4.4

Intersection	
Intersection Delay, s/veh	20.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	33	116	22	5	10	51	500	54	120	669	16
Future Vol, veh/h	3	33	116	22	5	10	51	500	54	120	669	16
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	34	121	23	5	10	53	521	56	125	697	17
Number of Lanes	0	1	0	0	1	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	12.1	11	16.7	25.5
HCM LOS	B	B	C	D

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	17%	0%	2%	59%	26%	0%
Vol Thru, %	83%	82%	22%	14%	74%	95%
Vol Right, %	0%	18%	76%	27%	0%	5%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	301	304	152	37	455	351
LT Vol	51	0	3	22	120	0
Through Vol	250	250	33	5	335	335
RT Vol	0	54	116	10	0	16
Lane Flow Rate	314	317	158	39	473	365
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.56	0.547	0.284	0.078	0.818	0.614
Departure Headway (Hd)	6.432	6.22	6.45	7.327	6.218	6.051
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	558	576	556	487	582	595
Service Time	4.198	3.986	4.504	5.406	3.975	3.809
HCM Lane V/C Ratio	0.563	0.55	0.284	0.08	0.813	0.613
HCM Control Delay	17.1	16.3	12.1	11	31.2	18
HCM Lane LOS	C	C	B	B	D	C
HCM 95th-tile Q	3.4	3.3	1.2	0.3	8.3	4.2

1625 Magnolia Avenue
MMF1701
Cumulative PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Mayflower Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.668
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Street Name:	Mayflower Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	0 1	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	39	235	35	152	325	252	218	806	48	38	530	123
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	39	235	35	152	325	252	218	806	48	38	530	123
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	235	35	152	325	252	218	806	48	38	530	123
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	235	35	152	325	252	218	806	48	38	530	123
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	235	35	152	325	252	218	806	48	38	530	123
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	1.00	1.00	1.00	1.00	1.89	0.11	1.00	1.62	0.38
Final Sat.:	1600	2785	415	1600	1600	1600	1600	3020	180	1600	2597	603
Capacity Analysis Module:												
Vol/Sat:	0.02	0.08	0.08	0.10	0.20	0.16	0.14	0.27	0.27	0.02	0.20	0.20
Crit Moves:	****			****			****			****		

1625 Magnolia Avenue
MMF1701
Cumulative PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Magnolia Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.775
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	C

Street Name:	Magnolia Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	69	207	83	96	232	59	78	1109	50	114	836	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	69	207	83	96	232	59	78	1109	50	114	836	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	69	207	83	96	232	59	78	1109	50	114	836	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	69	207	83	96	232	59	78	1109	50	114	836	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	69	207	83	96	232	59	78	1109	50	114	836	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.71	0.29	1.00	0.80	0.20	1.00	1.91	0.09	1.00	1.91	0.09
Final Sat.:	1600	1142	458	1600	1276	324	1600	3062	138	1600	3054	146
Capacity Analysis Module:												
Vol/Sat:	0.04	0.18	0.18	0.06	0.18	0.18	0.05	0.36	0.36	0.07	0.27	0.27
Crit Moves:		****		****				****		****		

Intersection	
Intersection Delay, s/veh	22.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕						↕			↕	
Traffic Vol, veh/h	25	171	23	0	0	0	13	312	91	65	390	12
Future Vol, veh/h	25	171	23	0	0	0	13	312	91	65	390	12
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	194	26	0	0	0	15	355	103	74	443	14
Number of Lanes	0	1	0	0	0	0	0	1	0	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	14.5	21.1	27.8
HCM LOS	B	C	D

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	3%	11%	14%
Vol Thru, %	75%	78%	84%
Vol Right, %	22%	11%	3%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	416	219	467
LT Vol	13	25	65
Through Vol	312	171	390
RT Vol	91	23	12
Lane Flow Rate	473	249	531
Geometry Grp	1	1	1
Degree of Util (X)	0.715	0.442	0.809
Departure Headway (Hd)	5.443	6.4	5.489
Convergence, Y/N	Yes	Yes	Yes
Cap	662	560	658
Service Time	3.505	4.475	3.549
HCM Lane V/C Ratio	0.715	0.445	0.807
HCM Control Delay	21.1	14.5	27.8
HCM Lane LOS	C	B	D
HCM 95th-tile Q	6	2.2	8.3

1625 Magnolia Avenue
MMF1701
Cumulative PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Magnolia Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.623
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Street Name:	Magnolia Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	1	0
Volume Module:												
Base Vol:	6	4	4	198	1	203	275	727	0	2	532	158
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	4	4	198	1	203	275	727	0	2	532	158
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	6	4	4	198	1	203	275	727	0	2	532	158
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	4	4	198	1	203	275	727	0	2	532	158
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	6	4	4	198	1	203	275	727	0	2	532	158
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.43	0.29	0.28	0.99	0.01	1.00	1.00	2.00	0.00	1.00	1.54	0.46
Final Sat.:	686	457	457	1592	8	1600	1600	3200	0	1600	2467	733
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.12	0.12	0.13	0.17	0.23	0.00	0.00	0.22	0.22
Crit Moves:	****					****	****				****	

1625 Magnolia Avenue
MMF1701
Cumulative PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Myrtle Avenue/Central Avenue - I-210 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.945
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	129	Level Of Service:	E

Street Name:	Myrtle Avenue						Central Avenue - I-210 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	1 0	1 0	1
Volume Module:												
Base Vol:	354	435	0	0	758	207	0	0	0	272	515	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	354	435	0	0	758	207	0	0	0	272	515	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	354	435	0	0	758	207	0	0	0	272	515	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	354	435	0	0	758	207	0	0	0	272	515	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	354	435	0	0	758	207	0	0	0	272	515	300
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.57	0.43	0.00	0.00	0.00	1.00	1.00	1.00
Final Sat.:	1600	3200	0	0	2514	686	0	0	0	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.22	0.14	0.00	0.00	0.30	0.30	0.00	0.00	0.00	0.17	0.32	0.19
Crit Moves:	****				****						****	

1625 Magnolia Avenue
MMF1701
Cumulative PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Myrtle Avenue/Evergreen Avenue - I-210 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.923
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	113	Level Of Service:	E

Street Name:	Myrtle Avenue						Evergreen Avenue - I-210 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	612	216	324	727	0	165	839	319	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	612	216	324	727	0	165	839	319	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	612	216	324	727	0	165	839	319	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	612	216	324	727	0	165	839	319	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	612	216	324	727	0	165	839	319	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.48	0.52	1.00	2.00	0.00	1.00	1.45	0.55	0.00	0.00	0.00
Final Sat.:	0	2365	835	1600	3200	0	1600	2318	882	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.20	0.23	0.00	0.10	0.36	0.36	0.00	0.00	0.00
Crit Moves:		****		****					****			

1625 Magnolia Avenue
MMF1701
Cumulative PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Myrtle Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.910
Loss Time (sec):	30	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	123	Level Of Service:	E

Street Name:	Myrtle Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	99	461	47	58	641	230	152	479	271	67	321	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	99	461	47	58	641	230	152	479	271	67	321	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	99	461	47	58	641	230	152	479	271	67	321	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	99	461	47	58	641	230	152	479	271	67	321	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	99	461	47	58	641	230	152	479	271	67	321	48
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.47	0.53	1.00	1.28	0.72	1.00	1.74	0.26
Final Sat.:	1600	2904	296	1600	2355	845	1600	2044	1156	1600	2784	416
Capacity Analysis Module:												
Vol/Sat:	0.06	0.16	0.16	0.04	0.27	0.27	0.10	0.23	0.23	0.04	0.12	0.12
Crit Moves:	****			****			****			****		

1625 Magnolia Avenue
MMF1701
Cumulative PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Myrtle Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.801
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Street Name:	Myrtle Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	162	387	154	128	569	60	82	965	164	162	720	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	162	387	154	128	569	60	82	965	164	162	720	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	162	387	154	128	569	60	82	965	164	162	720	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	162	387	154	128	569	60	82	965	164	162	720	53
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	162	387	154	128	569	60	82	965	164	162	720	53
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.43	0.57	1.00	1.81	0.19	1.00	2.00	1.00	1.00	1.86	0.14
Final Sat.:	1600	2289	911	1600	2895	305	1600	3200	1600	1600	2981	219
Capacity Analysis Module:												
Vol/Sat:	0.10	0.17	0.17	0.08	0.20	0.20	0.05	0.30	0.10	0.10	0.24	0.24
Crit Moves:	****			****			****			****		

Intersection	
Intersection Delay, s/veh	15.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	130	148	73	30	308	0	0	353	10
Future Vol, veh/h	0	0	0	130	148	73	30	308	0	0	353	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	141	161	79	33	335	0	0	384	11
Number of Lanes	0	0	0	0	2	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	13.3	16.6	17.5
HCM LOS	B	C	C

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	9%	64%	0%	0%
Vol Thru, %	91%	36%	50%	97%
Vol Right, %	0%	0%	50%	3%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	338	204	147	363
LT Vol	30	130	0	0
Through Vol	308	74	74	353
RT Vol	0	0	73	10
Lane Flow Rate	367	222	160	395
Geometry Grp	2	7	7	2
Degree of Util (X)	0.584	0.426	0.277	0.619
Departure Headway (Hd)	5.718	6.917	6.238	5.645
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	628	519	574	639
Service Time	3.772	4.673	3.994	3.698
HCM Lane V/C Ratio	0.584	0.428	0.279	0.618
HCM Control Delay	16.6	14.7	11.4	17.5
HCM Lane LOS	C	B	B	C
HCM 95th-tile Q	3.8	2.1	1.1	4.3

Intersection	
Intersection Delay, s/veh	25.1
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	12	69	22	23	23	194	612	123	73	367	14
Future Vol, veh/h	7	12	69	22	23	23	194	612	123	73	367	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	13	75	24	25	25	211	665	134	79	399	15
Number of Lanes	0	1	0	0	1	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	10.9	11.1	32.5	14.7
HCM LOS	B	B	D	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	39%	0%	8%	32%	28%	0%
Vol Thru, %	61%	71%	14%	34%	72%	93%
Vol Right, %	0%	29%	78%	34%	0%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	500	429	88	68	257	198
LT Vol	194	0	7	22	73	0
Through Vol	306	306	12	23	184	184
RT Vol	0	123	69	23	0	14
Lane Flow Rate	543	466	96	74	279	215
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.906	0.726	0.173	0.142	0.509	0.38
Departure Headway (Hd)	6.001	5.602	6.514	6.904	6.566	6.371
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	603	644	550	518	546	562
Service Time	3.746	3.347	4.564	4.959	4.328	4.133
HCM Lane V/C Ratio	0.9	0.724	0.175	0.143	0.511	0.383
HCM Control Delay	41.6	21.8	10.9	11.1	16	13
HCM Lane LOS	E	C	B	B	C	B
HCM 95th-tile Q	11.1	6.2	0.6	0.5	2.9	1.8

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Mayflower Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.714
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Street Name:	Mayflower Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	0 1	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	97	455	37	95	176	201	215	486	29	25	673	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	97	455	37	95	176	201	215	486	29	25	673	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	97	455	37	95	176	201	215	486	29	25	673	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	97	455	37	95	176	201	215	486	29	25	673	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	97	455	37	95	176	201	215	486	29	25	673	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.85	0.15	1.00	1.00	1.00	1.00	1.89	0.11	1.00	1.58	0.42
Final Sat.:	1600	2959	241	1600	1600	1600	1600	3020	180	1600	2525	675
Capacity Analysis Module:												
Vol/Sat:	0.06	0.15	0.15	0.06	0.11	0.13	0.13	0.16	0.16	0.02	0.27	0.27
Crit Moves:		****			****			****			****	

Intersection	
Int Delay, s/veh	2.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	210	9	15	53	21	57
Future Vol, veh/h	210	9	15	53	21	57
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	228	10	16	58	23	62

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	238	0	323	233
Stage 1	-	-	-	-	233	-
Stage 2	-	-	-	-	90	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1329	-	671	806
Stage 1	-	-	-	-	806	-
Stage 2	-	-	-	-	934	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1329	-	663	806
Mov Cap-2 Maneuver	-	-	-	-	663	-
Stage 1	-	-	-	-	796	-
Stage 2	-	-	-	-	934	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	762	-	-	1329	-
HCM Lane V/C Ratio	0.111	-	-	0.012	-
HCM Control Delay (s)	10.3	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0	-

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Magnolia Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.754
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Street Name:	Magnolia Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	89	277	65	44	221	37	57	486	32	41	1116	92
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	89	277	65	44	221	37	57	486	32	41	1116	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	89	277	65	44	221	37	57	486	32	41	1116	92
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	89	277	65	44	221	37	57	486	32	41	1116	92
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	89	277	65	44	221	37	57	486	32	41	1116	92
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.81	0.19	1.00	0.86	0.14	1.00	1.88	0.12	1.00	1.85	0.15
Final Sat.:	1600	1296	304	1600	1371	229	1600	3002	198	1600	2956	244
Capacity Analysis Module:												
Vol/Sat:	0.06	0.21	0.21	0.03	0.16	0.16	0.04	0.16	0.16	0.03	0.38	0.38
Crit Moves:		****			****			****			****	

Intersection	
Intersection Delay, s/veh	27.1
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	191	22	0	0	0	39	348	113	121	271	22
Future Vol, veh/h	43	191	22	0	0	0	39	348	113	121	271	22
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	215	25	0	0	0	44	391	127	136	304	25
Number of Lanes	0	1	0	0	0	0	0	1	0	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	16.7	34.4	24.7
HCM LOS	C	D	C

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	8%	17%	29%
Vol Thru, %	70%	75%	65%
Vol Right, %	23%	9%	5%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	500	256	414
LT Vol	39	43	121
Through Vol	348	191	271
RT Vol	113	22	22
Lane Flow Rate	562	288	465
Geometry Grp	1	1	1
Degree of Util (X)	0.867	0.523	0.753
Departure Headway (Hd)	5.558	6.542	5.824
Convergence, Y/N	Yes	Yes	Yes
Cap	646	547	614
Service Time	3.639	4.634	3.909
HCM Lane V/C Ratio	0.87	0.527	0.757
HCM Control Delay	34.4	16.7	24.7
HCM Lane LOS	D	C	C
HCM 95th-tile Q	10	3	6.7

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	14	6	459	291	7
Future Vol, veh/h	50	14	6	459	291	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	15	7	499	316	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	833	320	324	0	-	0
Stage 1	320	-	-	-	-	-
Stage 2	513	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	339	721	1236	-	-	-
Stage 1	736	-	-	-	-	-
Stage 2	601	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	336	721	1236	-	-	-
Mov Cap-2 Maneuver	336	-	-	-	-	-
Stage 1	730	-	-	-	-	-
Stage 2	601	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.6	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1236	-	380	-	-
HCM Lane V/C Ratio	0.005	-	0.183	-	-
HCM Control Delay (s)	7.9	0	16.6	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.7	-	-

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Magnolia Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.671
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Street Name:	Magnolia Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1	0	1	1	0	1	0
Volume Module:												
Base Vol:	2	2	3	209	5	142	195	440	3	6	732	264
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	2	3	209	5	142	195	440	3	6	732	264
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	2	3	209	5	142	195	440	3	6	732	264
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	2	3	209	5	142	195	440	3	6	732	264
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	2	3	209	5	142	195	440	3	6	732	264
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.28	0.29	0.43	0.98	0.02	1.00	1.00	1.99	0.01	1.00	1.47	0.53
Final Sat.:	457	457	686	1563	37	1600	1600	3178	22	1600	2352	848
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.13	0.09	0.12	0.14	0.14	0.00	0.31	0.31
Crit Moves:	****			****			****			****		

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Myrtle Avenue/Central Avenue - I-210 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.895
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	98	Level Of Service:	D

Street Name:	Myrtle Avenue						Central Avenue - I-210 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 2		0 0	0 0 1		1 0	0 0 0		0 0	1 0 1		0 1
Volume Module:												
Base Vol:	367	684	0	0	531	124	0	0	0	255	578	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	367	684	0	0	531	124	0	0	0	255	578	340
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	367	684	0	0	531	124	0	0	0	255	578	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	367	684	0	0	531	124	0	0	0	255	578	340
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	367	684	0	0	531	124	0	0	0	255	578	340
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.62	0.38	0.00	0.00	0.00	1.00	1.00	1.00
Final Sat.:	1600	3200	0	0	2594	606	0	0	0	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.23	0.21	0.00	0.00	0.20	0.20	0.00	0.00	0.00	0.16	0.36	0.21
Crit Moves:	****				****						****	

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Myrtle Avenue/Evergreen Avenue - I-210 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.774
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	C

Street Name:	Myrtle Avenue						Evergreen Avenue - I-210 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	630	197	256	527	0	378	503	314	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	630	197	256	527	0	378	503	314	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	630	197	256	527	0	378	503	314	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	630	197	256	527	0	378	503	314	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	630	197	256	527	0	378	503	314	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.52	0.48	1.00	2.00	0.00	1.00	1.23	0.77	0.00	0.00	0.00
Final Sat.:	0	2438	762	1600	3200	0	1600	1970	1230	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.16	0.16	0.00	0.24	0.26	0.26	0.00	0.00	0.00
Crit Moves:		****		****					****			

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Myrtle Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.811
Loss Time (sec):	30	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	98	Level Of Service:	D

Street Name:	Myrtle Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	132	474	49	56	555	156	149	304	128	28	291	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	132	474	49	56	555	156	149	304	128	28	291	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	132	474	49	56	555	156	149	304	128	28	291	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	474	49	56	555	156	149	304	128	28	291	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	132	474	49	56	555	156	149	304	128	28	291	72
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.56	0.44	1.00	1.41	0.59	1.00	1.60	0.40
Final Sat.:	1600	2900	300	1600	2498	702	1600	2252	948	1600	2565	635
Capacity Analysis Module:												
Vol/Sat:	0.08	0.16	0.16	0.04	0.22	0.22	0.09	0.14	0.13	0.02	0.11	0.11
Crit Moves:	****			****			****			****		

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Myrtle Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.788
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	C

Street Name:	Myrtle Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	223	599	137	38	306	27	45	419	120	126	1225	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	223	599	137	38	306	27	45	419	120	126	1225	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	223	599	137	38	306	27	45	419	120	126	1225	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	223	599	137	38	306	27	45	419	120	126	1225	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	223	599	137	38	306	27	45	419	120	126	1225	75
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.63	0.37	1.00	1.84	0.16	1.00	2.00	1.00	1.00	1.88	0.12
Final Sat.:	1600	2604	596	1600	2941	259	1600	3200	1600	1600	3015	185
Capacity Analysis Module:												
Vol/Sat:	0.14	0.23	0.23	0.02	0.10	0.10	0.03	0.13	0.08	0.08	0.41	0.41
Crit Moves:		****			****			****			****	

Intersection	
Intersection Delay, s/veh	21.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	101	264	37	24	365	0	0	307	9
Future Vol, veh/h	0	0	0	101	264	37	24	365	0	0	307	9
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	122	318	45	29	440	0	0	370	11
Number of Lanes	0	0	0	0	2	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	16.5	28	20.2
HCM LOS	C	D	C

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	6%	43%	0%	0%
Vol Thru, %	94%	57%	78%	97%
Vol Right, %	0%	0%	22%	3%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	389	233	169	316
LT Vol	24	101	0	0
Through Vol	365	132	132	307
RT Vol	0	0	37	9
Lane Flow Rate	469	281	204	381
Geometry Grp	2	7	7	2
Degree of Util (X)	0.787	0.557	0.383	0.652
Departure Headway (Hd)	6.043	7.146	6.768	6.164
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	595	502	529	583
Service Time	4.12	4.929	4.551	4.247
HCM Lane V/C Ratio	0.788	0.56	0.386	0.654
HCM Control Delay	28	18.6	13.7	20.2
HCM Lane LOS	D	C	B	C
HCM 95th-tile Q	7.5	3.4	1.8	4.7

Intersection	
Intersection Delay, s/veh	23.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	33	116	25	5	16	51	500	61	146	669	16
Future Vol, veh/h	3	33	116	25	5	16	51	500	61	146	669	16
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	34	121	26	5	17	53	521	64	152	697	17
Number of Lanes	0	1	0	0	1	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	12.3	11.2	17.4	30.2
HCM LOS	B	B	C	D

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	17%	0%	2%	54%	30%	0%
Vol Thru, %	83%	80%	22%	11%	70%	95%
Vol Right, %	0%	20%	76%	35%	0%	5%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	301	311	152	46	481	351
LT Vol	51	0	3	25	146	0
Through Vol	250	250	33	5	335	335
RT Vol	0	61	116	16	0	16
Lane Flow Rate	314	324	158	48	501	365
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.569	0.567	0.288	0.098	0.877	0.621
Departure Headway (Hd)	6.531	6.305	6.544	7.34	6.308	6.122
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	549	570	548	486	571	588
Service Time	4.305	4.079	4.605	5.42	4.072	3.885
HCM Lane V/C Ratio	0.572	0.568	0.288	0.099	0.877	0.621
HCM Control Delay	17.7	17.1	12.3	11.2	38.7	18.5
HCM Lane LOS	C	C	B	B	E	C
HCM 95th-tile Q	3.5	3.5	1.2	0.3	10	4.3

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Mayflower Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.672
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Street Name:	Mayflower Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	0 1	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	39	235	35	152	325	255	225	806	48	38	530	123
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	39	235	35	152	325	255	225	806	48	38	530	123
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	235	35	152	325	255	225	806	48	38	530	123
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	235	35	152	325	255	225	806	48	38	530	123
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	235	35	152	325	255	225	806	48	38	530	123
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	1.00	1.00	1.00	1.00	1.89	0.11	1.00	1.62	0.38
Final Sat.:	1600	2785	415	1600	1600	1600	1600	3020	180	1600	2597	603
Capacity Analysis Module:												
Vol/Sat:	0.02	0.08	0.08	0.10	0.20	0.16	0.14	0.27	0.27	0.02	0.20	0.20
Crit Moves:	****			****			****			****		

Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	199	35	56	32	12	32
Future Vol, veh/h	199	35	56	32	12	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	216	38	61	35	13	35

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	254	0	392	235
Stage 1	-	-	-	-	235	-
Stage 2	-	-	-	-	157	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1311	-	612	804
Stage 1	-	-	-	-	804	-
Stage 2	-	-	-	-	871	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1311	-	583	804
Mov Cap-2 Maneuver	-	-	-	-	583	-
Stage 1	-	-	-	-	766	-
Stage 2	-	-	-	-	871	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	729	-	-	1311	-
HCM Lane V/C Ratio	0.066	-	-	0.046	-
HCM Control Delay (s)	10.3	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Magnolia Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.787
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	C

Street Name:	Magnolia Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	0	1 0	1	1 0
Volume Module:												
Base Vol:	78	213	86	96	245	59	78	1109	57	121	836	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	78	213	86	96	245	59	78	1109	57	121	836	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	78	213	86	96	245	59	78	1109	57	121	836	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	213	86	96	245	59	78	1109	57	121	836	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	213	86	96	245	59	78	1109	57	121	836	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.71	0.29	1.00	0.81	0.19	1.00	1.90	0.10	1.00	1.91	0.09
Final Sat.:	1600	1140	460	1600	1289	311	1600	3044	156	1600	3054	146
Capacity Analysis Module:												
Vol/Sat:	0.05	0.19	0.19	0.06	0.19	0.19	0.05	0.36	0.36	0.08	0.27	0.27
Crit Moves:		****		****				****		****		

Intersection	
Intersection Delay, s/veh	37.7
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	183	23	0	0	0	39	331	94	65	416	38
Future Vol, veh/h	37	183	23	0	0	0	39	331	94	65	416	38
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	42	208	26	0	0	0	44	376	107	74	473	43
Number of Lanes	0	1	0	0	0	0	0	1	0	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	17.3	34.3	50.3
HCM LOS	C	D	F

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	8%	15%	13%
Vol Thru, %	71%	75%	80%
Vol Right, %	20%	9%	7%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	464	243	519
LT Vol	39	37	65
Through Vol	331	183	416
RT Vol	94	23	38
Lane Flow Rate	527	276	590
Geometry Grp	1	1	1
Degree of Util (X)	0.858	0.525	0.957
Departure Headway (Hd)	5.855	6.844	5.839
Convergence, Y/N	Yes	Yes	Yes
Cap	622	527	625
Service Time	3.874	4.891	3.857
HCM Lane V/C Ratio	0.847	0.524	0.944
HCM Control Delay	34.3	17.3	50.3
HCM Lane LOS	D	C	F
HCM 95th-tile Q	9.6	3	13.3

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	28	8	21	444	413	28
Future Vol, veh/h	28	8	21	444	413	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	9	23	483	449	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	993	464	479	0	-	0
Stage 1	464	-	-	-	-	-
Stage 2	529	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	272	598	1083	-	-	-
Stage 1	633	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	264	598	1083	-	-	-
Mov Cap-2 Maneuver	264	-	-	-	-	-
Stage 1	615	-	-	-	-	-
Stage 2	591	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.7	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1083	-	301	-	-
HCM Lane V/C Ratio	0.021	-	0.13	-	-
HCM Control Delay (s)	8.4	0	18.7	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Magnolia Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.628
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Street Name:	Magnolia Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1	0	1	1	0	1	0
Volume Module:												
Base Vol:	6	4	4	204	1	203	275	727	0	2	532	171
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	4	4	204	1	203	275	727	0	2	532	171
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	6	4	4	204	1	203	275	727	0	2	532	171
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	4	4	204	1	203	275	727	0	2	532	171
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	6	4	4	204	1	203	275	727	0	2	532	171
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.43	0.29	0.28	0.99	0.01	1.00	1.00	2.00	0.00	1.00	1.51	0.49
Final Sat.:	686	457	457	1592	8	1600	1600	3200	0	1600	2422	778
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.13	0.13	0.13	0.17	0.23	0.00	0.00	0.22	0.22
Crit Moves:	****			****			****				****	

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Myrtle Avenue/Central Avenue - I-210 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.967
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	150	Level Of Service:	E

Street Name:	Myrtle Avenue						Central Avenue - I-210 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	1 0	1 0	1
Volume Module:												
Base Vol:	357	435	0	0	758	219	0	0	0	272	541	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	357	435	0	0	758	219	0	0	0	272	541	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	357	435	0	0	758	219	0	0	0	272	541	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	357	435	0	0	758	219	0	0	0	272	541	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	357	435	0	0	758	219	0	0	0	272	541	300
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.55	0.45	0.00	0.00	0.00	1.00	1.00	1.00
Final Sat.:	1600	3200	0	0	2483	717	0	0	0	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.22	0.14	0.00	0.00	0.31	0.31	0.00	0.00	0.00	0.17	0.34	0.19
Crit Moves:	****				****						****	

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Myrtle Avenue/Evergreen Avenue - I-210 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.937
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	123	Level Of Service:	E

Street Name:	Myrtle Avenue						Evergreen Avenue - I-210 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	612	216	324	727	0	168	851	352	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	612	216	324	727	0	168	851	352	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	612	216	324	727	0	168	851	352	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	612	216	324	727	0	168	851	352	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	612	216	324	727	0	168	851	352	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.48	0.52	1.00	2.00	0.00	1.00	1.41	0.59	0.00	0.00	0.00
Final Sat.:	0	2365	835	1600	3200	0	1600	2264	936	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.20	0.23	0.00	0.11	0.38	0.38	0.00	0.00	0.00
Crit Moves:		****		****					****			

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Myrtle Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.917
Loss Time (sec):	30	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	125	Level Of Service:	E

Street Name:	Myrtle Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	106	461	47	58	641	230	152	482	274	67	328	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	461	47	58	641	230	152	482	274	67	328	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	461	47	58	641	230	152	482	274	67	328	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	461	47	58	641	230	152	482	274	67	328	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	106	461	47	58	641	230	152	482	274	67	328	48
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.47	0.53	1.00	1.28	0.72	1.00	1.74	0.26
Final Sat.:	1600	2904	296	1600	2355	845	1600	2040	1160	1600	2791	409
Capacity Analysis Module:												
Vol/Sat:	0.07	0.16	0.16	0.04	0.27	0.27	0.10	0.24	0.24	0.04	0.12	0.12
Crit Moves:	****			****			****			****		

