APPENDIX L

Traffic Study

CANYON SPRINGS HEALTHCARE CAMPUS & SENIOR LIVING

TRAFFIC IMPACT ANALYSIS

CITY OF RIVERSIDE

City Applications: P14-0294 (SPA), P14-0295 (EIR), P14-0296 (PPE), P14-0297 (RZ), P14-0298 (LLA), P14-0299 (VR)

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February 28, 2017 (Revised)
January 11, 2017 (Revised)
January 6, 2016 (Revised)
October 21, 2015 (Revised)
February 11, 2015

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LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
Caltrans	California Department of Transportation
DIF	Development Impact Fee
E+P	Existing Plus Project
E+A+C	Existing Plus Ambient Plus Cumulative
E+A+C+P	Existing Plus Ambient Plus Cumulative Plus Project
EVA	Emergency Vehicle Access Only
FHWA	Federal Highway Administration
HCM	Highway Capacity Manual
HEA	Hospital Emergency Access Only
ITE	Institute of Transportation Engineers
LOS	Level of Service
MUTCD	Manual on Uniform Traffic Control Devices
PCE	Passenger Car Equivalents
PeMS	Performance Measurement System
PHF	Peak Hour Factor
Project	Canyon Springs Healthcare Campus & Senior Living
RivTAM	Riverside County Transportation Analysis Model
RTA	Riverside Transit Authority
SCAG	Southern California Association of Governments
sf	Square Feet
TIA	Traffic Impact Analysis
tsf	Thousand Square Feet
TUMF	Transportation Uniform Mitigation Fee
v/c	Volume-to-Capacity Ratio
vphg	Vehicles Per Hour of Green
WRCOG	Western Riverside Council of Governments

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1 INTRODUCTION

This report presents the results of the traffic impact analysis (TIA) for the proposed Canyon Springs Healthcare Campus & Senior Living Development ("Project") which is generally located north of Eucalyptus Avenue, between Valley Springs Parkway and Day Street in the City of Riverside as shown on Exhibit 1-1. The Project is proposed to consist of several large contiguous parcels with improved street frontage and adequate infrastructure in a master planned business park. The largest parcel is situated south of Gateway Drive and includes medical uses. Two nearby 10-acre parcels within Canyon Springs will provide land for the related senior living and assisted living facilities.

The purpose of this traffic impact analysis is to evaluate the potential impacts to traffic and circulation associated with the development of the proposed Project, and to recommend improvements to mitigate impacts considered significant in comparison to established regulatory thresholds. The scope of this study has been developed through consultation with the City of Riverside and City of Moreno Valley, and follows the City of Riverside's and the California Department of Transportation's (Caltrans) traffic study requirements. (1) (2)

1.1 PROJECT OVERVIEW

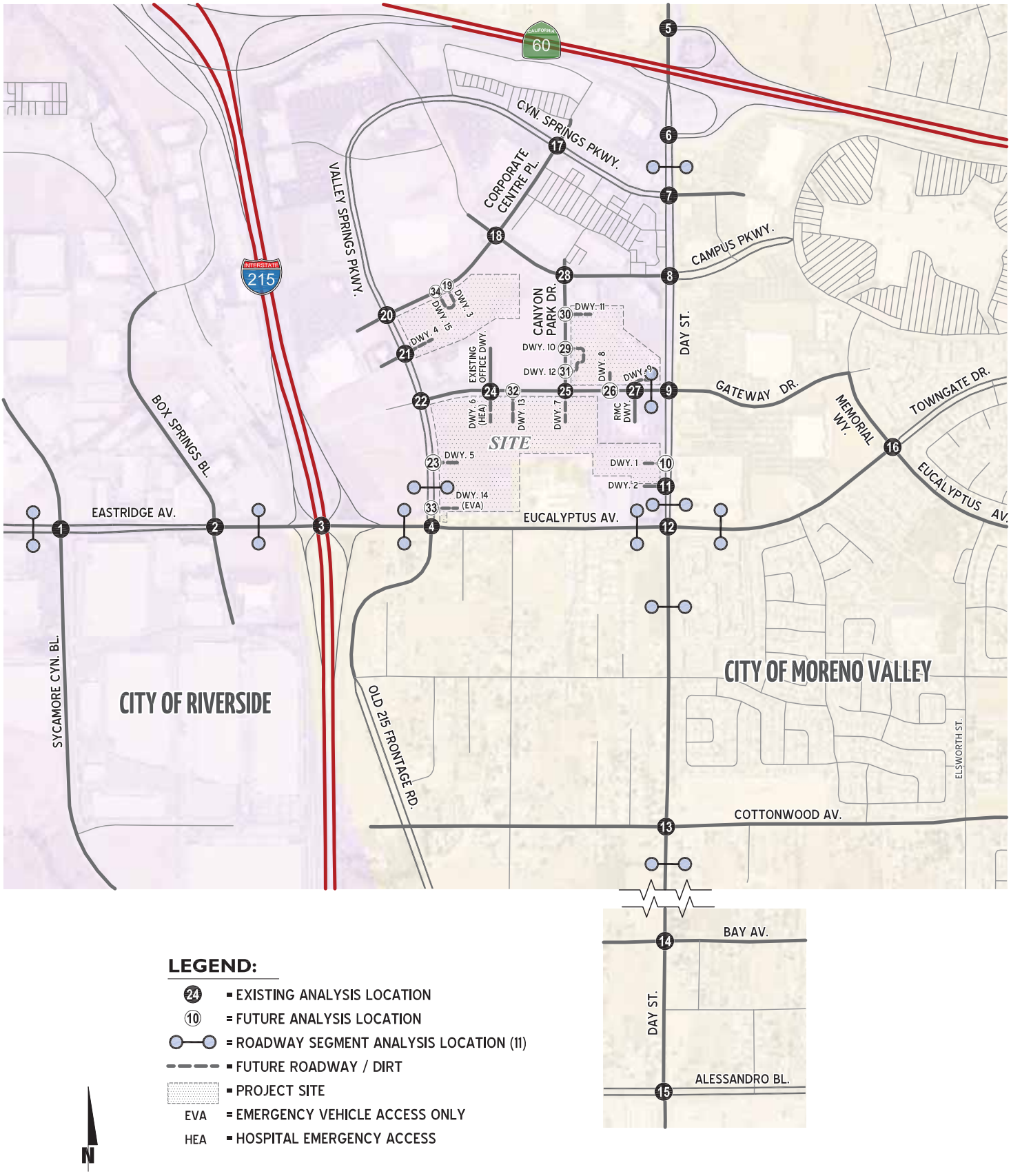
The previously approved specific plan land use consists of 100,000 square feet of general retail use and 800,000 square feet of general office use.

The proposed Project (Canyon Springs Healthcare Campus & Senior Living) land use plan (shown on Exhibit 1-2) is more intensive than the previously approved land use plan. The proposed Project consists of hospital land use with approximately 280 beds, approximately 370,000 square feet of medical office, approximately 234 senior adult-housing attached dwelling units, and an assisted living facility with approximately 267 beds. For the purposes of this TIA, the entire Project is included in the Cumulative Plus Project (Opening Year) scenario.

Trips anticipated to be generated by the Project have been estimated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) as presented in ITE's most current edition of Trip Generation (9th Edition, 2012). The Project is estimated to generate a total of approximately 18,528 trip-ends per day with 1,348 vehicles per hour during the AM peak hour and 1,854 vehicles per hour during the PM peak hour.

The proposed Project is anticipated to generate 5,361 more trip-ends per day with 184 more vehicles per hour during the AM peak hour and 278 more vehicles per hour during the PM peak hour in comparison with the previously approved specific plan land use. The assumptions and methods used to estimate the Project's trip generation characteristics are discussed in detail in Section 4.1 *Project Trip Generation* of this report.

EXHIBIT 1-1: LOCATION MAP

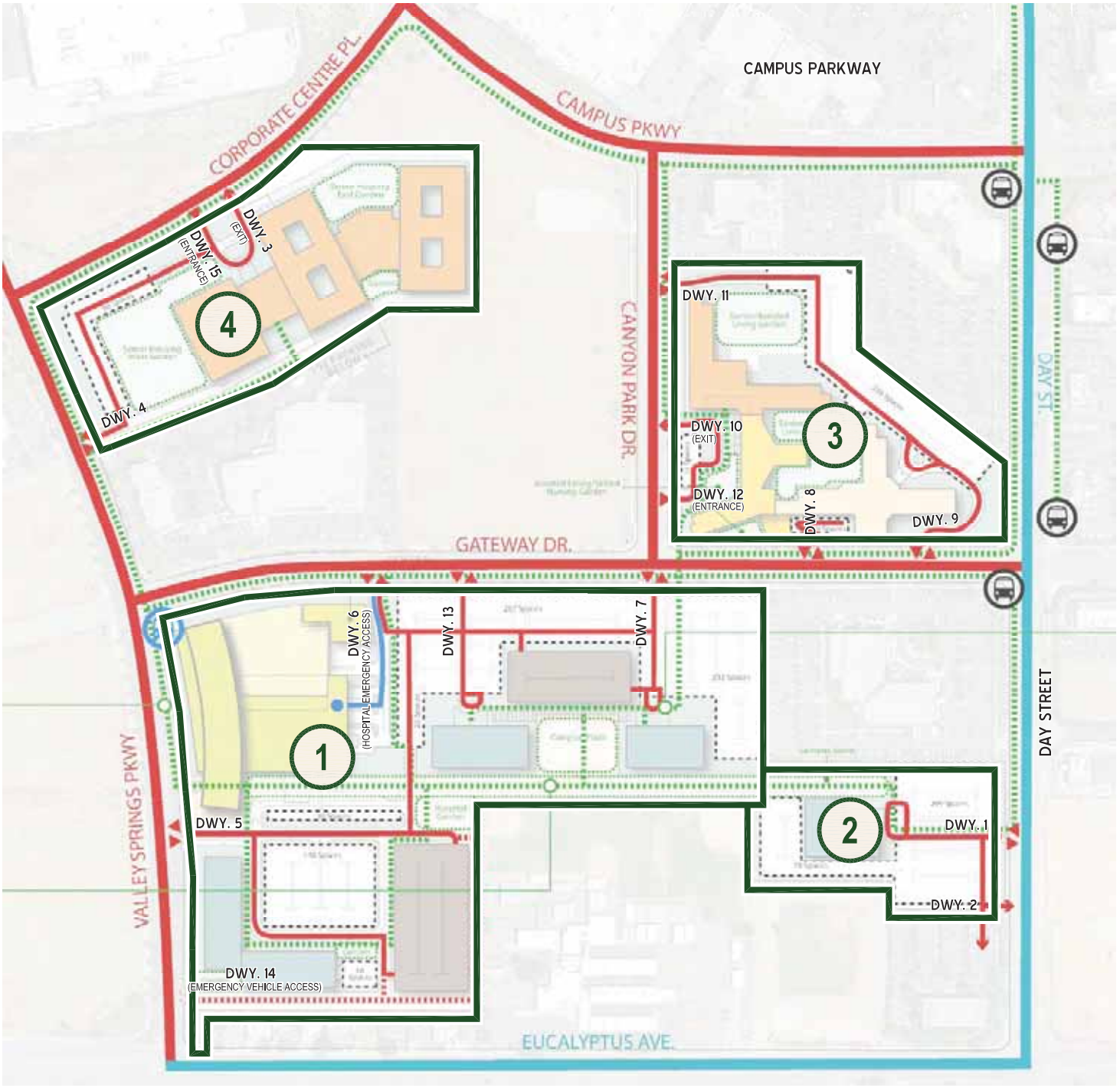


LEGEND:

- 24 = EXISTING ANALYSIS LOCATION
- 10 = FUTURE ANALYSIS LOCATION
- = ROADWAY SEGMENT ANALYSIS LOCATION (11)
- = FUTURE ROADWAY / DIRT
- = PROJECT SITE
- EVA = EMERGENCY VEHICLE ACCESS ONLY
- HEA = HOSPITAL EMERGENCY ACCESS

N

EXHIBIT 1-2: SITE PLAN



LEGEND:

- 4 — Project Traffic Analysis Zones (TAZ)
- Emergency Access
- Street, Driveway
- Street, Bike Route
- Pedestrian
- Ambulance Entrance
- RTA Bus Stop
- New RTA Bus Stop
- Open Space
- Parking Lot

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1.2 ANALYSIS SCENARIOS

For the purposes of this traffic study, potential impacts to traffic and circulation have been assessed for each of the following conditions:

- Existing (2014) Conditions (Baseline)
- Existing Plus Project (E+P) Conditions
- Cumulative (Opening Year) Without Project (EAC) Conditions
- Cumulative Plus Project (Opening Year) (EACP) Conditions
- General Plan Buildout Without Project Conditions
- General Plan Buildout With Project Conditions

1.2.1 EXISTING (2014) CONDITIONS

Information for Existing (2014) conditions is disclosed to represent the baseline traffic conditions as they existed at the time this report was prepared.

1.2.2 EXISTING PLUS PROJECT CONDITIONS

The Existing Plus Project (E+P) analysis determines significant traffic impacts that would occur on the existing roadway system with the addition of Project traffic. Pursuant to the approved scoping agreement with the City of Riverside, the E+P analysis is intended to identify the Project-specific impacts associated solely with the development of the proposed Project based on a comparison of the E+P traffic conditions to Existing conditions.

1.2.3 CUMULATIVE (OPENING YEAR) CONDITIONS

The Cumulative (Opening Year) Conditions analysis determines near-term cumulative traffic impacts based on a comparison of the "Cumulative Plus Project" traffic scenario to the "Cumulative without Project" traffic scenario. To account for background traffic growth, traffic associated with other known cumulative development projects in is combined with compounded growth of two percent per year over two years (or a total near term ambient growth factor of 4.04%). The Cumulative Plus Project analysis is utilized to determine if project mitigation measures and improvements funded through transportation mitigation fee programs, such as the City of Riverside Development Impact Fee (DIF) program, or other approved funding mechanism can accommodate the near-term cumulative traffic at the target level of service (LOS) identified in the City of Riverside General Plan. If the "funded" improvements can provide the target LOS, then the Project's payment into these fee programs could be considered as cumulative mitigation through the conditions of approval.

The adopted Southern California Association of Governments (SCAG) 2012 Regional Transportation Plan (RTP) (April 2012) growth forecasts for the City of Riverside identifies projected growth in population of 295,500 in 2008 to 382,700 in 2035, or a 29.51% increase over the 27 year period. (10) The change in population equates to roughly a 1.00 percent growth rate compounded annually. Similarly, growth over the same 27 year period in

households is projected to increase by 28.88 percent, or 0.94 percent annual growth rate. Finally, growth in employment over the same 27 year period is projected to increase by 43.76 percent, or a 1.35 percent annual growth rate. The background growth of 2.0 percent per year in conjunction with traffic generated by the development of future projects would tend to overstate as opposed to understate the growth in traffic volumes assumed in this traffic analysis. As such, the analysis is conservative, and would also overstate as opposed to understate potential impacts.

1.2.4 General Plan Buildout Conditions

For General Plan Buildout conditions, the volumes have been based on the traffic projections from the City of Riverside General Plan 2025 traffic model, City of Moreno Valley traffic model, and Riverside Transportation Analysis Model (RivTAM). The initial estimate of the future conditions peak hour turning movements has been reviewed for reasonableness. The reasonableness checks performed include a review of flow conservation in addition to ensuring reasonable peak-to-daily relationships and a minimum additional growth of five (5) percent over Cumulative (Opening Year) conditions.

1.3 Study Area

To ensure that this TIA satisfies the City of Riverside's traffic study requirements, Urban Crossroads, Inc. prepared a Project traffic study scoping package for review by City of Riverside, City of Moreno Valley and Caltrans staff prior to the preparation of this report. The Agreement provides an outline of the Project study area, trip generation, trip distribution, and analysis methodology. The Agreement approved by the City of Riverside is included in Appendix "1.1".

1.3.1 Intersections

The intersection analysis locations for this traffic study are listed in Table 1-1 and previously shown on Exhibit 1-1.

TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

ID	Intersection Location	Jurisdiction
1	Sycamore Canyon Boulevard / Eastridge Avenue	City of Riverside
2	Box Springs Boulevard / Eastridge Avenue	City of Riverside
3	I-215 Ramps / Eastridge Avenue - Eucalyptus Avenue	Caltrans
4	Valley Springs Parkway / Eucalyptus Avenue	City of Riverside/Moreno Valley
5	Day St. / SR-60 WB Ramps	Caltrans
6	Day St. / SR-60 EB Ramps	Caltrans
7	Day St. / Canyon Springs Parkway	City of Riverside/Moreno Valley
8	Day St. / Campus Parkway	City of Riverside/Moreno Valley
9	Day St. / Gateway Drive	City of Riverside/Moreno Valley
10	Day St. / Driveway 1	City of Riverside/Moreno Valley

TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS (Continued)

ID	Intersection Location	Jurisdiction
11	Day St. / Driveway 2	City of Riverside/Moreno Valley
12	Day St. / Eucalyptus Avenue	City of Riverside/Moreno Valley
13	Day St. / Cottonwood Avenue	City of Moreno Valley
14	Day St. / Bay Avenue	City of Moreno Valley
15	Day St. / Alessandro Boulevard	City of Moreno Valley
16	Memorial Way / Towngate Drive	City of Moreno Valley
17	Corporate Centre Place / Canyon Springs Parkway	City of Riverside
18	Corporate Centre Place / Campus Parkway	City of Riverside
19	Driveway 3 (Exit) / Corporate Centre Place	City of Riverside
20	Valley Springs Parkway / Corporate Centre Place	City of Riverside
21	Valley Springs Parkway / Driveway 4	City of Riverside
22	Valley Springs Parkway / Gateway Drive	City of Riverside
23	Valley Springs Parkway / Driveway 5	City of Riverside
24	Driveway 6 (HEA) / Gateway Drive	City of Riverside
25	Canyon Park Drive - Driveway 7 / Gateway Drive	City of Riverside
26	Driveway 8 / Gateway Drive	City of Riverside
27	Driveway 9 / Gateway Drive	City of Riverside
28	Canyon Park Drive / Campus Parkway	City of Riverside
29	Canyon Park Drive / Driveway 10 (Exit)	City of Riverside
30	Canyon Park Drive / Driveway 11	City of Riverside
31	Canyon Park Drive / Driveway 12 (Entrance)	City of Riverside
32	Driveway 13 / Gateway Drive	City of Riverside
33	Valley Springs Parkway / Driveway 14 (EVA)	City of Riverside
34	Driveway 15 (Entrance)/ Corporate Centre Place	City of Riverside

1.3.2 ROADWAY SEGMENTS

The roadway segment analysis locations for this traffic study are listed in Table 1-2 and previously shown on Exhibit 1-1.

TABLE 1-2: ROADWAY SEGMENT ANALYSIS LOCATIONS

ID	Roadway Segment	Jurisdiction
1	Eastridge Avenue, west of Sycamore Canyon Boulevard	City of Riverside
2	Eastridge Avenue, between Box Springs Boulevard & I-215	City of Riverside
3	Eastridge Avenue, between I-215 & Valley Springs Parkway	City of Riverside/Moreno Valley
4	Eucalyptus Avenue, west of Day Street	City of Riverside/Moreno Valley
5	Eucalyptus Avenue, east of Day Street	City of Moreno Valley
6	Valley Springs Parkway, north of Eucalyptus Avenue	City of Riverside
7	Day Street, between SR-60 EB Ramps and Canyon Springs Parkway	City of Riverside/Moreno Valley

ID	Roadway Segment	Jurisdiction
8	Day Street, north of Eucalyptus Avenue	City of Riverside/Moreno Valley
19	Day Street, south of Eucalyptus Avenue	City of Moreno Valley
10	Day Street, south of Cottonwood Avenue.	City of Moreno Valley
11	Gateway Drive, west of Day Street	City of Riverside

The roadway segment study area utilized for this analysis is based on a review of the key roadway segments in which the Project is anticipated to contribute 50 or more peak hour trips. The study area identifies a total of thirty (30) existing/future roadway segments. The roadway segments include the segments on either side of the study area intersections listed previously in Table 1-1.

1.3.3 FREEWAY MAINLINE SEGMENTS

The freeway mainline analysis locations include the segments on either side of the I-215 Freeway and Eastridge Avenue-Eucalyptus Avenue interchange, and on either side of the SR-60 Freeway and Day Street interchange where the proposed Project is anticipated to contribute 50 or more two-way peak hour trips. The study area freeway mainline analysis locations include twelve freeway mainline segments for the I-215 northbound and southbound directions of flow and SR-60 westbound and eastbound directions of flow as shown on Table 1-3:

TABLE 1-3: FREEWAY MAINLINE SEGMENT ANALYSIS LOCATIONS

ID	Freeway Mainline Segments
1	I-215 Northbound, south of Eucalyptus Avenue
2	I-215 Northbound, between ramps
3	I-215 Northbound, north of Eucalyptus Avenue
4	I-215 Southbound, north of Eucalyptus Avenue
5	I-215 Southbound, between ramps
6	I-215 Southbound, south of Eucalyptus Avenue
7	SR-60 Westbound, east of Day Street
8	SR-60 Westbound, between ramps
9	SR-60 Westbound, west of Day Street
10	SR-60 Eastbound, west of Day Street
11	SR-60 Eastbound, between ramps
12	SR-60 Eastbound, east of Day Street

1.3.4 FREEWAY MERGE/DIVERGE JUNCTIONS

The study area freeway merge/diverge ramp junction analysis locations include eight Freeway ramp junctions for the I-215 northbound and southbound directions of flow and SR-60 westbound and eastbound directions of flow as shown on Table 1-4:

TABLE 1-4: FREEWAY MERGE/DIVERGE RAMP JUNCTION ANALYSIS LOCATIONS

ID	Freeway Merge/Diverge Junctions
1	I-215 Northbound, On-ramp at Eucalyptus Avenue
2	I-215 Northbound, Off-ramp at Eucalyptus Avenue
3	I-215 Southbound, Off-ramp at Eucalyptus Avenue
4	I-215 Southbound, On-ramp at Eucalyptus Avenue

TABLE 1-4: FREEWAY MERGE/DIVERGE RAMP JUNCTION ANALYSIS LOCATIONS (Cont.)

ID	Freeway Merge/Diverge Junctions
5	SR-60 Westbound, Off-ramp at Day Street
6	SR-60 Westbound, On-ramp at Day Street
7	SR-60 Eastbound, Off-ramp at Day Street
8	SR-60 Eastbound, On-ramp at Day Street

1.3.5 PROGRESSION ANALYSIS

For the purpose of this analysis, a traffic signal progression analysis has been conducted for the following locations under Cumulative Plus Project conditions and General Plan Buildout with Project conditions, with the identified intersection improvements, to evaluate vehicular queuing by considering the signal timing and physical spacing of intersections:

- Eastridge Avenue–Eucalyptus Avenue, between Box Springs Boulevard and Valley Springs Parkway.
- Day Street, between SR-60 WB Ramps and Cottonwood Avenue.

2 METHODOLOGIES

This section of the report presents the methodologies used to perform the traffic analyses summarized in this report. The methodologies described are generally consistent with City of Riverside and Caltrans traffic study guidelines. (1) (2)

2.1 LEVEL OF SERVICE

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS A, representing completely free-flow conditions, to LOS F, representing breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

2.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The Highway Capacity Manual (HCM) 2010 methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. (3) The HCM uses different procedures depending on the type of intersection control.

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data conducted for Urban Crossroads collected in November 2014. The following peak hours were selected for analysis:

- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)

2.2.1 SIGNALIZED INTERSECTIONS

The City of Riverside requires signalized intersection operations analysis based on the methodology described in Chapter 18 and Chapter 31 of the HCM 2010. (3) Intersection LOS operations are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections LOS is directly related to the average control delay per vehicle and is correlated to a LOS designation as described in Table 2-1.

TABLE 2-1: SIGNALIZED INTERSECTION DESCRIPTION OF LOS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0	Level of Service, V/C > 1.0
Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00	A	F
Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00	B	F
Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00	C	F
Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00	D	F
Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00	E	F
Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths	80.01 and up	F	F

Source: HCM 2010, Chapter 18

The traffic modeling and signal timing optimization software package Synchro (Version 8 Build 801) has been utilized to analyze signalized intersections within the study area. Synchro is a macroscopic traffic software program that is based on the signalized intersection capacity analysis as specified in the Chapters 18 and 31 of the HCM 2010. (3) Macroscopic level models represent traffic in terms of aggregate measures for each movement at the study intersections. Equations are used to determine measures of effectiveness such as delay and queue length. The LOS and capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network.

The peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15 minute volumes. Common practice for LOS analysis is to use a peak 15-mintue rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g. PHF = [Hourly Volume] / [4 x Peak 15-minute Flow Rate]). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for all analysis scenarios. Per Chapter 4 of the HCM 2010, PHF values over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows while lower PHF values are indicative of greater variability of flow during the peak hour. (3)

2.2.2 UNSIGNALIZED INTERSECTIONS

The City of Riverside requires the operations of unsignalized intersections be evaluated using the methodology described in Chapter 19, Chapter 20, Chapter 32 of the HCM 2010. (4) The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2).

TABLE 2-2: UNSIGNALIZED INTERSECTION DESCRIPTION OF LOS

Description	Average Control Delay Per Vehicle (Seconds)	Level of Service, V/C ≤ 1.0	Level of Service, V/C > 1.0
Little or no delays.	0 to 10.00	A	F
Short traffic delays.	10.01 to 15.00	B	F
Average traffic delays.	15.01 to 25.00	C	F
Long traffic delays.	25.01 to 35.00	D	F
Very long traffic delays.	35.01 to 50.00	E	F
Extreme traffic delays with intersection capacity exceeded.	> 50.00	F	F

Source: HCM 2010, Chapter 19 and Chapter 20

At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. For all-way stop controlled intersections, LOS is computed for the intersection as a whole.

2.3 ROADWAY SEGMENT CAPACITY ANALYSIS

Roadway segment operations have been evaluated using the City of Riverside Roadway Capacity provided in Exhibit D of the City's TIA Guidelines. The daily roadway segment capacities for each type of roadway are summarized in Table 2-3.

TABLE 2-3: CITY OF RIVERSIDE ROADWAY CAPACITY (1)

Roadway Classification	Number of Lanes	Two-Way Traffic Volume (ADT)(2)		
		Service Level C	Service Level D	Service Level E
Local	2	2,500 - 2,799	2,800 – 3,099	3,100 +
Collector (66' of 80')	2	9,900 - 11,199	11,200 – 12,499	12,500+
Arterial(3)	2	14,400 - 16-199	16,200 – 17,999	18,000+
Arterial (88')	4	16,800 - 19,399	19,400 – 21,199	22,000+
Arterial (100')	4	26,200 – 29,599	29,600 – 32,999	33,000+
Arterial (120')	6	38,700 – 44,099	44,100 – 49,499	49,500+
Arterial (144')	8	50,600 – 57,799	57,800 – 64,999	65,000+

Notes: (1) All capacity figures are based on optimum conditions and are intended as guidelines for planning purposes only.
(2) Maximum two-way ADT values are based on the 1999 Modified Highway Capacity Manual Level of Service Tables
(3) Two-lane roadways designated as future arterials that conform to arterial design standards for vertical and horizontal alignment are analyzed as arterials.

Source: City of Riverside Traffic Impact Analysis Preparation Guide, Exhibit D.

It should be noted that these roadway capacities are "rule of thumb" estimates for planning purposes and are affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, and vehicle mix (truck and bus traffic). Where the ADT-based roadway segment analysis indicates a deficiency, a review of the more detailed peak hour intersection analysis is undertaken. The more detailed peak hour intersection analysis explicitly accounts for factors that affect roadway performance. Roadway segment widening is typically recommended if the peak hour intersection analysis indicates the need for additional through travel lanes.

2.4 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TIA uses the signal warrant criteria presented in the latest edition of the Federal Highway Administration's (FHWA) Manual on Uniform Traffic Control Devices (MUTCD), as amended by the MUTCD 2012 California Supplement, for all study area intersections. (4)

The signal warrant criteria for Existing conditions are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. Both the FHWA's *MUTCD* and the *MUTCD 2012 California Supplement* indicate that the installation of a traffic signal should be considered if one or more of the signal warrants are met. (4) Specifically, this TIA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for E+P traffic conditions. Warrant 3 criteria are basically identical for both the FHWA's *MUTCD* and the *MUTCD 2012 California Supplement*. Warrant 3 is appropriate to use for this TIA because it provides specialized warrant criteria for intersections with rural characteristics (e.g. located in communities with populations of less than 10,000 persons or with adjacent major streets operating above 40 miles per hour). For the purposes of this study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection.

Future intersections that do not currently exist have been assessed regarding the potential need for new traffic signals based on future average daily traffic (ADT) volumes, using the Caltrans planning level ADT-based signal warrant analysis worksheets.

Traffic signal warrant analyses were performed for the unsignalized study area intersections listed in Table 2-4.

TABLE 2-4: TRAFFIC SIGNAL WARRANT ANALYSIS LOCATIONS

ID	Intersection Location	Jurisdiction
10	Day St. / Driveway 1 - *Future Intersection*	City of Riverside/Moreno Valley
14	Day St. / Bay Avenue	City of Moreno Valley

TABLE 2-4: TRAFFIC SIGNAL WARRANT ANALYSIS LOCATIONS (Continued)

ID	Intersection Location	Jurisdiction
18	Corporate Centre Place / Campus Parkway	City of Riverside
19	Driveway 3 / Corporate Centre Place - *Future Intersection*	City of Riverside
21	Valley Springs Parkway / Driveway 4	City of Riverside
23	Valley Springs Parkway / Driveway 5 - *Future Intersection*	City of Riverside
24	Driveway 6 (HEA) / Gateway Drive	City of Riverside
25	Canyon Park Drive - Driveway 7 / Gateway Drive	City of Riverside
26	Driveway 8 / Gateway Drive - *Future Intersection*	City of Riverside
27	Driveway 9 / Gateway Drive	City of Riverside
28	Canyon Park Drive / Campus Parkway	City of Riverside
29	Canyon Park Drive / Driveway 10 - *Future Intersection*	City of Riverside
30	Canyon Park Drive / Driveway 11	City of Riverside

The traffic signal warrant analysis for Existing (2014) condition is presented on Section 3.0 *Area Conditions.* The traffic signal warrant analysis for future conditions are presented in Section 5.0 *Existing Plus Project Traffic Conditions*, Section 6.0 *Opening Year Traffic Conditions,* and Section 7.0 *General Plan Buildout Traffic Conditions* of this report.

It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant.

2.5 FREEWAY MAINLINE SEGMENT ANALYSIS

The freeway system in the study area has been subdivided into segments defined by the freeway-to-arterial interchange locations. The freeway segments have been evaluated in this TIA based upon peak hour directional volumes. The freeway segment analysis is based on the methodology described in Chapter 11 of the HCM 2010 and performed using HCS 2010 software. (3) The performance measure preferred by Caltrans to calculate LOS is density. Density is expressed in terms of passenger cars per mile per lane. Table 2-5 illustrates the freeway segment LOS thresholds for each density range utilized for this analysis.

TABLE 2-5: FREEWAY MAINLINE LOS THRESHOLDS

Level of Service	Description	Density Range (pc/mi/ln)[1]
A	Free-flow operations in which vehicles are relatively unimpeded in their ability to maneuver within the traffic stream. Effects of incidents are easily absorbed.	0.0 – 11.0
B	Relative free-flow operations in which vehicle maneuvers within the traffic stream are slightly restricted. Effects of minor incidents are easily absorbed.	11.1 – 18.0
C	Travel is still at relative free-flow speeds, but freedom to maneuver within the traffic stream is noticeably restricted. Minor incidents may be absorbed, but local deterioration in service will be substantial. Queues begin to form behind significant blockages.	18.1 – 26.0
D	Speeds begin to decline slightly and flows and densities begin to increase more quickly. Freedom to maneuver is noticeably limited. Minor incidents can be expected to create queuing as the traffic stream has little space to absorb disruptions.	26.1 – 35.0
E	Operation at capacity. Vehicles are closely spaced with little room to maneuver. Any disruption in the traffic stream can establish a disruption wave that propagates throughout the upstream traffic flow. Any incident can be expected to produce a serious disruption in traffic flow and extensive queuing.	35.1 – 45.0
F	Breakdown in vehicle flow. Demand exceeds capacity.	>45.0

[1] pc/mi/ln = passenger cars per mile per lane. Source: HCM 2010, Chapter 11

The I-215 and SR-60 Freeway mainline volume data was obtained from the Caltrans Performance Measurement System (PeMS) website for the segments of the I-215 Freeway interchange at Eucalyptus Avenue and SR-60 Freeway interchange at Day Street. (5) Freeway mainline peak hour volumes have been obtained for the week of November 4th through 6th, 2014 and have been flow conserved with freeway-ramp-to-arterial peak hour count data conducted during these same dates. In an effort to conduct a conservative analysis, the maximum value observed within the three (3) day period was utilized for the morning (AM) and evening (PM) peak hours. Truck data has been obtained from the Caltrans Traffic Data Branch website. (6) The Caltrans 2013 Annual Average Daily Truck Traffic on the California State Highway System is utilized which presents a 10.9% truck percentage along the I-215 freeway and 10.5% truck percentage along the SR-60 freeway within the study area. For the purpose of this analysis, actual vehicles (as opposed to passenger-car-equivalent volumes) and a parameter of 11% (rounded value) truck percentage have been utilized for the calculation of the basic freeway segment and merge/diverge analysis. The source data and freeway volume summary is also included as Appendix "3.1" to this report.

2.6 FREEWAY MERGE/DIVERGE RAMP JUNCTION ANALYSIS

The freeway system in the study area has been subdivided into segments defined by freeway-to-arterial interchange locations. The merge/diverge analysis is based on the HCM 2010 Freeway Merge and Diverge Segments analysis method and performed using HCS 2010 software. (3) The measure of effectiveness (reported in passenger car/mile/lane) are calculated based on the existing number of travel lanes, number of lanes at the on and off ramps both at the analysis junction and at upstream and downstream locations (if applicable) and acceleration/deceleration lengths at each merge/diverge point. Table 2-6 presents the merge/diverge area LOS thresholds for each density range utilized for this analysis.

Similar to the basic freeway segment analysis, the I-215 and SR-60 Freeway mainline volume data were obtained from the Caltrans Performance Measurement System (PeMS) website. (5) The ramp data (per the count data presented in Appendix "3.1") were then utilized to flow conserve the mainline volumes and determines the Freeway mainline volumes on either side of interchange. The data obtained was for November 2014. In an effort to conduct a conservative analysis, the maximum value observed within the three day period was utilized for the weekday morning (AM) and weekday evening (PM) peak hours. In addition, truck traffic, represented as a percentage of total traffic, has been utilized for the purposes of this analysis in an effort to not overstate traffic volumes and potential impacts. As such, actual vehicles (as opposed to PCE volumes) have been utilized for the purposes of the freeway ramp junction (merge/diverge) analysis. Truck data has been obtained from the Caltrans website. (6)

TABLE 2-6: DESCRIPTION OF FREEWAY MERGE AND DIVERGE LOS

Level of Service	Density Range (pc/mi/ln)[1]
A	≤10.0
B	10.0 – 20.0
C	20.0 – 28.0
D	28.0 – 35.0
E	>35.0
F	Demand Exceeds Capacity

[1] pc/mi/ln = passenger cars per mile per lane. Source: HCM 2010, Chapter 13

2.7 LOS CRITERIA

The definition of an intersection deficiency has been obtained from each of the applicable surrounding jurisdictions.

2.7.1 CITY OF RIVERSIDE

The City of Riverside General Plan Circulation and Community Mobility Element Policy CCM 2.3 requires that LOS D or better be maintained on Arterial Streets wherever possible. (7) At key locations, such as City Arterials that are used by regional freeway bypass traffic and at heavily traveled freeway interchanges, allow LOS E during the peak hour as the acceptable standard on

a case-by-case basis. Locations that may warrant the LOS E standard include portions of Arlington Avenue/Alessandro Boulevard, Van Buren Boulevard throughout the City, portions of La Sierra Avenue and selected freeway interchanges. The City also recognizes that along key freeway-feeder segments during peak commute hours, LOS F may be expected due to regional travel patterns.

2.7.2 CITY OF MORENO VALLEY

The definition of an intersection deficiency in the City of Moreno Valley is based on the City of Moreno Valley General Plan Circulation Element. The City of Moreno Valley General Plan states that target LOS "C" or LOS "D" be maintained along City roads (including intersections) wherever possible. Based on the LOS Standards presented in Figure 5.2-7 of the Moreno Valley TIA guidelines, LOS "D" is considered acceptable within the study area. (8)

2.7.2 CALTRANS

Regarding Caltrans' ramp to arterial intersections and other Caltrans maintained facilities, the published Caltrans traffic study guidelines (December 2002) states the following: (2)

"Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities, however, Caltrans acknowledges that this may not be always feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS."

As such, LOS "D" is also considered to be the limit of acceptable traffic operations during the peak hour at intersections maintained by Caltrans.

2.8 THRESHOLDS OF SIGNIFICANCE

2.8.1 CITY OF RIVERSIDE

To determine whether the addition of Project traffic at a study intersection results in a significant impact, the following thresholds of significance have been utilized:

- For projects in conformance with the General Plan, a significant impact occurs at a study intersection when the peak hour LOS falls below LOS C, or D per Policy CCM 2.3. In other words, a significant impact occurs at a study intersection if the addition of project trips causes the peak hour LOS to fall from acceptable (LOS A, B, C or D) to and unacceptable (LOS E or F or see applicable jurisdictional LOS criteria).
- For projects that propose uses or intensities above that contained in the General Plan, a significant impact at a study area intersection occurs when the addition of project-related trips causes either:
    - The peak hour LOS to degrade from acceptable (i.e., LOS "D" or better) to unacceptable levels (i.e., LOS "E" or LOS "F"); or
    - If the addition of project-related traffic results in an increase to the "pre-project" peak hour delay by the values shown in Table 2-7.

TABLE 2-7: CITY OF RIVERSIDE LEVEL OF SERVICE THRESHOLDS

Level of Service	Density Range (pc/mi/ln)[1]
A	By 10.0 seconds or more
B	By 10.0 seconds or more
C	By 8.0 seconds or more
D	By 5.0 seconds or more
E	By 2.0 seconds or more
F	By 1.0 second or more

Source: City of Riverside Traffic Impact Analysis Guidelines (Exhibit F, Level of Service Standards).

2.8.2 CITY OF MORENO VALLEY

Based on the City of Moreno Valley traffic study guidelines, a "significant" traffic impact occurs when the addition of project traffic as defined by the Existing plus Project (E+P) scenario causes an intersection that operates at an acceptable LOS under Existing traffic conditions to fall to an unacceptable LOS. Therefore, E+P traffic conditions are compared to Existing traffic conditions to identify significant project-related impacts according to the following criteria:

- If an intersection is projected to operate at an acceptable level of service without the Project (Existing baseline 2014) and the addition of Project traffic, as measured by 50 or more peak hour trips, is expected to cause the intersection to operate at an unacceptable level of service, the impact is considered a significant direct impact.
- If an intersection is currently operating at an unacceptable level of service without the Project (Existing baseline 2013) and the Project contributes 50 or more peak hour trips, the impact is considered a significant direct impact.

2.8.3 CALTRANS

It should be noted that Caltrans does not have an established threshold of significance for the freeway mainline. As such, the same thresholds defined above for arterial intersections have also been applied to the I-215 and SR-60 Freeway basic freeway segment and ramp analysis.

2.9 PROJECT FAIR SHARE CALCULATION METHODOLOGY

In cases where this TIA identifies that the proposed Project would have a significant cumulative impact to a roadway facility, and the recommended mitigation measure is a fair share monetary contribution, the following methodology was applied to determine the fair share contribution. A project's fair share contribution at an off-site study area intersection is determined based on the following equation, which is the ratio of Project traffic to new traffic, and new traffic is total future traffic subtracts existing baseline traffic:

Project Fair Share % = Project Traffic / (General Plan Buildout With Project Total Traffic – Existing 2014 Traffic)

The Project fair share contribution calculations are presented in Section 9.5.4 *Fair Share Contribution* of this TIA.

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3 AREA CONDITIONS

This section provides a summary of the existing circulation network, the City of Riverside General Plan Circulation Network, and a review of existing peak hour intersection operations and freeway mainline operations.

3.1 EXISTING CIRCULATION NETWORK

Pursuant to the Traffic Study Scoping Agreement (Appendix "1.1") and discussions with City of Riverside and City of Moreno Valley staff members, the study area includes a total of thirty-four existing and future intersections as shown previously on Exhibit 1-1. Of these thirty-four intersections, the existing study area circulation network includes twenty-four intersections. In general, the Project driveways are planned future intersections that do not currently exist. However, Driveway #2 (access to/from Day Street) will share the existing Community Professional Building / Healthcare Imaging Driveway located north of Eucalyptus Avenue.

Exhibit 3-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

3.2 GENERAL PLAN CIRCULATION ELEMENTS

As previously noted, the Project site is located within the City of Riverside. Exhibit 3-2 shows the City of Riverside Master Plan of Roadways, and Exhibit 3-3 illustrates the City of Riverside General Plan Roadway Cross-Sections.

In addition, the General Plan Circulation Element and Roadway Cross-Sections for the City of Moreno Valley are presented on Exhibits 3-4 and 3-5, respectively.

3.3 TRANSIT SERVICE

The study area is currently served by the Riverside Transit Authority (RTA), a public transit agency serving the City of Riverside, with bus service along Sycamore Avenue, Day Street, Eastridge Avenue-Eucalyptus Avenue, Alessandro Boulevard, I-215 Freeway, and SR-60 Freeway. The study area is currently served by RTA Routes 16, 20, 208, 210, and 212. Transit service is reviewed and updated by RTA periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

3.4 BICYCLE & PEDESTRIAN FACILITIES

Exhibit 3-6 illustrates the City of Riverside Master Plan of Trails and Bikeways. As shown on Exhibit 3-6, a Class II bike lane is proposed along Box Springs Boulevard within the study area. It should be noted that a Class II bike lanes currently exists along Sycamore Canyon Boulevard within the study area. Moreno Valley shows Day Street as a Class III bike facility and Eucalyptus as a Class II facility.