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Myrtle Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.802
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Street Name:	Myrtle Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	162	387	154	128	569	60	82	968	164	162	727	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	162	387	154	128	569	60	82	968	164	162	727	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	162	387	154	128	569	60	82	968	164	162	727	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	162	387	154	128	569	60	82	968	164	162	727	53
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	162	387	154	128	569	60	82	968	164	162	727	53
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.43	0.57	1.00	1.81	0.19	1.00	2.00	1.00	1.00	1.86	0.14
Final Sat.:	1600	2289	911	1600	2895	305	1600	3200	1600	1600	2983	217
Capacity Analysis Module:												
Vol/Sat:	0.10	0.17	0.17	0.08	0.20	0.20	0.05	0.30	0.10	0.10	0.24	0.24
Crit Moves:	****			****			****			****		

Intersection	
Intersection Delay, s/veh	18.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	156	148	73	30	339	0	0	379	10
Future Vol, veh/h	0	0	0	156	148	73	30	339	0	0	379	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	170	161	79	33	368	0	0	412	11
Number of Lanes	0	0	0	0	2	0	0	1	0	0	1	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	2	0
HCM Control Delay	14.9	19.7	20.8
HCM LOS	B	C	C

Lane	NBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	8%	68%	0%	0%
Vol Thru, %	92%	32%	50%	97%
Vol Right, %	0%	0%	50%	3%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	369	230	147	389
LT Vol	30	156	0	0
Through Vol	339	74	74	379
RT Vol	0	0	73	10
Lane Flow Rate	401	250	160	423
Geometry Grp	2	7	7	2
Degree of Util (X)	0.657	0.496	0.286	0.685
Departure Headway (Hd)	5.898	7.137	6.436	5.835
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	610	503	556	617
Service Time	3.967	4.907	4.206	3.904
HCM Lane V/C Ratio	0.657	0.497	0.288	0.686
HCM Control Delay	19.7	16.8	11.8	20.8
HCM Lane LOS	C	C	B	C
HCM 95th-tile Q	4.8	2.7	1.2	5.3

APPENDIX C

CUMULATIVE PROJECT LIST

City of Monrovia
Cumulative Project List – Land Development Projects

1. **725 East Huntington Drive (Former Albertsons Center)**
    - Commercial center façade renovations and interior tenant improvements. Possible future addition of square footage to west end of center. Potential subdivision of center into 3 potential brand name retails stores.
    - Lot Size: 6.06 Acres
    - Building Area: 98,000 SF (Existing area under proposed Tenant Improvement)
    - Under Construction

2. **530 Fano Street (12-Unit, 3-story, Residential Condominium Development)**
    - (New Construction) 12 unit residential condominium development with attached two car garages and six guest parking spaces.
    - Lot Size: 22,393 SF
    - Building Area: ±16,920 SF
    - In Building Plan Check

3. **1218 South 5th Avenue (City of Hope –Tenant Improvement)**
    - A façade remodel and additional roof-top equipment and ground level mechanical equipment for a new laboratory and research space.
    - Lot Size: 38,277 SF
    - Building Area: 42,936 SF (Existing area under proposed Tenant Improvement)
    - Under Construction

4. **SWC of Pomona Avenue between Primrose and Magnolia (MODA)**
    - 261 residential units for lease, including 2 courtyards totaling 18,500 sf and a two-story fitness gym. Total building height is 5 stories.
    - Lot Size: 2.8 acres (93 units per acre)
    - Building Area: 225,220 SF
    - Under Construction

5. **1110 – 1212 South Fifth Avenue (5th and Huntington)**
    - Residential/Commercial Mixed-Use Project, 4-story mixed use containing 154 residential units for lease and a ground floor retail space.
    - Lot Size: +/- 2.86 Acres
    - Building Area: 131,400 SF (154 Units) + 1,340 Retail Use
    - Under Construction

6. **137 West Pomona Avenue (The Lumber Yard) An Artisan Food Village**
    - Repurpose of two existing industrial buildings into chic food-hall. Existing *Building 1* totals ±9,490 square feet and existing *Building 2* totals ±15,364 square feet. A new ±2,040 square foot building will be added to the site.
    - Lot Size: ± 59,368
    - Total Floor Area Breakdown:
        i. Restaurant - 12,617 sf

ii. Coffee Shop - 2,165 sf
iii. Brewery Manufacturing - 3,477 sf
iv. Retail (Wine Retail and Tasting) - 2,675 sf
v. Mezzanine Storage- 4,841 sf

- Entitlements Approved

7. **239 West Chestnut Avenue (10-Unit Development)**
    - New 10 unit industrial condominium development with 38 parking spaces
    - Lot Size: 34,212 SF
    - Building Area: 16,349 SF
    - In Building Plan Check

8. **303 South Madison Avenue (6-Unit Planned Unit Development)**
    - 6 detached, two-story residential units for sale.
    - Lot Size: 20,241 SF
    - Building Area: 9,305 SF
    - Under Construction

9. **717-721 West Duarte Road-(8-Unit Residential Condominium Development)**
    - 8-unit residential condominium development (replacing two existing units)
    - Lot Size:18,652 SF
    - Building Area: 13,667 SF
    - In Planning Review (entitlements not yet granted)

10. **N/E Corner of Magnolia Avenue and Duarte Road (296 Residential Apartments)**
    - 205 and 225 W Duarte Road, 1725 Peck Rd (8507-003-045, 046, 047 and 048)
    - Site Area: 163,254 SF (3.75 Acres)
    - Density: 79 units per acre
    - Total New Residential Square Footage: 251,348 SF
    - In Planning Review (entitlements not yet granted)

11. **8251 South Myrtle Avenue (113 Units Residential Units)**
    - APNs: 8508-006-040, 0039,038, 037, 055, 054)
    - Site Area: 2.1 acres
    - Concept Stage – Currently On Hold.

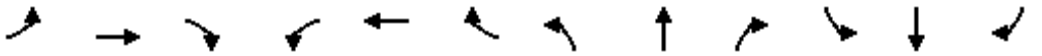
12. **Corner of Myrtle and Lime - Myrtle Lime Apartments (140 Residential Units)**\
    - Former Frontier and Existing City Parking Lot Property
    - Concept Stage - Massing Study Submitted

City of Monrovia (City) staff requested for the analysis of additional cumulative projects that were not included in the original cumulative project list, dated June 5, 2017. This request was made on April 18, 2018, in the City's screencheck comment letter for the 1625 Magnolia Avenue project Traffic Impact Analysis in the City of Monrovia, California. The additional cumulative projects are shown below:

- Station Square North Burke North – 280 dwelling units
- Marriott Town Place Suites – 109 rooms (Southwest corner of Huntington Drive and Myrtle Avenue)
- Thomas & Saffron Associates Residential Development – 103 dwelling units (current City park-and-ride lot)

APPENDIX D

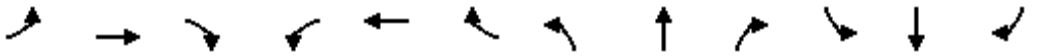
RAMP LOS WORKSHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	222	567	328	235	600	0	0	474	79
Future Volume (veh/h)	0	0	0	222	567	328	235	600	0	0	474	79
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				239	610	353	253	645	0	0	510	85
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				649	681	577	291	1701	0	0	775	129
Arrive On Green				0.36	0.36	0.36	0.33	0.96	0.00	0.00	0.25	0.25
Sat Flow, veh/h				1781	1870	1585	1781	3647	0	0	3143	506
Grp Volume(v), veh/h				239	610	353	253	645	0	0	296	299
Grp Sat Flow(s),veh/h/ln				1781	1870	1585	1781	1777	0	0	1777	1779
Q Serve(g_s), s				6.4	20.0	11.8	8.7	0.8	0.0	0.0	9.7	9.8
Cycle Q Clear(g_c), s				6.4	20.0	11.8	8.7	0.8	0.0	0.0	9.7	9.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.28
Lane Grp Cap(c), veh/h				649	681	577	291	1701	0	0	451	452
V/C Ratio(X)				0.37	0.90	0.61	0.87	0.38	0.00	0.00	0.66	0.66
Avail Cap(c_a), veh/h				682	716	607	301	1701	0	0	451	452
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.65	0.65	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				15.2	19.5	16.9	21.3	0.7	0.0	0.0	21.7	21.7
Incr Delay (d2), s/veh				0.3	13.5	1.7	15.9	0.4	0.0	0.0	7.3	7.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.4	10.1	4.1	4.0	0.3	0.0	0.0	4.6	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				15.5	32.9	18.6	37.2	1.2	0.0	0.0	29.0	29.1
LnGrp LOS				B	C	B	D	A	A	A	C	C
Approach Vol, veh/h					1202			898			595	
Approach Delay, s/veh					25.3			11.3			29.1	
Approach LOS					C			B			C	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		36.2			14.6	21.6		28.8				
Change Period (Y+Rc), s		5.1			4.0	5.1		5.1				
Max Green Setting (Gmax), s		29.9			11.0	14.9		24.9				
Max Q Clear Time (g_c+I1), s		2.8			10.7	11.8		22.0				
Green Ext Time (p_c), s		4.6			0.0	1.1		1.7				

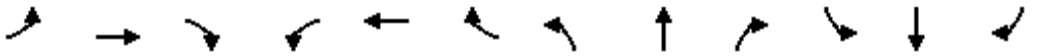
Intersection Summary												
HCM 6th Ctrl Delay			21.4									
HCM 6th LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	346	445	263	0	0	0	0	480	146	247	446	0
Future Volume (veh/h)	346	445	263	0	0	0	0	480	146	247	446	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	380	489	289				0	527	160	271	490	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	532	643	378				0	843	255	301	1934	0
Arrive On Green	0.30	0.30	0.30				0.00	0.31	0.31	0.34	1.00	0.00
Sat Flow, veh/h	1781	2152	1267				0	2782	813	1781	3647	0
Grp Volume(v), veh/h	380	403	375				0	348	339	271	490	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1642				0	1777	1724	1781	1777	0
Q Serve(g_s), s	12.4	13.4	13.5				0.0	10.8	10.9	9.4	0.0	0.0
Cycle Q Clear(g_c), s	12.4	13.4	13.5				0.0	10.8	10.9	9.4	0.0	0.0
Prop In Lane	1.00		0.77				0.00		0.47	1.00		0.00
Lane Grp Cap(c), veh/h	532	531	491				0	557	541	301	1934	0
V/C Ratio(X)	0.71	0.76	0.76				0.00	0.62	0.63	0.90	0.25	0.00
Avail Cap(c_a), veh/h	658	656	606				0	557	541	301	1934	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.77	0.77	0.00
Uniform Delay (d), s/veh	20.3	20.7	20.7				0.0	19.0	19.1	21.0	0.0	0.0
Incr Delay (d2), s/veh	2.8	4.1	4.6				0.0	5.2	5.4	22.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	5.6	5.3				0.0	4.8	4.7	4.8	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.1	24.8	25.3				0.0	24.2	24.5	43.9	0.2	0.0
LnGrp LOS	C	C	C				A	C	C	D	A	A
Approach Vol, veh/h		1158						687			761	
Approach Delay, s/veh		24.4						24.4			15.8	
Approach LOS		C						C			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	25.5		24.5		40.5
Change Period (Y+Rc), s	4.0	5.1		5.1		5.1
Max Green Setting (Gmax), s	11.0	15.8		24.0		30.8
Max Q Clear Time (g_c+I1), s	11.4	12.9		15.5		2.0
Green Ext Time (p_c), s	0.0	1.2		3.9		3.4

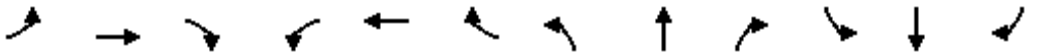
Intersection Summary		
HCM 6th Ctrl Delay		21.9
HCM 6th LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	202	507	288	290	393	0	0	691	200
Future Volume (veh/h)	0	0	0	202	507	288	290	393	0	0	691	200
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				217	545	310	312	423	0	0	743	215
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				560	588	498	333	1953	0	0	842	244
Arrive On Green				0.31	0.31	0.31	0.37	1.00	0.00	0.00	0.31	0.31
Sat Flow, veh/h				1781	1870	1585	1781	3647	0	0	2812	787
Grp Volume(v), veh/h				217	545	310	312	423	0	0	486	472
Grp Sat Flow(s),veh/h/ln				1781	1870	1585	1781	1777	0	0	1777	1729
Q Serve(g_s), s				7.1	21.1	12.5	12.7	0.0	0.0	0.0	19.5	19.5
Cycle Q Clear(g_c), s				7.1	21.1	12.5	12.7	0.0	0.0	0.0	19.5	19.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.46
Lane Grp Cap(c), veh/h				560	588	498	333	1953	0	0	550	535
V/C Ratio(X)				0.39	0.93	0.62	0.94	0.22	0.00	0.00	0.88	0.88
Avail Cap(c_a), veh/h				568	596	505	333	1953	0	0	550	535
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.62	0.62	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				20.1	24.9	21.9	23.1	0.0	0.0	0.0	24.6	24.6
Incr Delay (d2), s/veh				0.4	20.6	2.3	24.5	0.2	0.0	0.0	18.3	18.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.8	12.0	4.6	6.1	0.0	0.0	0.0	10.3	10.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				20.5	45.5	24.2	47.6	0.2	0.0	0.0	42.9	43.3
LnGrp LOS				C	D	C	D	A	A	A	D	D
Approach Vol, veh/h					1072			735			958	
Approach Delay, s/veh					34.3			20.3			43.1	
Approach LOS					C			C			D	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	46.3		18.0	28.3		28.7						
Change Period (Y+Rc), s	5.1		4.0	5.1		5.1						
Max Green Setting (Gmax), s	40.9		14.0	22.9		23.9						
Max Q Clear Time (g_c+I1), s	2.0		14.7	21.5		23.1						
Green Ext Time (p_c), s	3.0		0.0	0.8		0.4						

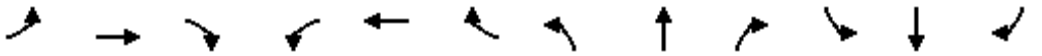
Intersection Summary		
HCM 6th Ctrl Delay	33.6	
HCM 6th LOS	C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	816	194	0	0	0	0	529	188	313	593	0
Future Volume (veh/h)	158	816	194	0	0	0	0	529	188	313	593	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	168	868	206				0	563	200	333	631	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	599	958	227				0	695	246	364	1875	0
Arrive On Green	0.34	0.34	0.34				0.00	0.27	0.27	0.41	1.00	0.00
Sat Flow, veh/h	1781	2850	676				0	2666	911	1781	3647	0
Grp Volume(v), veh/h	168	541	533				0	388	375	333	631	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1749				0	1777	1706	1781	1777	0
Q Serve(g_s), s	5.2	21.8	21.8				0.0	15.3	15.4	13.2	0.0	0.0
Cycle Q Clear(g_c), s	5.2	21.8	21.8				0.0	15.3	15.4	13.2	0.0	0.0
Prop In Lane	1.00		0.39				0.00		0.53	1.00		0.00
Lane Grp Cap(c), veh/h	599	598	588				0	480	461	364	1875	0
V/C Ratio(X)	0.28	0.91	0.91				0.00	0.81	0.81	0.92	0.34	0.00
Avail Cap(c_a), veh/h	615	614	604				0	480	461	380	1875	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.51	0.51	0.00
Uniform Delay (d), s/veh	18.2	23.8	23.8				0.0	25.6	25.6	21.6	0.0	0.0
Incr Delay (d2), s/veh	0.3	16.9	17.2				0.0	13.7	14.5	15.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	11.1	11.0				0.0	7.8	7.7	5.4	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.5	40.6	40.9				0.0	39.3	40.1	37.1	0.2	0.0
LnGrp LOS	B	D	D				A	D	D	D	A	A
Approach Vol, veh/h		1242						763			964	
Approach Delay, s/veh		37.7						39.7			13.0	
Approach LOS		D						D			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.3	25.4		30.3		44.7
Change Period (Y+Rc), s	4.0	5.1		5.1		5.1
Max Green Setting (Gmax), s	16.0	18.9		25.9		38.9
Max Q Clear Time (g_c+I1), s	15.2	17.4		23.8		2.0
Green Ext Time (p_c), s	0.1	0.7		1.4		4.7

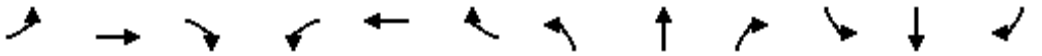
Intersection Summary	
HCM 6th Ctrl Delay	30.2
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	222	569	328	242	600	0	0	474	105
Future Volume (veh/h)	0	0	0	222	569	328	242	600	0	0	474	105
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				239	612	353	260	645	0	0	510	113
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				650	683	578	297	1699	0	0	723	159
Arrive On Green				0.36	0.36	0.36	0.33	0.96	0.00	0.00	0.25	0.25
Sat Flow, veh/h				1781	1870	1585	1781	3647	0	0	2988	638
Grp Volume(v), veh/h				239	612	353	260	645	0	0	312	311
Grp Sat Flow(s),veh/h/ln				1781	1870	1585	1781	1777	0	0	1777	1755
Q Serve(g_s), s				6.4	20.1	11.8	8.9	0.8	0.0	0.0	10.4	10.5
Cycle Q Clear(g_c), s				6.4	20.1	11.8	8.9	0.8	0.0	0.0	10.4	10.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.36
Lane Grp Cap(c), veh/h				650	683	578	297	1699	0	0	444	439
V/C Ratio(X)				0.37	0.90	0.61	0.88	0.38	0.00	0.00	0.70	0.71
Avail Cap(c_a), veh/h				682	716	607	301	1699	0	0	444	439
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.65	0.65	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				15.1	19.5	16.9	21.0	0.8	0.0	0.0	22.2	22.2
Incr Delay (d2), s/veh				0.3	13.6	1.7	16.7	0.4	0.0	0.0	9.0	9.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.4	10.2	4.1	4.2	0.3	0.0	0.0	5.1	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				15.5	33.1	18.5	37.8	1.2	0.0	0.0	31.2	31.5
LnGrp LOS				B	C	B	D	A	A	A	C	C
Approach Vol, veh/h					1204			905			623	
Approach Delay, s/veh					25.3			11.7			31.4	
Approach LOS					C			B			C	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		36.2			14.8	21.3		28.8				
Change Period (Y+Rc), s		5.1			4.0	5.1		5.1				
Max Green Setting (Gmax), s		29.9			11.0	14.9		24.9				
Max Q Clear Time (g_c+I1), s		2.8			10.9	12.5		22.1				
Green Ext Time (p_c), s		4.6			0.0	0.9		1.6				

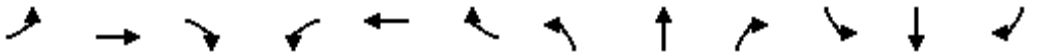
Intersection Summary												
HCM 6th Ctrl Delay			22.2									
HCM 6th LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	353	471	266	0	0	0	0	480	146	247	446	0
Future Volume (veh/h)	353	471	266	0	0	0	0	480	146	247	446	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	388	518	292				0	527	160	271	490	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	546	672	378				0	823	249	301	1908	0
Arrive On Green	0.31	0.31	0.31				0.00	0.31	0.31	0.34	1.00	0.00
Sat Flow, veh/h	1781	2193	1233				0	2782	813	1781	3647	0
Grp Volume(v), veh/h	388	420	390				0	348	339	271	490	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1648				0	1777	1724	1781	1777	0
Q Serve(g_s), s	12.6	13.9	14.0				0.0	11.0	11.1	9.4	0.0	0.0
Cycle Q Clear(g_c), s	12.6	13.9	14.0				0.0	11.0	11.1	9.4	0.0	0.0
Prop In Lane	1.00		0.75				0.00		0.47	1.00		0.00
Lane Grp Cap(c), veh/h	546	544	505				0	544	528	301	1908	0
V/C Ratio(X)	0.71	0.77	0.77				0.00	0.64	0.64	0.90	0.26	0.00
Avail Cap(c_a), veh/h	658	656	609				0	544	528	301	1908	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.74	0.74	0.00
Uniform Delay (d), s/veh	20.0	20.5	20.5				0.0	19.5	19.5	21.0	0.0	0.0
Incr Delay (d2), s/veh	2.8	4.6	5.1				0.0	5.7	5.9	22.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	5.9	5.5				0.0	4.9	4.9	4.8	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.8	25.1	25.6				0.0	25.1	25.4	43.2	0.2	0.0
LnGrp LOS	C	C	C				A	C	C	D	A	A
Approach Vol, veh/h		1198						687			761	
Approach Delay, s/veh		24.5						25.3			15.5	
Approach LOS		C						C			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	25.0		25.0		40.0
Change Period (Y+Rc), s	4.0	5.1		5.1		5.1
Max Green Setting (Gmax), s	11.0	15.8		24.0		30.8
Max Q Clear Time (g_c+I1), s	11.4	13.1		16.0		2.0
Green Ext Time (p_c), s	0.0	1.1		3.9		3.4

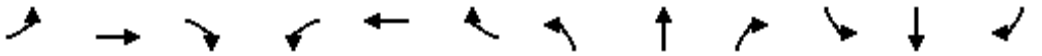
Intersection Summary	
HCM 6th Ctrl Delay	22.1
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	202	533	288	293	393	0	0	691	212
Future Volume (veh/h)	0	0	0	202	533	288	293	393	0	0	691	212
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				217	573	310	315	423	0	0	743	228
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				568	596	505	333	1938	0	0	818	251
Arrive On Green				0.32	0.32	0.32	0.37	1.00	0.00	0.00	0.31	0.31
Sat Flow, veh/h				1781	1870	1585	1781	3647	0	0	2771	822
Grp Volume(v), veh/h				217	573	310	315	423	0	0	493	478
Grp Sat Flow(s),veh/h/ln				1781	1870	1585	1781	1777	0	0	1777	1722
Q Serve(g_s), s				7.1	22.6	12.4	12.9	0.0	0.0	0.0	20.0	20.0
Cycle Q Clear(g_c), s				7.1	22.6	12.4	12.9	0.0	0.0	0.0	20.0	20.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.48
Lane Grp Cap(c), veh/h				568	596	505	333	1938	0	0	543	526
V/C Ratio(X)				0.38	0.96	0.61	0.95	0.22	0.00	0.00	0.91	0.91
Avail Cap(c_a), veh/h				568	596	505	333	1938	0	0	543	526
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.59	0.59	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				19.8	25.1	21.6	23.1	0.0	0.0	0.0	25.0	25.0
Incr Delay (d2), s/veh				0.4	27.4	2.2	25.4	0.2	0.0	0.0	21.6	22.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.8	13.7	4.6	6.2	0.0	0.0	0.0	11.0	10.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				20.2	52.5	23.8	48.6	0.2	0.0	0.0	46.7	47.2
LnGrp LOS				C	D	C	D	A	A	A	D	D
Approach Vol, veh/h					1100			738			971	
Approach Delay, s/veh					38.1			20.8			46.9	
Approach LOS					D			C			D	

Timer - Assigned Phs	2		5	6		8				
Phs Duration (G+Y+Rc), s	46.0		18.0	28.0		29.0				
Change Period (Y+Rc), s	5.1		4.0	5.1		5.1				
Max Green Setting (Gmax), s	40.9		14.0	22.9		23.9				
Max Q Clear Time (g_c+I1), s	2.0		14.9	22.0		24.6				
Green Ext Time (p_c), s	3.0		0.0	0.5		0.0				

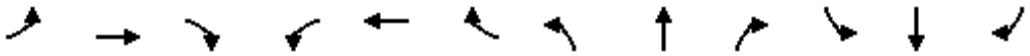
Intersection Summary		
HCM 6th Ctrl Delay	36.6	
HCM 6th LOS	D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	828	227	0	0	0	0	529	188	313	593	0
Future Volume (veh/h)	161	828	227	0	0	0	0	529	188	313	593	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	171	881	241				0	563	200	333	631	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	610	945	258				0	678	240	364	1852	0
Arrive On Green	0.34	0.34	0.34				0.00	0.26	0.26	0.41	1.00	0.00
Sat Flow, veh/h	1781	2758	754				0	2666	911	1781	3647	0
Grp Volume(v), veh/h	171	567	555				0	388	375	333	631	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1735				0	1777	1706	1781	1777	0
Q Serve(g_s), s	5.2	23.1	23.2				0.0	15.5	15.5	13.2	0.0	0.0
Cycle Q Clear(g_c), s	5.2	23.1	23.2				0.0	15.5	15.5	13.2	0.0	0.0
Prop In Lane	1.00		0.43				0.00		0.53	1.00		0.00
Lane Grp Cap(c), veh/h	610	609	595				0	469	450	364	1852	0
V/C Ratio(X)	0.28	0.93	0.93				0.00	0.83	0.83	0.92	0.34	0.00
Avail Cap(c_a), veh/h	615	614	599				0	469	450	380	1852	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.48	0.48	0.00
Uniform Delay (d), s/veh	17.9	23.8	23.8				0.0	26.0	26.0	21.6	0.0	0.0
Incr Delay (d2), s/veh	0.2	21.1	21.7				0.0	15.5	16.3	14.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	12.4	12.2				0.0	8.1	7.9	5.4	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.2	44.9	45.5				0.0	41.5	42.4	36.4	0.2	0.0
LnGrp LOS	B	D	D				A	D	D	D	A	A
Approach Vol, veh/h		1293						763			964	
Approach Delay, s/veh		41.6						42.0			12.7	
Approach LOS		D						D			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.3	24.9		30.8		44.2
Change Period (Y+Rc), s	4.0	5.1		5.1		5.1
Max Green Setting (Gmax), s	16.0	18.9		25.9		38.9
Max Q Clear Time (g_c+I1), s	15.2	17.5		25.2		2.0
Green Ext Time (p_c), s	0.1	0.7		0.5		4.7

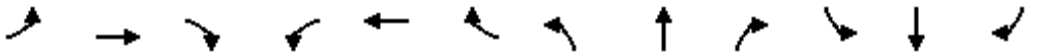
Intersection Summary		
HCM 6th Ctrl Delay		32.5
HCM 6th LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	255	576	340	360	684	0	0	531	98
Future Volume (veh/h)	0	0	0	255	576	340	360	684	0	0	531	98
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				274	619	366	387	735	0	0	571	105
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				655	688	583	301	1690	0	0	734	135
Arrive On Green				0.37	0.37	0.37	0.34	0.95	0.00	0.00	0.24	0.24
Sat Flow, veh/h				1781	1870	1585	1781	3647	0	0	3092	550
Grp Volume(v), veh/h				274	619	366	387	735	0	0	338	338
Grp Sat Flow(s),veh/h/ln				1781	1870	1585	1781	1777	0	0	1777	1771
Q Serve(g_s), s				7.5	20.3	12.3	11.0	1.1	0.0	0.0	11.5	11.6
Cycle Q Clear(g_c), s				7.5	20.3	12.3	11.0	1.1	0.0	0.0	11.5	11.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.31
Lane Grp Cap(c), veh/h				655	688	583	301	1690	0	0	435	434
V/C Ratio(X)				0.42	0.90	0.63	1.28	0.43	0.00	0.00	0.78	0.78
Avail Cap(c_a), veh/h				682	716	607	301	1690	0	0	435	434
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.33	0.33	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				15.4	19.4	16.9	21.5	0.9	0.0	0.0	22.9	22.9
Incr Delay (d2), s/veh				0.4	14.1	1.9	136.1	0.3	0.0	0.0	12.8	13.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.8	10.4	4.3	14.7	0.3	0.0	0.0	5.9	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				15.8	33.6	18.8	157.6	1.1	0.0	0.0	35.7	36.0
LnGrp LOS				B	C	B	F	A	A	A	D	D
Approach Vol, veh/h					1259			1122			676	
Approach Delay, s/veh					25.4			55.1			35.8	
Approach LOS					C			E			D	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		36.0			15.0	21.0		29.0				
Change Period (Y+Rc), s		5.1			4.0	5.1		5.1				
Max Green Setting (Gmax), s		29.9			11.0	14.9		24.9				
Max Q Clear Time (g_c+I1), s		3.1			13.0	13.6		22.3				
Green Ext Time (p_c), s		5.3			0.0	0.6		1.6				