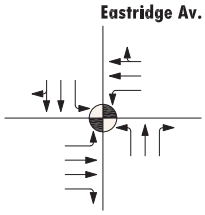
EXHIBIT 3-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS

LEGEND:

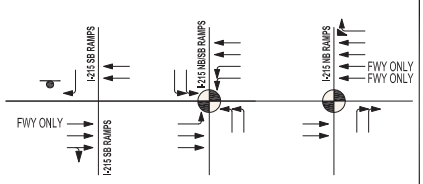
- (34) = INTERSECTION ID
- = TRAFFIC SIGNAL
- (S) = ALL WAY STOP
- = STOP SIGN
- 4 = NUMBER OF LANES
- D = DIVIDED
- U = UNDIVIDED
- DEF = DEFACTO RIGHT TURN LANE
- RTO = RIGHT TURN OVERLAP
- = FREE RIGHT TURN
- * = LEFT TURN LANE ACCOMMODATED WITHIN TWO-WAY LEFT TURN LANE (TWLTL) MEDIAN

1 Sycamore Cyn. Bl. & Eastridge Av.

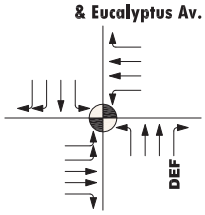
2 Box Springs Bl. & Eastridge Av.



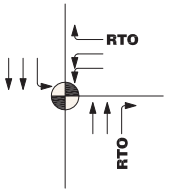
3 I-215 Ramps & Eucalyptus Av.



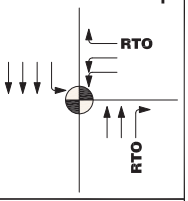
4 Valley Springs Pkwy. & Eucalyptus Av.



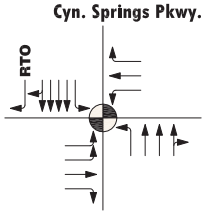
5 Day St. & SR-60 WB Ramps



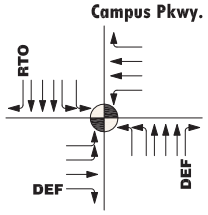
6 Day St. & SR-60 EB Ramps



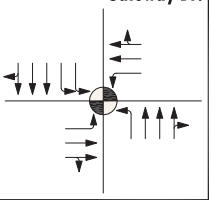
7 Day St. & Cyn. Springs Pkwy.



8 Day St. & Campus Pkwy.



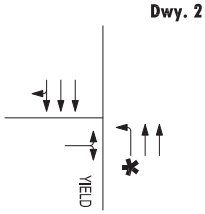
9 Day St. & Gateway Dr.



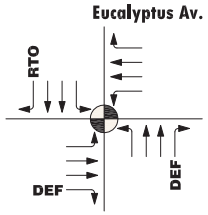
10 Day St. & Dwy. 1

INTERSECTION DOES NOT EXIST

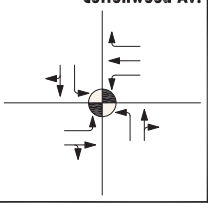
11 Day St. & Dwy. 2



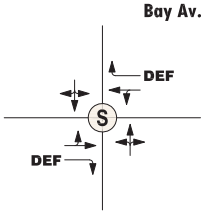
12 Day St. & Eucalyptus Av.



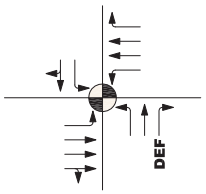
13 Day St. & Cottonwood Av.



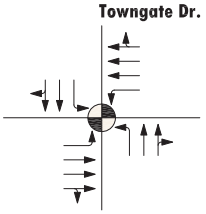
14 Day St. & Bay Av.



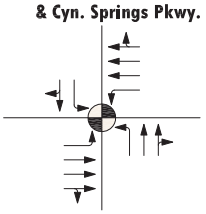
15 Day St. & Alessandro Bl.



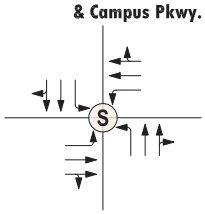
16 Memorial Wy. & Towngate Dr.



17 Corporate Centre Pl. & Cyn. Springs Pkwy.



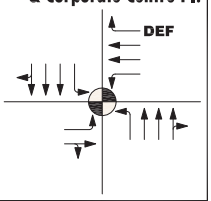
18 Corporate Centre Pl. & Campus Pkwy.



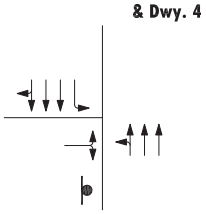
19 Dwy. 3 & Corporate Centre Pl.

INTERSECTION DOES NOT EXIST

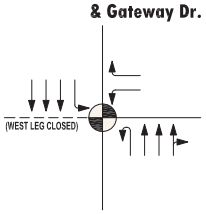
20 Valley Springs Pkwy. & Corporate Centre Pl.



21 Valley Springs Pkwy. & Dwy. 4



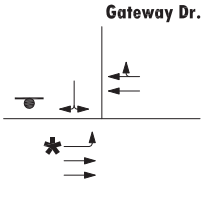
22 Valley Springs Pkwy. & Gateway Dr.



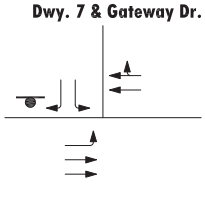
23 Valley Springs Pkwy. & Dwy. 5

INTERSECTION DOES NOT EXIST

24 Dwy. 6 & Gateway Dr.



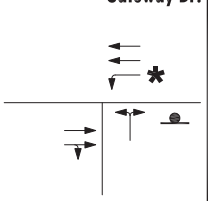
25 Canyon Park Dr. - Dwy. 7 & Gateway Dr.



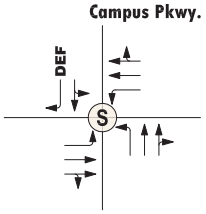
26 Dwy. 8 & Gateway Dr.

INTERSECTION DOES NOT EXIST

27 Dwy. 9 & Gateway Dr.



28 Canyon Park Dr. & Campus Pkwy.



29 Canyon Park Dr. & Dwy. 10

INTERSECTION DOES NOT EXIST

30 Canyon Park Dr. & Dwy. 11

INTERSECTION DOES NOT EXIST

31 Canyon Park Dr. & Dwy. 12

INTERSECTION DOES NOT EXIST

32 Dwy. 13 & Gateway Dr.

INTERSECTION DOES NOT EXIST

33 Valley Springs Pkwy. & Dwy. 14

INTERSECTION DOES NOT EXIST

34 Dwy. 15 & Corporate Centre Pl.

INTERSECTION DOES NOT EXIST

EXHIBIT 3-2: CITY OF RIVERSIDE MASTER PLAN OF ROADWAYS

LEGEND:

	66 FT LOCAL	2 LANES *
	66 FT COLLECTOR	2 LANES
	80 FT COLLECTOR	2 LANES
	88 FT ARTERIAL	4 LANES
	100 FT ARTERIAL	4 LANES
	110 FT ARTERIAL	4 LANES
	120 FT ARTERIAL	6 LANES
	144 FT ARTERIAL	8 LANES

- SCENIC BOULEVARD — REQUIRES SPECIAL LANDSCAPING. ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED.
- SPECIAL BOULEVARD — TWO-LANE DIVIDED ROADWAY OF VARIABLE GEOMETRIC DESIGN
- SPECIAL BOULEVARD — VARIABLE WIDTHS AND DESIGN. CONTACT PUBLIC WORKS FOR DETAIL. SEE OBJECTIVE CCM-3 AND POLICIES CCM-3.1 THROUGH CCM-3.5
- PARKWAYS — FOR INFORMATION ON PARKWAYS SEE LAND USE ELEMENT.
- CETAP CORRIDOR AREA — CORRIDOR OPTIONS SUBJECT TO SPECIAL STUDY.
- RIVERSIDE CITY BOUNDARY
- RIVERSIDE PROPOSED SPHERE OF INFLUENCE

NOTE:

* LOCAL STREETS ARE NOT SHOWN ON THIS PLAN EXCEPT WHERE NEEDED FOR CLARITY.

(1) MAGNOLIA AVENUE SHALL BE A SPECIAL BLVD. WITH 4 LANES EASTERLY OF HARRISON STREET.

(2) OVERLOOK PARKWAY SHALL BE A 2-LANE, 110-FOOT ARTERIAL WITH A WIDE MEDIAN PARKWAY. THE ALIGNMENT OF OVERLOOK PARKWAY WESTERLY OF WASHINGTON IS NOT YET DETERMINED PENDING PREPARATION OF SPECIFIC PLAN LEVEL STUDY.

(3) COLUMBIA AVENUE IS SHOWN BY HUNTER BUSINESS PARK SPECIFIC PLAN AS A 134-FOOT ARTERIAL. ACTUAL STREET WIDTH, DUE TO RAILROAD OVERCROSSING, WILL BE DETERMINED BY PUBLIC WORKS.

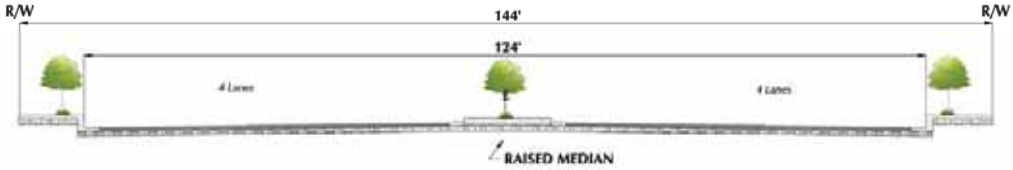
(4) THESE STREETS SHALL BE 66-FOOT LOCAL ROADWAYS SERVING AS ALTERNATE ROUTES.

(5) THE STREETS IN SYCAMORE CANYON BUSINESS PARK SPECIFIC PLAN VARY IN SIZE. SEE THE SPECIFIC PLAN FOR DETAILS.

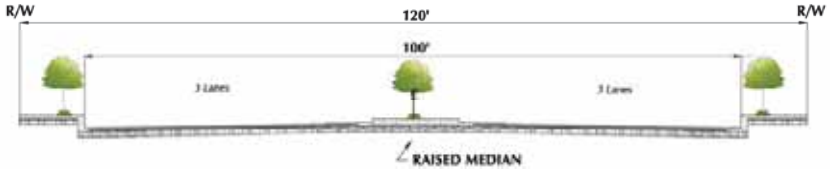
SOURCE: CITY OF RIVERSIDE

N

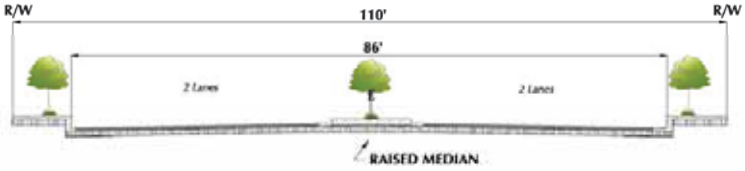
EXHIBIT 3-3: CITY OF RIVERSIDE GENERAL PLAN ROADWAY CROSS-SECTIONS



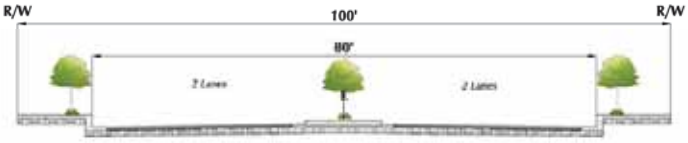
144-FOOT ARTERIAL



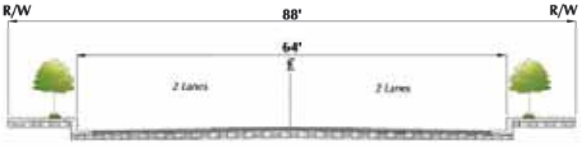
120-FOOT ARTERIAL



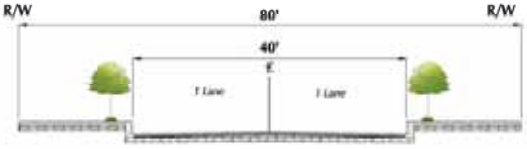
110-FOOT ARTERIAL



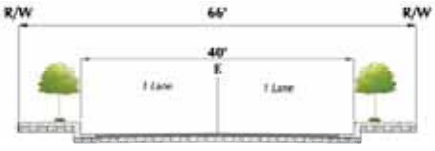
100-FOOT ARTERIAL



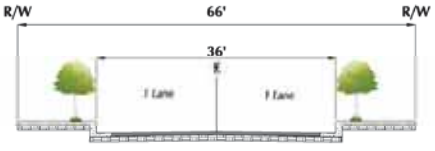
88-FOOT ARTERIAL



80-FOOT COLLECTOR



66-FOOT COLLECTOR



LOCAL STREET

SOURCE: CITY OF RIVERSIDE

EXHIBIT 3-4: CITY OF MORENO VALLEY GENERAL PLAN CIRCULATION ELEMENT

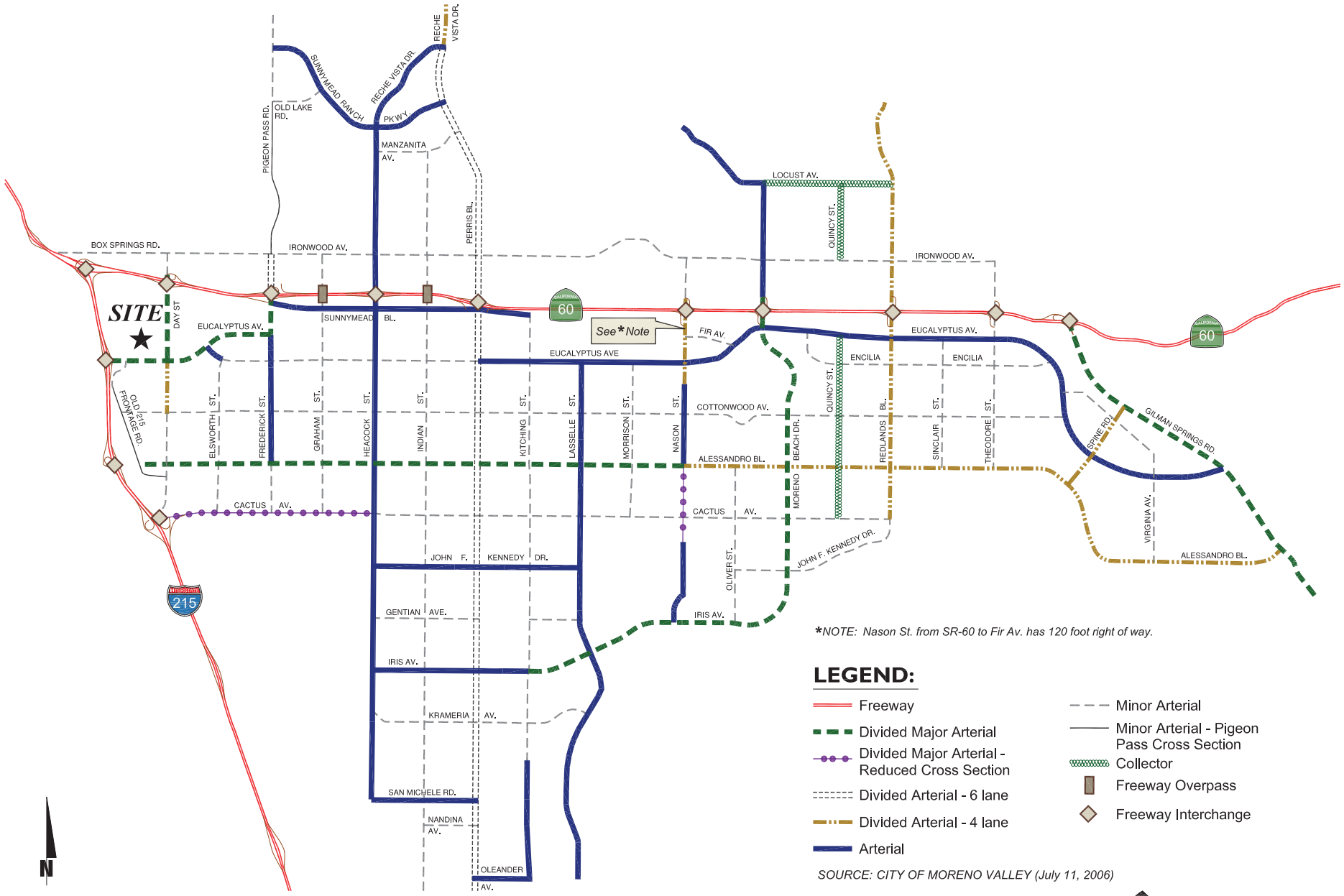
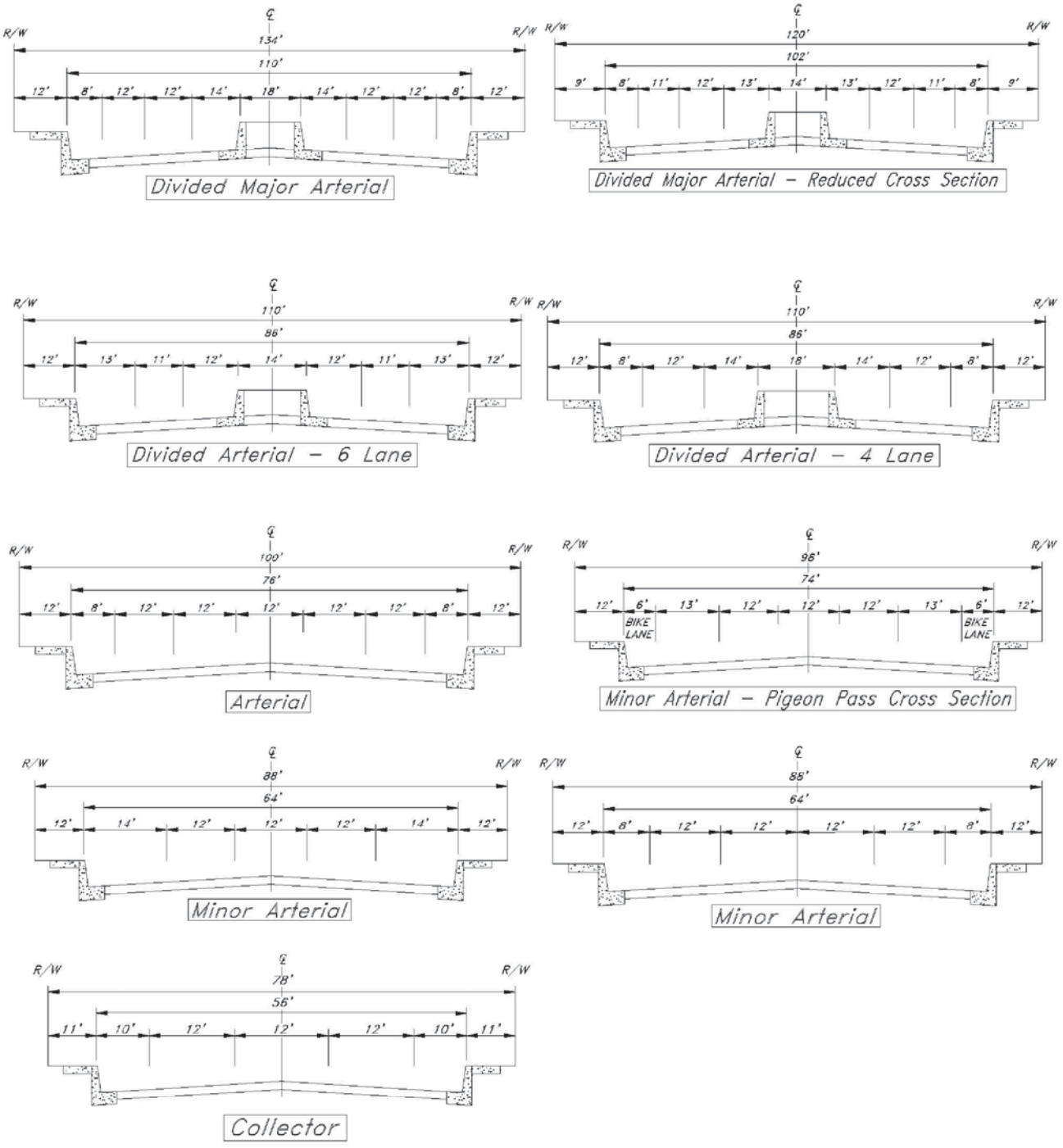
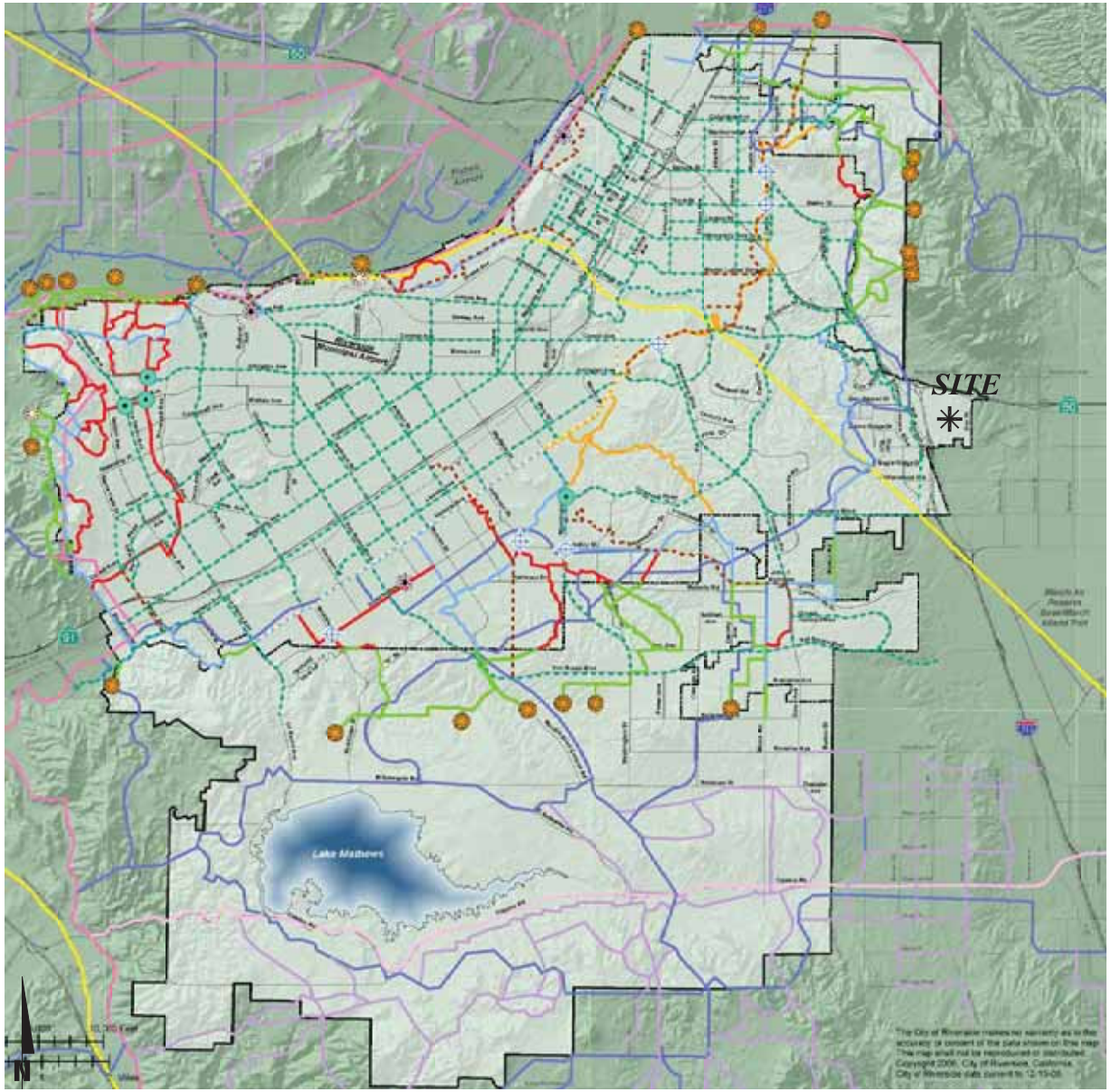


EXHIBIT 3-5: CITY OF MORENO VALLEY GENERAL PLAN ROADWAY CROSS-SECTIONS



SOURCE: CITY OF MORENO VALLEY

EXHIBIT 3-6: CITY OF RIVERSIDE MASTER PLAN OF TRAILS AND BIKEWAYS



LEGEND

CITY TRAIL POINTS
- STAGING AREAS EXISTING FACILITIES
- STAGING AREAS PROPOSED FACILITIES
- CONNECTION TO COUNTY DESIGNATED TRAILS
- TRAIL CROSSING PROPOSED STOP SIGN
- TRAIL CROSSING PROPOSED TRAFFIC SIGNAL

CITY TRAILS
- PRIMARY - EQUESTRIAN, BIKE & PEDESTRIAN TRAIL
- SECONDARY - EQUESTRIAN, BIKE & PEDESTRIAN TRAIL
- SECONDARY - NO EQUESTRIAN
- IN ADJACENT JURISDICTION

CITY BIKEWAYS
- CLASS 1
- CLASS 1&2
- CLASS 2

RIVERSIDE COUNTY TRAILS
- CLASS 1 BIKE PATH
- CLASS 1 BIKE PATH/REGIONAL TRAIL
- COMMUNITY TRAIL
- REGIONAL TRAIL
- HISTORIC TRAIL

- RIVERSIDE CITY BOUNDARY
- RIVERSIDE PROPOSED SPHERE OF INFLUENCE

SOURCE: CITY OF RIVERSIDE AND RIVERSIDE COUNTY GIS DATA

County Disclaimer: The County of Riverside assumes no warranty or legal responsibility for the information contained on this map. Data and information represented on this map is subject to change and may not be complete or appropriate for all purposes. County GIS and other sources should be queried for the most current information. Do not copy or resell this map. Horizontal accuracy: Parcel data is of mapping grade (quality) only and does not represent trustworthy locations or legal boundaries. User assumes all risk of use of this product. Copyright © 2006 county of Riverside, TLMA-GIS.

NOTE: Currently the City and County trails are not completely coordinated. The County Trails Plan is a conceptual plan at this time and many of the City's trails have not yet been built. An implementation tool of this General Plan is to work with the County to coordinate the RCIP and the City's General Plan (Tool #10).

Class II bikeways, also referred to as "bike lanes," are intended to delineate the right-of-way assigned to bicyclists and motorists, and to provide for more predictable movements of each. Bike lane signs and pavement marking help define the bikeway. A more important reason for bike lanes is to better accommodate bicyclists through corridors where insufficient room exists for safe bicycling on existing streets.

3.5 EXISTING (2014) TRAFFIC COUNTS

Manual weekday AM and PM peak hour turning movement counts were conducted in November 2014. The raw manual peak hour turning movement traffic count data sheets are included in Appendix "3.1". Flow conservation checks have been performed to the existing peak hour counts in an effort to ensure the flow of traffic volumes between closely spaced intersections is maintained.

Existing (2014) average daily traffic (ADT) volumes on arterial highways throughout the study area are shown on Exhibit 3-7. The ADT volumes are either based on traffic counts or have been estimated by factoring up peak hour counts. The following formula was used to estimate the daily volume for each intersection leg if daily traffic counts were not available:

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 12 = Leg Volume

Based on a comparison of PM peak hour traffic count data to 24-hour tube count data along roadway segments in close proximity to the study area, it was determined that the PM peak hour volumes were approximately eight to nine percent of the total 24-hour daily volume on select segments. As such, it was determined that the above equation could be utilized to approximate the ADT volume on the study area segments based on the same relationship (i.e., 8-9 percent PM peak-to-daily relationship).

Existing (2014) weekday AM and PM peak hour intersection volumes are shown on Exhibits 3-8 and 3-9, respectively. All of the intersection turning movement volumes illustrated on the exhibits and used in the traffic analysis are shown in terms of actual vehicles (i.e., no PCE factor has been applied).

The I-215 and SR-60 Freeway mainline volume data was obtained from the Caltrans Performance Measurement System (PeMS) website for the segments of the I-215 Freeway interchange at Eucalyptus Avenue and SR-60 Freeway interchange at Day Street. (5) Freeway mainline peak hour volumes have been obtained for the week of November 4th through 6th, 2014 and have been flow conserved with freeway-ramp-to-arterial peak hour count data conducted during these same dates. In an effort to conduct a conservative analysis, the maximum value observed within the three (3) day period was utilized for the morning (AM) and evening (PM) peak hours. Truck data has been obtained from the Caltrans Traffic Data Branch website. (6) The Caltrans 2013 Annual Average Daily Truck Traffic on the California State Highway System is utilized which presents a 10.9% truck percentage along the I-215 freeway and 10.5% truck percentage along the SR-60 freeway within the study area. For the purpose of this analysis, actual vehicles (as opposed to passenger-car-equivalent volumes) and a parameter of 11% (rounded value) truck percentage have been utilized for the calculation of the basic freeway segment and merge/diverge analysis. The source data and freeway volume summary is also included as Appendix "3.1" to this report.

EXHIBIT 3-7: EXISTING (2014) AVERAGE DAILY TRAFFIC VOLUMES

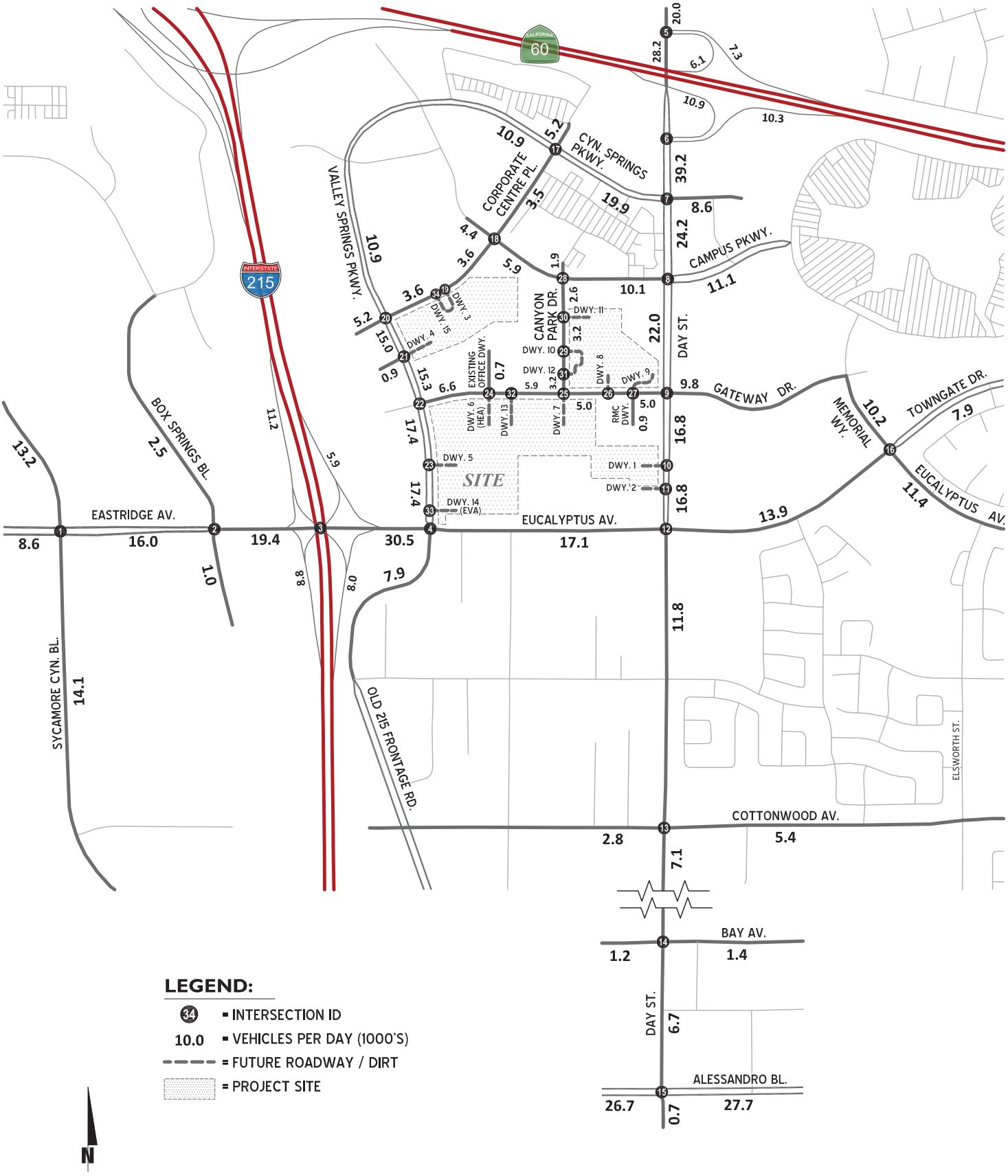
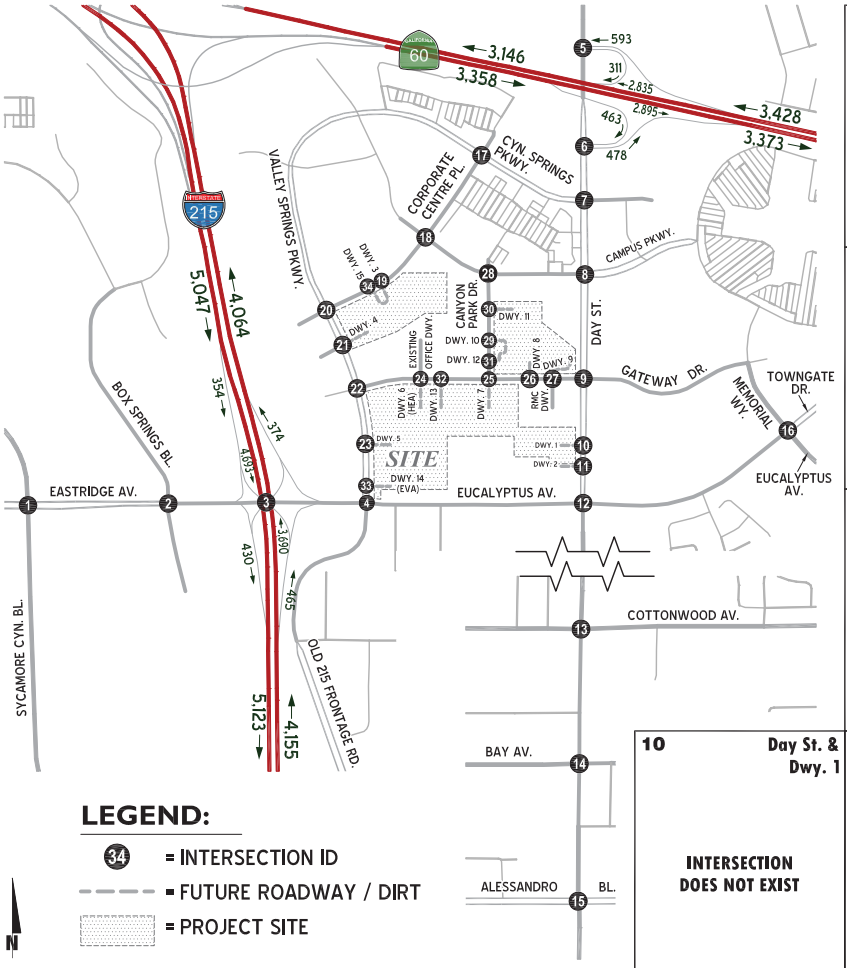
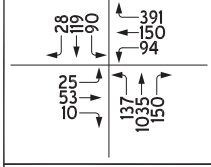


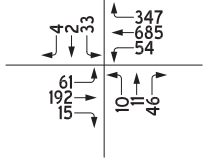
EXHIBIT 3-8: EXISTING (2014) AM PEAK HOUR INTERSECTION VOLUMES



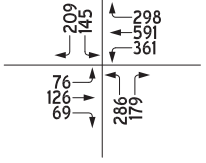
1 Sycamore Cyn. Bl. & Eastridge Av.



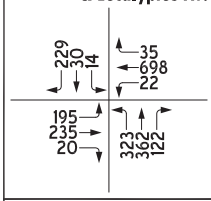
2 Box Springs Bl. & Eastridge Av.



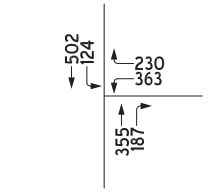
3 I-215 Ramps & Eucalyptus Av.



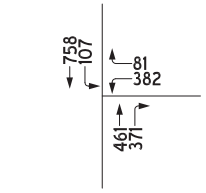
4 Valley Springs Pkwy. & Eucalyptus Av.



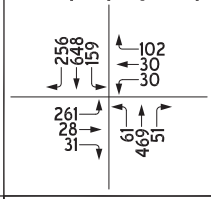
5 Day St. & SR-60 WB Ramps



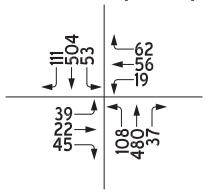
6 Day St. & SR-60 EB Ramps



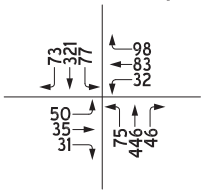
7 Day St. & Cyn. Springs Pkwy.



8 Day St. & Campus Pkwy.



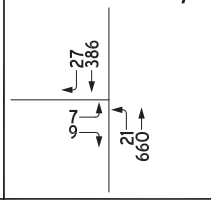
9 Day St. & Gateway Dr.



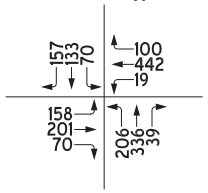
10 Day St. & Dwy. 1

INTERSECTION DOES NOT EXIST

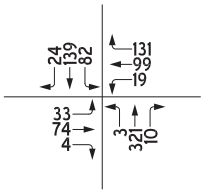
11 Day St. & Dwy. 2



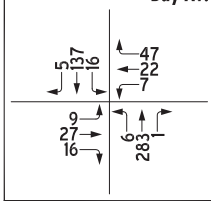
12 Day St. & Eucalyptus Av.



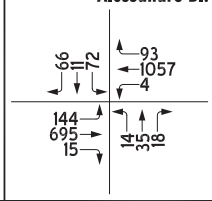
13 Day St. & Cottonwood Av.



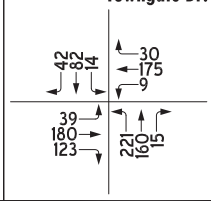
14 Day St. & Bay Av.



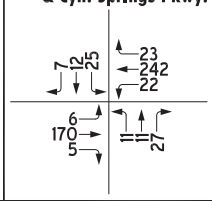
15 Day St. & Alessandro Bl.



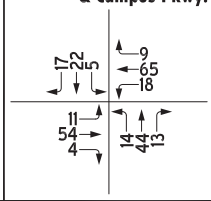
16 Memorial Wy. & Towngate Dr.



17 Corporate Centre Pl. & Cyn. Springs Pkwy.



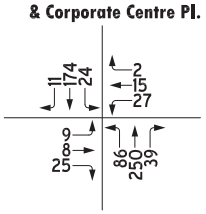
18 Corporate Centre Pl. & Campus Pkwy.



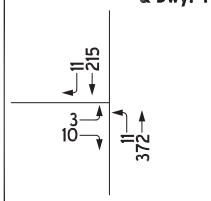
19 Dwy. 3 & Corporate Centre Pl.

INTERSECTION DOES NOT EXIST

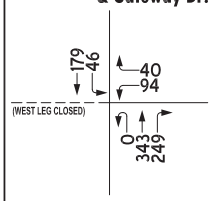
20 Valley Springs Pkwy. & Corporate Centre Pl.



21 Valley Springs Pkwy. & Dwy. 4



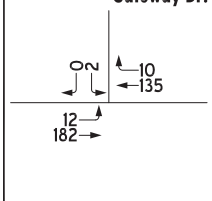
22 Valley Springs Pkwy. & Gateway Dr.



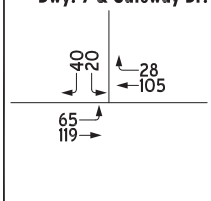
23 Valley Springs Pkwy. & Dwy. 5

INTERSECTION DOES NOT EXIST

24 Dwy. 6 & Gateway Dr.



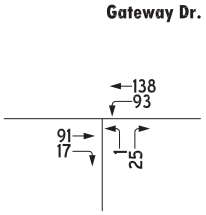
25 Canyon Park Dr. - Dwy. 7 & Gateway Dr.



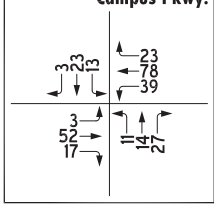
26 Dwy. 8 & Gateway Dr.