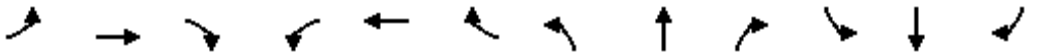
Intersection Summary												
HCM 6th Ctrl Delay			38.6									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	371	477	311	0	0	0	0	630	197	256	527	0
Future Volume (veh/h)	371	477	311	0	0	0	0	630	197	256	527	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	408	524	342				0	692	216	281	579	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	571	661	431				0	778	243	301	1857	0
Arrive On Green	0.32	0.32	0.32				0.00	0.29	0.29	0.34	1.00	0.00
Sat Flow, veh/h	1781	2062	1344				0	2759	832	1781	3647	0
Grp Volume(v), veh/h	408	452	414				0	461	447	281	579	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1628				0	1777	1721	1781	1777	0
Q Serve(g_s), s	13.1	15.0	15.1				0.0	16.1	16.1	9.9	0.0	0.0
Cycle Q Clear(g_c), s	13.1	15.0	15.1				0.0	16.1	16.1	9.9	0.0	0.0
Prop In Lane	1.00		0.83				0.00		0.48	1.00		0.00
Lane Grp Cap(c), veh/h	571	569	522				0	519	502	301	1857	0
V/C Ratio(X)	0.71	0.79	0.79				0.00	0.89	0.89	0.93	0.31	0.00
Avail Cap(c_a), veh/h	658	656	601				0	519	502	301	1857	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.62	0.62	0.00
Uniform Delay (d), s/veh	19.5	20.1	20.1				0.0	22.0	22.0	21.1	0.0	0.0
Incr Delay (d2), s/veh	3.1	5.8	6.4				0.0	19.9	20.5	25.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	6.5	6.0				0.0	8.9	8.7	5.1	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.6	26.0	26.5				0.0	41.9	42.5	46.1	0.3	0.0
LnGrp LOS	C	C	C				A	D	D	D	A	A
Approach Vol, veh/h		1274						908			860	
Approach Delay, s/veh		25.1						42.2			15.3	
Approach LOS		C						D			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	24.1		25.9		39.1
Change Period (Y+Rc), s	4.0	5.1		5.1		5.1
Max Green Setting (Gmax), s	11.0	15.8		24.0		30.8
Max Q Clear Time (g_c+I1), s	11.9	18.1		17.1		2.0
Green Ext Time (p_c), s	0.0	0.0		3.7		4.1

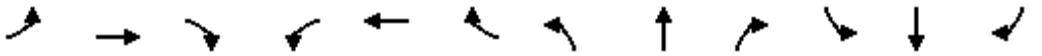
Intersection Summary	
HCM 6th Ctrl Delay	27.4
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	272	515	300	354	435	0	0	758	207
Future Volume (veh/h)	0	0	0	272	515	300	354	435	0	0	758	207
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				292	554	323	381	468	0	0	815	223
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				565	593	502	333	1944	0	0	847	232
Arrive On Green				0.32	0.32	0.32	0.37	1.00	0.00	0.00	0.31	0.31
Sat Flow, veh/h				1781	1870	1585	1781	3647	0	0	2851	754
Grp Volume(v), veh/h				292	554	323	381	468	0	0	525	513
Grp Sat Flow(s),veh/h/ln				1781	1870	1585	1781	1777	0	0	1777	1735
Q Serve(g_s), s				10.0	21.6	13.1	14.0	0.0	0.0	0.0	21.8	21.8
Cycle Q Clear(g_c), s				10.0	21.6	13.1	14.0	0.0	0.0	0.0	21.8	21.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.43
Lane Grp Cap(c), veh/h				565	593	502	333	1944	0	0	546	533
V/C Ratio(X)				0.52	0.93	0.64	1.15	0.24	0.00	0.00	0.96	0.96
Avail Cap(c_a), veh/h				568	596	505	333	1944	0	0	546	533
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.40	0.40	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				20.9	24.9	22.0	23.5	0.0	0.0	0.0	25.6	25.6
Incr Delay (d2), s/veh				0.8	22.0	2.8	79.6	0.1	0.0	0.0	30.3	30.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.0	12.4	4.9	11.5	0.0	0.0	0.0	13.0	12.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				21.7	46.9	24.7	103.1	0.1	0.0	0.0	55.9	56.4
LnGrp LOS				C	D	C	F	A	A	A	E	E
Approach Vol, veh/h					1169			849			1038	
Approach Delay, s/veh					34.5			46.4			56.1	
Approach LOS					C			D			E	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		46.1			18.0	28.1		28.9				
Change Period (Y+Rc), s		5.1			4.0	5.1		5.1				
Max Green Setting (Gmax), s		40.9			14.0	22.9		23.9				
Max Q Clear Time (g_c+I1), s		2.0			16.0	23.8		23.6				
Green Ext Time (p_c), s		3.3			0.0	0.0		0.2				

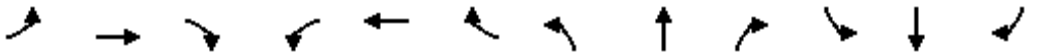
Intersection Summary												
HCM 6th Ctrl Delay			45.1									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	839	319	0	0	0	0	612	216	324	727	0
Future Volume (veh/h)	165	839	319	0	0	0	0	612	216	324	727	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	176	893	339				0	651	230	345	773	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	615	871	329				0	657	232	374	1843	0
Arrive On Green	0.35	0.35	0.35				0.00	0.26	0.26	0.42	1.00	0.00
Sat Flow, veh/h	1781	2522	953				0	2668	909	1781	3647	0
Grp Volume(v), veh/h	176	628	604				0	449	432	345	773	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1699				0	1777	1707	1781	1777	0
Q Serve(g_s), s	5.4	25.9	25.9				0.0	18.9	18.9	13.7	0.0	0.0
Cycle Q Clear(g_c), s	5.4	25.9	25.9				0.0	18.9	18.9	13.7	0.0	0.0
Prop In Lane	1.00		0.56				0.00		0.53	1.00		0.00
Lane Grp Cap(c), veh/h	615	614	587				0	453	435	374	1843	0
V/C Ratio(X)	0.29	1.02	1.03				0.00	0.99	0.99	0.92	0.42	0.00
Avail Cap(c_a), veh/h	615	614	587				0	453	435	380	1843	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.38	0.38	0.00
Uniform Delay (d), s/veh	17.8	24.5	24.6				0.0	27.8	27.9	21.1	0.0	0.0
Incr Delay (d2), s/veh	0.3	42.3	45.0				0.0	40.1	41.1	13.3	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	17.1	16.8				0.0	12.5	12.1	5.3	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1	66.9	69.6				0.0	67.9	69.0	34.5	0.3	0.0
LnGrp LOS	B	F	F				A	E	E	C	A	A
Approach Vol, veh/h		1408						881			1118	
Approach Delay, s/veh		61.9						68.4			10.8	
Approach LOS		E						E			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.8	24.2		31.0		44.0
Change Period (Y+Rc), s	4.0	5.1		5.1		5.1
Max Green Setting (Gmax), s	16.0	18.9		25.9		38.9
Max Q Clear Time (g_c+I1), s	15.7	20.9		27.9		2.0
Green Ext Time (p_c), s	0.0	0.0		0.0		6.0

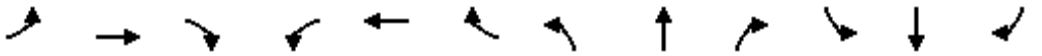
Intersection Summary		
HCM 6th Ctrl Delay		46.8
HCM 6th LOS		D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	255	578	340	367	684	0	0	531	124
Future Volume (veh/h)	0	0	0	255	578	340	367	684	0	0	531	124
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				274	622	366	395	735	0	0	571	133
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				656	689	584	301	1687	0	0	698	162
Arrive On Green				0.37	0.37	0.37	0.34	0.95	0.00	0.00	0.24	0.24
Sat Flow, veh/h				1781	1870	1585	1781	3647	0	0	2956	665
Grp Volume(v), veh/h				274	622	366	395	735	0	0	354	350
Grp Sat Flow(s),veh/h/ln				1781	1870	1585	1781	1777	0	0	1777	1751
Q Serve(g_s), s				7.5	20.5	12.3	11.0	1.2	0.0	0.0	12.2	12.3
Cycle Q Clear(g_c), s				7.5	20.5	12.3	11.0	1.2	0.0	0.0	12.2	12.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.38
Lane Grp Cap(c), veh/h				656	689	584	301	1687	0	0	433	427
V/C Ratio(X)				0.42	0.90	0.63	1.31	0.44	0.00	0.00	0.82	0.82
Avail Cap(c_a), veh/h				682	716	607	301	1687	0	0	433	427
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.32	0.32	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				15.3	19.4	16.9	21.5	0.9	0.0	0.0	23.2	23.2
Incr Delay (d2), s/veh				0.4	14.4	1.9	147.3	0.3	0.0	0.0	15.6	16.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.8	10.5	4.3	15.6	0.3	0.0	0.0	6.5	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				15.7	33.9	18.8	168.8	1.2	0.0	0.0	38.8	39.3
LnGrp LOS				B	C	B	F	A	A	A	D	D
Approach Vol, veh/h					1262			1130			704	
Approach Delay, s/veh					25.5			59.8			39.0	
Approach LOS					C			E			D	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		35.9			15.0	20.9		29.1				
Change Period (Y+Rc), s		5.1			4.0	5.1		5.1				
Max Green Setting (Gmax), s		29.9			11.0	14.9		24.9				
Max Q Clear Time (g_c+I1), s		3.2			13.0	14.3		22.5				
Green Ext Time (p_c), s		5.3			0.0	0.3		1.5				

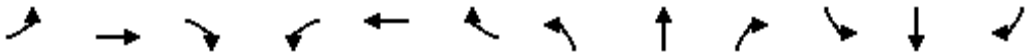
Intersection Summary												
HCM 6th Ctrl Delay			41.1									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	378	503	314	0	0	0	0	630	197	256	527	0
Future Volume (veh/h)	378	503	314	0	0	0	0	630	197	256	527	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	415	553	345				0	692	216	281	579	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	582	687	428				0	761	237	301	1834	0
Arrive On Green	0.33	0.33	0.33				0.00	0.29	0.29	0.34	1.00	0.00
Sat Flow, veh/h	1781	2101	1310				0	2759	832	1781	3647	0
Grp Volume(v), veh/h	415	468	430				0	461	447	281	579	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1635				0	1777	1721	1781	1777	0
Q Serve(g_s), s	13.3	15.6	15.6				0.0	16.3	16.3	9.9	0.0	0.0
Cycle Q Clear(g_c), s	13.3	15.6	15.6				0.0	16.3	16.3	9.9	0.0	0.0
Prop In Lane	1.00		0.80				0.00		0.48	1.00		0.00
Lane Grp Cap(c), veh/h	582	581	534				0	507	491	301	1834	0
V/C Ratio(X)	0.71	0.80	0.81				0.00	0.91	0.91	0.93	0.32	0.00
Avail Cap(c_a), veh/h	658	656	604				0	507	491	301	1834	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.59	0.59	0.00
Uniform Delay (d), s/veh	19.2	20.0	20.0				0.0	22.4	22.4	21.1	0.0	0.0
Incr Delay (d2), s/veh	3.2	6.5	7.1				0.0	22.9	23.5	24.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	6.8	6.3				0.0	9.3	9.1	5.1	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.3	26.5	27.1				0.0	45.3	45.9	45.3	0.3	0.0
LnGrp LOS	C	C	C				A	D	D	D	A	A
Approach Vol, veh/h		1313						908			860	
Approach Delay, s/veh		25.4						45.6			15.0	
Approach LOS		C						D			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	23.6		26.4		38.6
Change Period (Y+Rc), s	4.0	5.1		5.1		5.1
Max Green Setting (Gmax), s	11.0	15.8		24.0		30.8
Max Q Clear Time (g_c+I1), s	11.9	18.3		17.6		2.0
Green Ext Time (p_c), s	0.0	0.0		3.6		4.1

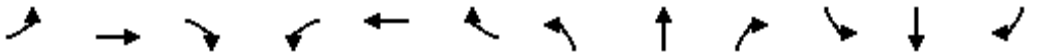
Intersection Summary	
HCM 6th Ctrl Delay	28.4
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	272	541	300	357	435	0	0	758	219
Future Volume (veh/h)	0	0	0	272	541	300	357	435	0	0	758	219
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				292	582	323	384	468	0	0	815	235
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				568	596	505	333	1938	0	0	831	240
Arrive On Green				0.32	0.32	0.32	0.37	1.00	0.00	0.00	0.31	0.31
Sat Flow, veh/h				1781	1870	1585	1781	3647	0	0	2815	784
Grp Volume(v), veh/h				292	582	323	384	468	0	0	532	518
Grp Sat Flow(s),veh/h/ln				1781	1870	1585	1781	1777	0	0	1777	1729
Q Serve(g_s), s				10.0	23.1	13.1	14.0	0.0	0.0	0.0	22.3	22.3
Cycle Q Clear(g_c), s				10.0	23.1	13.1	14.0	0.0	0.0	0.0	22.3	22.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.45
Lane Grp Cap(c), veh/h				568	596	505	333	1938	0	0	543	528
V/C Ratio(X)				0.51	0.98	0.64	1.15	0.24	0.00	0.00	0.98	0.98
Avail Cap(c_a), veh/h				568	596	505	333	1938	0	0	543	528
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.40	0.40	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				20.8	25.3	21.9	23.5	0.0	0.0	0.0	25.8	25.8
Incr Delay (d2), s/veh				0.8	30.8	2.7	83.2	0.1	0.0	0.0	34.2	34.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.0	14.5	4.9	11.8	0.0	0.0	0.0	13.8	13.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				21.6	56.1	24.6	106.7	0.1	0.0	0.0	60.0	60.6
LnGrp LOS				C	E	C	F	A	A	A	E	E
Approach Vol, veh/h					1197			852			1050	
Approach Delay, s/veh					39.2			48.2			60.3	
Approach LOS					D			D			E	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		46.0			18.0	28.0		29.0				
Change Period (Y+Rc), s		5.1			4.0	5.1		5.1				
Max Green Setting (Gmax), s		40.9			14.0	22.9		23.9				
Max Q Clear Time (g_c+I1), s		2.0			16.0	24.3		25.1				
Green Ext Time (p_c), s		3.3			0.0	0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			48.8									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	851	352	0	0	0	0	612	216	324	727	0
Future Volume (veh/h)	168	851	352	0	0	0	0	612	216	324	727	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	179	905	374				0	651	230	345	773	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	615	849	348				0	657	232	374	1843	0
Arrive On Green	0.35	0.35	0.35				0.00	0.26	0.26	0.42	1.00	0.00
Sat Flow, veh/h	1781	2457	1008				0	2668	909	1781	3647	0
Grp Volume(v), veh/h	179	653	626				0	449	432	345	773	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1689				0	1777	1707	1781	1777	0
Q Serve(g_s), s	5.5	25.9	25.9				0.0	18.9	18.9	13.7	0.0	0.0
Cycle Q Clear(g_c), s	5.5	25.9	25.9				0.0	18.9	18.9	13.7	0.0	0.0
Prop In Lane	1.00		0.60				0.00		0.53	1.00		0.00
Lane Grp Cap(c), veh/h	615	614	583				0	453	435	374	1843	0
V/C Ratio(X)	0.29	1.06	1.07				0.00	0.99	0.99	0.92	0.42	0.00
Avail Cap(c_a), veh/h	615	614	583				0	453	435	380	1843	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.37	0.37	0.00
Uniform Delay (d), s/veh	17.9	24.5	24.6				0.0	27.8	27.9	21.1	0.0	0.0
Incr Delay (d2), s/veh	0.3	54.4	58.7				0.0	40.1	41.1	13.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	19.1	18.9				0.0	12.5	12.1	5.3	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1	79.0	83.2				0.0	67.9	69.0	34.2	0.3	0.0
LnGrp LOS	B	F	F				A	E	E	C	A	A
Approach Vol, veh/h		1458						881			1118	
Approach Delay, s/veh		73.3						68.4			10.7	
Approach LOS		E						E			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.8	24.2		31.0		44.0
Change Period (Y+Rc), s	4.0	5.1		5.1		5.1
Max Green Setting (Gmax), s	16.0	18.9		25.9		38.9
Max Q Clear Time (g_c+I1), s	15.7	20.9		27.9		2.0
Green Ext Time (p_c), s	0.0	0.0		0.0		6.0

Intersection Summary	
HCM 6th Ctrl Delay	51.8
HCM 6th LOS	D

APPENDIX E

EXISTING ADT COUNTS

Prepared by City Count, LLC (www.citycount.com)

ADT Volume Report

Duarte Road - 5th to Mayflower

Day: Tuesday, February 2, 2016 **City:** Monrovia, CA

Daily Totals	NB	SB	EB	WB	Total
	0	0	10804	10641	21445

AM	NB	SB	EB		WB		Total		PM	NB	SB	EB		WB		Total	
00:00			19		10		29		12:00			151		163		314	
00:15			14		12		26		12:15			145		147		292	
00:30			14		9		23		12:30			156		171		327	
00:45			4	51	4	35	8	86	12:45			159	611	133	614	292	1225
01:00			7		3		10		13:00			144		156		300	
01:15			5		6		11		13:15			150		131		281	
01:30			5		6		11		13:30			139		154		293	
01:45			3	20	4	19	7	39	13:45			128	561	140	581	268	1142
02:00			4		3		7		14:00			141		157		298	
02:15			3		2		5		14:15			142		146		288	
02:30			2		4		6		14:30			186		157		343	
02:45			6	15	1	10	7	25	14:45			165	634	150	610	315	1244
03:00			3		4		7		15:00			226		167		393	
03:15			8		1		9		15:15			211		163		374	
03:30			8		7		15		15:30			211		149		360	
03:45			9	28	3	15	12	43	15:45			223	871	180	659	403	1530
04:00			3		7		10		16:00			275		166		441	
04:15			12		12		24		16:15			265		177		442	
04:30			10		18		28		16:30			285		170		455	
04:45			11	36	20	57	31	93	16:45			324	1149	182	695	506	1844
05:00			17		16		33		17:00			336		220		556	
05:15			18		28		46		17:15			361		206		567	
05:30			36		35		71		17:30			335		227		562	
05:45			35	106	49	128	84	234	17:45			311	1343	210	863	521	2206
06:00			45		41		86		18:00			317		177		494	
06:15			58		80		138		18:15			249		172		421	
06:30			62		156		218		18:30			251		164		415	
06:45			94	259	214	491	308	750	18:45			202	1019	147	660	349	1679
07:00			87		260		347		19:00			174		130		304	
07:15			74		293		367		19:15			123		131		254	
07:30			139		326		465		19:30			116		122		238	
07:45			139	439	280	1159	419	1598	19:45			123	536	88	471	211	1007
08:00			198		293		491		20:00			114		100		214	
08:15			168		263		431		20:15			84		81		165	
08:30			143		247		390		20:30			80		112		192	
08:45			131	640	210	1013	341	1653	20:45			71	349	81	374	152	723
09:00			122		164		286		21:00			89		79		168	
09:15			111		156		267		21:15			70		65		135	
09:30			112		151		263		21:30			72		45		117	
09:45			133	478	141	612	274	1090	21:45			70	301	53	242	123	543
10:00			121		124		245		22:00			60		63		123	
10:15			122		135		257		22:15			45		45		90	
10:30			112		148		260		22:30			43		35		78	
10:45			134	489	132	539	266	1028	22:45			28	176	23	166	51	342
11:00			143		133		276		23:00			26		27		53	
11:15			148		137		285		23:15			27		13		40	
11:30			135		137		272		23:30			18		15		33	
11:45			163	589	145	552	308	1141	23:45			33	104	21	76	54	180
Totals				3150		4630	7780		Totals				7654		6011	13665	
Split %				40.5%		59.5%	36.3%		Split %				56.0%		44.0%	63.7%	

Daily Totals	NB	SB	EB	WB	Total
	0	0	10804	10641	21445

AM Peak Hour	07:45	07:15	07:30	PM Peak Hour	16:45	17:00	17:00
AM Peak Hr Volume	648	1192	1806	PM Peak Hr Volume	1356	863	2206
AM Pk Hr Factor	0.818	0.914	0.920	PM Pk Hr Factor	0.939	0.950	0.973

Prepared by City Count, LLC (www.citycount.com)

ADT Volume Report

Duarte Road - Mayflower to Myrtle

Day: Tuesday, February 2, 2016 **City:** Monrovia, CA

Daily Totals	NB	SB	EB	WB	Total
	0	0	9306	8225	17531

AM	NB	SB	EB		WB		Total		PM	NB	SB	EB		WB		Total	
00:00			18		9		27		12:00			157		129		286	
00:15			13		8		21		12:15			132		112		244	
00:30			6		8		14		12:30			164		148		312	
00:45			4	41	4	29	8	70	12:45			151	604	135	524	286	1128
01:00			9		0		9		13:00			146		109		255	
01:15			4		6		10		13:15			132		107		239	
01:30			5		5		10		13:30			191		135		326	
01:45			0	18	1	12	1	30	13:45			136	605	106	457	242	1062
02:00			1		2		3		14:00			151		130		281	
02:15			2		1		3		14:15			149		112		261	
02:30			4		2		6		14:30			168		132		300	
02:45			4	11	3	8	7	19	14:45			142	610	117	491	259	1101
03:00			2		2		4		15:00			212		146		358	
03:15			6		2		8		15:15			197		143		340	
03:30			13		6		19		15:30			218		151		369	
03:45			7	28	3	13	10	41	15:45			189	816	147	587	336	1403
04:00			4		1		5		16:00			232		134		366	
04:15			6		7		13		16:15			210		147		357	
04:30			9		14		23		16:30			246		150		396	
04:45			15	34	20	42	35	76	16:45			227	915	161	592	388	1507
05:00			12		20		32		17:00			233		167		400	
05:15			21		19		40		17:15			251		165		416	
05:30			38		37		75		17:30			254		172		426	
05:45			38	109	45	121	83	230	17:45			205	943	155	659	360	1602
06:00			40		31		71		18:00			256		152		408	
06:15			61		49		110		18:15			191		127		318	
06:30			63		97		160		18:30			183		112		295	
06:45			72	236	143	320	215	556	18:45			152	782	109	500	261	1282
07:00			98		143		241		19:00			138		108		246	
07:15			106		194		300		19:15			95		76		171	
07:30			202		206		408		19:30			82		86		168	
07:45			190	596	173	716	363	1312	19:45			86	401	65	335	151	736
08:00			157		196		353		20:00			96		55		151	
08:15			139		206		345		20:15			75		69		144	
08:30			112		162		274		20:30			58		81		139	
08:45			106	514	175	739	281	1253	20:45			66	295	54	259	120	554
09:00			120		129		249		21:00			71		61		132	
09:15			93		138		231		21:15			47		43		90	
09:30			114		117		231		21:30			51		32		83	
09:45			103	430	110	494	213	924	21:45			33	202	34	170	67	372
10:00			123		117		240		22:00			35		37		72	
10:15			104		116		220		22:15			23		36		59	
10:30			100		126		226		22:30			32		26		58	
10:45			117	444	117	476	234	920	22:45			30	120	26	125	56	245
11:00			121		124		245		23:00			14		24		38	
11:15			113		112		225		23:15			26		19		45	
11:30			125		106		231		23:30			18		18		36	
11:45			120	479	140	482	260	961	23:45			15	73	13	74	28	147
Totals				2940		3452	6392		Totals				6366		4773	11139	
Split %				46.0%		54.0%	36.5%		Split %				57.2%		42.8%	63.5%	

Daily Totals	NB	SB	EB	WB	Total
	0	0	9306	8225	17531

AM Peak Hour	07:30	07:30	07:30	PM Peak Hour	17:15	16:45	16:45
AM Peak Hr Volume	688	781	1469	PM Peak Hr Volume	966	665	1630
AM Pk Hr Factor	0.851	0.948	0.900	PM Pk Hr Factor	0.943	0.967	0.957

Prepared by City Count, LLC (www.citycount.com)

ADT Volume Report

Duarte Road - Myrtle to California

Day: Tuesday, February 2, 2016 **City:** Monrovia, CA

Daily Totals	NB	SB	EB	WB	Total
	0	0	5286	5381	10667

AM	NB	SB	EB		WB		Total		PM	NB	SB	EB		WB		Total	
00:00			10		10		20		12:00			105		84		189	
00:15			10		13		23		12:15			76		91		167	
00:30			5		6		11		12:30			87		112		199	
00:45			1	26	8	37	9	63	12:45			83	351	69	356	152	707
01:00			2		2		4		13:00			98		78		176	
01:15			4		3		7		13:15			62		76		138	
01:30			4		1		5		13:30			112		79		191	
01:45			1	11	4	10	5	21	13:45			82	354	80	313	162	667
02:00			1		1		2		14:00			85		83		168	
02:15			0		2		2		14:15			72		55		127	
02:30			4		0		4		14:30			116		103		219	
02:45			1	6	3	6	4	12	14:45			93	366	87	328	180	694
03:00			0		1		1		15:00			136		117		253	
03:15			1		3		4		15:15			118		91		209	
03:30			10		6		16		15:30			127		91		218	
03:45			3	14	3	13	6	27	15:45			130	511	96	395	226	906
04:00			0		2		2		16:00			132		104		236	
04:15			2		4		6		16:15			125		98		223	
04:30			3		8		11		16:30			150		112		262	
04:45			6	11	11	25	17	36	16:45			116	523	96	410	212	933
05:00			2		11		13		17:00			110		99		209	
05:15			6		10		16		17:15			119		96		215	
05:30			12		20		32		17:30			115		91		206	
05:45			14	34	17	58	31	92	17:45			116	460	88	374	204	834
06:00			23		27		50		18:00			106		78		184	
06:15			17		44		61		18:15			108		75		183	
06:30			27		60		87		18:30			105		75		180	
06:45			51	118	93	224	144	342	18:45			75	394	62	290	137	684
07:00			33		117		150		19:00			75		68		143	
07:15			60		141		201		19:15			63		73		136	
07:30			95		140		235		19:30			53		49		102	
07:45			83	271	113	511	196	782	19:45			52	243	33	223	85	466
08:00			95		127		222		20:00			60		35		95	
08:15			75		141		216		20:15			35		38		73	
08:30			75		93		168		20:30			38		46		84	
08:45			62	307	100	461	162	768	20:45			43	176	30	149	73	325
09:00			71		74		145		21:00			36		39		75	
09:15			58		84		142		21:15			32		31		63	
09:30			55		86		141		21:30			32		24		56	
09:45			80	264	74	318	154	582	21:45			27	127	22	116	49	243
10:00			69		69		138		22:00			26		30		56	
10:15			67		62		129		22:15			11		21		32	
10:30			55		75		130		22:30			25		24		49	
10:45			80	271	78	284	158	555	22:45			13	75	23	98	36	173
11:00			76		103		179		23:00			9		20		29	
11:15			87		68		155		23:15			9		16		25	
11:30			90		71		161		23:30			11		16		27	
11:45			82	335	77	319	159	654	23:45			9	38	11	63	20	101
Totals				1668		2266	3934		Totals				3618		3115	6733	
Split %				42.4%		57.6%	36.9%		Split %				53.7%		46.3%	63.1%	

Daily Totals	NB	SB	EB	WB	Total
	0	0	5286	5381	10667

AM Peak Hour	07:30	07:30	07:30	PM Peak Hour	15:45	16:00	15:45
AM Peak Hr Volume	348	521	869	PM Peak Hr Volume	537	410	947
AM Pk Hr Factor	0.916	0.924	0.924	PM Pk Hr Factor	0.895	0.915	0.904

Prepared by City Count, LLC (www.citycount.com)