INTERSECTION DOES NOT EXIST

27 Dwy. 9 & Gateway Dr.



28 Canyon Park Dr. & Campus Pkwy.



29 Canyon Park Dr. & Dwy. 10

INTERSECTION DOES NOT EXIST

30 Canyon Park Dr. & Dwy. 11

INTERSECTION DOES NOT EXIST

31 Canyon Park Dr. & Dwy. 12

INTERSECTION DOES NOT EXIST

32 Dwy. 13 & Gateway Dr.

INTERSECTION DOES NOT EXIST

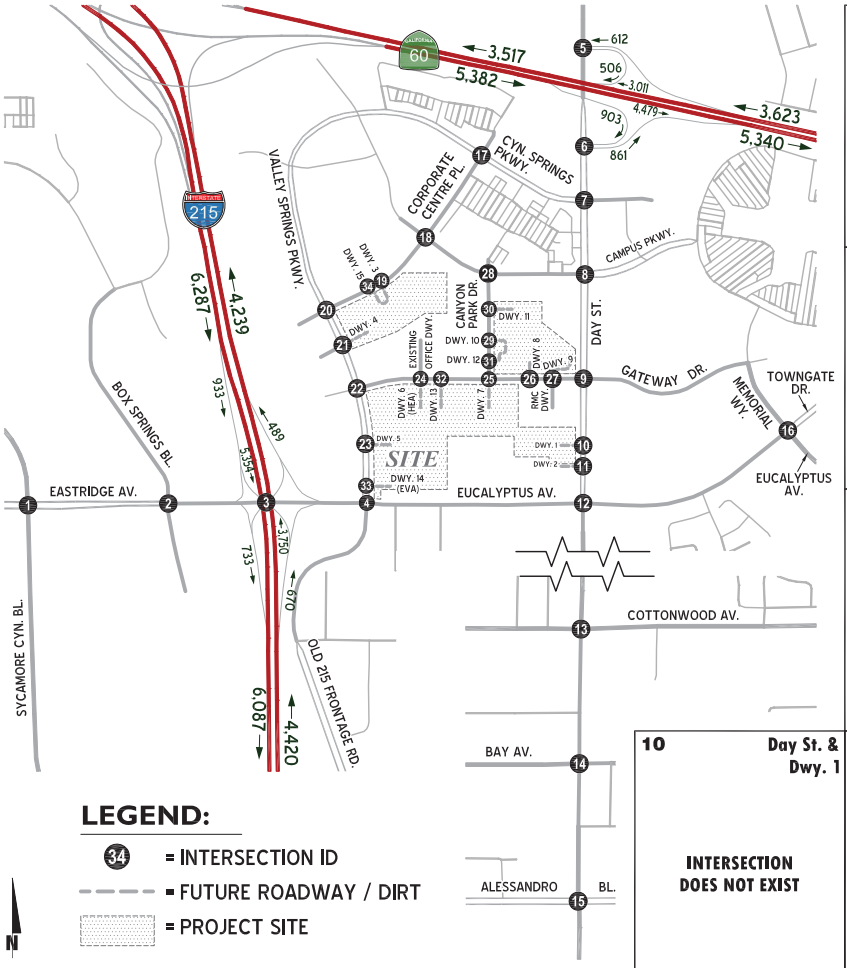
33 Valley Springs Pkwy. & Dwy. 14

INTERSECTION DOES NOT EXIST

34 Dwy. 15 & Corporate Centre Pl.

INTERSECTION DOES NOT EXIST

EXHIBIT 3-9: EXISTING (2014) PM PEAK HOUR INTERSECTION VOLUMES



LEGEND:

34 = INTERSECTION ID

= FUTURE ROADWAY / DIRT

= PROJECT SITE

N

1 Sycamore Cyn. Bl. & Eastridge Av.

20 → 310 ← 276		224 ← 78 ← 450
69 → 149 → 61	34 ← 202 ← 114	

2 Box Springs Bl. & Eastridge Av.

37 → 2 ← 99		58 ← 716 ← 28
12 → 545 → 3	18 ← 3 ← 29	

3 I-215 Ramps & Eucalyptus Av.

304 → 629		328 ← 361 ← 600
161 → 379 → 133	137 ← 533	

4 Valley Springs Pkwy. & Eucalyptus Av.

695 → 180 → 59		46 ← 539 ← 37
484 → 854 → 203	55 ← 139 ← 47	

5 Day St. & SR-60 WB Ramps

635 → 75		142 ← 470
	813 ← 431	

6 Day St. & SR-60 EB Ramps

950 → 155		288 ← 615
	956 ← 706	

7 Day St. & Cyn. Springs Pkwy.

481 → 726 → 203		222 ← 69 ← 45
626 → 118 → 158	206 ← 814 ← 58	

8 Day St. & Campus Pkwy.

48 → 443 → 247		236 ← 183 ← 83
176 → 84 → 166	181 ← 666 ← 91	

9 Day St. & Gateway Dr.

35 → 540 → 201		180 ← 99 ← 115
89 → 105 → 67	57 ← 498 ← 115	

10 Day St. & Dwy. 1

INTERSECTION DOES NOT EXIST

11 Day St. & Dwy. 2

1 → 757		
12 → 9	2 ← 850	

12 Day St. & Eucalyptus Av.

219 → 376 → 134		133 ← 330 ← 31
229 → 28 → 164	76 ← 323 ← 33	

13 Day St. & Cottonwood Av.

21 → 273 → 145		110 ← 80 ← 11
23 → 86 → 9	11 ← 253 ← 16	

14 Day St. & Bay Av.

6 → 279 → 19		18 ← 22 ← 9
8 → 41 → 13	12 ← 243 ← 5	

15 Day St. & Alessandro Bl.

81 → 20 → 177		120 ← 805 ← 4
127 → 1193 → 5	11 ← 14 ← 7	

16 Memorial Wy. & Towngate Dr.

81 → 271 → 53		61 ← 240 ← 26
115 → 260 → 213	153 ← 265 ← 20	

17 Corporate Centre Pl. & Cyn. Springs Pkwy.

32 → 56 → 163		97 ← 417 ← 41
40 → 365 → 31	26 ← 45 ← 52	

18 Corporate Centre Pl. & Campus Pkwy.

28 → 83 → 38		46 ← 129 ← 60
22 → 161 → 19	9 ← 72 ← 61	

19 Dwy. 3 & Corporate Centre Pl.

INTERSECTION DOES NOT EXIST

20 Valley Springs Pkwy. & Corporate Centre Pl.

30 → 413 → 38		3 ← 57 ← 102
32 → 41 → 105	172 ← 393 ← 63	

21 Valley Springs Pkwy. & Dwy. 4

15 → 605		
11 → 31	18 ← 617	

22 Valley Springs Pkwy. & Gateway Dr.

598 → 38		72 ← 336
(WEST LEG CLOSED)	0 ← 563 ← 106	

23 Valley Springs Pkwy. & Dwy. 5

INTERSECTION DOES NOT EXIST

24 Dwy. 6 & Gateway Dr.

21 → 14		15 ← 306
10 → 159		

25 Canyon Park Dr. - Dwy. 7 & Gateway Dr.

147 → 44		43 ← 174
31 → 142		

26 Dwy. 8 & Gateway Dr.

INTERSECTION DOES NOT EXIST

27 Dwy. 9 & Gateway Dr.

		175 ← 16
213 → 5	5 ← 48	

28 Canyon Park Dr. & Campus Pkwy.

13 → 31 → 34		44 ← 199 ← 82
13 → 217 → 30	23 ← 26 ← 28	

29 Canyon Park Dr. & Dwy. 10

INTERSECTION DOES NOT EXIST

30 Canyon Park Dr. & Dwy. 11

INTERSECTION DOES NOT EXIST

31 Canyon Park Dr. & Dwy. 12

INTERSECTION DOES NOT EXIST

32 Dwy. 13 & Gateway Dr.

INTERSECTION DOES NOT EXIST

33 Valley Springs Pkwy. & Dwy. 14

INTERSECTION DOES NOT EXIST

34 Dwy. 15 & Corporate Centre Pl.

INTERSECTION DOES NOT EXIST

The Existing (2014) freeway mainline directional volumes and on/off ramp volumes for the AM and PM peak hours are also provided on Exhibits 3-8 and 3-9, respectively.

3.6 EXISTING (2014) CONDITIONS INTERSECTION OPERATIONS ANALYSIS

Existing (2014) peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection operations analysis results are summarized in Table 3-1 which indicates that the existing study area intersections are currently operating at acceptable LOS during the peak hours. The intersection operations analysis worksheets are included in Appendix "3.2" of this TIA.

3.7 EXISTING (2014) CONDITIONS ROADWAY SEGMENT CAPACITY ANALYSIS

Existing (2014) roadway segment capacity have been evaluated for the study area key roadway segments based on the analysis methodologies presented previously in Section 2.3 *Roadway Segment Capacity Analysis* of this report. It should be noted that the roadway segment capacities are approximate figures only, and are used at the General Plan level to assist in determining the roadway functional classification (number of through lanes) needed to meet traffic demand.

Table 3-2 provides a summary of the Existing (2014) conditions roadway segment capacity analysis. As shown on Table 3-2, the study area roadway segments operate at acceptable LOS.

3.8 EXISTING (2014) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS

Traffic signal warrants for Existing (2014) traffic conditions are based on existing peak hour intersection turning volumes. For Existing (2014) traffic conditions, the unsignalized study area intersections do not appear to warrant traffic signal (See Appendix "3.3").

3.9 EXISTING (2014) CONDITIONS BASIC FREEWAY SEGMENT ANALYSIS

Existing (2014) mainline directional volumes for the weekday AM and PM peak hours are also provided on Exhibits 3-8 and 3-9, respectively.

The Existing (2014) basic freeway segment analysis results are presented on Table 3-3. As shown on Table 3-3, the freeway segments analyzed for this study were found to operate at an acceptable LOS (i.e., LOS "D" or better) during the peak hours with the existing number of lanes in each direction, with the exception of the I-215 SB freeway mainline segment, south of Eucalyptus Avenue, which currently operates at an LOS "E" during the peak hours. Existing (2014) basic freeway segment analysis worksheets are provided in Appendix "3.4".

3.10 EXISTING (2014) CONDITIONS FREEWAY MERGE/DIVERGE ANALYSIS

Ramp merge and diverge operations were also evaluated for Existing (2014) conditions and the results of this analysis are presented in Table 3-4. As shown in Table 3-4, the I-215 SB On-Ramp at Eucalyptus Avenue exceeds the acceptable levels of service, with existing geometry. Existing (2014) freeway ramp junction operations analysis worksheets are provided in Appendix "3.5".

TABLE 3-1: INTERSECTION ANALYSIS FOR EXISTING (2014) CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs)		Level of Service[2]	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Sycamore Cyn. Bl. / Eastridge Av.	TS	2	2	1>	2	2	1>	2	3	1	2	2	1>	44.8	30.4	D	C
2	Box Springs Bl. / Eastridge Av.	TS	1	1	1	1	2	0	1	2	1	1	2	0	12.2	15.5	B	B
3	I-215 NB & SB Ramps / Eucalyptus Av.	TS	2	0	0	2	0	0	1	2	0	2	2	0	33.9	29.1	C	C
	➢ I-215 SB Ramps / Eucalyptus Av.	CSS	0	0	0	0	0	1	0	3	0	0	2	0	17.1	13.4	C	B
	➢ I-215 NB Ramps / Eucalyptus Av.	TS	0	0	2	0	0	0	0	2	0	0	4	1>>	0.1	0.4	A	A
4	Valley Springs Pkwy. / Eucalyptus Av.	TS	1	2	d	1	1	2	2	2	1	1	2	1	38.2	37.2	D	D
5	Day St. / SR-60 WB Ramps	TS	0	2	1>	1	2	0	0	0	0	2	0	1>	16.8	11.4	B	B
6	Day St. / SR-60 EB Ramps	TS	0	2	1>	1	3	0	0	0	0	2	0	1>	11.2	12.0	B	B
7	Day St. / Cyn. Springs Pkwy.	TS	1	3	0	1	3.5	1.5>	2	1	1	1	1	1	14.8	26.1	B	C
8	Day St. / Campus Pkwy.	TS	2	3	d	2	3	1>	2	1	d	1	2	1	11.4	26.6	B	C
9	Day St. / Gateway Dr.	TS	1	3	0	2	3	0	1	2	0	1	2	0	18.9	28.0	B	C
10	Day St. / Dwy. 1		Intersection Does Not Exist															
11	Day St. / Dwy. 2	CSY	1	2	0	0	3	0	0	1!	0	0	0	0	12.1	16.7	B	C
12	Day St. / Eucalyptus Av.	TS	1	2	d	1	2	1>	1	2	d	1	2	1	32.0	29.5	C	C
13	Day St. / Cottonwood Av.	TS	1	1	0	1	1	0	1	1	0	1	1	1	26.7	24.6	C	C
14	Day St. / Bay Av.	AWS	0	1!	0	0	1!	0	0.5	0.5	d	0.5	0.5	d	10.4	10.5	B	B
15	Day St. / Alessandro Bl.	TS	1	1	d	1	1	0	1	3	0	1	2	1	15.4	16.9	B	B
16	Memorial Wy. / Towngate Dr.	TS	1	2	0	1	2	0	1	3	0	1	3	0	34.0	29.7	C	C
17	Corporate Ctr. Pl. / Cyn. Springs Pkwy.	TS	1	2	0	1	1	0	1	3	0	1	3	0	36.9	34.2	D	C
18	Corporate Ctre Pl. / Campus Pkwy.	AWS	1	2	0	1	2	0	1	2	0	1	2	0	8.0	9.7	A	A
19	Dwy. 3 / Corporate Ctr. Pl.		Intersection Does Not Exist															
20	Valley Springs Pkwy. / Corporate Ctr. Pl.	TS	1	3	0	1	3	0	1	1	0	1	2	d	15.9	20.4	B	C
21	Valley Springs Pkwy. / Dwy. 4	CSS	0	3	0	1	3	0	0	1!	0	0	0	0	10.5	13.2	B	B
22	Valley Springs Pkwy. / Gateway Dr.	TS	1	3	0	1	3	0	0	0	0	1	0	1	11.4	9.9	B	A
23	Valley Springs Pkwy. / Dwy. 5		Intersection Does Not Exist															
24	Dwy. 6 / Gateway Dr.	CSS	0	0	0	0	1!	0	1	2	0	0	2	0	10.1	10.9	B	B
25	Canyon Park Dr. - Dwy. 7 / Gateway Dr.	CSS	0	0	0	1	0	1	1	2	0	0	2	0	10.7	11.3	B	B
26	Dwy. 8 / Gateway Dr.		Intersection Does Not Exist															
27	Dwy. 9 / Gateway Dr.	CSS	0	1!	0	0	0	0	0	2	0	1	2	0	8.8	9.3	A	A
28	Canyon Park Dr. / Campus Pkwy.	AWS	1	2	0	0.5	0.5	d	1	2	0	1	2	0	8.2	9.7	A	A
29	Canyon Park Dr. / Dwy. 10		Intersection Does Not Exist															
30	Canyon Park Dr. / Dwy. 11		Intersection Does Not Exist															
31	Canyon Park Dr. / Dwy. 12		Intersection Does Not Exist															
32	Dwy. 13 / Gateway Dr.		Intersection Does Not Exist															
33	Valley Springs Pkwy. / Dwy. 14		Intersection Does Not Exist															
34	Dwy. 15 / Corporate Centre Pl.		Intersection Does Not Exist															

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane

[2] Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. Delay and level of service is calculated using Synchro 8.0 analysis software.

[3] TS = Traffic Signal; CSY = Cross-street Yield (implied); CSS = Cross-street Stop; AWS = All-Way Stop

TABLE 3-2: ROADWAY VOLUME/CAPACITY ANALYSIS FOR EXISTING (2014) CONDITIONS

Roadway	Segment	Through Travel Lanes[1]	LOS "E" Capacity[2]	ADT[3]	Volume/ Capacity Ratio
Eastridge Av. - Eucalyptus Av.	West of Sycamore Cyn. Bl.	5	45,800	8,600	0.19
	B/w Box Springs Bl. & I-215	4	36,600	19,400	0.53
	B/w I-215 & Valley Springs Pkwy.	5	45,800	30,500	0.67
	West of Day St.	4	36,600	17,100	0.47
	East of Day St.	5	45,800	13,900	0.30
Valley Springs Pkwy.	North of Eucalyptus Av.	5	45,800	17,400	0.38
Day St.	B/w SR-60 EB Ramps & Cyn. Springs Pkwy.	6	54,900	39,200	0.71
	North of Eucalyptus Av.	5	45,800	16,800	0.37
	South of Eucalyptus Av.	4	36,400	11,800	0.32
	South of Cottonwood Av.	2	11,500	7,100	0.62
Gateway Dr.	West of Day St.	4	36,400	5,000	0.14

[1] Existing Number of Through lanes
[2] LOS "E" capacity has been estimated based on the City of Riverside TIA Preparation Guide, Exhibit D - City of Riverside Roadway Capacity.
[3] Average Daily Traffic (ADT) expressed in vehicles per day.

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TABLE 3-3: BASIC FREEWAY SEGMENT ANALYSIS FOR EXISTING (2014) CONDITIONS

Freeway	Direction	Mainline Segment Location	Lanes[1]	Volume		Density[2]		LOS[3]	
				AM	PM	AM	PM	AM	PM
I-215 Freeway	NB	South of Eucalyptus Av.	3	4,155	4,420	23.8	25.8	C	C
		Between Ramps	3	3,690	3,750	20.7	21.1	C	C
		North of Eucalyptus Av.	3	4,064	4,239	23.2	24.4	C	C
	SB	North of Eucalyptus Av.	5	5,047	6,287	16.8	21.2	B	C
		Between Ramps	3	4,693	5,354	27.9	34.2	D	D
		South of Eucalyptus Av.	3	5,123	6,087	31.8	43.8	D	**E**
SR-60 Freeway	WB	East of Day St.	4	3,428	3,623	14.0	14.8	B	B
		Between Ramps	3	2,835	3,011	15.5	16.4	B	B
		West of Day St.	3	3,146	3,517	17.2	19.3	B	C
	EB	West of Day St.	6	3,358	5,382	9.2	14.7	A	B
		Between Ramps	4	2,895	4,479	11.9	18.4	B	C
		East of Day St.	5	3,373	5,340	11.1	17.5	B	B

[1] Number of lanes are in the specified direction and is based on existing conditions.

[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).

[3] Level of service determined using HCS 2010: Basic Freeway Segments software, Version 6.65

BOLD = LOS E or F

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TABLE 3-4: FREEWAY RAMP JUNCTION MERGE/DIVERGE ANALYSIS FOR EXISTING (2014) CONDITIONS

Freeway	Direction	Ramp Location	Junction Type	Lanes on Freeway	Lanes on Ramp	Volume		Density [1]		LOS [2]	
						AM	PM	AM	PM	AM	PM
I-215 Freeway	NB	NB Off Ramp at Eucalyptus Av.	Diverge	3	1	465	670	30.0	31.7	D	D
		NB On Ramp at Eucalyptus Av.	Merge	3	1	374	489	25.8	27.0	C	C
	SB	SB Off Ramp at Eucalyptus Av.	Diverge	5	2	354	933	9.3	12.2	A	B
		SB On Ramp at Eucalyptus Av.	Merge	3	1	430	733	30.6	36.6	D	**E**
SR-60 Freeway	WB	WB Off Ramp at Day St.	Diverge	4	1	593	612	13.1	14.1	B	B
		WB On Ramp at Day St.	Merge	3	1	311	506	17.6	20.1	B	C
	EB	EB Off Ramp at Day St.	Diverge	6	2	463	903	13.4	18.2	B	B
		EB On Ramp at Day St.	Merge	4	1	478	861	13.4	22.2	B	C

[1] Density calculated based on the Highway Capacity Manual (HCM) analysis; (pc/mi/ln) = passenger car per mile per lane

[2] Level of service determined using HCS2010 : Ramps and Ramp Junction software, Version 6.60

BOLD = LOS E or F

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4 PROJECTED FUTURE TRAFFIC

This section presents the traffic volumes estimated to be generated by the Project, as well as the Project's trip assignment onto the study area roadway network. The Project consists of hospital land use with approximately 280 beds, approximately 370,000 square feet of medical office, approximately 234 senior adult-housing attached dwelling units, and an assisted living facility with approximately 267 beds. For the purposes of this TIA, the entire Project is included in the Cumulative (Opening Year) scenario.

The Project is proposed to have access along Day Street, Corporate Centre Place, Valley Springs Parkway, Gateway Drive, and Canyon Park Drive.

4.1 PROJECT TRIP GENERATION

For analysis purposes, the Project was divided into 4 traffic analysis zones (TAZ), as depicted previously on Exhibit 1-2.

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development.

Trip generation rates used to estimate Project traffic are shown in Table 4-1 and a summary of the Project's trip generation is shown in Table 4-2. The trip generation rates are based upon data collected by the Institute of Transportation Engineers (ITE) for hospital (ITE Land Use Code 610), medical office building (ITE Land Use Code 720), senior adult housing-attached (ITE Land Use Code 252), and assisted living (ITE Land Use Code 254) in their *Trip Generation* manual, 9th Edition, 2012. (9) It should be noted that Table 4-1 also shows the trip generation rates for the previously approved specific plan land use which consists of 100,000 square feet of general retail use and 800,000 square feet of general office use.

As shown on Table 4-2, the proposed Project is anticipated to generate a total of approximately 18,528 trip-ends per day with 1,348 vehicles per hour during the AM peak hour and 1,854 vehicles per hour during the PM peak hour. Table 4-2 also indicates that the proposed Project is anticipated to generate 5,361 more trip-ends per day with 184 more vehicles per hour during the AM peak hour and 278 more vehicles per hour during the PM peak hour in comparison with the previously approved specific plan land use.

4.2 PROJECT TRIP DISTRIBUTION

Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the route where the Project traffic would distribute. The Project trip distribution was developed based on anticipated travel patterns to and from the Project site for both passenger cars and truck traffic.

TABLE 4-1: PROJECT TRIP GENERATION RATES

Land Use	ITE CODE	Quantity	Units[2]	AM Peak Hour			PM Peak Hour			Daily
				In	Out	Total	In	Out	Total	
CURRENTLY PROPOSED PROJECT LAND USE										
Hospital	610	280	BEDS	0.95	0.37	1.32	0.47	0.95	1.42	12.94
Medical Office Building	720	370	TSF	1.89	0.50	2.39	1.00	2.57	3.57	36.13
Senior Adult Housing - Attached	252	234	DU	0.07	0.13	0.20	0.13	0.12	0.25	3.44
Assisted Living	254	267	BEDS	0.12	0.06	0.18	0.15	0.14	0.29	2.74
PREVIOUSLY APPROVED SPECIFIC PLAN LAND USE										
Retail	820	100	TSF	0.97	0.59	1.56	2.88	3.12	6.00	67.91
General Office Building	710	800	TSF	1.11	0.15	1.26	0.21	1.01	1.22	7.97

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 9th Edition (2012).

[2] TSF = Thousand Square Feet; DU = Dwelling Units

TABLE 4-2: PROJECT TRIP GENERATION SUMMARY

TRIP GENERATION RESULTS										
Land Use	ITE CODE	Quantity	Units[1]	AM Peak Hour			PM Peak Hour			Daily
				In	Out	Total	In	Out	Total	
CURRENTLY PROPOSED PROJECT LAND USE										
Hospital	610	280	BEDS	266	104	370	132	266	398	3,623
Medical-Dental Office	720	370	TSF	699	185	884	370	951	1,321	13,368
Senior Adult Housing - Attached	252	234	DU	16	30	46	30	28	58	805
Assisted Living	254	267	BEDS	32	16	48	40	37	77	732
CURRENTLY PROPOSED PROJECT TOTAL TRIPS				**1,013**	**335**	**1,348**	**572**	**1,282**	**1,854**	**18,528**
PREVIOUSLY APPROVED SPECIFIC PLAN LAND USE										
Retail	820	100	TSF	97	59	156	288	312	600	6,791
General Office Building	710	800	TSF	888	120	1,008	168	808	976	6,376
PREVIOSULY APPROVED PROJECT TOTAL TRIPS				**985**	**179**	**1,164**	**456**	**1,120**	**1,576**	**13,167**

Land Use	AM Peak Hour			PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	
Currently Proposed Project	1,013	335	1,348	572	1,282	1,854	18,528
Previously Proposed Specific Plan Land Use	985	179	1,164	456	1,120	1,576	13,167
Delta (Current - Previous)	**28**	**156**	**184**	**116**	**162**	**278**	**5,361**
	3%	47%	14%	20%	13%	15%	29%

[1] TSF = Thousand Square Feet; DU = Dwelling Units

The trip distribution pattern is heavily influenced by the geographical location of the site, the location of surrounding uses, and the proximity to the regional freeway system. Exhibits 4-1 through 4-4 illustrate the Project trip distribution patterns for TAZ 1 through 4.