ADT Volume Report

Evergreen Avenue - Mayflower to Magnolia

Day: Wednesday, February 3, 2016 **City:** Monrovia, CA

Daily Totals	NB	SB	EB	WB	Total
	0	0	2067	233	2300

AM	NB	SB	EB		WB		Total		PM	NB	SB	EB		WB		Total	
00:00			2		1		3		12:00			33		7		40	
00:15			2		0		2		12:15			34		3		37	
00:30			1		0		1		12:30			27		5		32	
00:45			0	5	0	1	0	6	12:45			24	118	3	18	27	136
01:00			1		0		1		13:00			30		0		30	
01:15			0		0		0		13:15			38		5		43	
01:30			1		0		1		13:30			35		4		39	
01:45			0	2	0	0	0	2	13:45			33	136	1	10	34	146
02:00			1		0		1		14:00			49		4		53	
02:15			0		0		0		14:15			52		3		55	
02:30			1		0		1		14:30			34		3		37	
02:45			0	2	0	0	0	2	14:45			38	173	2	12	40	185
03:00			0		0		0		15:00			36		4		40	
03:15			0		0		0		15:15			28		5		33	
03:30			2		0		2		15:30			42		10		52	
03:45			2	4	0	0	2	4	15:45			44	150	1	20	45	170
04:00			1		0		1		16:00			35		7		42	
04:15			3		1		4		16:15			33		2		35	
04:30			6		0		6		16:30			50		2		52	
04:45			7	17	1	2	8	19	16:45			51	169	0	11	51	180
05:00			6		1		7		17:00			62		3		65	
05:15			8		3		11		17:15			64		8		72	
05:30			6		7		13		17:30			48		5		53	
05:45			11	31	5	16	16	47	17:45			45	219	1	17	46	236
06:00			17		1		18		18:00			40		1		41	
06:15			25		0		25		18:15			28		4		32	
06:30			33		2		35		18:30			36		1		37	
06:45			28	103	3	6	31	109	18:45			19	123	1	7	20	130
07:00			34		4		38		19:00			22		2		24	
07:15			27		2		29		19:15			15		2		17	
07:30			40		10		50		19:30			16		2		18	
07:45			36	137	8	24	44	161	19:45			24	77	1	7	25	84
08:00			32		1		33		20:00			30		1		31	
08:15			23		6		29		20:15			15		3		18	
08:30			38		6		44		20:30			13		3		16	
08:45			25	118	4	17	29	135	20:45			15	73	2	9	17	82
09:00			30		1		31		21:00			15		1		16	
09:15			28		3		31		21:15			9		1		10	
09:30			30		6		36		21:30			14		2		16	
09:45			17	105	3	13	20	118	21:45			14	52	4	8	18	60
10:00			22		4		26		22:00			15		1		16	
10:15			22		2		24		22:15			11		0		11	
10:30			23		1		24		22:30			7		1		8	
10:45			31	98	5	12	36	110	22:45			3	36	2	4	5	40
11:00			22		2		24		23:00			5		0		5	
11:15			27		2		29		23:15			3		0		3	
11:30			32		6		38		23:30			3		0		3	
11:45			26	107	9	19	35	126	23:45			1	12	0	0	1	12
Totals				729		110	839		Totals				1338		123	1461	
Split %				86.9%		13.1%	36.5%		Split %				91.6%		8.4%	63.5%	

Daily Totals	NB	SB	EB	WB	Total
	0	0	2067	233	2300

AM Peak Hour	07:00	07:30	07:00	PM Peak Hour	16:30	15:15	16:45
AM Peak Hr Volume	137	25	161	PM Peak Hr Volume	227	23	241
AM Pk Hr Factor	0.856	0.625	0.805	PM Pk Hr Factor	0.887	0.575	0.837

Prepared by City Count, LLC (www.citycount.com)

ADT Volume Report

Evergreen Avenue - Myrtle to California

Day: Wednesday, February 3, 2016 **City:** Monrovia, CA

Daily Totals	NB	SB	EB	WB	Total
	0	0	14299	0	14299

AM	NB	SB	EB		WB		Total		PM	NB	SB	EB		WB		Total	
00:00			39		0		39		12:00			218		0		218	
00:15			41		0		41		12:15			206		0		206	
00:30			29		0		29		12:30			199		0		199	
00:45			22	131	0	0	22	131	12:45			208	831	0	0	208	831
01:00			35		0		35		13:00			219		0		219	
01:15			23		0		23		13:15			224		0		224	
01:30			19		0		19		13:30			202		0		202	
01:45			16	93	0	0	16	93	13:45			232	877	0	0	232	877
02:00			11		0		11		14:00			239		0		239	
02:15			8		0		8		14:15			264		0		264	
02:30			8		0		8		14:30			283		0		283	
02:45			5	32	0	0	5	32	14:45			244	1030	0	0	244	1030
03:00			4		0		4		15:00			252		0		252	
03:15			14		0		14		15:15			264		0		264	
03:30			10		0		10		15:30			272		0		272	
03:45			14	42	0	0	14	42	15:45			234	1022	0	0	234	1022
04:00			17		0		17		16:00			313		0		313	
04:15			27		0		27		16:15			299		0		299	
04:30			25		0		25		16:30			312		0		312	
04:45			47	116	0	0	47	116	16:45			320	1244	0	0	320	1244
05:00			54		0		54		17:00			350		0		350	
05:15			59		0		59		17:15			317		0		317	
05:30			81		0		81		17:30			358		0		358	
05:45			82	276	0	0	82	276	17:45			314	1339	0	0	314	1339
06:00			113		0		113		18:00			287		0		287	
06:15			120		0		120		18:15			253		0		253	
06:30			159		0		159		18:30			234		0		234	
06:45			139	531	0	0	139	531	18:45			228	1002	0	0	228	1002
07:00			194		0		194		19:00			213		0		213	
07:15			225		0		225		19:15			168		0		168	
07:30			237		0		237		19:30			157		0		157	
07:45			226	882	0	0	226	882	19:45			159	697	0	0	159	697
08:00			204		0		204		20:00			159		0		159	
08:15			189		0		189		20:15			129		0		129	
08:30			185		0		185		20:30			130		0		130	
08:45			162	740	0	0	162	740	20:45			106	524	0	0	106	524
09:00			157		0		157		21:00			138		0		138	
09:15			152		0		152		21:15			108		0		108	
09:30			178		0		178		21:30			100		0		100	
09:45			155	642	0	0	155	642	21:45			66	412	0	0	66	412
10:00			161		0		161		22:00			69		0		69	
10:15			161		0		161		22:15			55		0		55	
10:30			180		0		180		22:30			51		0		51	
10:45			200	702	0	0	200	702	22:45			56	231	0	0	56	231
11:00			179		0		179		23:00			45		0		45	
11:15			183		0		183		23:15			49		0		49	
11:30			168		0		168		23:30			46		0		46	
11:45			189	719	0	0	189	719	23:45			44	184	0	0	44	184
Totals				4906		0	4906		Totals				9393		0	9393	
Split %				100.0%		0.0%	34.3%		Split %				100.0%		0.0%	65.7%	

Daily Totals	NB	SB	EB	WB	Total
	0	0	14299	0	14299

AM Peak Hour	07:15	11:00	07:15	PM Peak Hour	16:45	23:00	16:45
AM Peak Hr Volume	892	0	892	PM Peak Hr Volume	1345	0	1345
AM Pk Hr Factor	0.941	#DIV/0!	0.941	PM Pk Hr Factor	0.939	#DIV/0!	0.939

Prepared by City Count, LLC (www.citycount.com)

ADT Volume Report

Huntington Avenue - Mayflower to Myrtle

Day: Wednesday, February 17, 2016 **City:** Monrovia, CA

Daily Totals	NB	SB	EB	WB	Total
	0	0	11306	13993	25299

AM	NB		SB		EB		WB		Total		PM	NB		SB		EB		WB		Total	
00:00					13		12		25		12:00					220		234		454	
00:15					6		11		17		12:15					219		244		463	
00:30					15		15		30		12:30					235		215		450	
00:45					5	39	9	47	14	86	12:45					252	926	235	928	487	1854
01:00					13		8		21		13:00					221		196		417	
01:15					4		5		9		13:15					209		167		376	
01:30					7		2		9		13:30					215		148		363	
01:45					3	27	5	20	8	47	13:45					183	828	187	698	370	1526
02:00					7		6		13		14:00					221		146		367	
02:15					5		4		9		14:15					188		162		350	
02:30					3		8		11		14:30					191		201		392	
02:45					4	19	6	24	10	43	14:45					190	790	152	661	342	1451
03:00					2		2		4		15:00					230		214		444	
03:15					0		5		5		15:15					219		165		384	
03:30					2		3		5		15:30					262		198		460	
03:45					5	9	2	12	7	21	15:45					273	984	235	812	508	1796
04:00					8		9		17		16:00					255		185		440	
04:15					9		11		20		16:15					276		196		472	
04:30					11		15		26		16:30					302		235		537	
04:45					25	53	12	47	37	100	16:45					289	1122	198	814	487	1936
05:00					10		16		26		17:00					305		235		540	
05:15					23		37		60		17:15					288		286		574	
05:30					20		52		72		17:30					289		238		527	
05:45					30	83	60	165	90	248	17:45					276	1158	285	1044	561	2202
06:00					34		106		140		18:00					211		235		446	
06:15					39		185		224		18:15					181		235		416	
06:30					46		260		306		18:30					192		245		437	
06:45					60	179	300	851	360	1030	18:45					250	834	235	950	485	1784
07:00					61		289		350		19:00					211		212		423	
07:15					92		340		432		19:15					197		196		393	
07:30					116		302		418		19:30					149		157		306	
07:45					144	413	308	1239	452	1652	19:45					132	689	126	691	258	1380
08:00					132		351		483		20:00					127		111		238	
08:15					131		348		479		20:15					123		145		268	
08:30					96		351		447		20:30					113		125		238	
08:45					111	470	257	1307	368	1777	20:45					92	455	98	479	190	934
09:00					108		257		365		21:00					93		95		188	
09:15					101		240		341		21:15					78		87		165	
09:30					116		234		350		21:30					76		76		152	
09:45					124	449	239	970	363	1419	21:45					61	308	45	303	106	611
10:00					121		188		309		22:00					48		65		113	
10:15					149		210		359		22:15					36		42		78	
10:30					144		205		349		22:30					25		38		63	
10:45					140	554	208	811	348	1365	22:45					21	130	25	170	46	300
11:00					149		218		367		23:00					14		35		49	
11:15					182		190		372		23:15					12		24		36	
11:30					192		222		414		23:30					27		22		49	
11:45					194	717	230	860	424	1577	23:45					17	70	9	90	26	160
Totals						3012		6353	9365		Totals						8294		7640	15934	
Split %						32.2%		67.8%	37.0%		Split %						52.1%		47.9%	63.0%	

Daily Totals	NB	SB	EB	WB	Total
	0	0	11306	13993	25299

AM Peak Hour	11:00	07:45	07:45	PM Peak Hour	16:30	17:15	17:00
AM Peak Hr Volume	717	1358	1861	PM Peak Hr Volume	1184	1044	2202
AM Pk Hr Factor	0.924	0.967	0.963	PM Pk Hr Factor	0.970	0.913	0.959

Prepared by City Count, LLC (www.citycount.com)

ADT Volume Report

Mayflower Avenue - Huntington to Central

Day: Thursday, February 4, 2016 **City:** Monrovia, CA

Daily Totals	NB	SB	EB	WB	Total
	8610	6806	0	0	15416

AM	NB		SB		EB	WB	Total		PM	NB		SB		EB	WB	Total	
00:00	14		20				34		12:00	160		119				279	
00:15	11		13				24		12:15	127		116				243	
00:30	3		15				18		12:30	116		113				229	
00:45	5	33	2	50			7	83	12:45	138	541	89	437			227	978
01:00	3		5				8		13:00	125		110				235	
01:15	2		4				6		13:15	128		95				223	
01:30	4		1				5		13:30	143		103				246	
01:45	0	9	2	12			2	21	13:45	102	498	102	410			204	908
02:00	1		2				3		14:00	123		86				209	
02:15	5		4				9		14:15	121		95				216	
02:30	4		2				6		14:30	133		121				254	
02:45	4	14	4	12			8	26	14:45	149	526	95	397			244	923
03:00	6		1				7		15:00	134		128				262	
03:15	4		1				5		15:15	134		141				275	
03:30	2		7				9		15:30	120		106				226	
03:45	13	25	5	14			18	39	15:45	151	539	128	503			279	1042
04:00	6		5				11		16:00	159		123				282	
04:15	9		1				10		16:15	139		153				292	
04:30	14		9				23		16:30	142		164				306	
04:45	23	52	8	23			31	75	16:45	148	588	169	609			317	1197
05:00	29		11				40		17:00	139		174				313	
05:15	28		9				37		17:15	153		165				318	
05:30	35		14				49		17:30	162		166				328	
05:45	54	146	20	54			74	200	17:45	163	617	170	675			333	1292
06:00	84		25				109		18:00	141		186				327	
06:15	69		34				103		18:15	146		141				287	
06:30	109		37				146		18:30	138		151				289	
06:45	159	421	45	141			204	562	18:45	112	537	128	606			240	1143
07:00	157		59				216		19:00	134		126				260	
07:15	205		100				305		19:15	90		130				220	
07:30	245		86				331		19:30	84		110				194	
07:45	251	858	111	356			362	1214	19:45	64	372	90	456			154	828
08:00	221		95				316		20:00	80		94				174	
08:15	188		85				273		20:15	75		98				173	
08:30	187		69				256		20:30	59		92				151	
08:45	171	767	64	313			235	1080	20:45	41	255	85	369			126	624
09:00	130		74				204		21:00	56		71				127	
09:15	121		96				217		21:15	37		74				111	
09:30	123		62				185		21:30	39		65				104	
09:45	133	507	59	291			192	798	21:45	42	174	44	254			86	428
10:00	120		65				185		22:00	32		29				61	
10:15	101		67				168		22:15	22		37				59	
10:30	94		53				147		22:30	24		41				65	
10:45	127	442	70	255			197	697	22:45	15	93	27	134			42	227
11:00	128		79				207		23:00	12		32				44	
11:15	125		110				235		23:15	10		21				31	
11:30	131		80				211		23:30	9		17				26	
11:45	172	556	89	358			261	914	23:45	9	40	7	77			16	117
Totals		3830		1879			5709		Totals		4780		4927			9707	
Split %		67.1%		32.9%			37.0%		Split %		49.2%		50.8%			63.0%	

Daily Totals	NB	SB	EB	WB	Total
	8610	6806	0	0	15416

AM Peak Hour	07:15	07:15	07:15	PM Peak Hour	17:15	17:15	17:15
AM Peak Volume	922	392	1314	PM Peak Volume	619	687	1306
AM Pk Hr Factor	0.918	0.883	0.907	PM Pk Hr Factor	0.949	0.923	0.980

Prepared by City Count, LLC (www.citycount.com)

ADT Volume Report

Mayflower Avenue - Central to Duarte

Day: Wednesday, February 3, 2016 **City:** Monrovia, CA

Daily Totals	NB	SB	EB	WB	Total
	7830	7406	0	0	15236

AM	NB		SB		EB	WB	Total		PM	NB		SB		EB	WB	Total	
00:00	5		8				13		12:00	138		113				251	
00:15	7		10				17		12:15	101		115				216	
00:30	2		11				13		12:30	112		122				234	
00:45	0	14	8	37			8	51	12:45	131	482	116	466			247	948
01:00	3		7				10		13:00	93		114				207	
01:15	3		5				8		13:15	115		120				235	
01:30	2		4				6		13:30	115		112				227	
01:45	5	13	5	21			10	34	13:45	107	430	121	467			228	897
02:00	3		7				10		14:00	108		137				245	
02:15	4		4				8		14:15	122		145				267	
02:30	4		6				10		14:30	116		107				223	
02:45	2	13	3	20			5	33	14:45	133	479	98	487			231	966
03:00	1		2				3		15:00	151		163				314	
03:15	4		0				4		15:15	119		149				268	
03:30	4		6				10		15:30	115		148				263	
03:45	6	15	2	10			8	25	15:45	121	506	131	591			252	1097
04:00	2		2				4		16:00	122		149				271	
04:15	2		4				6		16:15	144		123				267	
04:30	6		5				11		16:30	143		159				302	
04:45	9	19	5	16			14	35	16:45	139	548	154	585			293	1133
05:00	13		6				19		17:00	149		186				335	
05:15	21		9				30		17:15	125		168				293	
05:30	39		12				51		17:30	143		193				336	
05:45	54	127	18	45			72	172	17:45	161	578	207	754			368	1332
06:00	56		18				74		18:00	136		205				341	
06:15	81		32				113		18:15	130		173				303	
06:30	102		43				145		18:30	114		154				268	
06:45	130	369	55	148			185	517	18:45	110	490	157	689			267	1179
07:00	143		79				222		19:00	106		109				215	
07:15	202		97				299		19:15	94		124				218	
07:30	283		140				423		19:30	66		141				207	
07:45	246	874	119	435			365	1309	19:45	82	348	94	468			176	816
08:00	233		126				359		20:00	72		89				161	
08:15	182		78				260		20:15	57		84				141	
08:30	155		75				230		20:30	50		108				158	
08:45	161	731	62	341			223	1072	20:45	30	209	88	369			118	578
09:00	109		63				172		21:00	45		71				116	
09:15	109		77				186		21:15	37		83				120	
09:30	103		82				185		21:30	38		63				101	
09:45	101	422	66	288			167	710	21:45	31	151	50	267			81	418
10:00	113		64				177		22:00	17		39				56	
10:15	103		82				185		22:15	18		33				51	
10:30	92		72				164		22:30	18		36				54	
10:45	90	398	61	279			151	677	22:45	18	71	27	135			45	206
11:00	109		83				192		23:00	18		27				45	
11:15	120		97				217		23:15	12		22				34	
11:30	131		103				234		23:30	10		11				21	
11:45	132	492	119	402			251	894	23:45	11	51	26	86			37	137
Totals		3487		2042			5529		Totals		4343		5364			9707	
Split %		63.1%		36.9%			36.3%		Split %		44.7%		55.3%			63.7%	

Daily Totals	NB	SB	EB	WB	Total
	7830	7406	0	0	15236

AM Peak Hour	07:15	07:15	07:15	PM Peak Hour	17:00	17:30	17:30
AM Peak Volume	964	482	1446	PM Peak Volume	578	778	1348
AM Pk Hr Factor	0.852	0.861	0.855	PM Pk Hr Factor	0.898	0.940	0.916

Prepared by City Count, LLC (www.citycount.com)

ADT Volume Report

Mayflower Avenue - Duarte to South City Limit

Day: Thursday, February 4, 2016 **City:** Monrovia, CA

Daily Totals	NB	SB	EB	WB	Total
	3563	3637	0	0	7200

AM	NB		SB		EB	WB	Total		PM	NB		SB		EB	WB	Total	
00:00	1		6				7		12:00	84		47				131	
00:15	0		4				4		12:15	42		60				102	
00:30	1		3				4		12:30	45		50				95	
00:45	0	2	7	20			7	22	12:45	56	227	61	218			117	445
01:00	1		4				5		13:00	56		70				126	
01:15	1		0				1		13:15	48		55				103	
01:30	3		2				5		13:30	48		53				101	
01:45	1	6	5	11			6	17	13:45	40	192	50	228			90	420
02:00	0		4				4		14:00	46		45				91	
02:15	0		1				1		14:15	62		64				126	
02:30	2		0				2		14:30	47		65				112	
02:45	2	4	2	7			4	11	14:45	65	220	68	242			133	462
03:00	2		1				3		15:00	57		75				132	
03:15	0		2				2		15:15	48		87				135	
03:30	1		1				2		15:30	52		64				116	
03:45	3	6	0	4			3	10	15:45	55	212	71	297			126	509
04:00	3		1				4		16:00	62		65				127	
04:15	4		1				5		16:15	66		84				150	
04:30	6		2				8		16:30	68		91				159	
04:45	9	22	2	6			11	28	16:45	59	255	90	330			149	585
05:00	10		3				13		17:00	54		96				150	
05:15	17		2				19		17:15	59		83				142	
05:30	12		11				23		17:30	65		96				161	
05:45	20	59	5	21			25	80	17:45	51	229	89	364			140	593
06:00	34		11				45		18:00	59		98				157	
06:15	32		12				44		18:15	53		80				133	
06:30	59		18				77		18:30	42		80				122	
06:45	92	217	35	76			127	293	18:45	41	195	73	331			114	526
07:00	98		36				134		19:00	31		56				87	
07:15	120		46				166		19:15	30		59				89	
07:30	133		56				189		19:30	22		51				73	
07:45	136	487	76	214			212	701	19:45	22	105	46	212			68	317
08:00	125		57				182		20:00	18		49				67	
08:15	99		43				142		20:15	19		46				65	
08:30	76		35				111		20:30	19		45				64	
08:45	65	365	19	154			84	519	20:45	18	74	39	179			57	253
09:00	64		43				107		21:00	13		37				50	
09:15	61		39				100		21:15	16		39				55	
09:30	41		26				67		21:30	12		36				48	
09:45	51	217	31	139			82	356	21:45	12	53	21	133			33	186
10:00	44		44				88		22:00	15		21				36	
10:15	40		37				77		22:15	11		8				19	
10:30	29		35				64		22:30	10		13				23	
10:45	41	154	29	145			70	299	22:45	4	40	16	58			20	98
11:00	49		52				101		23:00	5		20				25	
11:15	48		46				94		23:15	7		7				14	
11:30	46		44				90		23:30	6		5				11	
11:45	59	202	69	211			128	413	23:45	2	20	5	37			7	57
Totals		1741		1008			2749		Totals		1822		2629			4451	
Split %		63.3%		36.7%			38.2%		Split %		40.9%		59.1%			61.8%	

Daily Totals	NB	SB	EB	WB	Total
	3563	3637	0	0	7200

AM Peak Hour	07:15	07:15	07:15	PM Peak Hour	16:00	17:15	16:15
AM Peak Volume	514	235	749	PM Peak Volume	255	366	608
AM Pk Hr Factor	0.945	0.773	0.883	PM Pk Hr Factor	0.938	0.934	0.956

Prepared by City Count, LLC (www.citycount.com)

ADT Volume Report

Magnolia Avenue - Huntington to Central

Day: Wednesday, February 3, 2016 **City:** Monrovia, CA

Daily Totals	NB	SB	EB	WB	Total
	3197	3593	0	0	6790

AM	NB		SB		EB	WB	Total		PM	NB		SB		EB	WB	Total	
00:00	0		4				4		12:00	52		57				109	
00:15	3		3				6		12:15	56		56				112	
00:30	2		3				5		12:30	56		70				126	
00:45	1	6	3	13			4	19	12:45	53	217	58	241			111	458
01:00	1		0				1		13:00	60		59				119	
01:15	2		2				4		13:15	46		73				119	
01:30	0		1				1		13:30	67		58				125	
01:45	2	5	1	4			3	9	13:45	49	222	77	267			126	489
02:00	0		3				3		14:00	50		69				119	
02:15	3		1				4		14:15	54		68				122	
02:30	0		0				0		14:30	47		52				99	
02:45	2	5	1	5			3	10	14:45	51	202	65	254			116	456
03:00	0		3				3		15:00	54		52				106	
03:15	1		1				2		15:15	56		62				118	
03:30	0		0				0		15:30	78		70				148	
03:45	1	2	1	5			2	7	15:45	72	260	68	252			140	512
04:00	2		2				4		16:00	44		64				108	
04:15	3		3				6		16:15	69		69				138	
04:30	0		5				5		16:30	57		98				155	
04:45	4	9	2	12			6	21	16:45	85	255	74	305			159	560
05:00	2		6				8		17:00	54		90				144	
05:15	7		9				16		17:15	65		89				154	
05:30	11		8				19		17:30	67		88				155	
05:45	13	33	11	34			24	67	17:45	83	269	94	361			177	630
06:00	18		15				33		18:00	67		82				149	
06:15	24		16				40		18:15	56		50				106	
06:30	29		21				50		18:30	47		62				109	
06:45	49	120	32	84			81	204	18:45	50	220	68	262			118	482
07:00	36		44				80		19:00	61		54				115	
07:15	64		45				109		19:15	40		51				91	
07:30	84		72				156		19:30	25		43				68	
07:45	84	268	62	223			146	491	19:45	38	164	65	213			103	377
08:00	64		79				143		20:00	31		45				76	
08:15	43		44				87		20:15	31		36				67	
08:30	50		48				98		20:30	26		35				61	
08:45	46	203	40	211			86	414	20:45	34	122	24	140			58	262
09:00	29		40				69		21:00	17		38				55	
09:15	28		28				56		21:15	13		25				38	
09:30	55		30				85		21:30	9		17				26	
09:45	29	141	30	128			59	269	21:45	17	56	15	95			32	151
10:00	43		35				78		22:00	12		16				28	
10:15	36		35				71		22:15	13		16				29	
10:30	41		49				90		22:30	7		10				17	
10:45	42	162	47	166			89	328	22:45	5	37	12	54			17	91
11:00	48		53				101		23:00	5		3				8	
11:15	47		61				108		23:15	5		12				17	
11:30	54		58				112		23:30	3		5				8	
11:45	55	204	69	241			124	445	23:45	2	15	3	23			5	38
Totals		1158		1126			2284		Totals		2039		2467			4506	
Split %		50.7%		49.3%			33.6%		Split %		45.3%		54.7%			66.4%	

Daily Totals	NB	SB	EB	WB	Total
	3197	3593	0	0	6790

AM Peak Hour	07:15	07:15	07:15	PM Peak Hour	17:15	17:00	17:15
AM Peak Volume	296	258	554	PM Peak Volume	282	361	635
AM Pk Hr Factor	0.881	0.816	0.888	PM Pk Hr Factor	0.849	0.960	0.897

Prepared by City Count, LLC (www.citycount.com)

ADT Volume Report

Magnolia Avenue - Central to Duarte

Day: Tuesday, February 2, 2016 **City:** Monrovia, CA

Daily Totals	NB	SB	EB	WB	Total
	2923	3332	0	0	6255

AM	NB		SB		EB	WB	Total		PM	NB		SB		EB	WB	Total	
00:00	5		8				13		12:00	39		58				97	
00:15	1		2				3		12:15	32		61				93	
00:30	3		1				4		12:30	30		44				74	
00:45	1	10	5	16			6	26	12:45	55	156	50	213			105	369
01:00	1		2				3		13:00	45		60				105	
01:15	1		2				3		13:15	38		51				89	
01:30	2		2				4		13:30	79		67				146	
01:45	0	4	2	8			2	12	13:45	49	211	54	232			103	443
02:00	2		2				4		14:00	56		44				100	
02:15	1		1				2		14:15	39		43				82	
02:30	0		2				2		14:30	46		64				110	
02:45	3	6	1	6			4	12	14:45	51	192	64	215			115	407
03:00	0		0				0		15:00	65		73				138	
03:15	2		0				2		15:15	55		64				119	
03:30	0		1				1		15:30	60		77				137	
03:45	3	5	0	1			3	6	15:45	62	242	68	282			130	524
04:00	2		3				5		16:00	67		75				142	
04:15	6		2				8		16:15	69		75				144	
04:30	8		5				13		16:30	77		72				149	
04:45	7	23	6	16			13	39	16:45	63	276	71	293			134	569
05:00	9		5				14		17:00	60		83				143	
05:15	12		9				21		17:15	78		96				174	
05:30	13		11				24		17:30	70		100				170	
05:45	16	50	18	43			34	93	17:45	72	280	70	349			142	629
06:00	21		10				31		18:00	53		76				129	
06:15	19		18				37		18:15	53		64				117	
06:30	34		32				66		18:30	55		52				107	
06:45	37	111	34	94			71	205	18:45	45	206	63	255			108	461
07:00	45		37				82		19:00	38		44				82	
07:15	37		49				86		19:15	30		47				77	
07:30	61		62				123		19:30	19		37				56	
07:45	74	217	64	212			138	429	19:45	15	102	37	165			52	267
08:00	73		59				132		20:00	25		45				70	
08:15	42		40				82		20:15	29		38				67	
08:30	36		23				59		20:30	13		36				49	
08:45	23	174	41	163			64	337	20:45	12	79	20	139			32	218
09:00	24		40				64		21:00	17		30				47	
09:15	44		41				85		21:15	12		20				32	
09:30	23		30				53		21:30	10		21				31	
09:45	42	133	29	140			71	273	21:45	10	49	19	90			29	139
10:00	43		38				81		22:00	13		16				29	
10:15	40		38				78		22:15	12		20				32	
10:30	36		33				69		22:30	7		10				17	
10:45	43	162	32	141			75	303	22:45	12	44	10	56			22	100
11:00	38		43				81		23:00	5		5				10	
11:15	32		52				84		23:15	4		4				8	
11:30	40		45				85		23:30	4		4				8	
11:45	59	169	44	184			103	353	23:45	9	22	6	19			15	41
Totals		1064		1024			2088		Totals		1859		2308			4167	
Split %		51.0%		49.0%			33.4%		Split %		44.6%		55.4%			66.6%	

Daily Totals	NB	SB	EB	WB	Total
	2923	3332	0	0	6255

AM Peak Hour	07:30	07:15	07:15	PM Peak Hour	17:00	16:45	17:00
AM Peak Volume	250	234	479	PM Peak Volume	280	350	629
AM Pk Hr Factor	0.845	0.914	0.868	PM Pk Hr Factor	0.897	0.875	0.904

Prepared by City Count, LLC (www.citycount.com)

ADT Volume Report

Myrtle Avenue - Huntington to Central

Day: Thursday, February 4, 2016 **City:** Monrovia, CA

Daily Totals	NB	SB	EB	WB	Total
	10870	10461	0	0	21331

AM	NB		SB		EB	WB	Total		PM	NB		SB		EB	WB	Total	
00:00	17		33				50		12:00	194		193				387	
00:15	19		20				39		12:15	221		163				384	
00:30	15		13				28		12:30	176		181				357	
00:45	7	58	10	76			17	134	12:45	192	783	188	725			380	1508
01:00	7		14				21		13:00	171		175				346	
01:15	12		8				20		13:15	183		165				348	
01:30	7		19				26		13:30	206		169				375	
01:45	11	37	15	56			26	93	13:45	184	744	196	705			380	1449
02:00	8		8				16		14:00	134		169				303	
02:15	6		11				17		14:15	157		180				337	
02:30	7		11				18		14:30	159		172				331	
02:45	12	33	4	34			16	67	14:45	188	638	183	704			371	1342
03:00	8		12				20		15:00	161		165				326	
03:15	10		7				17		15:15	161		154				315	
03:30	11		10				21		15:30	162		195				357	
03:45	12	41	11	40			23	81	15:45	173	657	169	683			342	1340
04:00	10		20				30		16:00	160		181				341	
04:15	9		15				24		16:15	165		161				326	
04:30	12		19				31		16:30	153		195				348	
04:45	18	49	25	79			43	128	16:45	159	637	169	706			328	1343
05:00	23		38				61		17:00	158		266				424	
05:15	40		50				90		17:15	162		183				345	
05:30	60		49				109		17:30	157		219				376	
05:45	81	204	50	187			131	391	17:45	172	649	181	849			353	1498
06:00	74		80				154		18:00	181		202				383	
06:15	81		89				170		18:15	154		142				296	
06:30	99		104				203		18:30	168		147				315	
06:45	138	392	108	381			246	773	18:45	166	669	143	634			309	1303
07:00	118		132				250		19:00	125		173				298	
07:15	150		121				271		19:15	168		129				297	
07:30	183		159				342		19:30	126		148				274	
07:45	288	739	146	558			434	1297	19:45	116	535	112	562			228	1097
08:00	218		136				354		20:00	92		137				229	
08:15	239		110				349		20:15	95		107				202	
08:30	183		120				303		20:30	97		131				228	
08:45	229	869	109	475			338	1344	20:45	85	369	119	494			204	863
09:00	207		129				336		21:00	91		125				216	
09:15	155		128				283		21:15	81		127				208	
09:30	153		111				264		21:30	68		100				168	
09:45	183	698	140	508			323	1206	21:45	82	322	91	443			173	765
10:00	185		116				301		22:00	66		74				140	
10:15	146		150				296		22:15	49		62				111	
10:30	166		138				304		22:30	54		65				119	
10:45	195	692	162	566			357	1258	22:45	33	202	44	245			77	447
11:00	161		147				308		23:00	38		42				80	
11:15	185		135				320		23:15	27		45				72	
11:30	193		163				356		23:30	24		19				43	
11:45	197	736	172	617			369	1353	23:45	28	117	28	134			56	251
Totals		4548		3577			8125		Totals		6322		6884			13206	
Split %		56.0%		44.0%			38.1%		Split %		47.9%		52.1%			61.9%	

Daily Totals	NB	SB	EB	WB	Total
	10870	10461	0	0	21331

AM Peak Hour	07:45	11:00	07:30	PM Peak Hour	12:00	17:00	12:00
AM Peak Volume	928	617	1479	PM Peak Volume	783	849	1508
AM Pk Hr Factor	0.806	0.897	0.852	PM Pk Hr Factor	0.886	0.798	0.974

Prepared by City Count, LLC (www.citycount.com)

ADT Volume Report

Myrtle Avenue - Central to Duarte

Day: Tuesday, February 2, 2016 **City:** Monrovia, CA

Daily Totals	NB	SB	EB	WB	Total
	9879	10025	0	0	19904

AM	NB		SB		EB	WB	Total		PM	NB		SB		EB	WB	Total	
00:00	12		16				28		12:00	170		155				325	
00:15	12		12				24		12:15	160		125				285	
00:30	10		16				26		12:30	158		159				317	
00:45	8	42	19	63			27	105	12:45	126	614	176	615			302	1229
01:00	11		11				22		13:00	158		161				319	
01:15	13		21				34		13:15	139		181				320	
01:30	7		7				14		13:30	157		167				324	
01:45	13	44	7	46			20	90	13:45	162	616	143	652			305	1268
02:00	7		5				12		14:00	166		143				309	
02:15	7		2				9		14:15	127		158				285	
02:30	6		4				10		14:30	197		167				364	
02:45	5	25	5	16			10	41	14:45	155	645	140	608			295	1253
03:00	7		2				9		15:00	194		149				343	
03:15	6		3				9		15:15	183		172				355	
03:30	5		4				9		15:30	194		248				442	
03:45	8	26	5	14			13	40	15:45	182	753	177	746			359	1499
04:00	11		9				20		16:00	174		181				355	
04:15	22		21				43		16:15	184		188				372	
04:30	39		38				77		16:30	195		194				389	
04:45	45	117	55	123			100	240	16:45	195	748	206	769			401	1517
05:00	45		40				85		17:00	202		218				420	
05:15	57		51				108		17:15	190		216				406	
05:30	81		64				145		17:30	185		216				401	
05:45	86	269	73	228			159	497	17:45	177	754	200	850			377	1604
06:00	118		58				176		18:00	165		190				355	
06:15	95		64				159		18:15	163		183				346	
06:30	133		99				232		18:30	170		155				325	
06:45	172	518	95	316			267	834	18:45	152	650	153	681			305	1331
07:00	112		103				215		19:00	117		171				288	
07:15	186		146				332		19:15	110		119				229	
07:30	182		175				357		19:30	92		129				221	
07:45	153	633	157	581			310	1214	19:45	94	413	112	531			206	944
08:00	172		186				358		20:00	90		97				187	
08:15	185		153				338		20:15	69		77				146	
08:30	139		130				269		20:30	60		104				164	
08:45	146	642	156	625			302	1267	20:45	55	274	82	360			137	634
09:00	152		124				276		21:00	59		101				160	
09:15	144		122				266		21:15	56		77				133	
09:30	147		136				283		21:30	45		94				139	
09:45	154	597	128	510			282	1107	21:45	34	194	73	345			107	539
10:00	116		117				233		22:00	45		42				87	
10:15	124		139				263		22:15	22		39				61	
10:30	150		131				281		22:30	32		36				68	
10:45	136	526	146	533			282	1059	22:45	35	134	37	154			72	288
11:00	140		123				263		23:00	28		26				54	
11:15	109		126				235		23:15	21		23				44	
11:30	156		158				314		23:30	20		22				42	
11:45	157	562	156	563			313	1125	23:45	14	83	25	96			39	179
Totals		4001		3618			7619		Totals		5878		6407			12285	
Split %		52.5%		47.5%			38.3%		Split %		47.8%		52.2%			61.7%	

Daily Totals	NB	SB	EB	WB	Total
	9879	10025	0	0	19904

AM Peak Hour	07:15	07:30	07:30	PM Peak Hour	16:30	16:45	16:45
AM Peak Volume	693	671	1363	PM Peak Volume	782	856	1628
AM Pk Hr Factor	0.931	0.902	0.952	PM Pk Hr Factor	0.968	0.982	0.969

Prepared by City Count, LLC (www.citycount.com)

ADT Volume Report

Myrtle Avenue - Duarte to South City Limit

Day: Wednesday, February 3, 2016 **City:** Monrovia, CA

Daily Totals	NB	SB	EB	WB	Total
	11190	10388	0	0	21578

AM	NB		SB		EB	WB	Total		PM	NB		SB		EB	WB	Total	
00:00	14		27				41		12:00	156		143				299	
00:15	8		19				27		12:15	152		142				294	
00:30	14		13				27		12:30	146		171				317	
00:45	6	42	26	85			32	127	12:45	172	626	151	607			323	1233
01:00	12		16				28		13:00	180		118				298	
01:15	12		18				30		13:15	166		169				335	
01:30	10		8				18		13:30	198		168				366	
01:45	12	46	10	52			22	98	13:45	172	716	166	621			338	1337
02:00	6		6				12		14:00	200		154				354	
02:15	2		4				6		14:15	230		180				410	
02:30	8		3				11		14:30	200		194				394	
02:45	0	16	4	17			4	33	14:45	212	842	182	710			394	1552
03:00	4		2				6		15:00	220		188				408	
03:15	4		3				7		15:15	234		179				413	
03:30	8		10				18		15:30	240		240				480	
03:45	14	30	8	23			22	53	15:45	216	910	200	807			416	1717
04:00	22		16				38		16:00	226		228				454	
04:15	28		14				42		16:15	250		238				488	
04:30	60		17				77		16:30	214		239				453	
04:45	72	182	47	94			119	276	16:45	202	892	215	920			417	1812
05:00	48		30				78		17:00	228		324				552	
05:15	56		39				95		17:15	200		252				452	
05:30	84		53				137		17:30	192		269				461	
05:45	108	296	62	184			170	480	17:45	214	834	245	1090			459	1924
06:00	120		50				170		18:00	196		253				449	
06:15	132		63				195		18:15	170		185				355	
06:30	226		92				318		18:30	170		170				340	
06:45	216	694	90	295			306	989	18:45	130	666	175	783			305	1449
07:00	168		131				299		19:00	114		164				278	
07:15	196		106				302		19:15	84		122				206	
07:30	198		153				351		19:30	120		142				262	
07:45	274	836	165	555			439	1391	19:45	74	392	103	531			177	923
08:00	210		125				335		20:00	76		105				181	
08:15	218		157				375		20:15	64		101				165	
08:30	190		146				336		20:30	86		98				184	
08:45	186	804	124	552			310	1356	20:45	60	286	89	393			149	679
09:00	134		157				291		21:00	58		109				167	
09:15	158		105				263		21:15	34		81				115	
09:30	128		120				248		21:30	42		91				133	
09:45	146	566	122	504			268	1070	21:45	48	182	71	352			119	534
10:00	154		83				237		22:00	32		53				85	
10:15	114		112				226		22:15	42		52				94	
10:30	174		108				282		22:30	28		67				95	
10:45	130	572	119	422			249	994	22:45	8	110	32	204			40	314
11:00	140		124				264		23:00	16		41				57	
11:15	142		117				259		23:15	18		29				47	
11:30	150		126				276		23:30	18		13				31	
11:45	154	586	111	478			265	1064	23:45	12	64	26	109			38	173
Totals		4670		3261			7931		Totals		6520		7127			13647	
Split %		58.9%		41.1%			36.8%		Split %		47.8%		52.2%			63.2%	

Daily Totals	NB	SB	EB	WB	Total
	11190	10388	0	0	21578

AM Peak Hour	07:30	07:30	07:30	PM Peak Hour	15:30	17:00	17:00
AM Peak Volume	900	600	1500	PM Peak Volume	932	1090	1924
AM Pk Hr Factor	0.821	0.909	0.854	PM Pk Hr Factor	0.932	0.841	0.871

APPENDIX F

QUEUING WORKSHEETS

Intersection: 8: Myrtle Avenue & Central Avenue

Movement	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	T	T	TR
Maximum Queue (ft)	160	359	234	218	151	136	295	375
Average Queue (ft)	84	188	115	135	101	93	85	191
95th Queue (ft)	140	300	188	207	139	128	209	333
Link Distance (ft)	1375	1375	1375	208	208	208	428	428
Upstream Blk Time (%)				1			0	1
Queuing Penalty (veh)				4			0	0
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 9: Myrtle Avenue & Evergreen Avenue

Movement	EB	EB	EB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	T	TR	L	T	T
Maximum Queue (ft)	246	180	224	484	489	211	118	98
Average Queue (ft)	135	108	138	267	361	127	67	57
95th Queue (ft)	211	165	205	579	563	192	105	92
Link Distance (ft)	1320	1320	1320	454	454	208	208	208
Upstream Blk Time (%)				20	28	1		
Queuing Penalty (veh)				0	0	3		
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 7

Intersection: 8: Myrtle Avenue & Central Avenue

Movement	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	T	T	TR
Maximum Queue (ft)	279	403	223	224	104	91	472	471
Average Queue (ft)	108	233	123	161	50	40	441	446
95th Queue (ft)	196	364	191	237	88	76	495	464
Link Distance (ft)	1375	1375	1375	208	208	208	428	428
Upstream Blk Time (%)				7			73	83
Queuing Penalty (veh)				17			0	0
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 9: Myrtle Avenue & Evergreen Avenue

Movement	EB	EB	EB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	T	TR	L	T	T
Maximum Queue (ft)	224	327	322	464	469	224	138	130
Average Queue (ft)	87	204	198	263	357	158	88	83
95th Queue (ft)	182	286	290	561	548	234	123	118
Link Distance (ft)	1320	1320	1320	454	454	208	208	208
Upstream Blk Time (%)				25	31	4		
Queuing Penalty (veh)				0	0	13		
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 30

Intersection: 8: Myrtle Avenue & Central Avenue

Movement	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	T	T	TR
Maximum Queue (ft)	193	396	223	215	158	152	373	438
Average Queue (ft)	86	194	118	134	103	95	116	239
95th Queue (ft)	161	323	186	207	142	136	292	406
Link Distance (ft)	1375	1375	1375	208	208	208	428	428
Upstream Blk Time (%)				2			1	1
Queuing Penalty (veh)				4			0	0
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 9: Myrtle Avenue & Evergreen Avenue

Movement	EB	EB	EB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	T	TR	L	T	T
Maximum Queue (ft)	266	197	243	474	483	225	121	102
Average Queue (ft)	139	121	139	247	348	122	69	61
95th Queue (ft)	224	180	202	550	556	197	105	95
Link Distance (ft)	1320	1320	1320	454	454	208	208	208
Upstream Blk Time (%)				18	23	2		
Queuing Penalty (veh)				0	0	4		
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 8

Intersection: 8: Myrtle Avenue & Central Avenue

Movement	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	T	T	TR
Maximum Queue (ft)	228	529	255	225	92	89	477	476
Average Queue (ft)	100	292	131	169	50	39	447	446
95th Queue (ft)	179	475	211	239	85	75	462	460
Link Distance (ft)	1375	1375	1375	208	208	208	428	428
Upstream Blk Time (%)				9			75	87
Queuing Penalty (veh)				20			0	0
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 9: Myrtle Avenue & Evergreen Avenue

Movement	EB	EB	EB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	T	TR	L	T	T
Maximum Queue (ft)	236	373	385	483	482	225	151	135
Average Queue (ft)	86	221	222	213	309	154	87	79
95th Queue (ft)	169	321	339	480	504	236	129	117
Link Distance (ft)	1320	1320	1320	454	454	208	208	208
Upstream Blk Time (%)				11	15	5		
Queuing Penalty (veh)				0	0	14		
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 34

Intersection: 8: Myrtle Avenue & Central Avenue

Movement	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	T	T	TR
Maximum Queue (ft)	218	430	223	229	159	154	433	457
Average Queue (ft)	100	220	121	200	102	96	238	324
95th Queue (ft)	176	373	190	259	153	148	533	516
Link Distance (ft)	1375	1375	1375	208	208	208	428	428
Upstream Blk Time (%)				23			27	32
Queuing Penalty (veh)				71			0	0
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 9: Myrtle Avenue & Evergreen Avenue

Movement	EB	EB	EB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	T	TR	L	T	T
Maximum Queue (ft)	749	457	504	502	504	224	132	128
Average Queue (ft)	344	195	209	466	472	143	80	71
95th Queue (ft)	841	663	616	537	505	219	118	109
Link Distance (ft)	1320	1320	1320	454	454	208	208	208
Upstream Blk Time (%)	5	4	1	75	86	3		
Queuing Penalty (veh)	0	0	0	0	0	8		
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 79

Intersection: 8: Myrtle Avenue & Central Avenue

Movement	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	T	T	TR
Maximum Queue (ft)	242	488	266	228	106	103	478	471
Average Queue (ft)	128	265	134	206	54	45	447	446
95th Queue (ft)	207	452	222	257	95	88	462	459
Link Distance (ft)	1375	1375	1375	208	208	208	428	428
Upstream Blk Time (%)				30			81	90
Queuing Penalty (veh)				74			0	0
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 9: Myrtle Avenue & Evergreen Avenue

Movement	EB	EB	EB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	T	TR	L	T	T
Maximum Queue (ft)	576	576	579	489	508	226	163	164
Average Queue (ft)	271	322	330	371	421	152	107	96
95th Queue (ft)	692	528	527	623	581	229	149	143
Link Distance (ft)	1320	1320	1320	454	454	208	208	208
Upstream Blk Time (%)				37	51	4		0
Queuing Penalty (veh)				0	0	13		0
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 86

Intersection: 8: Myrtle Avenue & Central Avenue

Movement	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	T	T	TR
Maximum Queue (ft)	218	430	223	229	159	154	433	457
Average Queue (ft)	100	220	121	200	102	96	238	324
95th Queue (ft)	176	373	190	259	153	148	533	516
Link Distance (ft)	1375	1375	1375	208	208	208	428	428
Upstream Blk Time (%)				23			27	32
Queuing Penalty (veh)				71			0	0
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 9: Myrtle Avenue & Evergreen Avenue

Movement	EB	EB	EB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	T	TR	L	T	T
Maximum Queue (ft)	749	457	504	502	504	224	132	128
Average Queue (ft)	344	195	209	466	472	143	80	71
95th Queue (ft)	841	663	616	537	505	219	118	109
Link Distance (ft)	1320	1320	1320	454	454	208	208	208
Upstream Blk Time (%)	5	4	1	75	86	3		
Queuing Penalty (veh)	0	0	0	0	0	8		
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 79

Intersection: 8: Myrtle Avenue & Central Avenue

Movement	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	T	T	TR
Maximum Queue (ft)	309	558	233	228	120	108	469	479
Average Queue (ft)	134	294	130	205	56	43	446	446
95th Queue (ft)	243	483	207	254	99	88	460	462
Link Distance (ft)	1375	1375	1375	208	208	208	428	428
Upstream Blk Time (%)				29			81	90
Queuing Penalty (veh)				73			0	0
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 9: Myrtle Avenue & Evergreen Avenue

Movement	EB	EB	EB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	T	TR	L	T	T
Maximum Queue (ft)	646	892	876	487	500	225	164	165
Average Queue (ft)	261	563	574	366	422	146	106	94
95th Queue (ft)	578	1000	1001	613	571	223	150	142
Link Distance (ft)	1320	1320	1320	454	454	208	208	208
Upstream Blk Time (%)				43	52	3	0	0
Queuing Penalty (veh)				0	0	10	0	0
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 83

APPENDIX G

LOS MITIGATION WORKSHEETS

Intersection	
Intersection Delay, s/veh	21.9
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	191	22	0	0	0	39	348	113	121	271	22
Future Vol, veh/h	43	191	22	0	0	0	39	348	113	121	271	22
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	215	25	0	0	0	44	391	127	136	304	25
Number of Lanes	0	1	0	0	0	0	0	1	1	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	1
HCM Control Delay	16.3	22.1	25
HCM LOS	C	C	C

Lane	NBLn1	NBLn2	EBLn1	SBLn1
Vol Left, %	10%	0%	17%	29%
Vol Thru, %	90%	0%	75%	65%
Vol Right, %	0%	100%	9%	5%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	387	113	256	414
LT Vol	39	0	43	121
Through Vol	348	0	191	271
RT Vol	0	113	22	22
Lane Flow Rate	435	127	288	465
Geometry Grp	7	7	2	5
Degree of Util (X)	0.753	0.193	0.516	0.757
Departure Headway (Hd)	6.231	5.468	6.462	5.861
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	578	653	555	614
Service Time	4.001	3.237	4.537	3.929
HCM Lane V/C Ratio	0.753	0.194	0.519	0.757
HCM Control Delay	25.7	9.6	16.3	25
HCM Lane LOS	D	A	C	C
HCM 95th-tile Q	6.6	0.7	2.9	6.8

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project AM w/ Mit

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Myrtle Avenue/Central Avenue - I-210 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.857
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	82	Level Of Service:	D

Street Name:	Myrtle Avenue						Central Avenue - I-210 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	2 0	1	0 0	0 0	0	1 0	1 0	1
Volume Module:												
Base Vol:	367	684	0	0	531	124	0	0	0	255	578	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	367	684	0	0	531	124	0	0	0	255	578	340
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	367	684	0	0	531	124	0	0	0	255	578	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	367	684	0	0	531	124	0	0	0	255	578	340
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	367	684	0	0	531	124	0	0	0	255	578	340
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00
Final Sat.:	1600	3200	0	0	3200	1600	0	0	0	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.23	0.21	0.00	0.00	0.17	0.08	0.00	0.00	0.00	0.16	0.36	0.21
Crit Moves:	****				****						****	

Intersection	
Intersection Delay, s/veh	32.4
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	183	23	0	0	0	39	331	94	65	416	38
Future Vol, veh/h	37	183	23	0	0	0	39	331	94	65	416	38
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	42	208	26	0	0	0	44	376	107	74	473	43
Number of Lanes	0	1	0	0	0	0	0	1	1	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	1
HCM Control Delay	16.7	22.5	48.5
HCM LOS	C	C	E

Lane	NBLn1	NBLn2	EBLn1	SBLn1
Vol Left, %	11%	0%	15%	13%
Vol Thru, %	89%	0%	75%	80%
Vol Right, %	0%	100%	9%	7%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	370	94	243	519
LT Vol	39	0	37	65
Through Vol	331	0	183	416
RT Vol	0	94	23	38
Lane Flow Rate	420	107	276	590
Geometry Grp	7	7	2	5
Degree of Util (X)	0.746	0.167	0.514	0.948
Departure Headway (Hd)	6.385	5.617	6.695	5.787
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	563	632	536	625
Service Time	4.173	3.405	4.784	3.865
HCM Lane V/C Ratio	0.746	0.169	0.515	0.944
HCM Control Delay	25.8	9.5	16.7	48.5
HCM Lane LOS	D	A	C	E
HCM 95th-tile Q	6.5	0.6	2.9	12.9

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project PM w/ Mit

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Myrtle Avenue/Central Avenue - I-210 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.898
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	99	Level Of Service:	D

Street Name:	Myrtle Avenue						Central Avenue - I-210 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	2 0	1	0 0	0 0	0	1 0	1 0	1
Volume Module:												
Base Vol:	357	435	0	0	758	219	0	0	0	272	541	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	357	435	0	0	758	219	0	0	0	272	541	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	357	435	0	0	758	219	0	0	0	272	541	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	357	435	0	0	758	219	0	0	0	272	541	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	357	435	0	0	758	219	0	0	0	272	541	300
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00
Final Sat.:	1600	3200	0	0	3200	1600	0	0	0	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.22	0.14	0.00	0.00	0.24	0.14	0.00	0.00	0.00	0.17	0.34	0.19
Crit Moves:	****				****						****	

APPENDIX J2
PARKING ANALYSIS

CARLSBAD
FRESNO
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

October 2, 2018

Alec Schiffer
Trammell Crow Residential
5790 Fleet Street, Suite 140
Carlsbad, CA 92008

Subject: 1625 Magnolia Avenue Parking Analysis

Dear Mr. Schiffer:

LSA is pleased to present this parking analysis for the 1625 Magnolia Avenue residential development (project) in Monrovia, California. This analysis is based on the project site plan dated September 27, 2018. The proposed project is a residential development comprising a total of 436 apartment dwelling units. Of the 436 dwelling units, 20 will be studio, 254 will be one-bedroom (4 of which are live-work units), 147 will be two-bedroom, and 15 will be three-bedroom for a total of 613 bedrooms in the complex. A total of 797 parking spaces will be provided; 631 parking spaces are allocated for apartment residents, 9 spaces for live work parking, 112parking spaces are allocated for apartment guests, 11 parking spaces are allocated for leasing office guests, and 34 parking spaces are for paid public use. The 34 paid public parking spaces will be provided mainly for the Metro Gold Line Station. Therefore, a total of 763 parking spaces will be available primarily for the project's use. The project will also provide 262 bicycle parking spaces on site for residents of the project and patrons of the Metro Gold Line Station.

The project site is close to alternative modes of transportation. A pedestrian sidewalk connecting the project site and the Metro Gold Line Station will be constructed for ease of circulation. Three Metro bus stops are within walking distance of the project site and are accessible via sidewalk connections. On-street (Class III) bicycle routes are located along Magnolia Avenue, next to the project site.

PARKING ANALYSIS

City Parking Requirements

City of Monrovia (City) Zoning Code 17.24.030 states that multiple-family housing developments within Monrovia shall provide 2.5 parking spaces per dwelling unit for multifamily residential projects with six or more units. Based on these rates, the proposed 436 apartments would require 1,090 parking spaces; however, this method does not account for the more urban transition of the area and the transit-adjacent nature of the project.

Published Survey Data

The Institute of Transportation Engineers (ITE) Parking Generation, 4th Edition, provides information based on three decades of research. Empirical data for high-rise apartments shows the 85th percentile peak-period parking demand to be 1.52 spaces per dwelling unit, as presented in Table A. High-rise apartments are rental units that have five or more levels and one or more elevators. Low- or mid-rise apartments (Land Use code 221) are a related use, but are composed of as little as three other buildings (i.e., quadraplexes) or units of one to four levels. Some of the sample of low- or mid-rise were affordable units and some were outside continental United States. The Land Use code

description and parking demand data from the *Parking Generation* Manual is provided as an attachment. The 436-unit project would create a demand for 663 parking spaces, according to the ITE parking rate.

As Table A shows, the current site plan could provide adequate parking to satisfy the parking demands of the project based on ITE parking research. The parking supply exceeds the calculated parking demand by 134 spaces.

Table A: Proposed Project Parking Demand from ITE Parking Rates

	ITE Parking Demand
85th Percentile Observed Rate	1.52 spaces per dwelling unit
Proposed Project	436 dwelling units
Parking Demand	663 parking spaces
Proposed Parking	797 parking spaces
Parking Surplus (Proposed Parking – Parking Demand)	134 parking spaces

Surveys of Similar Sites

In May 2014, National Data and Surveying Services conducted parking demand surveys on behalf of LSA at three apartment complexes in Southern California. These sites have similar characteristics to the proposed project. Specifically, on-street parking is not permitted adjacent to the surveyed sites, one-bedroom units account for approximately one-half of the units at each complex, and a parking supply ratio of less than two spaces per bedroom is provided at each site. At these complexes, residential parking spaces were observed to be shared with guest parking spaces. Therefore, the parking demand observed is the total parking demand for all patrons, guests and residents. It should be noted that the locations are not adjacent to transit; therefore, the parking demand may be higher than the proposed project.