4.3 MODAL SPLIT

The traffic reducing potential of public transit, walking or bicycling have not been considered in this TIA. Essentially, the traffic projections are "conservative" in that these alternative travel modes might be able to reduce the forecasted traffic volumes (employee trips only).

4.4 PROJECT TRIP ASSIGNMENT

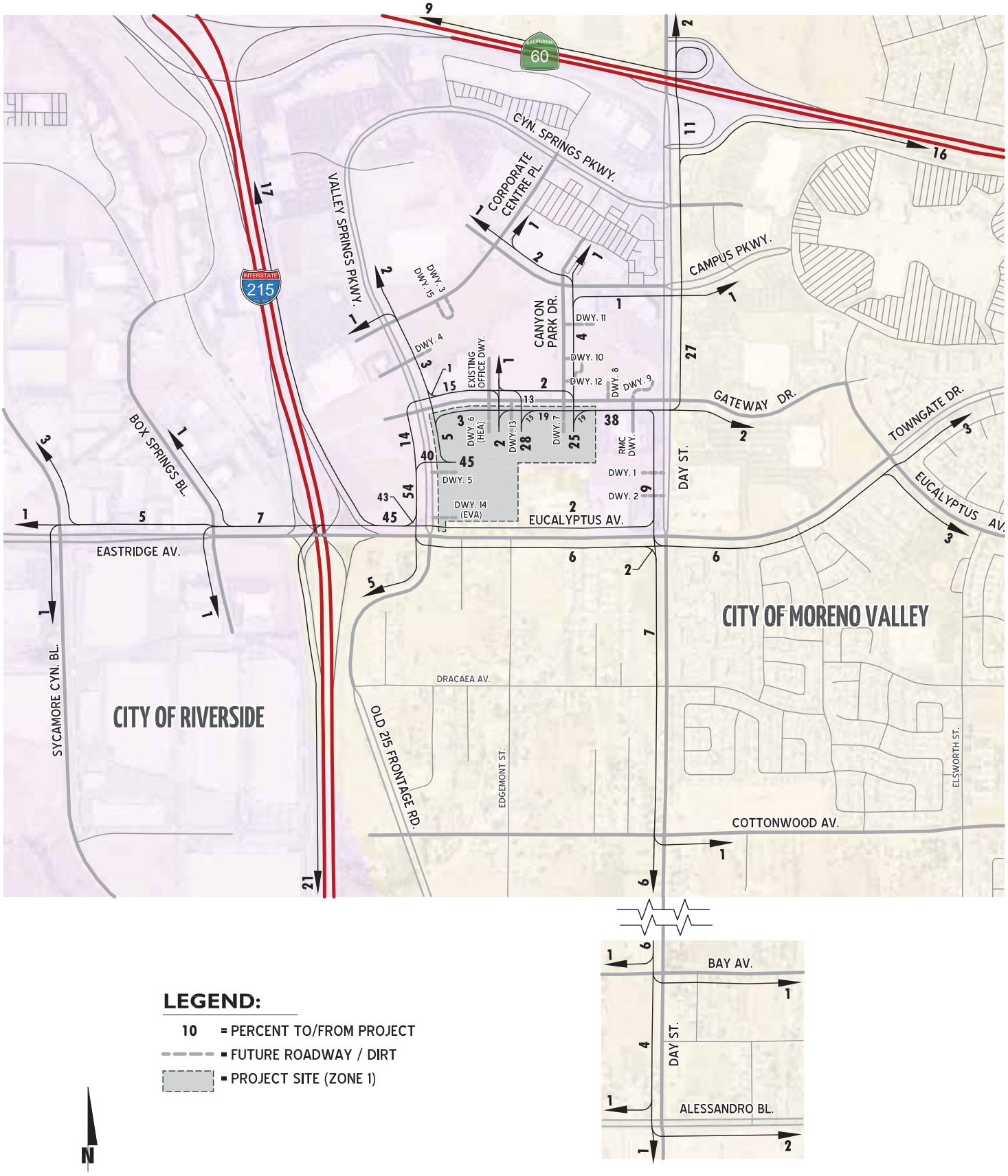
The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project. Based on the identified Project traffic generation and trip distribution patterns, Project ADT volumes are shown on Exhibit 4-5. Project weekday AM and PM peak hour volumes are shown on Exhibits 4-6 and 4-7, respectively.

4.5 BACKGROUND TRAFFIC

Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the development of future projects that have been approved but not yet built and/or for which development applications have been filed and are under consideration by governing agencies. Future year traffic forecasts also include two years of background (ambient) growth at 2% per year for Cumulative (Opening Year) traffic conditions. The ambient growth factor is intended to approximate regional traffic growth. The total ambient growth is 4.04% (compounded growth of two percent per year over two years or $1.02^{2 \text{ years}}$) for Opening Year traffic conditions. This ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects.

The adopted Southern California Association of Governments (SCAG) 2012 Regional Transportation Plan (RTP) (April 2012) growth forecasts for the City of Riverside identifies projected growth in population of 295,500 in 2008 to 382,700 in 2035, or a 29.51% increase over the 27 year period. (10) The change in population equates to roughly a 1.00 percent growth rate compounded annually. Similarly, growth over the same 27 year period in households is projected to increase by 28.88 percent, or 0.94 percent annual growth rate. Finally, growth in employment over the same 27 year period is projected to increase by 43.76 percent, or a 1.35 percent annual growth rate. The background growth of 2.0 percent per year in conjunction with traffic generated by the development of future projects would tend to overstate as opposed to understate the growth in traffic volumes assumed in this traffic analysis. As such, the analysis is conservative, and would also overstate as opposed to understate potential impacts.

EXHIBIT 4-1: PROJECT ZONE 1 TRIP DISTRIBUTION PATTERN



LEGEND:

10 = PERCENT TO/FROM PROJECT

= FUTURE ROADWAY / DIRT

= PROJECT SITE (ZONE 1)

N

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URBAN CROSSROADS

EXHIBIT 4-2: PROJECT ZONE 2 TRIP DISTRIBUTION PATTERN

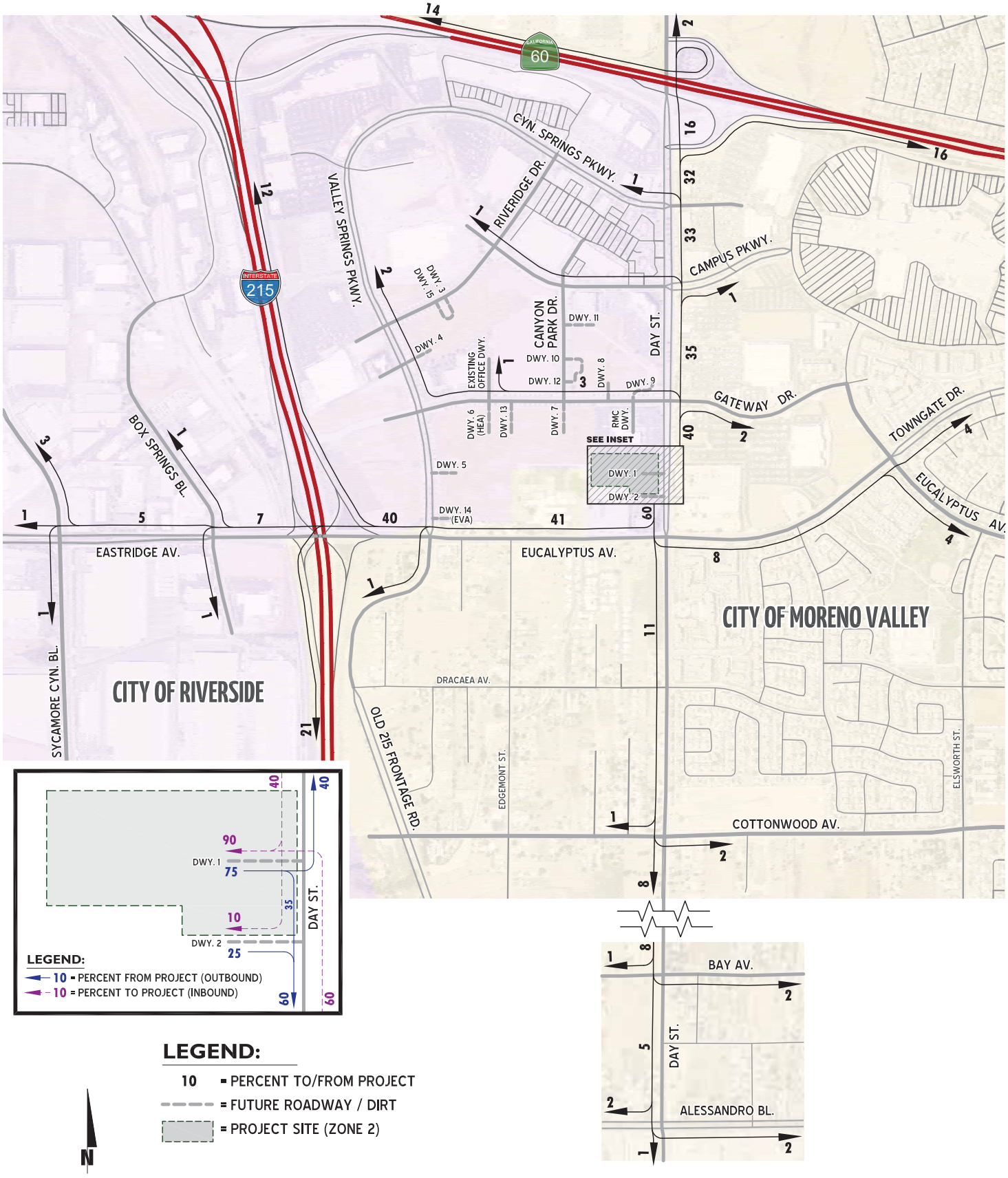
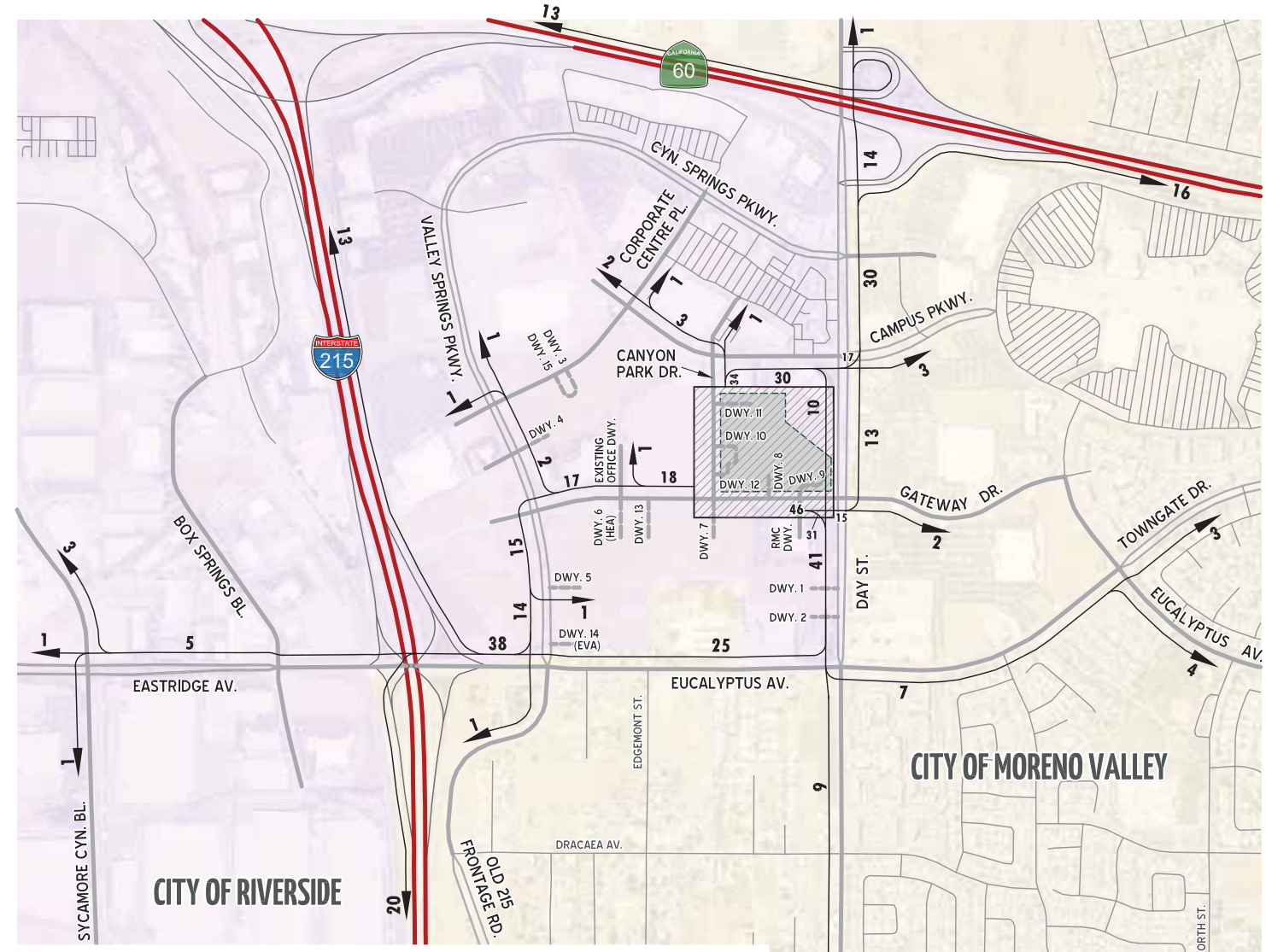
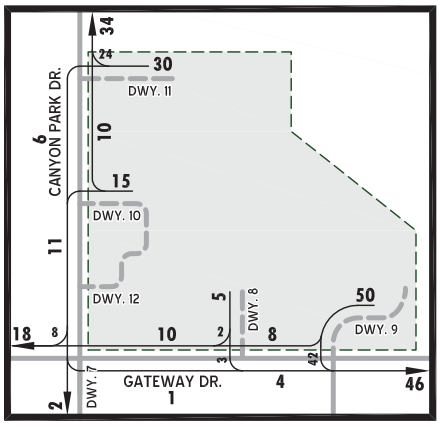


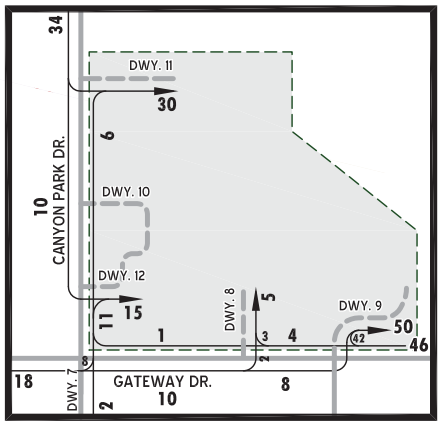
EXHIBIT 4-3: PROJECT ZONE 3 TRIP DISTRIBUTION PATTERN

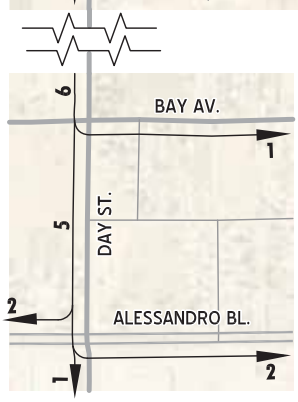


TAZ 3 ON-SITE OUTBOUND DISTRIBUTION



TAZ 3 ON-SITE INBOUND DISTRIBUTION





LEGEND:

10 = PERCENT TO/FROM PROJECT

= FUTURE ROADWAY / DIRT

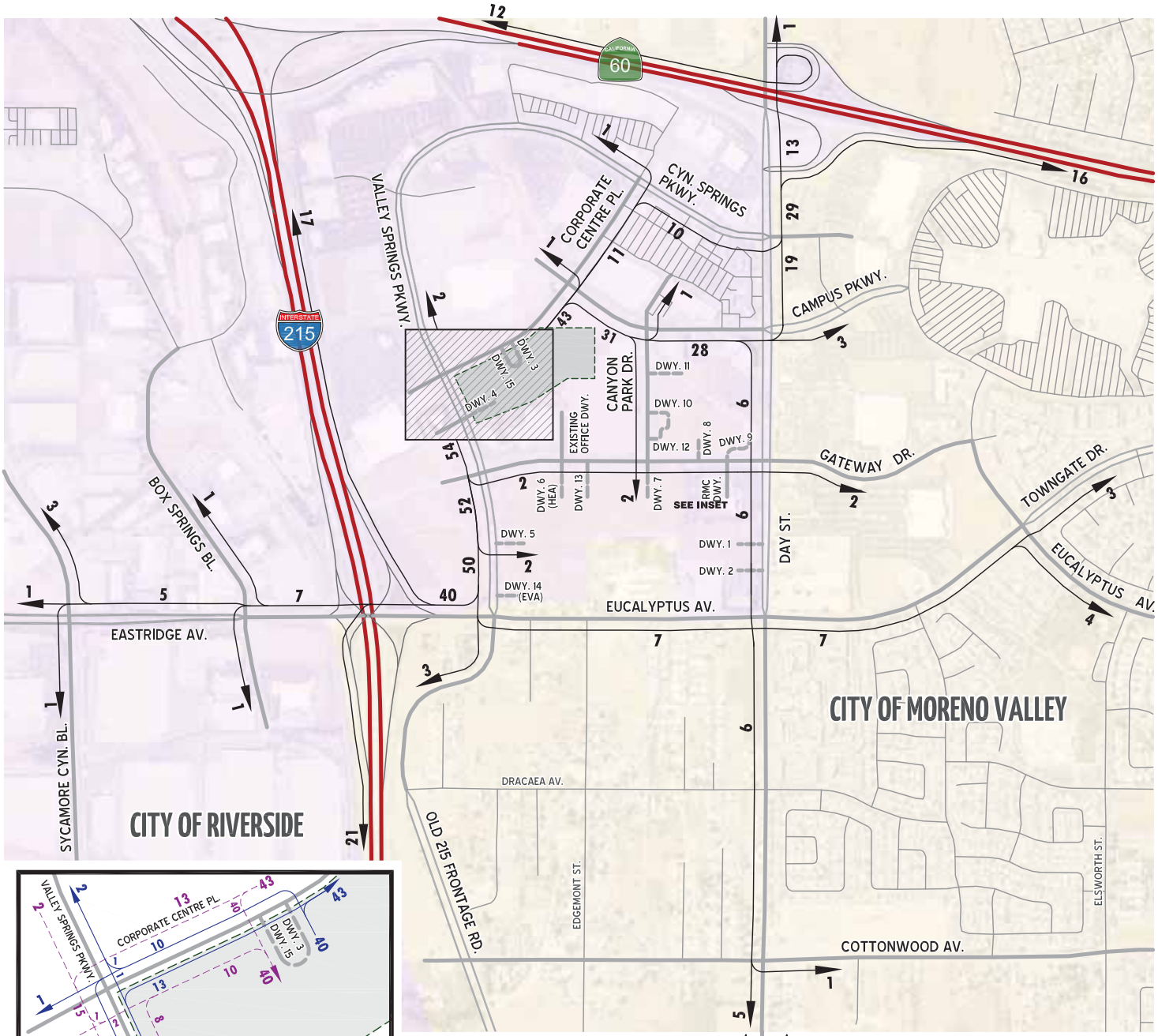
= PROJECT SITE (ZONE 3)

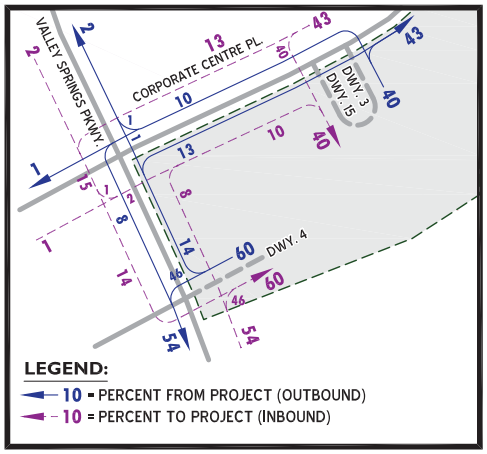
N

08890 - 002.dwg

URBAN CROSSROADS

EXHIBIT 4-4: PROJECT ZONE 4 TRIP DISTRIBUTION PATTERN





LEGEND:

10 = PERCENT TO/FROM PROJECT

= FUTURE ROADWAY / DIRT

= PROJECT SITE (ZONE 4)

N

08890 - 002.dwg

URBAN CROSSROADS

EXHIBIT 4-5: PROJECT ONLY AVERAGE DAILY TRAFFIC VOLUMES

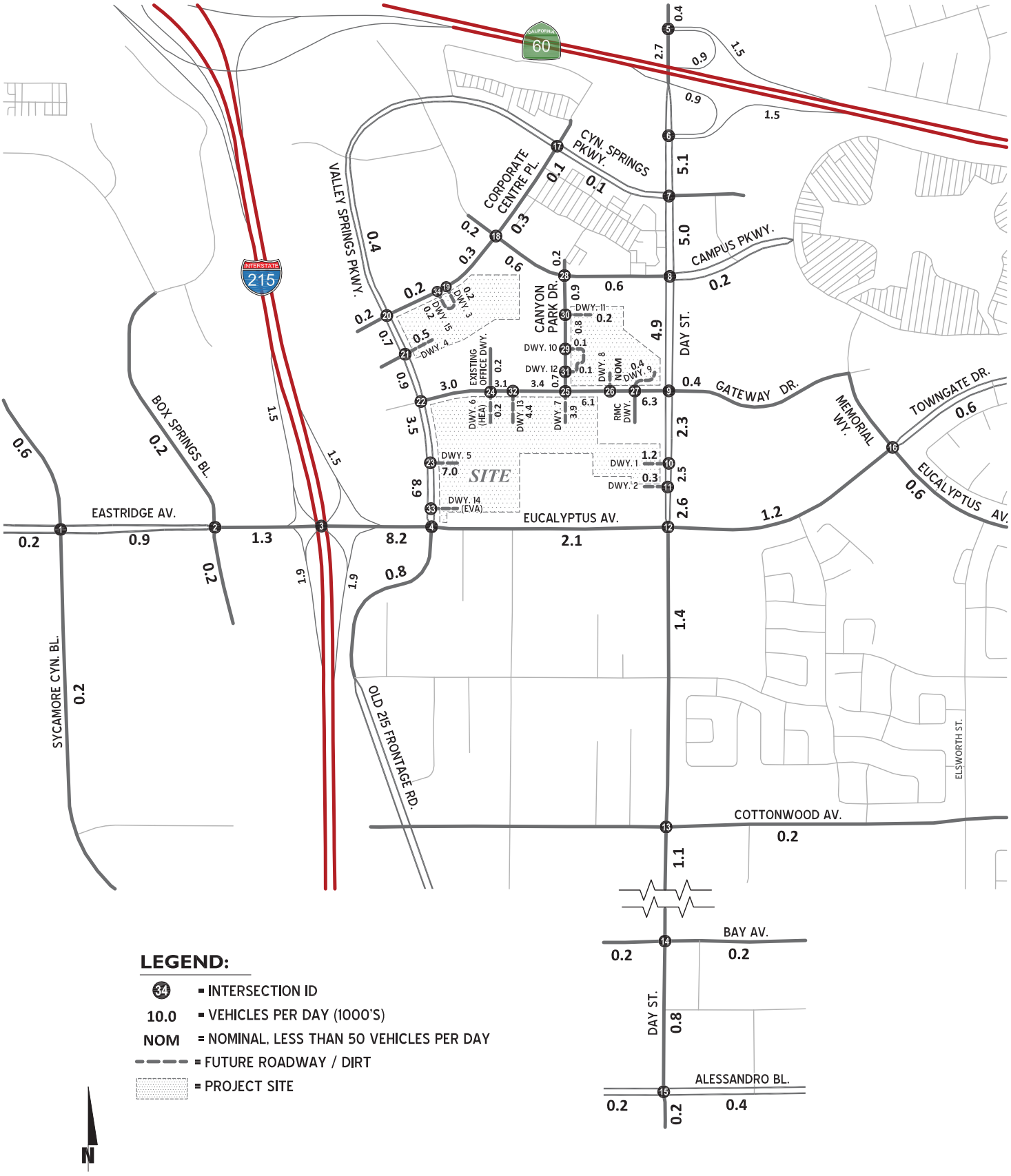
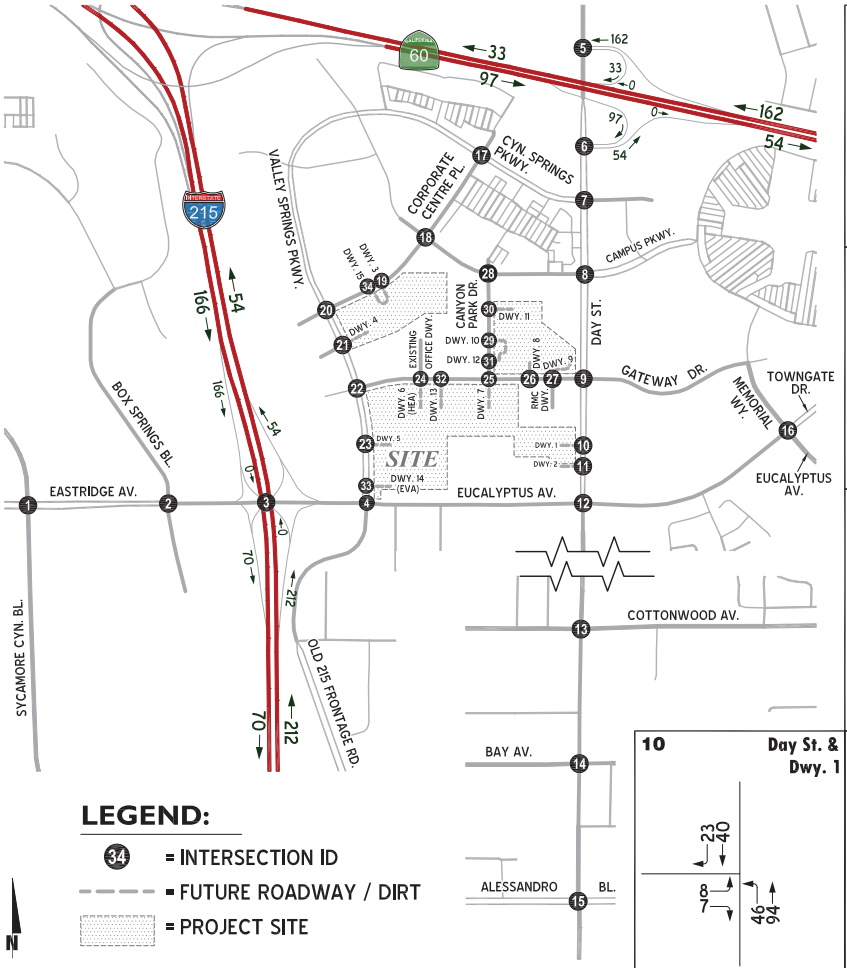


EXHIBIT 4-6: PROJECT ONLY AM PEAK HOUR INTERSECTION VOLUMES



LEGEND:

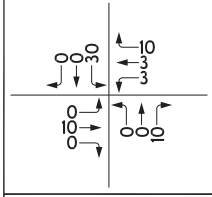
34 = INTERSECTION ID

= FUTURE ROADWAY / DIRT

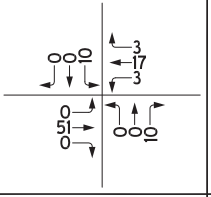
= PROJECT SITE

N

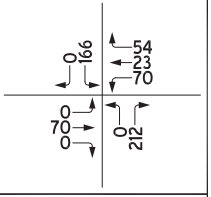
1 Sycamore Cyn. Bl. & Eastridge Av.



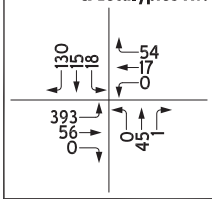
2 Box Springs Bl. & Eastridge Av.



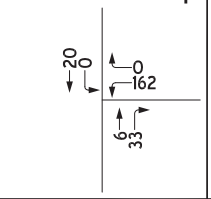
3 I-215 Ramps & Eucalyptus Av.



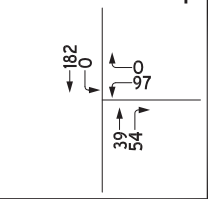
4 Valley Springs Pkwy. & Eucalyptus Av.



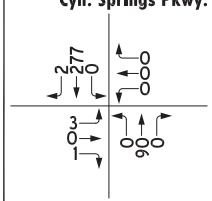
5 Day St. & SR-60 WB Ramps



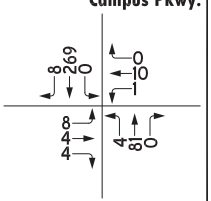
6 Day St. & SR-60 EB Ramps



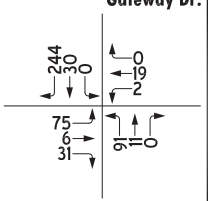
7 Day St. & Cyn. Springs Pkwy.



8 Day St. & Campus Pkwy.

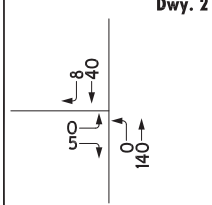


9 Day St. & Gateway Dr.

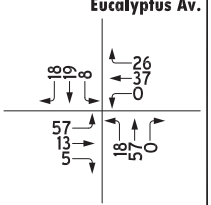


10 Day St. & Dwy. 1

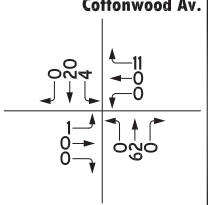
11 Day St. & Dwy. 2



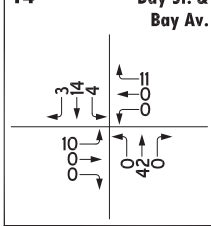
12 Day St. & Eucalyptus Av.



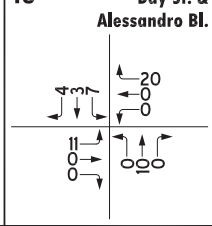
13 Day St. & Cottonwood Av.



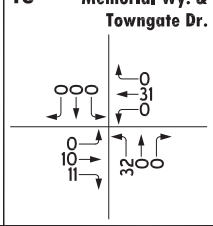
14 Day St. & Bay Av.



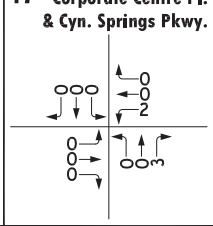
15 Day St. & Alessandro Bl.



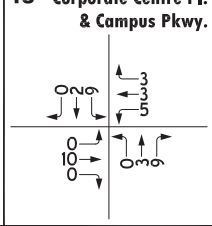
16 Memorial Wy. & Towngate Dr.



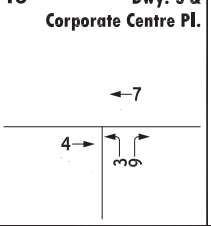
17 Corporate Centre Pl. & Cyn. Springs Pkwy.



18 Corporate Centre Pl. & Campus Pkwy.



19 Dwy. 3 & Corporate Centre Pl.



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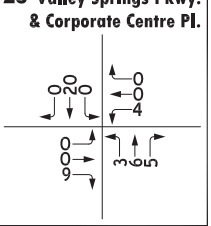

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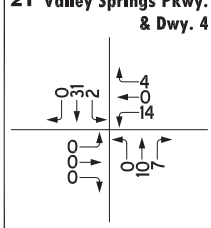

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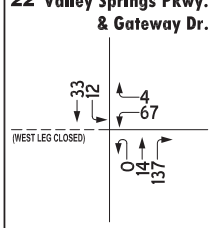
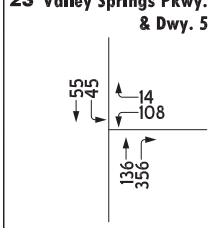
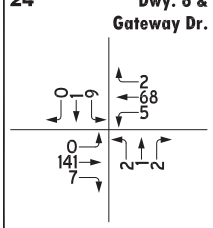


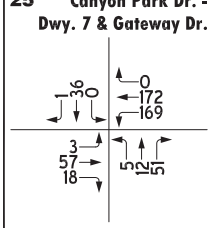
23 Valley Springs Pkwy. & Dwy. 5



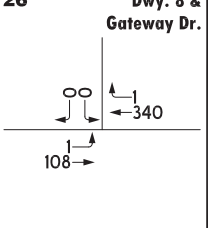
24 Dwy. 6 & Gateway Dr.



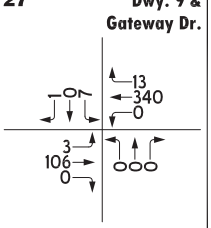
25 Canyon Park Dr. - Dwy. 7 & Gateway Dr.



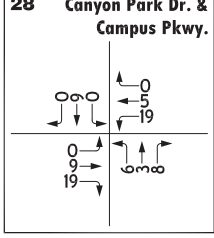
26 Dwy. 8 & Gateway Dr.



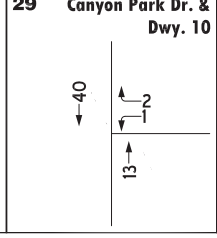
27 Dwy. 9 & Gateway Dr.



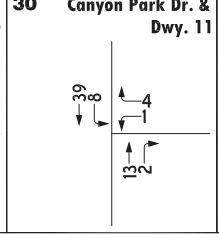
28 Canyon Park Dr. & Campus Pkwy.



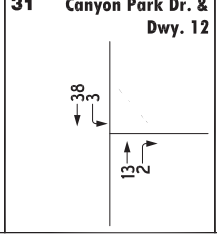
29 Canyon Park Dr. & Dwy. 10



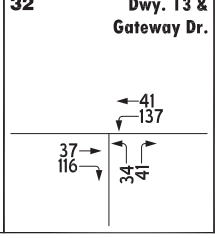
30 Canyon Park Dr. & Dwy. 11



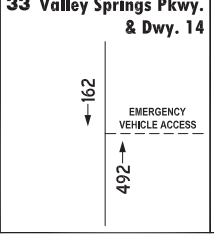
31 Canyon Park Dr. & Dwy. 12



32 Dwy. 13 & Gateway Dr.



33 Valley Springs Pkwy. & Dwy. 14



34 Dwy. 15 & Corporate Centre Pl.

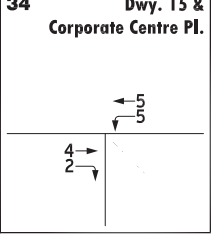
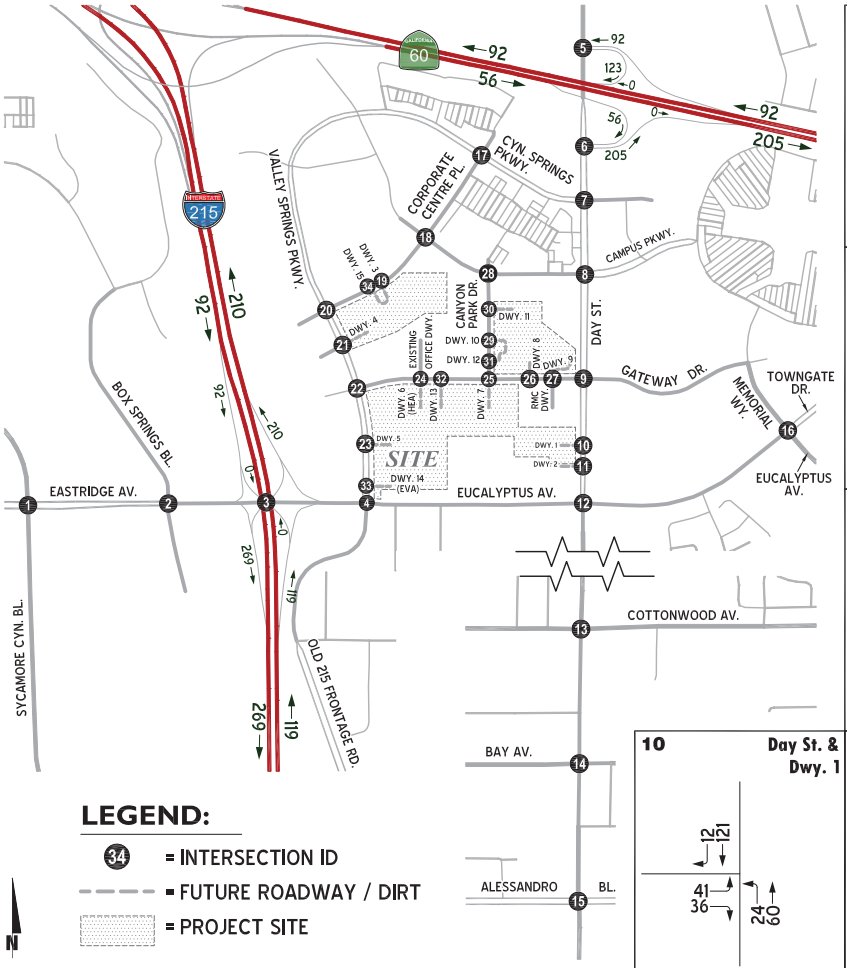
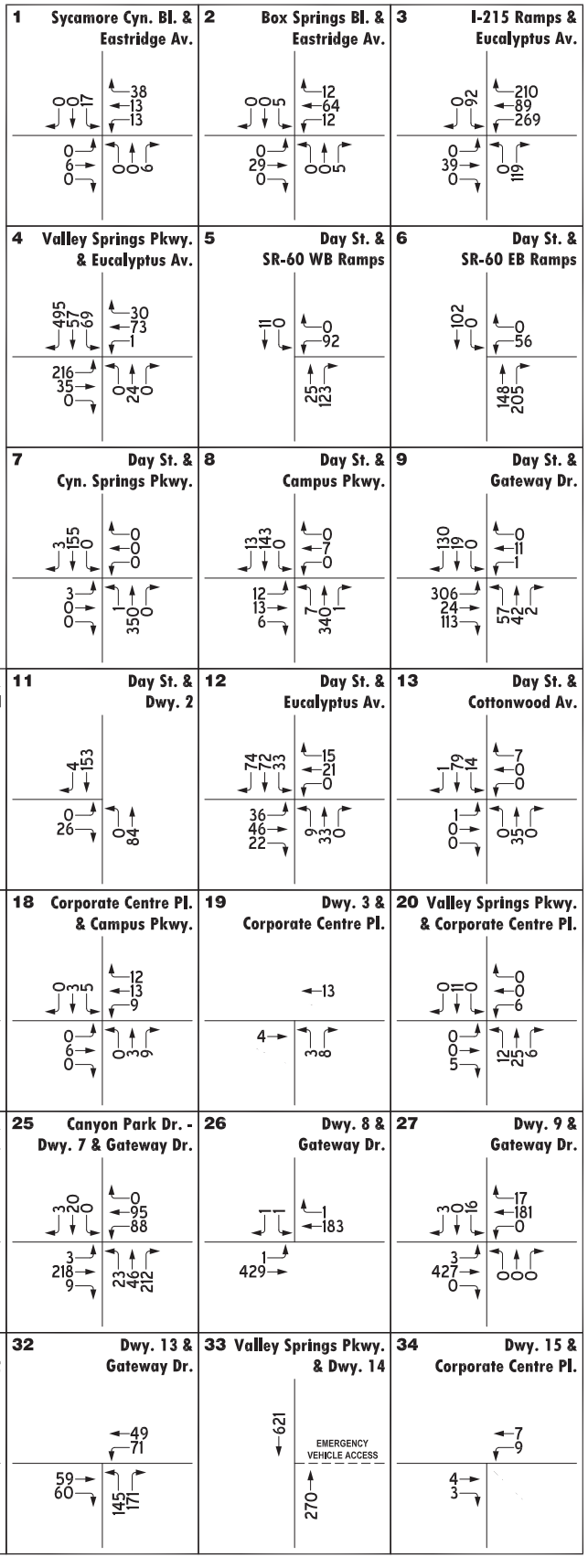


EXHIBIT 4-7: PROJECT ONLY PM PEAK HOUR INTERSECTION VOLUMES

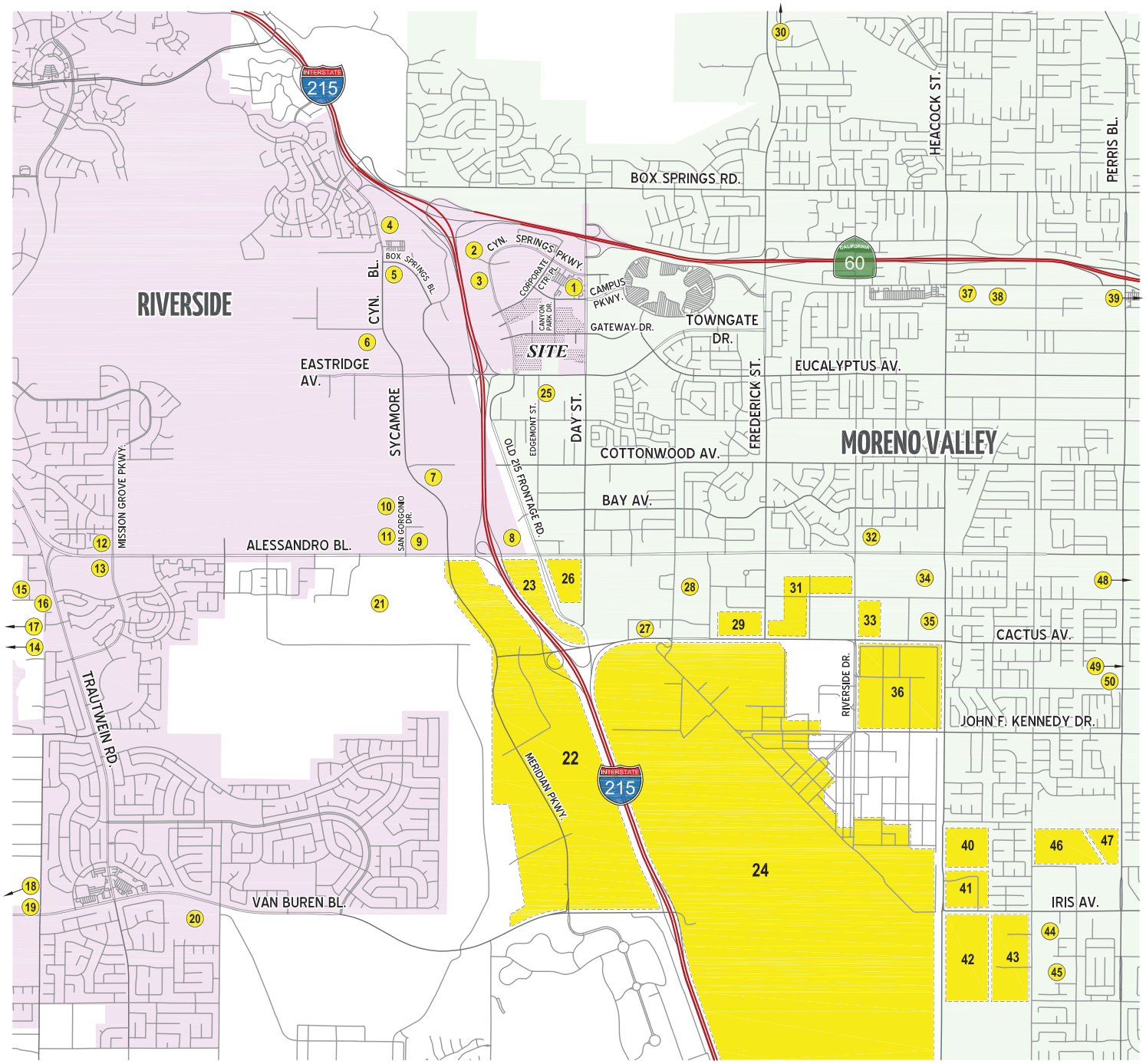




4.6 CUMULATIVE DEVELOPMENT TRAFFIC

City of Riverside traffic impact analysis guidelines require that other reasonably foreseeable development projects which are either approved or being processed concurrently in the study area also be included as part of a cumulative analysis scenario. A cumulative project list was developed for the purposes of this analysis through consultation with planning and engineering staff from the City of Riverside. Exhibit 4-8 illustrates the cumulative development location map. A summary of cumulative development projects and their proposed land uses are shown on Table 4-3. If applicable, the traffic generated by individual cumulative projects was manually added to the Opening Year forecasts to ensure that traffic generated by the listed cumulative development projects in Table 4-3 are reflected as part of the background traffic. Table 4-4 includes the trip generation for the cumulative development projects considered for the purposes of this analysis. Cumulative Development Projects Only ADT volumes are shown on Exhibit 4-9. Cumulative Development Projects Only weekday AM and PM peak hour volumes are shown on Exhibits 4-10 and 4-11, respectively.