The three surveyed sites were IMT Valencia (208 units and 397 parking spaces) at 28100 Smyth Drive in Valencia, Alara Links (230 units and 448 parking spaces) at 25330 Silver Aspen Way in Valencia, and Ridgestone (352 units and 665 parking spaces) at 39415 Ardenwood Way in Lake Elsinore. LSA calculated observed parking rates based on the total number of dwelling units within the apartment complexes. Tables B and C present the resulting parking rates per dwelling unit.

Table B: Weekday Surveyed Apartment Parking Rates per Dwelling Unit

	IMT Valencia		**Alara Links**		**Ridgestone**	
	208 dwelling units 397 parking spaces		**230 dwelling units 448 parking spaces**		**352 dwelling units 665 parking spaces**	
	Parked Cars	**Parking Rate**	**Parked Cars**	**Parking Rate**	**Parked Cars**	**Parking Rate**
6:00 a.m.	387	**1.86**	351	1.53	505	1.43
7:00 a.m.	358	1.72	332	1.44	465	1.32
8:00 a.m.	320	1.54	314	1.37	421	1.20
9:00 a.m.	317	1.52	296	1.29	386	1.10
5:00 p.m.	305	1.47	291	1.27	411	1.17
6:00 p.m.	319	1.53	313	1.36	429	1.22
7:00 p.m.	330	1.59	333	1.45	469	1.33
8:00 p.m.	339	1.63	331	1.44	491	1.39
9:00 p.m.	360	1.73	377	**1.64**	517	**1.47**

Note: **Bold** numbers indicate the highest calculated parking rate for each site.

Table C: Weekend Surveyed Apartment Parking Rates per Dwelling Unit

	IMT Valencia 208 dwelling units 397 parking spaces		Alara Links 230 dwelling units 448 parking spaces		Ridgestone 352 dwelling units 665 parking spaces	
	Parked Cars	Parking Rate	Parked Cars	Parking Rate	Parked Cars	Parking Rate
6:00 a.m.	370	**1.78**	377	**1.64**	540	**1.53**
7:00 a.m.	365	1.75	368	1.60	524	1.49
8:00 a.m.	362	1.74	348	1.51	499	1.42
9:00 a.m.	355	1.71	323	1.40	477	1.36
5:00 p.m.	335	1.61	313	1.36	447	1.27
6:00 p.m.	341	1.64	298	1.30	462	1.31
7:00 p.m.	341	1.64	306	1.33	475	1.35
8:00 p.m.	339	1.63	315	1.37	480	1.36
9:00 p.m.	341	1.64	342	1.49	496	1.41

Note: **Bold** numbers indicate the highest calculated parking rate for each site.

LSA also calculated observed parking rates based on the total number of bedrooms within the apartment complexes. Tables D and E present the resulting parking rates per bedroom.

Table D: Weekday Surveyed Apartment Parking Rates per Bedroom

	IMT Valencia 326 bedrooms 397 parking spaces		Alara Links 320 bedrooms 448 parking spaces		Ridgestone 528 bedrooms 665 parking spaces	
	Parked Cars	Parking Rate	Parked Cars	Parking Rate	Parked Cars	Parking Rate
6:00 a.m.	387	**1.19**	351	1.10	505	0.96
7:00 a.m.	358	1.10	332	1.04	465	0.88
8:00 a.m.	320	0.98	314	0.98	421	0.80
9:00 a.m.	317	0.97	296	0.93	386	0.73
5:00 p.m.	305	0.94	291	0.91	411	0.78
6:00 p.m.	319	0.98	313	0.98	429	0.81
7:00 p.m.	330	1.01	333	1.04	469	0.89
8:00 p.m.	339	1.04	331	1.03	491	0.93
9:00 p.m.	360	1.10	377	**1.18**	517	**0.98**

Note: **Bold** numbers indicate the highest calculated parking rate for each site.

Table E: Weekend Surveyed Apartment Parking Rates per Bedroom

	IMT Valencia 326 bedrooms 397 parking spaces		Alara Links 320 Bedrooms 448 parking spaces		Ridgestone 528 Bedrooms 665 parking spaces	
	Parked Cars	Parking Rate	Parked Cars	Parking Rate	Parked Cars	Parking Rate
6:00 a.m.	370	**1.13**	377	**1.18**	540	**1.02**
7:00 a.m.	365	1.12	368	1.15	524	0.99
8:00 a.m.	362	1.11	348	1.09	499	0.95
9:00 a.m.	355	1.09	323	1.01	477	0.90
5:00 p.m.	335	1.03	313	0.98	447	0.85
6:00 p.m.	341	1.05	298	0.93	462	0.88
7:00 p.m.	341	1.05	306	0.96	475	0.90
8:00 p.m.	339	1.04	315	0.98	480	0.91
9:00 p.m.	341	1.05	342	1.07	496	0.94

Note: **Bold** numbers indicate the highest calculated parking rate for each site.

As anticipated, the parking demand was highest late at night and early in the morning. Table F summarizes the highest period of parking demand observed at each site and calculates the average parking rate from the three surveyed sites. A weighted average of 1.65 parking spaces per dwelling unit and 1.11 parking spaces per bedroom was utilized in the observed apartment complexes.

Table F: Peak Surveyed Apartment Parking Rates

	Peak Period	Peak Parking Rate (Dwelling Units)	Peak Parking Rate (Bedrooms)
IMT Valencia (208 dwelling units; 326 bedrooms)	Weekday 6:00 a.m.	1.86	1.19
Alara Links (230 dwelling units; 320 bedrooms)	Saturday 6:00 a.m.	1.64	1.18
Ridgestone (352 dwelling units; 528 bedroom)	Saturday 6:00 a.m.	1.53	1.02
Weighted Average		**1.65**	**1.11**

The 1625 Magnolia Avenue project proposes to construct 20 studio, 254 one-bedroom, 147 two-bedroom, and 15 three-bedroom dwelling units for a total of 436 dwelling units and 613 bedrooms. Table G calculates the estimated parking demand for the proposed project based on the average parking rates developed above. Table G also compares the estimated parking demand for the proposed project to the proposed parking supply.

Table G: Proposed Project Parking Demand from Surveyed Parking Rates

	Empirical Parking Demand per Dwelling Unit	Empirical Parking Demand per Bedroom
Peak Observed Rate	1.65 spaces per dwelling unit	1.11 spaces per bedroom
Proposed Project	436 dwelling units	613 bedrooms
Projected Demand	719 spaces	680 spaces
Proposed Parking Supply	797 spaces	797 spaces
Parking Surplus	78 spaces	117 spaces

As Table G shows, applying the surveyed parking rates from Table F (1.65 spaces per dwelling unit and 1.11 spaces per bedroom) to the proposed project renders parking demand with a surplus in both considerations: by dwelling unit (78 spaces) and by bedroom (117 spaces). Therefore, whether the parking demand is generated based on a rate per dwelling unit or a rate per bedroom, the proposed project will offer adequate parking supply.

Live-Work Guest Parking

The ITE Parking Generation, 4th Edition, was used to identify a parking rate for the live-work commercial parking spaces. The live-work units are considered to be a mix of residential and commercial office uses. Given the nature of the space, office use or professional service is the most likely use for the space. The office use shows the 85th percentile peak-period parking demand to be 2.98 spaces per 1,000 square feet, as presented in Table H. The proposed office space within the live-work units is approximately 1,561 square feet. The calculated demand of parking spaces based on this ITE parking rate is seven spaces. As shown in Table G, the parking surplus for parking demand based on dwelling units and bedrooms will be greater than seven spaces; therefore, the commercial parking supply is anticipated accommodate the parking demand for live-work guests.

Table H: Proposed Live-Work Commercial Parking Demand from ITE Parking Rates

	ITE Parking Demand
85th Percentile Observed Rate	2.98 spaces per 1,000 square feet
Proposed Project	1,561 square feet
Calculated Demand	5 spaces

Bicycle Parking

The City's Bicycle Master Plan (June 2016) states that all new major developments in Monrovia are recommended to provide bicycle parking. The bicycle parking guidelines state that multifamily residential uses are recommended to provide 1 short-term bicycle parking space per 10 residential units and 1 long-term bicycle parking space per 2 residential units. Based on this guideline, the proposed project of 436 dwelling units is intended to provide 44 short-term bicycle parking spaces and 218 long-term bicycle parking spaces, for a total of 262 bicycle parking spaces. The proposed project will provide 44 short-term bicycle parking spaces and 218 long-term bicycle parking spaces, for a total of 262 bicycle parking spaces in a bike storage area on the project site. Furthermore, the project will provide an additional 11 bicycle parking spaces for leasing and Metro Gold Line Station guests.

CONCLUSION

The City's Zoning Code requires 2.5 parking spaces per dwelling for multifamily residential projects with six or more units. Nationwide studies (ITE Parking Generation) determined that the parking generation rate for apartments is 1.52 spaces per dwelling unit based on the 85th percentile rate. Surveys taken in Southern California in May 2014 identified average parking generation rates of 1.65 spaces per dwelling unit and 1.11 spaces per bedroom. Although the proposed parking rate is lower than the City's required parking rate of 2.5 spaces per dwelling unit, the proposed rate is greater than the surveyed parking demand rates. If these parking rates are applied to the proposed project, then the proposed 797 parking spaces would provide a surplus of parking spaces.

The project's proximity to multiple transit uses and provided bicycle parking spaces will help to alleviate the project's parking demand. Additionally, there are 34 public parking spaces that are primarily intended to serve transit patrons. These spaces should be available to serve the project parking demand during nights and weekends when the transit parking demand is lower. The amount of provided parking spaces for the project is anticipated to be adequate based on the results of this analysis.

Sincerely,

LSA Associates, Inc.

Anthony Petros
Principal

Attachment: Institute of Traffic Engineers *Parking Generation* 4th Edition Land Use 222: High-Rise Apartment

Land Use: 222
High-Rise Apartment

Description

High-rise apartments (rental dwelling units) are units located in rental buildings that have five or more levels (floors) and most likely have one or more elevators. Low/mid-rise apartment (Land Use 221) is a related use.

Database Description

The database consisted of a mix of central city, not downtown (CND) and urban central business district (CBD) sites. Parking demand rates at the CND sites differed from those at the CBD sites and, therefore, the data were analyzed separately.

- Average parking supply ratio: 2.0 parking spaces per dwelling unit at the CND sites. Parking availability was not provided for the CBD sites.

All study sites were within three blocks of transit service.

Parking demand counts were submitted between 12:00 and 5:00 a.m. on a weekday.

The two CBD sites had 740 and 940 dwelling units and peak parking demand rates of 0.34 and 0.56 parked vehicles per dwelling unit, respectively. The parking demand information from these sites was excluded from the data plots and analysis.

Parking surveys of apartments should attempt to obtain information on occupancy rate. Future parking surveys should also indicate the number of levels contained in the apartment building as well as the number of bedrooms for each unit.

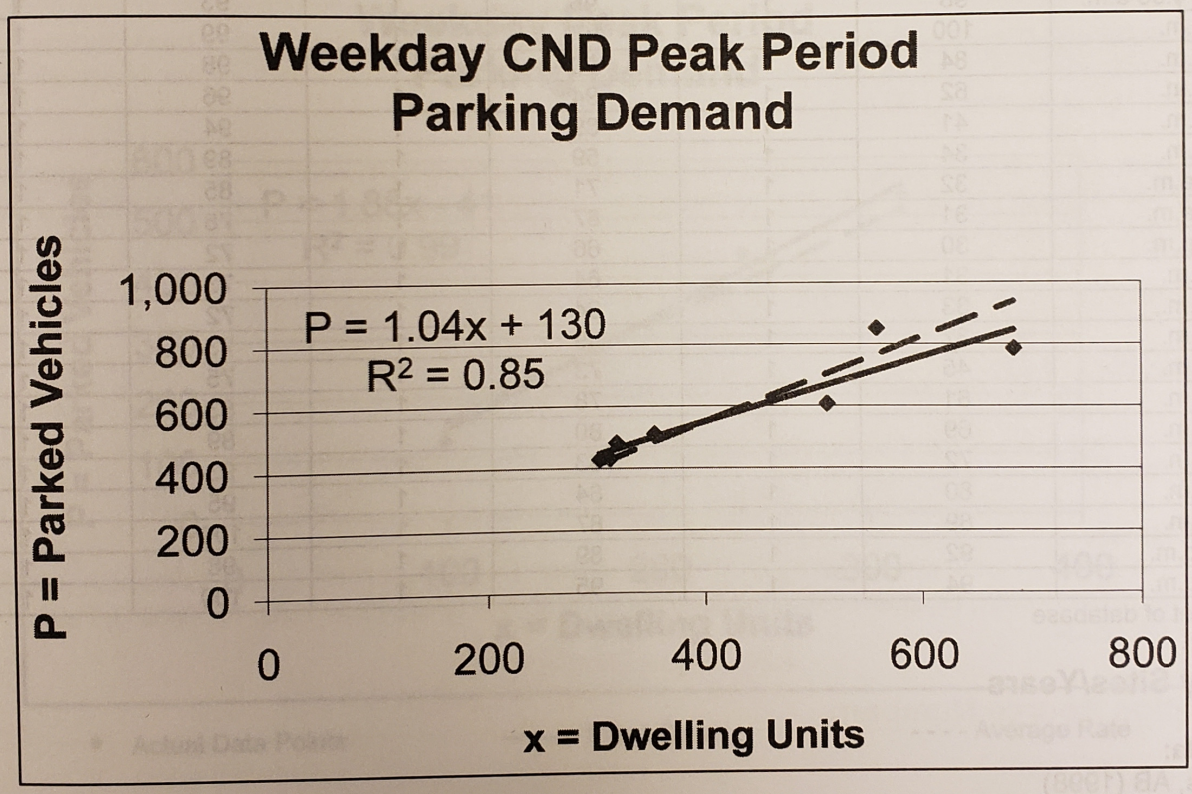
Study Sites/Years

Chicago, IL (1969); Chicago, IL (1978); San Diego, CA (1996)

Land Use: 222
High-Rise Apartment

Average Peak Period Parking Demand vs. Dwelling Units
On a: Weekday
Location: Central City, Not Downtown

Statistic	Peak Period Demand
Peak Period	12:00–5:00 a.m.
Number of Study Sites	7
Average Size of Study Sites	435 dwelling units
Average Peak Period Parking Demand	1.37 vehicles per dwelling unit
Standard Deviation	0.15
Coefficient of Variation	11%
Range	1.15–1.52 vehicles per dwelling unit
85th Percentile	1.52 vehicles per dwelling unit
33rd Percentile	1.38 vehicles per dwelling unit



APPENDIX J3
TRAFFIC IMPACT ANALYSIS ADDENDUM

CARLSBAD
FRESNO
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: July 15, 2019

TO: Ashley Swarts, Trammell Crow Residential

FROM: Anthony Petros, Principal, LSA

SUBJECT: 1625 Magnolia Avenue Traffic Study Cumulative (Year 2022) Analysis

The *1625 Magnolia Avenue Traffic Study* LSA prepared in May 2018 evaluated Cumulative and Cumulative Plus Project impacts using a 2020 Year horizon. This reflected a 2-year construction period. This cumulative analysis evaluated 10 study area intersections using the Highway Capacity Manual (HCM) methodology for unsignalized intersections and California Department of Transportation (Caltrans) facilities and Intersection Capacity Utilization (ICU) methodology for signalized city intersections, based on the City of Monrovia's (City) thresholds of significance. Ambient growth between 2018 and 2020 was applied to existing counts and included the contribution of seven cumulative projects.

As shown in the Traffic Study, results of the Cumulative Plus Project (Year 2020) condition suggest impacts to intersection levels of service (LOS) at Myrtle Avenue/Central Avenue-Interstate 210 (I-210) westbound off-ramp (Caltrans facility) and Magnolia Avenue/Evergreen Avenue. Recommended mitigation measures include restriping the Magnolia Avenue/Evergreen Avenue northern and southern leg centerline allowing for the inclusion of a de facto right-turn lane and adding a southbound right-turn lane at Myrtle Avenue/Central Avenue-I-210 eastbound off-ramp. Application of these mitigation measures, illustrated in Table N of the Traffic Study, offset these project impacts.

Cumulative and Cumulative Plus Project (Year 2022) Analysis

As directed by City staff, an amendment to the Cumulative analysis was initiated to reflect Year 2022 conditions. To prepare the 2022 cumulative traffic base, the ambient growth was increased by an additional 2 years (or 1.64 percent). At the direction of City staff, no new cumulative projects were added to this scenario.

As a result, Table E (Cumulative and Cumulative Plus Project LOS Summary), Table G (Cumulative and Cumulative Plus Project Ramp Intersection Summary), and Table M (Cumulative and Cumulative Plus Project Off-Ramp Queue Summary) were updated to reflect the 1.64 percent growth rate increase.

Table A (Cumulative and Cumulative Plus Project LOS Summary), Table B (Cumulative and Cumulative Plus Project Ramp Intersection Summary), and Table C (Cumulative and Cumulative Plus Project Off-Ramp Queues Summary) of this memorandum are provided to illustrate results of the Cumulative Year 2022 scenario (all tables are provided in Attachment A). HCM and ICU worksheets are provided in Attachment B.

Based on the results of the Cumulative Year 2022 analysis, impacts to Myrtle Avenue/Central Avenue-I-210 westbound off-ramp and Magnolia Avenue/Evergreen Avenue still occur. Mitigation measures previously mentioned are recommended for these intersections. With the increased growth rate, a new impact to ramp LOS is shown at Myrtle Avenue/Evergreen Avenue-I-210 eastbound off-ramp in the p.m. peak hour. Mitigation recommended for this intersection includes reassigning the eastbound through movement to an eastbound through-left movement. As shown in Table D, application of this mitigation measure will eliminate the impact at Myrtle Avenue/Evergreen Avenue-I-210 eastbound off-ramp and bring ramp operations back to acceptable levels of service. Both improvements to Myrtle Avenue/Central Avenue-1-210 westbound off-ramp and Myrtle Avenue/Evergreen Avenue-I-210 eastbound off-ramp are included in the Monrovia Citywide Fee Program.

The City has conducted an Area Traffic Study and is devising a Development Impact Fee (DIF) program to address the cumulative effects of major development projects on the transportation system in the vicinity of the Monrovia Gold Line Station. The DIF will include each project's fair share cost of the traffic study and the recommended mitigation measure(s) identified for that project's specific impact(s). If the City Council adopts the DIF, it shall be paid prior to recording the Final Map or the amount of the DIF included in the bonds. Payment or bonding of the DIF shall fully satisfy the project's mitigation obligation for those improvements covered by the DIF. If the City Council does not adopt a DIF but does approve an Area Traffic Study that commits future applicants to pay fair share fees and obligates the City to spend those fees on specified improvements, the project will not pay a DIF, but will be responsible for their fair share as a fee in-lieu of improvements for mitigating the specific impacts identified in the project's Traffic Study. The costs of those improvements or fee-in-lieu of for mitigation shall be paid prior to the Final Map recording, or a bond equal to the determined amount shall be posted prior to the Final Map recording.

Conclusion

Based on this analysis of Cumulative Year 2022 conditions and application of mitigation measures, the project can continue to be implemented without significantly impacting the surrounding study are intersections in the future year scenario.

I trust this information will be useful in your planning efforts. If you have any questions, please call me at (949) 553-0666.

Attachments: A: Tables A–D
B: HCM and ICU Worksheets

ATTACHMENT A

TABLES A–D

LSA

Table A: Cumulative and Cumulative Plus Project LOS Summary

Study Area No.	Node No.	Intersection	Cumulative				Cumulative Plus Project				Peak-Hour Δ ICU/Delay		Significant Impact?
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour				
			ICU / Delay	LOS	ICU / Delay	LOS	ICU / Delay	LOS	ICU / Delay	LOS	AM	PM	
1	127	Mayflower Avenue/Diamond Street-Evergreen Avenue	25.1	D	21.5	C	26.4	D	24.5	C	1.3	3.0	No
2	31	Mayflower Avenue/Duarte Road	0.723	C	0.676	B	0.724	C	0.681	B	0.001	0.005	No
3		Project Driveway 1/Evergreen Avenue	N/A	-	N/A	-	10.4	B	10.3	B	-	-	No
4	32	Magnolia Avenue/Huntington Drive	0.752	C	0.785	C	0.764	C	0.797	C	0.012	0.012	No
5	37	Magnolia Avenue/Evergreen Avenue	20.4	C	23.8	C	28.7	C	40.8	E	8.3	17.0	Yes
6		Magnolia Avenue/Project Driveway 2	N/A	-	N/A	-	16.8	C	19.0	C	-	-	No
7		Magnolia Avenue/Duarte Road	0.672	B	0.631	B	0.680	B	0.636	B	0.008	0.005	No
8	39	Myrtle Avenue/Central Avenue-I-210 WB Ramps	0.894	D	0.958	E	0.908	E	0.980	E	0.014	0.022	Yes
9	38	Myrtle Avenue/Evergreen Avenue-I-210 EB Ramps	0.775	C	0.936	E	0.784	C	0.950	E	0.009	0.014	No
10	33	Myrtle Avenue/Duarte Road	0.818	D	0.919	E	0.819	D	0.925	E	0.001	0.006	No

Note: Gray shading indicates that values exceed City of Monrovia's level of service criteria.

Δ = change

I-210 = Interstate 210

EB = eastbound

HCM = Highway Capacity Manual delay (seconds per vehicle)

ICU = intersection capacity utilization ratio

LOS = level of service

N/A = not applicable; driveway does not currently exist

WB = westbound

LSA

Table B: Cumulative and Cumulative Plus Project Ramp Intersection Summary

Intersection		Cumulative				Cumulative Plus Project				Peak-Hour Δ		Significant Impact?
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		HCM		
		HCM	LOS	HCM	LOS	HCM	LOS	HCM	LOS	AM	PM	
8	Myrtle Avenue/ Central Avenue-I-210 WB Ramps	39.8	D	47.7	D	42.3	D	51.6	D	2.5	3.9	No
9	Myrtle Avenue/ Evergreen Avenue-I-210 EB Ramps	28.7	C	50.2	D	30.0	C	55.5	E	1.3	5.3	Yes

Note: Gray shading indicates that values exceed City of Monrovia's level of service criteria.

Δ = change
EB = eastbound
HCM = Highway Capacity Manual delay (seconds per vehicle)
I-210 = Interstate 210
LOS = level of service
WB = westbound

LSA

Table C: Cumulative and Cumulative Plus Project Off-Ramp Queue Summary

Freeway Off-Ramp	Lane Description	Vehicle Storage Capacity	Vehicle Queue Length (ft)				Exceeds Capacity?
			AM	PM	AM	PM	
			Cumulative		Cumulative Plus Project		
Myrtle Avenue/Central Avenue - I-210 WB Off-Ramp	Single Lane Ramp	990	751	895	751	948	No
Myrtle Avenue/Evergreen Avenue - I-210 EB Off-Ramp	Dual Lane Ramp	1630	1,529	1,240	1,529	1,604	No

[1] 95th percentile queues were calculated by Synchro 10

EB = eastbound
I-210 = Interstate 210
ft = foot/feet
WB = westbound

ATTACHMENT B

HCM AND ICU WORKSHEETS

ATTACHMENT B

HCM AND ICU WORKSHEETS

Intersection	
Intersection Delay, s/veh	25.1
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	12	70	15	24	10	197	622	124	72	373	14
Future Vol, veh/h	7	12	70	15	24	10	197	622	124	72	373	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	13	76	16	26	11	214	676	135	78	405	15
Number of Lanes	0	1	0	0	1	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	10.8	10.8	32.3	14.5
HCM LOS	B	B	D	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	39%	0%	8%	31%	28%	0%
Vol Thru, %	61%	71%	13%	49%	72%	93%
Vol Right, %	0%	29%	79%	20%	0%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	508	435	89	49	259	201
LT Vol	197	0	7	15	72	0
Through Vol	311	311	12	24	187	187
RT Vol	0	124	70	10	0	14
Lane Flow Rate	552	473	97	53	281	218
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.908	0.725	0.173	0.103	0.507	0.381
Departure Headway (Hd)	5.92	5.522	6.434	6.987	6.491	6.3
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	613	652	557	512	554	569
Service Time	3.658	3.26	4.475	5.037	4.245	4.054
HCM Lane V/C Ratio	0.9	0.725	0.174	0.104	0.507	0.383
HCM Control Delay	41.5	21.5	10.8	10.8	15.8	12.9
HCM Lane LOS	E	C	B	B	C	B
HCM 95th-tile Q	11.3	6.2	0.6	0.3	2.8	1.8

1625 Magnolia Avenue
MMF1701
Cumulative AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Mayflower Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.723
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Street Name:	Mayflower Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	0 1	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	98	463	37	96	179	197	218	494	30	26	684	183
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	98	463	37	96	179	197	218	494	30	26	684	183
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	98	463	37	96	179	197	218	494	30	26	684	183
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	98	463	37	96	179	197	218	494	30	26	684	183
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	98	463	37	96	179	197	218	494	30	26	684	183
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.85	0.15	1.00	1.00	1.00	1.00	1.89	0.11	1.00	1.58	0.42
Final Sat.:	1600	2963	237	1600	1600	1600	1600	3017	183	1600	2525	675
Capacity Analysis Module:												
Vol/Sat:	0.06	0.16	0.16	0.06	0.11	0.12	0.14	0.16	0.16	0.02	0.27	0.27
Crit Moves:		****			****			****			****	

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	214	0	0	54	0	0
Future Vol, veh/h	214	0	0	54	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	233	0	0	59	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	233	0	292	233
Stage 1	-	-	-	-	233	-
Stage 2	-	-	-	-	59	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1335	-	699	806
Stage 1	-	-	-	-	806	-
Stage 2	-	-	-	-	964	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1335	-	699	806
Mov Cap-2 Maneuver	-	-	-	-	699	-
Stage 1	-	-	-	-	806	-
Stage 2	-	-	-	-	964	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1335	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

1625 Magnolia Avenue
MMF1701
Cumulative AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Magnolia Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.752
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Street Name:	Magnolia Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	70	268	59	44	224	37	58	494	32	40	1133	94
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	268	59	44	224	37	58	494	32	40	1133	94
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	268	59	44	224	37	58	494	32	40	1133	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	268	59	44	224	37	58	494	32	40	1133	94
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	268	59	44	224	37	58	494	32	40	1133	94
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.82	0.18	1.00	0.86	0.14	1.00	1.88	0.12	1.00	1.85	0.15
Final Sat.:	1600	1311	289	1600	1373	227	1600	3005	195	1600	2955	245
Capacity Analysis Module:												
Vol/Sat:	0.04	0.20	0.20	0.03	0.16	0.16	0.04	0.16	0.16	0.03	0.38	0.38
Crit Moves:		****			****			****			****	

Intersection	
Intersection Delay, s/veh	20.4
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	167	23	0	0	0	37	313	108	123	273	21
Future Vol, veh/h	18	167	23	0	0	0	37	313	108	123	273	21
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	188	26	0	0	0	42	352	121	138	307	24
Number of Lanes	0	1	0	0	0	0	0	1	0	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	13.7	22.9	21.1
HCM LOS	B	C	C

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	8%	9%	29%
Vol Thru, %	68%	80%	65%
Vol Right, %	24%	11%	5%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	458	208	417
LT Vol	37	18	123
Through Vol	313	167	273
RT Vol	108	23	21
Lane Flow Rate	515	234	469
Geometry Grp	1	1	1
Degree of Util (X)	0.755	0.41	0.713
Departure Headway (Hd)	5.283	6.318	5.48
Convergence, Y/N	Yes	Yes	Yes
Cap	684	568	656
Service Time	3.334	4.384	3.533
HCM Lane V/C Ratio	0.753	0.412	0.715
HCM Control Delay	22.9	13.7	21.1
HCM Lane LOS	C	B	C
HCM 95th-tile Q	6.9	2	5.9

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	458	296	0
Future Vol, veh/h	0	0	0	458	296	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	498	322	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	820	322	322	0	-	0
Stage 1	322	-	-	-	-	-
Stage 2	498	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	345	719	1238	-	-	-
Stage 1	735	-	-	-	-	-
Stage 2	611	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	345	719	1238	-	-	-
Mov Cap-2 Maneuver	345	-	-	-	-	-
Stage 1	735	-	-	-	-	-
Stage 2	611	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1238	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

1625 Magnolia Avenue
MMF1701
Cumulative AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Magnolia Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.672
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Street Name:	Magnolia Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	1	0
Volume Module:												
Base Vol:	2	2	3	199	5	144	199	447	3	6	743	267
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	2	3	199	5	144	199	447	3	6	743	267
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	2	3	199	5	144	199	447	3	6	743	267
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	2	3	199	5	144	199	447	3	6	743	267
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	2	3	199	5	144	199	447	3	6	743	267
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.28	0.29	0.43	0.98	0.02	1.00	1.00	1.99	0.01	1.00	1.47	0.53
Final Sat.:	457	457	686	1561	39	1600	1600	3179	21	1600	2354	846
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.13	0.09	0.12	0.14	0.14	0.00	0.32	0.32
Crit Moves:		****			****			****			****	

1625 Magnolia Avenue
MMF1701
Cumulative AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Myrtle Avenue/Central Avenue - I-210 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.894
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	97	Level Of Service:	D

Street Name:	Myrtle Avenue						Central Avenue - I-210 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	1 0	1 0	1
Volume Module:												
Base Vol:	364	694	0	0	540	100	0	0	0	259	586	346
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	364	694	0	0	540	100	0	0	0	259	586	346
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	364	694	0	0	540	100	0	0	0	259	586	346
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	364	694	0	0	540	100	0	0	0	259	586	346
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	364	694	0	0	540	100	0	0	0	259	586	346
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.69	0.31	0.00	0.00	0.00	1.00	1.00	1.00
Final Sat.:	1600	3200	0	0	2700	500	0	0	0	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.23	0.22	0.00	0.00	0.20	0.20	0.00	0.00	0.00	0.16	0.37	0.22
Crit Moves:	****				****						****	

1625 Magnolia Avenue
MMF1701
Cumulative AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Myrtle Avenue/Evergreen Avenue - I-210 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.775
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	C

Street Name:	Myrtle Avenue						Evergreen Avenue - I-210 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	638	200	260	536	0	376	485	316	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	638	200	260	536	0	376	485	316	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	638	200	260	536	0	376	485	316	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	638	200	260	536	0	376	485	316	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	638	200	260	536	0	376	485	316	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.52	0.48	1.00	2.00	0.00	1.00	1.21	0.79	0.00	0.00	0.00
Final Sat.:	0	2436	764	1600	3200	0	1600	1938	1262	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.16	0.17	0.00	0.24	0.25	0.25	0.00	0.00	0.00
Crit Moves:		****		****					****			

1625 Magnolia Avenue
MMF1701
Cumulative AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Myrtle Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.818
Loss Time (sec):	30	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Street Name:	Myrtle Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	133	483	50	56	563	158	151	301	123	29	294	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	133	483	50	56	563	158	151	301	123	29	294	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	133	483	50	56	563	158	151	301	123	29	294	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	483	50	56	563	158	151	301	123	29	294	74
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	133	483	50	56	563	158	151	301	123	29	294	74
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.56	0.44	1.00	1.42	0.58	1.00	1.60	0.40
Final Sat.:	1600	2900	300	1600	2499	701	1600	2272	928	1600	2557	643
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.17	0.04	0.23	0.23	0.09	0.13	0.13	0.02	0.11	0.12
Crit Moves:	****				****		****					****

1625 Magnolia Avenue
MMF1701
Cumulative AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Myrtle Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.788
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	C

Street Name:	Myrtle Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	223	599	137	38	306	27	45	412	120	126	1224	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	223	599	137	38	306	27	45	412	120	126	1224	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	223	599	137	38	306	27	45	412	120	126	1224	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	223	599	137	38	306	27	45	412	120	126	1224	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	223	599	137	38	306	27	45	412	120	126	1224	75
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.63	0.37	1.00	1.84	0.16	1.00	2.00	1.00	1.00	1.88	0.12
Final Sat.:	1600	2604	596	1600	2941	259	1600	3200	1600	1600	3015	185
Capacity Analysis Module:												
Vol/Sat:	0.14	0.23	0.23	0.02	0.10	0.10	0.03	0.13	0.08	0.08	0.41	0.41
Crit Moves:		****			****			****			****	

Intersection	
Intersection Delay, s/veh	21.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	33	118	23	5	10	52	508	55	122	680	17
Future Vol, veh/h	3	33	118	23	5	10	52	508	55	122	680	17
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	34	123	24	5	10	54	529	57	127	708	18
Number of Lanes	0	1	0	0	1	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	12.2	11.1	17.2	26.9
HCM LOS	B	B	C	D

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	17%	0%	2%	61%	26%	0%
Vol Thru, %	83%	82%	21%	13%	74%	95%
Vol Right, %	0%	18%	77%	26%	0%	5%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	306	309	154	38	462	357
LT Vol	52	0	3	23	122	0
Through Vol	254	254	33	5	340	340
RT Vol	0	55	118	10	0	17
Lane Flow Rate	319	322	160	40	481	372
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.573	0.56	0.289	0.081	0.836	0.629
Departure Headway (Hd)	6.474	6.261	6.483	7.381	6.253	6.086
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	555	573	553	483	578	591
Service Time	4.243	4.03	4.539	5.461	4.014	3.847
HCM Lane V/C Ratio	0.575	0.562	0.289	0.083	0.832	0.629
HCM Control Delay	17.7	16.8	12.2	11.1	33.2	18.7
HCM Lane LOS	C	C	B	B	D	C
HCM 95th-tile Q	3.6	3.4	1.2	0.3	8.7	4.4

1625 Magnolia Avenue
MMF1701
Cumulative PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Mayflower Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.676
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Street Name:	Mayflower Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	0 1	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	39	239	35	155	330	256	221	818	49	38	539	125
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	39	239	35	155	330	256	221	818	49	38	539	125
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	239	35	155	330	256	221	818	49	38	539	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	239	35	155	330	256	221	818	49	38	539	125
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	239	35	155	330	256	221	818	49	38	539	125
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	1.00	1.00	1.00	1.00	1.89	0.11	1.00	1.62	0.38
Final Sat.:	1600	2791	409	1600	1600	1600	1600	3019	181	1600	2598	602
Capacity Analysis Module:												
Vol/Sat:	0.02	0.09	0.09	0.10	0.21	0.16	0.14	0.27	0.27	0.02	0.21	0.21
Crit Moves:	****			****			****			****		

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	202	0	0	32	0	0
Future Vol, veh/h	202	0	0	32	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	220	0	0	35	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	220	0	255	220
Stage 1	-	-	-	-	220	-
Stage 2	-	-	-	-	35	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1349	-	734	820
Stage 1	-	-	-	-	817	-
Stage 2	-	-	-	-	987	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1349	-	734	820
Mov Cap-2 Maneuver	-	-	-	-	734	-
Stage 1	-	-	-	-	817	-
Stage 2	-	-	-	-	987	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1349	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

1625 Magnolia Avenue
MMF1701
Cumulative PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Magnolia Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.785
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	C

Street Name:	Magnolia Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	0	1 0	1	0
Volume Module:												
Base Vol:	70	210	85	97	236	60	80	1127	50	116	849	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	210	85	97	236	60	80	1127	50	116	849	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	210	85	97	236	60	80	1127	50	116	849	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	210	85	97	236	60	80	1127	50	116	849	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	210	85	97	236	60	80	1127	50	116	849	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.71	0.29	1.00	0.80	0.20	1.00	1.92	0.08	1.00	1.91	0.09
Final Sat.:	1600	1139	461	1600	1276	324	1600	3064	136	1600	3056	144
Capacity Analysis Module:												
Vol/Sat:	0.04	0.18	0.18	0.06	0.18	0.19	0.05	0.37	0.37	0.07	0.28	0.28
Crit Moves:		****		****				****		****		

Intersection	
Intersection Delay, s/veh	23.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	174	24	0	0	0	13	316	93	66	395	12
Future Vol, veh/h	26	174	24	0	0	0	13	316	93	66	395	12
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	30	198	27	0	0	0	15	359	106	75	449	14
Number of Lanes	0	1	0	0	0	0	0	1	0	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	14.9	22.1	29.6
HCM LOS	B	C	D

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	3%	12%	14%
Vol Thru, %	75%	78%	84%
Vol Right, %	22%	11%	3%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	422	224	473
LT Vol	13	26	66
Through Vol	316	174	395
RT Vol	93	24	12
Lane Flow Rate	480	255	538
Geometry Grp	1	1	1
Degree of Util (X)	0.731	0.456	0.826
Departure Headway (Hd)	5.486	6.444	5.532
Convergence, Y/N	Yes	Yes	Yes
Cap	657	555	650
Service Time	3.554	4.521	3.598
HCM Lane V/C Ratio	0.731	0.459	0.828
HCM Control Delay	22.1	14.9	29.6
HCM Lane LOS	C	B	D
HCM 95th-tile Q	6.3	2.4	8.8

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	423	419	0
Future Vol, veh/h	0	0	0	423	419	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	460	455	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	915	455	455	0	-	0
Stage 1	455	-	-	-	-	-
Stage 2	460	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	303	605	1106	-	-	-
Stage 1	639	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	303	605	1106	-	-	-
Mov Cap-2 Maneuver	303	-	-	-	-	-
Stage 1	639	-	-	-	-	-
Stage 2	636	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1106	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

1625 Magnolia Avenue
MMF1701
Cumulative PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Magnolia Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.631
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Street Name:	Magnolia Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	1	0
Volume Module:												
Base Vol:	6	4	4	201	1	206	279	738	0	2	540	160
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	4	4	201	1	206	279	738	0	2	540	160
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	6	4	4	201	1	206	279	738	0	2	540	160
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	4	4	201	1	206	279	738	0	2	540	160
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	6	4	4	201	1	206	279	738	0	2	540	160
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.43	0.29	0.28	0.99	0.01	1.00	1.00	2.00	0.00	1.00	1.54	0.46
Final Sat.:	686	457	457	1592	8	1600	1600	3200	0	1600	2469	731
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.13	0.13	0.13	0.17	0.23	0.00	0.00	0.22	0.22
Crit Moves:	****					****	****				****	

1625 Magnolia Avenue
MMF1701
Cumulative PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Myrtle Avenue/Central Avenue - I-210 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.958
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	141	Level Of Service:	E

Street Name:	Myrtle Avenue						Central Avenue - I-210 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	1 0	1 0	1
Volume Module:												
Base Vol:	359	443	0	0	770	211	0	0	0	276	524	304
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	359	443	0	0	770	211	0	0	0	276	524	304
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	359	443	0	0	770	211	0	0	0	276	524	304
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	359	443	0	0	770	211	0	0	0	276	524	304
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	359	443	0	0	770	211	0	0	0	276	524	304
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.57	0.43	0.00	0.00	0.00	1.00	1.00	1.00
Final Sat.:	1600	3200	0	0	2512	688	0	0	0	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.22	0.14	0.00	0.00	0.31	0.31	0.00	0.00	0.00	0.17	0.33	0.19
Crit Moves:	****				****						****	

1625 Magnolia Avenue
MMF1701
Cumulative PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Myrtle Avenue/Evergreen Avenue - I-210 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.936
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	122	Level Of Service:	E

Street Name:	Myrtle Avenue						Evergreen Avenue - I-210 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	621	219	329	736	0	167	853	323	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	621	219	329	736	0	167	853	323	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	621	219	329	736	0	167	853	323	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	621	219	329	736	0	167	853	323	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	621	219	329	736	0	167	853	323	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.48	0.52	1.00	2.00	0.00	1.00	1.45	0.55	0.00	0.00	0.00
Final Sat.:	0	2366	834	1600	3200	0	1600	2321	879	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.21	0.23	0.00	0.10	0.37	0.37	0.00	0.00	0.00
Crit Moves:		****		****					****			

1625 Magnolia Avenue
MMF1701
Cumulative PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Myrtle Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.919
Loss Time (sec):	30	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	126	Level Of Service:	E

Street Name:	Myrtle Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	100	468	48	58	651	232	155	486	276	68	326	49
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	468	48	58	651	232	155	486	276	68	326	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	468	48	58	651	232	155	486	276	68	326	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	468	48	58	651	232	155	486	276	68	326	49
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	468	48	58	651	232	155	486	276	68	326	49
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.47	0.53	1.00	1.28	0.72	1.00	1.74	0.26
Final Sat.:	1600	2902	298	1600	2359	841	1600	2041	1159	1600	2782	418
Capacity Analysis Module:												
Vol/Sat:	0.06	0.16	0.16	0.04	0.28	0.28	0.10	0.24	0.24	0.04	0.12	0.12
Crit Moves:	****			****			****			****		

1625 Magnolia Avenue
MMF1701
Cumulative PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Myrtle Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.801
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Street Name:	Myrtle Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	162	387	154	128	569	60	82	965	164	162	720	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	162	387	154	128	569	60	82	965	164	162	720	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	162	387	154	128	569	60	82	965	164	162	720	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	162	387	154	128	569	60	82	965	164	162	720	53
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	162	387	154	128	569	60	82	965	164	162	720	53
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.43	0.57	1.00	1.81	0.19	1.00	2.00	1.00	1.00	1.86	0.14
Final Sat.:	1600	2289	911	1600	2895	305	1600	3200	1600	1600	2981	219
Capacity Analysis Module:												
Vol/Sat:	0.10	0.17	0.17	0.08	0.20	0.20	0.05	0.30	0.10	0.10	0.24	0.24
Crit Moves:	****			****			****			****		

Intersection	
Intersection Delay, s/veh	26.4
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	12	70	22	24	23	197	622	125	74	373	14
Future Vol, veh/h	7	12	70	22	24	23	197	622	125	74	373	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	13	76	24	26	25	214	676	136	80	405	15
Number of Lanes	0	1	0	0	1	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	11	11.2	34.6	15
HCM LOS	B	B	D	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	39%	0%	8%	32%	28%	0%
Vol Thru, %	61%	71%	13%	35%	72%	93%
Vol Right, %	0%	29%	79%	33%	0%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	508	436	89	69	261	201
LT Vol	197	0	7	22	74	0
Through Vol	311	311	12	24	187	187
RT Vol	0	125	70	23	0	14
Lane Flow Rate	552	474	97	75	283	218
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.924	0.741	0.176	0.145	0.519	0.388
Departure Headway (Hd)	6.027	5.628	6.543	6.94	6.604	6.411
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	602	640	548	516	544	560
Service Time	3.775	3.375	4.594	4.993	4.369	4.175
HCM Lane V/C Ratio	0.917	0.741	0.177	0.145	0.52	0.389
HCM Control Delay	44.8	22.8	11	11.2	16.3	13.2
HCM Lane LOS	E	C	B	B	C	B
HCM 95th-tile Q	11.8	6.5	0.6	0.5	3	1.8

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Mayflower Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.724
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Street Name:	Mayflower Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	0 1	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	98	463	37	96	179	204	219	494	30	26	684	183
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	98	463	37	96	179	204	219	494	30	26	684	183
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	98	463	37	96	179	204	219	494	30	26	684	183
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	98	463	37	96	179	204	219	494	30	26	684	183
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	98	463	37	96	179	204	219	494	30	26	684	183
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.85	0.15	1.00	1.00	1.00	1.00	1.89	0.11	1.00	1.58	0.42
Final Sat.:	1600	2963	237	1600	1600	1600	1600	3017	183	1600	2525	675
Capacity Analysis Module:												
Vol/Sat:	0.06	0.16	0.16	0.06	0.11	0.13	0.14	0.16	0.16	0.02	0.27	0.27
Crit Moves:		****			****			****			****	

Intersection	
Int Delay, s/veh	2.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	214	9	15	54	21	57
Future Vol, veh/h	214	9	15	54	21	57
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	233	10	16	59	23	62

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	243	0	329	238
Stage 1	-	-	-	-	238	-
Stage 2	-	-	-	-	91	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1323	-	665	801
Stage 1	-	-	-	-	802	-
Stage 2	-	-	-	-	933	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1323	-	656	801
Mov Cap-2 Maneuver	-	-	-	-	656	-
Stage 1	-	-	-	-	792	-
Stage 2	-	-	-	-	933	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	10.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	756	-	-	1323	-
HCM Lane V/C Ratio	0.112	-	-	0.012	-
HCM Control Delay (s)	10.4	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0	-

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Magnolia Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.764
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Street Name:	Magnolia Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	90	281	66	44	225	37	58	494	33	41	1133	94
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	281	66	44	225	37	58	494	33	41	1133	94
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	281	66	44	225	37	58	494	33	41	1133	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	281	66	44	225	37	58	494	33	41	1133	94
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	281	66	44	225	37	58	494	33	41	1133	94
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.81	0.19	1.00	0.86	0.14	1.00	1.87	0.13	1.00	1.85	0.15
Final Sat.:	1600	1296	304	1600	1374	226	1600	3000	200	1600	2955	245
Capacity Analysis Module:												
Vol/Sat:	0.06	0.22	0.22	0.03	0.16	0.16	0.04	0.16	0.16	0.03	0.38	0.38
Crit Moves:		****			****			****			****	

Intersection	
Intersection Delay, s/veh	28.7
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	193	23	0	0	0	39	352	115	123	275	23
Future Vol, veh/h	44	193	23	0	0	0	39	352	115	123	275	23
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	49	217	26	0	0	0	44	396	129	138	309	26
Number of Lanes	0	1	0	0	0	0	0	1	0	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	17.1	36.8	26
HCM LOS	C	E	D

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	8%	17%	29%
Vol Thru, %	70%	74%	65%
Vol Right, %	23%	9%	5%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	506	260	421
LT Vol	39	44	123
Through Vol	352	193	275
RT Vol	115	23	23
Lane Flow Rate	569	292	473
Geometry Grp	1	1	1
Degree of Util (X)	0.884	0.534	0.77
Departure Headway (Hd)	5.597	6.585	5.862
Convergence, Y/N	Yes	Yes	Yes
Cap	642	543	610
Service Time	3.681	4.68	3.951
HCM Lane V/C Ratio	0.886	0.538	0.775
HCM Control Delay	36.8	17.1	26
HCM Lane LOS	E	C	D
HCM 95th-tile Q	10.6	3.1	7.1

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	14	6	465	296	7
Future Vol, veh/h	50	14	6	465	296	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	15	7	505	322	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	845	326	330	0	-	0
Stage 1	326	-	-	-	-	-
Stage 2	519	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	333	715	1229	-	-	-
Stage 1	731	-	-	-	-	-
Stage 2	597	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	330	715	1229	-	-	-
Mov Cap-2 Maneuver	330	-	-	-	-	-
Stage 1	725	-	-	-	-	-
Stage 2	597	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.8	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1229	-	374	-	-
HCM Lane V/C Ratio	0.005	-	0.186	-	-
HCM Control Delay (s)	7.9	0	16.8	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.7	-	-

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Magnolia Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.680
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Street Name:	Magnolia Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1	0	1	1	0	1	0
Volume Module:												
Base Vol:	2	2	3	212	5	144	199	447	3	6	743	268
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	2	3	212	5	144	199	447	3	6	743	268
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	2	3	212	5	144	199	447	3	6	743	268
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	2	3	212	5	144	199	447	3	6	743	268
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	2	3	212	5	144	199	447	3	6	743	268
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.28	0.29	0.43	0.98	0.02	1.00	1.00	1.99	0.01	1.00	1.47	0.53
Final Sat.:	457	457	686	1563	37	1600	1600	3179	21	1600	2352	848
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.14	0.14	0.09	0.12	0.14	0.14	0.00	0.32	0.32
Crit Moves:		****			****			****			****	

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Myrtle Avenue/Central Avenue - I-210 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.908
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	104	Level Of Service:	E

Street Name:	Myrtle Avenue						Central Avenue - I-210 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	1 0	1 0	1
Volume Module:												
Base Vol:	371	694	0	0	540	126	0	0	0	259	588	346
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	371	694	0	0	540	126	0	0	0	259	588	346
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	371	694	0	0	540	126	0	0	0	259	588	346
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	371	694	0	0	540	126	0	0	0	259	588	346
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	371	694	0	0	540	126	0	0	0	259	588	346
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.62	0.38	0.00	0.00	0.00	1.00	1.00	1.00
Final Sat.:	1600	3200	0	0	2595	605	0	0	0	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.23	0.22	0.00	0.00	0.21	0.21	0.00	0.00	0.00	0.16	0.37	0.22
Crit Moves:	****				****						****	

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Myrtle Avenue/Evergreen Avenue - I-210 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.784
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Street Name:	Myrtle Avenue						Evergreen Avenue - I-210 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	638	200	260	536	0	383	511	319	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	638	200	260	536	0	383	511	319	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	638	200	260	536	0	383	511	319	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	638	200	260	536	0	383	511	319	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	638	200	260	536	0	383	511	319	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.52	0.48	1.00	2.00	0.00	1.00	1.23	0.77	0.00	0.00	0.00
Final Sat.:	0	2436	764	1600	3200	0	1600	1970	1230	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.16	0.17	0.00	0.24	0.26	0.26	0.00	0.00	0.00
Crit Moves:		****		****				****				

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Myrtle Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.819
Loss Time (sec):	30	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Street Name:	Myrtle Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	134	483	50	56	563	158	151	308	130	29	295	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	134	483	50	56	563	158	151	308	130	29	295	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	134	483	50	56	563	158	151	308	130	29	295	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	134	483	50	56	563	158	151	308	130	29	295	74
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	134	483	50	56	563	158	151	308	130	29	295	74
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.56	0.44	1.00	1.41	0.59	1.00	1.60	0.40
Final Sat.:	1600	2900	300	1600	2499	701	1600	2250	950	1600	2558	642
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.17	0.04	0.23	0.23	0.09	0.14	0.14	0.02	0.12	0.12
Crit Moves:	****				****		****				****	

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Myrtle Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.788
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	C

Street Name:	Myrtle Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	223	599	137	38	306	27	45	419	120	126	1225	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	223	599	137	38	306	27	45	419	120	126	1225	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	223	599	137	38	306	27	45	419	120	126	1225	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	223	599	137	38	306	27	45	419	120	126	1225	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	223	599	137	38	306	27	45	419	120	126	1225	75
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.63	0.37	1.00	1.84	0.16	1.00	2.00	1.00	1.00	1.88	0.12
Final Sat.:	1600	2604	596	1600	2941	259	1600	3200	1600	1600	3015	185
Capacity Analysis Module:												
Vol/Sat:	0.14	0.23	0.23	0.02	0.10	0.10	0.03	0.13	0.08	0.08	0.41	0.41
Crit Moves:		****			****			****			****	

Intersection	
Intersection Delay, s/veh	24.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	33	118	26	5	16	52	508	62	148	680	17
Future Vol, veh/h	3	33	118	26	5	16	52	508	62	148	680	17
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	34	123	27	5	17	54	529	65	154	708	18
Number of Lanes	0	1	0	0	1	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	12.4	11.3	17.9	32.2
HCM LOS	B	B	C	D

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	17%	0%	2%	55%	30%	0%
Vol Thru, %	83%	80%	21%	11%	70%	95%
Vol Right, %	0%	20%	77%	34%	0%	5%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	306	316	154	47	488	357
LT Vol	52	0	3	26	148	0
Through Vol	254	254	33	5	340	340
RT Vol	0	62	118	16	0	17
Lane Flow Rate	319	329	160	49	508	372
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.582	0.581	0.293	0.101	0.896	0.636
Departure Headway (Hd)	6.575	6.349	6.579	7.392	6.346	6.158
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	545	566	544	482	569	584
Service Time	4.35	4.124	4.64	5.474	4.112	3.924
HCM Lane V/C Ratio	0.585	0.581	0.294	0.102	0.893	0.637
HCM Control Delay	18.2	17.6	12.4	11.3	41.7	19.2
HCM Lane LOS	C	C	B	B	E	C
HCM 95th-tile Q	3.7	3.7	1.2	0.3	10.6	4.5

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Mayflower Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.681
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Street Name:	Mayflower Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	0 1	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	39	239	35	155	330	259	228	818	49	38	539	125
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	39	239	35	155	330	259	228	818	49	38	539	125
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	239	35	155	330	259	228	818	49	38	539	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	239	35	155	330	259	228	818	49	38	539	125
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	239	35	155	330	259	228	818	49	38	539	125
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	1.00	1.00	1.00	1.00	1.89	0.11	1.00	1.62	0.38
Final Sat.:	1600	2791	409	1600	1600	1600	1600	3019	181	1600	2598	602
Capacity Analysis Module:												
Vol/Sat:	0.02	0.09	0.09	0.10	0.21	0.16	0.14	0.27	0.27	0.02	0.21	0.21
Crit Moves:	****			****			****			****		

Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	202	35	56	32	12	32
Future Vol, veh/h	202	35	56	32	12	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	220	38	61	35	13	35

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	258	0	396	239
Stage 1	-	-	-	-	239	-
Stage 2	-	-	-	-	157	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1307	-	609	800
Stage 1	-	-	-	-	801	-
Stage 2	-	-	-	-	871	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1307	-	580	800
Mov Cap-2 Maneuver	-	-	-	-	580	-
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	871	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	725	-	-	1307	-
HCM Lane V/C Ratio	0.066	-	-	0.047	-
HCM Control Delay (s)	10.3	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Magnolia Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.797
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	C

Street Name:	Magnolia Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	79	216	88	97	249	60	80	1127	57	123	849	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	216	88	97	249	60	80	1127	57	123	849	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	79	216	88	97	249	60	80	1127	57	123	849	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	216	88	97	249	60	80	1127	57	123	849	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	79	216	88	97	249	60	80	1127	57	123	849	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.71	0.29	1.00	0.81	0.19	1.00	1.90	0.10	1.00	1.91	0.09
Final Sat.:	1600	1137	463	1600	1289	311	1600	3046	154	1600	3056	144
Capacity Analysis Module:												
Vol/Sat:	0.05	0.19	0.19	0.06	0.19	0.19	0.05	0.37	0.37	0.08	0.28	0.28
Crit Moves:		****		****				****		****		

Intersection	
Intersection Delay, s/veh	40.8
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	186	24	0	0	0	39	335	96	66	421	38
Future Vol, veh/h	38	186	24	0	0	0	39	335	96	66	421	38
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	211	27	0	0	0	44	381	109	75	478	43
Number of Lanes	0	1	0	0	0	0	0	1	0	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	17.8	37	55
HCM LOS	C	E	F

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	8%	15%	13%
Vol Thru, %	71%	75%	80%
Vol Right, %	20%	10%	7%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	470	248	525
LT Vol	39	38	66
Through Vol	335	186	421
RT Vol	96	24	38
Lane Flow Rate	534	282	597
Geometry Grp	1	1	1
Degree of Util (X)	0.877	0.54	0.977
Departure Headway (Hd)	5.909	6.892	5.894
Convergence, Y/N	Yes	Yes	Yes
Cap	614	524	620
Service Time	3.93	4.942	3.913
HCM Lane V/C Ratio	0.87	0.538	0.963
HCM Control Delay	37	17.8	55
HCM Lane LOS	E	C	F
HCM 95th-tile Q	10.2	3.2	14.1

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	28	8	21	451	419	28
Future Vol, veh/h	28	8	21	451	419	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	9	23	490	455	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1006	470	485	0	-	0
Stage 1	470	-	-	-	-	-
Stage 2	536	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	267	594	1078	-	-	-
Stage 1	629	-	-	-	-	-
Stage 2	587	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	259	594	1078	-	-	-
Mov Cap-2 Maneuver	259	-	-	-	-	-
Stage 1	611	-	-	-	-	-
Stage 2	587	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1078	-	296	-	-
HCM Lane V/C Ratio	0.021	-	0.132	-	-
HCM Control Delay (s)	8.4	0	19	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Magnolia Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.636
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Street Name:	Magnolia Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	1	0	0	1	1	0	1	0	1	1	0
Volume Module:												
Base Vol:	6	4	4	207	1	206	279	738	0	2	540	173
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	4	4	207	1	206	279	738	0	2	540	173
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	6	4	4	207	1	206	279	738	0	2	540	173
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	4	4	207	1	206	279	738	0	2	540	173
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	6	4	4	207	1	206	279	738	0	2	540	173
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.43	0.29	0.28	0.99	0.01	1.00	1.00	2.00	0.00	1.00	1.51	0.49
Final Sat.:	686	457	457	1592	8	1600	1600	3200	0	1600	2424	776
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.13	0.13	0.13	0.17	0.23	0.00	0.00	0.22	0.22
Crit Moves:	****			****			****				****	

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Myrtle Avenue/Central Avenue - I-210 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.980
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	167	Level Of Service:	E

Street Name:	Myrtle Avenue						Central Avenue - I-210 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	1 0	1 0	1
Volume Module:												
Base Vol:	362	443	0	0	770	223	0	0	0	276	550	304
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	362	443	0	0	770	223	0	0	0	276	550	304
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	362	443	0	0	770	223	0	0	0	276	550	304
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	362	443	0	0	770	223	0	0	0	276	550	304
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	362	443	0	0	770	223	0	0	0	276	550	304
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.55	0.45	0.00	0.00	0.00	1.00	1.00	1.00
Final Sat.:	1600	3200	0	0	2481	719	0	0	0	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.23	0.14	0.00	0.00	0.31	0.31	0.00	0.00	0.00	0.17	0.34	0.19
Crit Moves:	****				****						****	

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Myrtle Avenue/Evergreen Avenue - I-210 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.950
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	133	Level Of Service:	E

Street Name:	Myrtle Avenue						Evergreen Avenue - I-210 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	1 0	1	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	621	219	329	736	0	170	865	356	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	621	219	329	736	0	170	865	356	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	621	219	329	736	0	170	865	356	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	621	219	329	736	0	170	865	356	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	621	219	329	736	0	170	865	356	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.48	0.52	1.00	2.00	0.00	1.00	1.42	0.58	0.00	0.00	0.00
Final Sat.:	0	2366	834	1600	3200	0	1600	2267	933	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.21	0.23	0.00	0.11	0.38	0.38	0.00	0.00	0.00
Crit Moves:		****		****					****			

1625 Magnolia Avenue
MMF1701
Cumulative Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Myrtle Avenue/Duarte Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.925
Loss Time (sec):	30	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	128	Level Of Service:	E

Street Name:	Myrtle Avenue						Duarte Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	107	468	48	58	651	232	155	489	279	68	333	49
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	107	468	48	58	651	232	155	489	279	68	333	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	107	468	48	58	651	232	155	489	279	68	333	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	468	48	58	651	232	155	489	279	68	333	49
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	107	468	48	58	651	232	155	489	279	68	333	49
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.47	0.53	1.00	1.27	0.73	1.00	1.74	0.26
Final Sat.:	1600	2902	298	1600	2359	841	1600	2038	1163	1600	2790	410
Capacity Analysis Module:												
Vol/Sat:	0.07	0.16	0.16	0.04	0.28	0.28	0.10	0.24	0.24	0.04	0.12	0.12
Crit Moves:	****			****			****			****		

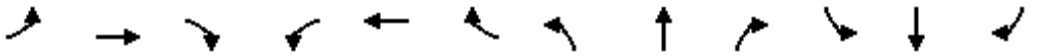
1625 Magnolia Avenue
MMF1701
Cumulative Plus Project PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Myrtle Avenue/Huntington Drive

Cycle (sec):	100	Critical Vol./Cap.(X):	0.802
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

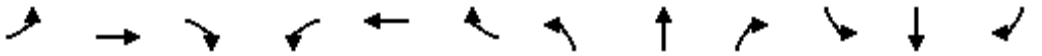
Street Name:	Myrtle Avenue						Huntington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	162	387	154	128	569	60	82	968	164	162	727	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	162	387	154	128	569	60	82	968	164	162	727	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	162	387	154	128	569	60	82	968	164	162	727	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	162	387	154	128	569	60	82	968	164	162	727	53
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	162	387	154	128	569	60	82	968	164	162	727	53
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.43	0.57	1.00	1.81	0.19	1.00	2.00	1.00	1.00	1.86	0.14
Final Sat.:	1600	2289	911	1600	2895	305	1600	3200	1600	1600	2983	217
Capacity Analysis Module:												
Vol/Sat:	0.10	0.17	0.17	0.08	0.20	0.20	0.05	0.30	0.10	0.10	0.24	0.24
Crit Moves:	****			****			****			****		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	259	586	346	364	694	0	0	540	100
Future Volume (veh/h)	0	0	0	259	586	346	364	694	0	0	540	100
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				278	630	372	391	746	0	0	581	108
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				661	694	588	301	1678	0	0	723	134
Arrive On Green				0.37	0.37	0.37	0.34	0.94	0.00	0.00	0.24	0.24
Sat Flow, veh/h				1781	1870	1585	1781	3647	0	0	3086	555
Grp Volume(v), veh/h				278	630	372	391	746	0	0	344	345
Grp Sat Flow(s),veh/h/ln				1781	1870	1585	1781	1777	0	0	1777	1771
Q Serve(g_s), s				7.6	20.8	12.5	11.0	1.3	0.0	0.0	11.9	11.9
Cycle Q Clear(g_c), s				7.6	20.8	12.5	11.0	1.3	0.0	0.0	11.9	11.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.31
Lane Grp Cap(c), veh/h				661	694	588	301	1678	0	0	429	427
V/C Ratio(X)				0.42	0.91	0.63	1.30	0.44	0.00	0.00	0.80	0.81
Avail Cap(c_a), veh/h				682	716	607	301	1678	0	0	429	427
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.29	0.29	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				15.2	19.4	16.8	21.5	1.0	0.0	0.0	23.2	23.2
Incr Delay (d2), s/veh				0.4	15.2	2.0	140.9	0.2	0.0	0.0	14.6	15.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.8	10.8	4.3	15.1	0.3	0.0	0.0	6.3	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				15.7	34.6	18.9	162.4	1.2	0.0	0.0	37.8	38.2
LnGrp LOS				B	C	B	F	A	A	A	D	D
Approach Vol, veh/h					1280			1137			689	
Approach Delay, s/veh					25.9			56.6			38.0	
Approach LOS					C			E			D	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		35.8			15.0	20.8		29.2				
Change Period (Y+Rc), s		5.1			4.0	5.1		5.1				
Max Green Setting (Gmax), s		29.9			11.0	14.9		24.9				
Max Q Clear Time (g_c+I1), s		3.3			13.0	13.9		22.8				
Green Ext Time (p_c), s		5.4			0.0	0.4		1.3				

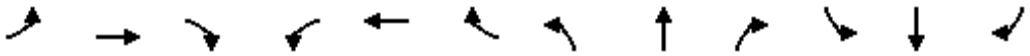
Intersection Summary												
HCM 6th Ctrl Delay			39.8									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	376	485	316	0	0	0	0	638	200	260	536	0
Future Volume (veh/h)	376	485	316	0	0	0	0	638	200	260	536	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	413	533	347				0	701	220	286	589	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	576	668	434				0	769	241	301	1846	0
Arrive On Green	0.32	0.32	0.32				0.00	0.29	0.29	0.34	1.00	0.00
Sat Flow, veh/h	1781	2064	1342				0	2755	835	1781	3647	0
Grp Volume(v), veh/h	413	459	421				0	468	453	286	589	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1629				0	1777	1720	1781	1777	0
Q Serve(g_s), s	13.3	15.3	15.3				0.0	16.5	16.5	10.2	0.0	0.0
Cycle Q Clear(g_c), s	13.3	15.3	15.3				0.0	16.5	16.5	10.2	0.0	0.0
Prop In Lane	1.00		0.82				0.00		0.49	1.00		0.00
Lane Grp Cap(c), veh/h	576	575	527				0	513	497	301	1846	0
V/C Ratio(X)	0.72	0.80	0.80				0.00	0.91	0.91	0.95	0.32	0.00
Avail Cap(c_a), veh/h	658	656	601				0	513	497	301	1846	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.60	0.60	0.00
Uniform Delay (d), s/veh	19.4	20.1	20.1				0.0	22.3	22.3	21.2	0.0	0.0
Incr Delay (d2), s/veh	3.2	6.1	6.7				0.0	23.0	23.6	27.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	6.6	6.2				0.0	9.5	9.2	5.4	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.6	26.2	26.8				0.0	45.3	45.9	48.9	0.3	0.0
LnGrp LOS	C	C	C				A	D	D	D	A	A
Approach Vol, veh/h		1293						921			875	
Approach Delay, s/veh		25.2						45.6			16.2	
Approach LOS		C						D			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	23.9		26.1		38.9
Change Period (Y+Rc), s	4.0	5.1		5.1		5.1
Max Green Setting (Gmax), s	11.0	15.8		24.0		30.8
Max Q Clear Time (g_c+I1), s	12.2	18.5		17.3		2.0
Green Ext Time (p_c), s	0.0	0.0		3.7		4.2

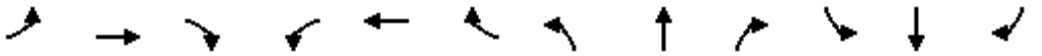
Intersection Summary	
HCM 6th Ctrl Delay	28.7
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	276	524	304	359	443	0	0	770	211
Future Volume (veh/h)	0	0	0	276	524	304	359	443	0	0	770	211
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				297	563	327	386	476	0	0	828	227
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				568	596	505	333	1938	0	0	841	231
Arrive On Green				0.32	0.32	0.32	0.37	1.00	0.00	0.00	0.31	0.31
Sat Flow, veh/h				1781	1870	1585	1781	3647	0	0	2849	755
Grp Volume(v), veh/h				297	563	327	386	476	0	0	534	521
Grp Sat Flow(s),veh/h/ln				1781	1870	1585	1781	1777	0	0	1777	1734
Q Serve(g_s), s				10.2	22.0	13.3	14.0	0.0	0.0	0.0	22.4	22.4
Cycle Q Clear(g_c), s				10.2	22.0	13.3	14.0	0.0	0.0	0.0	22.4	22.4
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.44
Lane Grp Cap(c), veh/h				568	596	505	333	1938	0	0	543	530
V/C Ratio(X)				0.52	0.94	0.65	1.16	0.25	0.00	0.00	0.98	0.98
Avail Cap(c_a), veh/h				568	596	505	333	1938	0	0	543	530
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.35	0.35	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				20.9	24.9	21.9	23.5	0.0	0.0	0.0	25.9	25.9
Incr Delay (d2), s/veh				0.9	24.0	2.9	84.2	0.1	0.0	0.0	34.9	35.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.1	12.9	5.0	11.9	0.0	0.0	0.0	13.9	13.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				21.8	48.9	24.8	107.7	0.1	0.0	0.0	60.7	61.3
LnGrp LOS				C	D	C	F	A	A	A	E	E
Approach Vol, veh/h					1187			862			1055	
Approach Delay, s/veh					35.5			48.3			61.0	
Approach LOS					D			D			E	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		46.0			18.0	28.0		29.0				
Change Period (Y+Rc), s		5.1			4.0	5.1		5.1				
Max Green Setting (Gmax), s		40.9			14.0	22.9		23.9				
Max Q Clear Time (g_c+I1), s		2.0			16.0	24.4		24.0				
Green Ext Time (p_c), s		3.4			0.0	0.0		0.0				

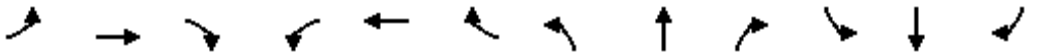
Intersection Summary												
HCM 6th Ctrl Delay			47.7									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	853	323	0	0	0	0	621	219	329	736	0
Future Volume (veh/h)	167	853	323	0	0	0	0	621	219	329	736	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	178	907	344				0	661	233	350	783	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	615	872	329				0	651	229	379	1843	0
Arrive On Green	0.35	0.35	0.35				0.00	0.25	0.25	0.43	1.00	0.00
Sat Flow, veh/h	1781	2524	952				0	2670	908	1781	3647	0
Grp Volume(v), veh/h	178	637	614				0	456	438	350	783	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1699				0	1777	1707	1781	1777	0
Q Serve(g_s), s	5.5	25.9	25.9				0.0	19.0	19.0	14.0	0.0	0.0
Cycle Q Clear(g_c), s	5.5	25.9	25.9				0.0	19.0	19.0	14.0	0.0	0.0
Prop In Lane	1.00		0.56				0.00		0.53	1.00		0.00
Lane Grp Cap(c), veh/h	615	614	587				0	449	431	379	1843	0
V/C Ratio(X)	0.29	1.04	1.05				0.00	1.02	1.02	0.92	0.42	0.00
Avail Cap(c_a), veh/h	615	614	587				0	449	431	380	1843	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.36	0.36	0.00
Uniform Delay (d), s/veh	17.9	24.5	24.6				0.0	28.0	28.0	21.0	0.0	0.0
Incr Delay (d2), s/veh	0.3	46.7	49.8				0.0	46.4	47.4	13.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	17.8	17.5				0.0	13.3	12.9	5.4	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1	71.2	74.4				0.0	74.4	75.4	34.1	0.3	0.0
LnGrp LOS	B	F	F				A	F	F	C	A	A
Approach Vol, veh/h		1429						894			1133	
Approach Delay, s/veh		65.9						74.9			10.7	
Approach LOS		E						E			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.9	24.1		31.0		44.0
Change Period (Y+Rc), s	4.0	5.1		5.1		5.1
Max Green Setting (Gmax), s	16.0	18.9		25.9		38.9
Max Q Clear Time (g_c+I1), s	16.0	21.0		27.9		2.0
Green Ext Time (p_c), s	0.0	0.0		0.0		6.1

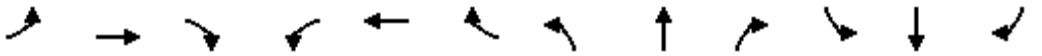
Intersection Summary	
HCM 6th Ctrl Delay	50.2
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	259	588	346	371	694	0	0	540	126
Future Volume (veh/h)	0	0	0	259	588	346	371	694	0	0	540	126
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				278	632	372	399	746	0	0	581	135
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				662	695	589	301	1676	0	0	690	160
Arrive On Green				0.37	0.37	0.37	0.34	0.94	0.00	0.00	0.24	0.24
Sat Flow, veh/h				1781	1870	1585	1781	3647	0	0	2958	664
Grp Volume(v), veh/h				278	632	372	399	746	0	0	360	356
Grp Sat Flow(s),veh/h/ln				1781	1870	1585	1781	1777	0	0	1777	1751
Q Serve(g_s), s				7.6	20.9	12.5	11.0	1.3	0.0	0.0	12.5	12.6
Cycle Q Clear(g_c), s				7.6	20.9	12.5	11.0	1.3	0.0	0.0	12.5	12.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.38
Lane Grp Cap(c), veh/h				662	695	589	301	1676	0	0	428	422
V/C Ratio(X)				0.42	0.91	0.63	1.32	0.45	0.00	0.00	0.84	0.84
Avail Cap(c_a), veh/h				682	716	607	301	1676	0	0	428	422
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.24	0.24	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				15.2	19.4	16.8	21.5	1.0	0.0	0.0	23.5	23.5
Incr Delay (d2), s/veh				0.4	15.4	2.0	151.3	0.2	0.0	0.0	17.8	18.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.8	10.8	4.3	16.0	0.3	0.0	0.0	6.9	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				15.6	34.8	18.8	172.8	1.2	0.0	0.0	41.3	41.9
LnGrp LOS				B	C	B	F	A	A	A	D	D
Approach Vol, veh/h					1282			1145			716	
Approach Delay, s/veh					26.0			61.0			41.6	
Approach LOS					C			E			D	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		35.8			15.0	20.8		29.2				
Change Period (Y+Rc), s		5.1			4.0	5.1		5.1				
Max Green Setting (Gmax), s		29.9			11.0	14.9		24.9				
Max Q Clear Time (g_c+I1), s		3.3			13.0	14.6		22.9				
Green Ext Time (p_c), s		5.4			0.0	0.1		1.3				

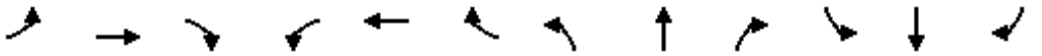
Intersection Summary												
HCM 6th Ctrl Delay			42.3									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	383	511	319	0	0	0	0	638	200	260	536	0
Future Volume (veh/h)	383	511	319	0	0	0	0	638	200	260	536	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	421	562	351				0	701	220	286	589	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	588	693	433				0	751	236	301	1823	0
Arrive On Green	0.33	0.33	0.33				0.00	0.28	0.28	0.34	1.00	0.00
Sat Flow, veh/h	1781	2100	1311				0	2755	835	1781	3647	0
Grp Volume(v), veh/h	421	475	438				0	468	453	286	589	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1634				0	1777	1720	1781	1777	0
Q Serve(g_s), s	13.5	15.9	15.9				0.0	16.7	16.7	10.2	0.0	0.0
Cycle Q Clear(g_c), s	13.5	15.9	15.9				0.0	16.7	16.7	10.2	0.0	0.0
Prop In Lane	1.00		0.80				0.00		0.49	1.00		0.00
Lane Grp Cap(c), veh/h	588	587	540				0	501	485	301	1823	0
V/C Ratio(X)	0.72	0.81	0.81				0.00	0.93	0.93	0.95	0.32	0.00
Avail Cap(c_a), veh/h	658	656	603				0	501	485	301	1823	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.57	0.57	0.00
Uniform Delay (d), s/veh	19.1	19.9	19.9				0.0	22.7	22.7	21.2	0.0	0.0
Incr Delay (d2), s/veh	3.3	6.9	7.5				0.0	26.6	27.3	26.8	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	7.0	6.5				0.0	10.0	9.7	5.3	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.4	26.8	27.4				0.0	49.4	50.0	48.0	0.3	0.0
LnGrp LOS	C	C	C				A	D	D	D	A	A
Approach Vol, veh/h		1334						921			875	
Approach Delay, s/veh		25.6						49.7			15.9	
Approach LOS		C						D			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	23.4		26.6		38.4
Change Period (Y+Rc), s	4.0	5.1		5.1		5.1
Max Green Setting (Gmax), s	11.0	15.8		24.0		30.8
Max Q Clear Time (g_c+I1), s	12.2	18.7		17.9		2.0
Green Ext Time (p_c), s	0.0	0.0		3.5		4.2

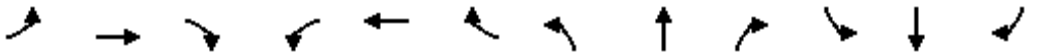
Intersection Summary	
HCM 6th Ctrl Delay	30.0
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	276	550	304	362	443	0	0	770	223
Future Volume (veh/h)	0	0	0	276	550	304	362	443	0	0	770	223
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				297	591	327	389	476	0	0	828	240
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				568	596	505	333	1938	0	0	830	240
Arrive On Green				0.32	0.32	0.32	0.37	1.00	0.00	0.00	0.31	0.31
Sat Flow, veh/h				1781	1870	1585	1781	3647	0	0	2812	787
Grp Volume(v), veh/h				297	591	327	389	476	0	0	541	527
Grp Sat Flow(s),veh/h/ln				1781	1870	1585	1781	1777	0	0	1777	1729
Q Serve(g_s), s				10.2	23.6	13.3	14.0	0.0	0.0	0.0	22.8	22.8
Cycle Q Clear(g_c), s				10.2	23.6	13.3	14.0	0.0	0.0	0.0	22.8	22.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.46
Lane Grp Cap(c), veh/h				568	596	505	333	1938	0	0	543	528
V/C Ratio(X)				0.52	0.99	0.65	1.17	0.25	0.00	0.00	1.00	1.00
Avail Cap(c_a), veh/h				568	596	505	333	1938	0	0	543	528
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.37	0.37	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				20.9	25.4	21.9	23.5	0.0	0.0	0.0	26.0	26.0
Incr Delay (d2), s/veh				0.9	34.6	2.9	88.4	0.1	0.0	0.0	38.0	38.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.1	15.3	5.0	12.3	0.0	0.0	0.0	14.6	14.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				21.8	60.1	24.8	111.9	0.1	0.0	0.0	64.0	64.8
LnGrp LOS				C	E	C	F	A	A	A	E	E
Approach Vol, veh/h					1215			865			1068	
Approach Delay, s/veh					41.2			50.4			64.4	
Approach LOS					D			D			E	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		46.0			18.0	28.0		29.0				
Change Period (Y+Rc), s		5.1			4.0	5.1		5.1				
Max Green Setting (Gmax), s		40.9			14.0	22.9		23.9				
Max Q Clear Time (g_c+I1), s		2.0			16.0	24.8		25.6				
Green Ext Time (p_c), s		3.4			0.0	0.0		0.0				

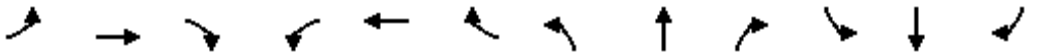
Intersection Summary												
HCM 6th Ctrl Delay			51.6									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	865	356	0	0	0	0	621	219	329	736	0
Future Volume (veh/h)	170	865	356	0	0	0	0	621	219	329	736	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	181	920	379				0	661	233	350	783	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	615	850	347				0	651	229	379	1843	0
Arrive On Green	0.35	0.35	0.35				0.00	0.25	0.25	0.43	1.00	0.00
Sat Flow, veh/h	1781	2461	1006				0	2670	908	1781	3647	0
Grp Volume(v), veh/h	181	662	637				0	456	438	350	783	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1689				0	1777	1707	1781	1777	0
Q Serve(g_s), s	5.6	25.9	25.9				0.0	19.0	19.0	14.0	0.0	0.0
Cycle Q Clear(g_c), s	5.6	25.9	25.9				0.0	19.0	19.0	14.0	0.0	0.0
Prop In Lane	1.00		0.60				0.00		0.53	1.00		0.00
Lane Grp Cap(c), veh/h	615	614	583				0	449	431	379	1843	0
V/C Ratio(X)	0.29	1.08	1.09				0.00	1.02	1.02	0.92	0.42	0.00
Avail Cap(c_a), veh/h	615	614	583				0	449	431	380	1843	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.34	0.34	0.00
Uniform Delay (d), s/veh	17.9	24.5	24.6				0.0	28.0	28.0	21.0	0.0	0.0
Incr Delay (d2), s/veh	0.3	59.6	64.6				0.0	46.4	47.4	12.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	20.0	19.8				0.0	13.3	12.9	5.3	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.2	84.2	89.1				0.0	74.4	75.4	33.6	0.2	0.0
LnGrp LOS	B	F	F				A	F	F	C	A	A
Approach Vol, veh/h		1480						894			1133	
Approach Delay, s/veh		78.2						74.9			10.5	
Approach LOS		E						E			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.9	24.1		31.0		44.0
Change Period (Y+Rc), s	4.0	5.1		5.1		5.1
Max Green Setting (Gmax), s	16.0	18.9		25.9		38.9
Max Q Clear Time (g_c+I1), s	16.0	21.0		27.9		2.0
Green Ext Time (p_c), s	0.0	0.0		0.0		6.1

Intersection Summary	
HCM 6th Ctrl Delay	55.5
HCM 6th LOS	E



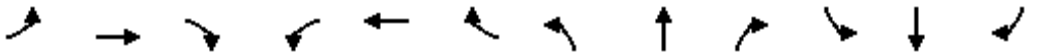
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	383	511	319	0	0	0	0	638	200	260	536	0
Future Volume (veh/h)	383	511	319	0	0	0	0	638	200	260	536	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	421	562	351				0	701	220	286	589	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	581	703	439				0	761	239	301	1836	0
Arrive On Green	0.33	0.33	0.33				0.00	0.29	0.29	0.34	1.00	0.00
Sat Flow, veh/h	1781	2154	1345				0	2755	835	1781	3647	0
Grp Volume(v), veh/h	421	488	425				0	468	453	286	589	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1628				0	1777	1720	1781	1777	0
Q Serve(g_s), s	13.6	15.5	15.5				0.0	16.6	16.6	10.2	0.0	0.0
Cycle Q Clear(g_c), s	13.6	15.5	15.5				0.0	16.6	16.6	10.2	0.0	0.0
Prop In Lane	1.00		0.83				0.00		0.49	1.00		0.00
Lane Grp Cap(c), veh/h	581	610	531				0	508	492	301	1836	0
V/C Ratio(X)	0.72	0.80	0.80				0.00	0.92	0.92	0.95	0.32	0.00
Avail Cap(c_a), veh/h	658	691	601				0	508	492	301	1836	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.57	0.57	0.00
Uniform Delay (d), s/veh	19.3	20.0	20.0				0.0	22.5	22.5	21.2	0.0	0.0
Incr Delay (d2), s/veh	3.4	6.0	6.8				0.0	24.5	25.1	26.8	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	7.0	6.2				0.0	9.7	9.5	5.3	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.8	25.9	26.8				0.0	46.9	47.5	48.0	0.3	0.0
LnGrp LOS	C	C	C				A	D	D	D	A	A
Approach Vol, veh/h		1334						921			875	
Approach Delay, s/veh		25.2						47.2			15.9	
Approach LOS		C						D			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	23.7		26.3		38.7
Change Period (Y+Rc), s	4.0	5.1		5.1		5.1
Max Green Setting (Gmax), s	11.0	15.8		24.0		30.8
Max Q Clear Time (g_c+I1), s	12.2	18.6		17.5		2.0
Green Ext Time (p_c), s	0.0	0.0		3.7		4.2

Intersection Summary	
HCM 6th Ctrl Delay	29.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	865	356	0	0	0	0	621	219	329	736	0
Future Volume (veh/h)	170	865	356	0	0	0	0	621	219	329	736	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	181	920	379				0	661	233	350	783	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	615	872	356				0	651	229	379	1843	0
Arrive On Green	0.35	0.35	0.35				0.00	0.25	0.25	0.43	1.00	0.00
Sat Flow, veh/h	1781	2524	1031				0	2670	908	1781	3647	0
Grp Volume(v), veh/h	181	680	619				0	456	438	350	783	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1685				0	1777	1707	1781	1777	0
Q Serve(g_s), s	5.6	25.9	25.9				0.0	19.0	19.0	14.0	0.0	0.0
Cycle Q Clear(g_c), s	5.6	25.9	25.9				0.0	19.0	19.0	14.0	0.0	0.0
Prop In Lane	1.00		0.61				0.00		0.53	1.00		0.00
Lane Grp Cap(c), veh/h	615	646	582				0	449	431	379	1843	0
V/C Ratio(X)	0.29	1.05	1.06				0.00	1.02	1.02	0.92	0.42	0.00
Avail Cap(c_a), veh/h	615	646	582				0	449	431	380	1843	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.34	0.34	0.00
Uniform Delay (d), s/veh	17.9	24.6	24.6				0.0	28.0	28.0	21.0	0.0	0.0
Incr Delay (d2), s/veh	0.3	50.0	55.6				0.0	46.4	47.4	12.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	19.3	18.3				0.0	13.3	12.9	5.3	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.2	74.6	80.1				0.0	74.4	75.4	33.6	0.2	0.0
LnGrp LOS	B	F	F				A	F	F	C	A	A
Approach Vol, veh/h		1480						894			1133	
Approach Delay, s/veh		70.0						74.9			10.5	
Approach LOS		E						E			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.9	24.1		31.0		44.0
Change Period (Y+Rc), s	4.0	5.1		5.1		5.1
Max Green Setting (Gmax), s	16.0	18.9		25.9		38.9
Max Q Clear Time (g_c+I1), s	16.0	21.0		27.9		2.0
Green Ext Time (p_c), s	0.0	0.0		0.0		6.1

Intersection Summary	
HCM 6th Ctrl Delay	52.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.