EXHIBIT 4-8: CUMULATIVE DEVELOPMENT PROJECTS LOCATION MAP



LEGEND:

50 = CUMULATIVE DEVELOPMENT PROJECT ID (SEE TABLE 3)

N

08890 - 009.dwg

URBAN CROSSROADS

TABLE 4-3: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

ID	Project Name	Land Use[1]	Quantity	Units[2]
CITY OF RIVERSIDE				
1	6287 Day Street (P10-0090; P10-0091)	Gas Station	2	VFP
2	2570 Canyon Springs Parkway (P08-0274; P08-0275)	Bank w/ Drive Thru	2.746	TSF
3	6211 Valley Springs Parkway (Steak N' Shake Restaurant; P14-0536)	Fast Food w/ Drive Thru	3.750	TSF
4	5940-5980 Sycamore Canyon Boulevard (P13-0553; P13-0554; P13-0583; P14-0065)	Apartments	275	DU
5	SE corner of Sycamore Cyn. Bl. & Box Springs Rd. (P13-0607 P13-06008; P0609; P13-0854)	Light Industrial	171.616	TSF
6	6465 Sycamore Canyon Boulevard	Health Club	4.000	TSF
7	2325 Cottonwood Avenue (P12-0507; P12-0508; P12-0509; P12-0510)	High-Cube Warehouse	235.741	TSF
8	Alessandro Bl. (APN 263-091-008, 263-100-019, 263-100-005; P14-0841 to 0848)	Commercial and Industrial Complex	101.580	TSF
9	2100 Alessandro Boulevard	Vocational School	11.505	TSF
10	NW cor Alessandro Blvd & San Gorgonio Dr. (TM34707; Alessandro Business Park)	4 Industrial/ Manufacturing Bldgs	662.018	TSF
11	Alessandro and Gorgonio	Fast Food w/ Drive Thru	4.050	TSF
12	360 Alessandro Boulevard (P12-0419; P12-0557; P12-0558; P12-0559)	Bank w/ Drive Thru	3.858	TSF
13	381 Alessandro Bl. (P07-1181; P07-0593)	Auto Parts Store	1.500	TSF
14	14601 Dauchy Av. - TM36370 (P12-0601; P12-0697; P12-0698)	Residential	10	DU
15	TM32180 (P07-1073)	SFDR	9	DU
16	18875 Moss Road	SFDR	8	DU
17	South of Clarke St., west of Crystal View Terrace (PM34583; P09-0141; P09-173)	SFDR	3	DU
18	18580 Van Buren Boulevard (P08-0402; P13-0822)	Auto Repair Shop	8.142	TSF
19	N. of Van Buren Boulevard; W. of Wood Street (P10-0808; P10-0708)	Fast Food w/Drive Thru	2.361	TSF
20	19985 Van Buren Boulevard (P10-0118; Gless Ranch)	Commercial Retail	425.447	TSF
COUNTY OF RIVERSIDE				
21	PP 22925 (Amstar/Kaliber Development)	Office (258.102 TSF)	258.102	TSF
		Warehousing	409.312	TSF
		General Light Industrial	42.222	TSF
		Retail	10.000	TSF
22	Meridian Business Park North	Industrial Park	5,985.000	TSF
23	Freeway Business Center Southwest corner of Old 215 Frontage Rd. and Alessandro Bl.	High-Cube Warehouse	709.083	TSF
24	Airport Master Plan	Airport Use	559.000	TSF
CITY OF MORENO VALLEY				
25	Edgemont Street, South of Eucalyptus Av.	Apartments	112	DU
26	Moreno Valley/March Field Metrolink Station[3,4]	Commuter Rail Station	1	Station
27	PA 08-0047-0052 (Komar Cactus Plaza)[5]	Hotel	110	RMS
		Fast Food w/Drive Thru	8.000	TSF
		Commercial	42.400	TSF
28	373K Industrial Facility	High-Cube Warehouse	373.030	TSF
29	PA 08-0072 (Overton Moore Properties)	High-Cube Warehouse	520.000	TSF

TABLE 4-3: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

ID	Project Name	Land Use[1]	Quantity	Units[2]
CITY OF MORENO VALLEY (Continued)				
30	TR 32515	Residential	161	DU
31	Harbor Freight Expansion	High-Cube Warehouse	1,279.910	TSF
32	PA 09-0031	Gas Station	12	VFP
33	Centerpointe Business Park	General Light Industrial	356.000	TSF
34	PA 04-0063 (Centerpointe Buildings 8 and 9)	General Light Industrial	361.384	TSF
35	PA 08-0093 (Centerpointe Business Park II)	General Light Industrial	99.988	TSF
36	March Lifecare Campus Specific Plan[6]	Medical Offices	190.000	TSF
		Commercial Retail	210.000	TSF
		Research & Education	200.000	TSF
		Hospital	50	Beds
		Institutional Residential	660	Beds
37	TR 33771 / Creative Design Associates	Residential	12	DU
38	TR 35663 / Kha	Residential	12	DU
39	TR 31814 / Moreno Valley Investors	Residential	60	DU
40	TM 34748	SFDR	135	DU
41	PA 07-0035; PA 07-0039 (Moreno Valley Industrial Park)	General Light Industrial	204.657	TSF
		High-Cube Warehouse	409.920	TSF
42	March Business Center	General Light Industrial	16.732	TSF
		Warehousing	87.429	TSF
		High-Cube Warehouse	1,380.246	TSF
43	PA 07-0079 (Indian Business Park)	High-Cube Warehouse	1,560.046	TSF
44	TM 33810	SFDR	16	DU
45	TM 34151	SFDR	37	DU
46	Legacy Park / TR36760	Residential	186	DU
47	Moreno Valley Walmart	Free Standing Discount Store	189.520	TSF
		Gas Station/Market/Car Wash	16	VFP
48	TM 34988	Condo/Townhomes	251	DU
49	TM 33417	Condo/Townhomes	10	DU
50	TM 33607	Condo/Townhomes	54	DU

[1] SFDR = Single Family Detached Residential

[2] DU = Dwelling Units; TSF = Thousand Square Feet; VFP = Vehicle Fueling Positions

[3] Source: Steak N' Shake Restaurant Approved Traffic Impact Study Scope, Kunzman Associates, Inc., August 4, 2014.

[4] Source: Perris Valley Line DEIR, Kleinfelder/STV, July 2011.

[5] Source: Cactus Avenue and Commerce Center Drive Commercial Center TIA, Urban Crossroads, Inc., December 9, 2008 (Revised).

[6] Source: March Lifecare Campus Specific Plan Traffic Impact Analysis, Mountain Pacific, Inc., May 2009 (Revised).

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TABLE 4-4: CUMULATIVE DEVELOPMENT TRIP GENERATION SUMMARY

#	Project/Location	Land Use[1]	Quantity[2]	AM Peak Hour			PM Peak Hour			Daily
				In	Out	Total	In	Out	Total	
City of Riverside Cumulative Projects										
1	6287 Day Street (P10-0090; P10-0091)	Gasoline/Service Station	2 VFP	12	12	24	14	14	28	337
2	2570 Canyon Springs Parkway (P08-0274; P08-0275)	Drive-in Bank	2.746 TSF	19	14	33	33	33	66	407
3	6211 Valley Springs Parkway[3] (Steak N' Shake Restaurant; P14-0536)	Fast Food w/ Drive Thru	3.750 DU	87	83	170	64	59	123	1,860
	- Internal Capture (10%)			(9)	(8)	(17)	(6)	(6)	(12)	(186)
	- Pass-by Trips (25%)			(22)	(21)	(43)	(16)	(15)	(31)	(465)
	Subtotal[3]			56	54	110	42	38	80	1,209
4	5940-5980 Sycamore Canyon Boulevard (P13-0553; P13-0554; P13-0583; P14-0065)	Apartment	275 DU	28	113	141	110	61	171	1,829
5	SE corner of Sycamore Cyn. Bl. & Box Springs Rd. (P13-0607 P13-06008; P0609; P13-0854)	Gen. Lt. Industrial	171.616 TSF	139	19	158	21	146	167	1,196
6	6465 Sycamore Canyon Boulevard	Health/Fitness Club	4 TSF	3	3	6	8	6	14	132
7	2325 Cottonwood Avenue (P12-0507; P12-0508; P12-0509; P12-0510)	High-Cube Warehouse	235.741 TSF							
	- Warehouse Vehicle Mix (ITE LU 152)[4]									
	Passenger Cars:			13	6	19	6	13	19	245
	2-Axle Trucks (PCE = 1.5)			*2*	*1*	*3*	*1*	*2*	*3*	*50*
	3-Axle Trucks (PCE = 2)			*2*	*1*	*3*	*1*	*2*	*3*	*53*
	4-Axle Trucks (PCE = 3)			*9*	*4*	*13*	*5*	*12*	*17*	*273*
	Net Truck Trips PCE's			13	6	19	7	16	23	376
	Subtotal			26	12	38	13	29	42	621
8	Alessandro Bl. (APN 263-091-008, 263-100-019, 263-100-005; P14-0841 to 0848)	Commercial	101.580 TSF	98	60	158	291	315	606	6,861
9	2100 Alessandro Boulevard	Junior/Community College	11.505 TSF	25	9	34	17	12	29	316
10	NW cor Alessandro Blvd & San Gorgonio Dr. (TM34707; Alessandro Business Park)	Manufacturing	662.018 TSF	377	106	483	172	311	483	2,529
11	Alessandro and Gorgonio	Fast Food w/ Drive Thru	4.050 TSF	94	90	184	69	63	132	2,009
12	360 Alessandro Boulevard (P12-0419; P12-0557; P12-0558; P12-0559)	Drive-in Bank	3.858 TSF	27	20	47	47	47	94	572
13	381 Alessandro Bl. (P07-1181; P07-0593)	Automobile Parts Sales	1.5 TSF	2	2	4	4	5	9	93
14	14601 Dauchy Av. TM36370 (P12-0601; P12-0697; P12-0698)	SFDR	10 DU	2	6	8	6	4	10	95
15	TM32180 (P07-1073)	SFDR	9 DU	2	5	7	6	3	9	86
16	18875 Moss Road	SFDR	8 DU	2	4	6	5	3	8	76
17	South of Clarke St., west of Crystal View Terrace (PM34583; P09-0141; P09-173)	SFDR	3 DU	1	2	3	2	1	3	29
18	18580 Van Buren Boulevard (P08-0402; P13-0822)	Automobile Care Center	8.142 TSF	12	6	18	12	13	25	n/a
19	N. of Van Buren Boulevard; W. of Wood Street P10-0808; P10-0708)	Fast Food w/ Drive Thru	2.361 TSF	55	53	108	40	37	77	1,171
20	19985 Van Buren Boulevard (P10-0118; Gless Ranch)	Commercial	425.447 TSF	234	145	379	757	821	1,578	17,405
City of Riverside Subtotal				1,214	735	1,949	1,669	1,962	3,631	36,973

TABLE 4-4: CUMULATIVE DEVELOPMENT TRIP GENERATION SUMMARY

#	Project/Location	Land Use[1]	Quantity[2]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
County of Riverside Cumulative Projects										
21	PP 22925	General Office Building	258.102 TSF	359	49	408	62	305	367	2,700
	(Amstar/Kaliber Development)	Gen. Lt. Industrial	42.222 TSF	34	5	39	5	36	41	294
		Commercial	10 TSF	24	15	39	62	67	129	1,520
	- Warehouse Vehicle Mix (ITE LU 150)[5]	Warehousing	409.312 TSF							
	Passenger Cars:			77	20	97	26	78	104	1,160
	2-Axle Trucks (PCE = 1.5)			*5*	*1*	*6*	*2*	*5*	*7*	*76*
	3-Axle Trucks (PCE = 2)			*9*	*2*	*11*	*3*	*9*	*12*	*135*
	4-Axle Trucks (PCE = 3)			*36*	*9*	*45*	*12*	*36*	*48*	*539*
	Passenger Car Total			494	89	583	155	486	641	5,674
	Truck Total (PCE)			50	12	62	17	50	67	750
	Subtotal			544	101	645	172	536	708	6,424
22	Meridian Business Park North	Industrial Park	5,985.0 TSF	4,010	898	4,908	1,077	4,010	5,087	40,878
23	Freeway Business Center									
	Southwest corner of Old 215 Frontage Rd. / Alessandro Bl.									
	- Warehouse Vehicle Mix (ITE LU 152)[4]	High-Cube Warehouse	709.083 TSF							
	Passenger Cars:			39	18	57	18	39	57	737
	2-Axle Trucks (PCE = 1.5)			*5*	*2*	*7*	*3*	*6*	*9*	*150*
	3-Axle Trucks (PCE = 2)			*5*	*2*	*7*	*3*	*7*	*10*	*160*
	4-Axle Trucks (PCE = 3)			*27*	*12*	*39*	*16*	*35*	*51*	*821*
	Net Truck Trips PCE's			37	16	53	22	48	70	1,131
	Subtotal			76	34	110	40	87	127	1,868
24	Airport Master Plan[6]	Gen. Lt. Industrial	559.000 TSF							
	Passenger Cars:			364	49	413	54	382	436	3,129
	Net Truck Trips PCE's			212	29	241	31	223	254	1,824
	Subtotal			576	78	654	85	605	690	4,953
County of Riverside Subtotal				5,206	1,111	6,317	1,374	5,238	6,612	54,123
City of Moreno Valley Cumulative Projects										
25	Edgemont Street, South of Eucalyptus Av.	Apartment	112 DU	11	46	57	45	25	70	745
26	Moreno Valley/March Field Metrolink Station[3,4]	Commuter Rail Station	1 Station	170	42	212	33	62	95	1,140
27	PA 08-0047-0052 (Komar Cactus Plaza)[5]	Hotel	110 RM	45	31	76	47	41	88	1,577
		Fast Food w/ Drive Thru	8.000 TSF	185	178	363	136	125	261	3,969
		Commercial	42.400 TSF	57	35	92	162	176	338	3,888
	- Internal Capture (15%)			(43)	(37)	(80)	(52)	(51)	(103)	(1,415)
	- Pass-by Trips (Commercial Only 25%)			(12)	(11)	(23)	(43)	(42)	(85)	(972)
	Subtotal			232	196	428	250	249	499	7,047
28	373K Industrial Facility									
	- Warehouse Vehicle Mix (ITE LU 152)[8]	High-Cube Warehouse	373.030 TSF							
	Passenger Cars:			21	9	30	9	21	30	388
	2-Axle Trucks (PCE = 1.5)			*3*	*1*	*4*	*1*	*3*	*4*	*79*
	3-Axle Trucks (PCE = 2)			*3*	*1*	*4*	*1*	*4*	*5*	*84*
	4-Axle Trucks (PCE = 3)			*14*	*6*	*20*	*8*	*19*	*27*	*432*
	Net Truck Trips PCE's			20	8	28	10	26	36	595
	Subtotal			41	17	58	19	47	66	983
29	PA 08-0072 (Overton Moore Properties)									
	- Warehouse Vehicle Mix (ITE LU 152)[4]	High-Cube Warehouse	520.000 TSF							
	Passenger Cars:			29	13	42	13	29	42	541
	2-Axle Trucks (PCE = 1.5)			*4*	*2*	*6*	*2*	*5*	*7*	*110*
	3-Axle Trucks (PCE = 2)			*4*	*2*	*6*	*2*	*5*	*7*	*118*
	4-Axle Trucks (PCE = 3)			*20*	*9*	*29*	*11*	*26*	*37*	*602*
	Net Truck Trips PCE's			28	13	41	15	36	51	830
	Subtotal			57	26	83	28	65	93	1,371
30	TR 32515	SFDR	161 DU	31	90	121	101	60	161	1,533

TABLE 4-4: CUMULATIVE DEVELOPMENT TRIP GENERATION SUMMARY

#	Project/Location	Land Use[1]	Quantity[2]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
City of Moreno Valley Cumulative Projects (Continued)										
31	Harbor Freight Expansion									
	- Warehouse Vehicle Mix (ITE LU 152)[4]	High-Cube Warehouse	1,279.910 TSF							
	Passenger Cars:			70	32	102	32	70	102	1,331
	2-Axle Trucks (PCE = 1.5)			*9*	*4*	*13*	*5*	*12*	*17*	*270*
	3-Axle Trucks (PCE = 2)			*9*	*4*	*13*	*5*	*13*	*18*	*289*
	4-Axle Trucks (PCE = 3)			*49*	*22*	*71*	*28*	*64*	*92*	*1,482*
	Net Truck Trips PCE's			67	30	97	38	89	127	2,041
	Subtotal			137	62	199	70	159	229	3,372
32	PA 09-0031	Gasoline/Service Station	12 VFP	74	72	146	83	83	166	2,023
33	Centerpointe Business Park	Gen. Lt. Industrial	356 TSF	288	39	327	43	303	346	2,481
34	PA 04-0063 (Centerpointe Buildings 8 and 9)	Gen. Lt. Industrial	361.384 TSF	293	40	333	43	307	350	2,519
35	PA 08-0093 (Centerpointe Business Park II)	Gen. Lt. Industrial	99.988 TSF	81	11	92	12	85	97	697
36	March Lifecare Campus Specific Plan[6]	Medical-Dental Office	190 TSF	359	95	454	190	488	678	6,865
		Commercial	210 TSF	151	92	243	473	512	985	11,000
		R & D	200 TSF	202	42	244	32	182	214	1,622
		Hospital	50 Beds	48	19	67	24	48	72	647
		Assisted Living	660 Beds	79	40	119	99	92	191	1,808
	- Internal Capture (15%)			(126)	(43)	(169)	(123)	(198)	(321)	(3,291)
	- Pass-by Trips (Commercial Only 25%)			(31)	(30)	(61)	(123)	(123)	(246)	(2,750)
	Subtotal			682	215	897	572	1,001	1,573	15,901
37	TR 33771 / Creative Design Associates	SFDR	12 DU	2	7	9	8	4	12	114
38	TR 35663 / Kha	SFDR	12 DU	2	7	9	8	4	12	114
39	TR 31814 / Moreno Valley Investors	SFDR	60 DU	11	34	45	38	22	60	571
40	TM 34748	SFDR	135 DU	26	76	102	85	50	135	1,285
41	Moreno Valley Industrial Park (PA 07-0035; PA 07-0039)	Gen. Lt. Industrial	204.66 TSF	166	23	189	25	174	199	1,426
	- Warehouse Vehicle Mix (ITE LU 152)[4]	High-Cube Warehouse	409.92 TSF							
	Passenger Cars:			23	10	33	10	23	33	426
	2-Axle Trucks (PCE = 1.5)			*3*	*1*	*4*	*2*	*4*	*6*	*86*
	3-Axle Trucks (PCE = 2)			*3*	*1*	*4*	*2*	*4*	*6*	*93*
	4-Axle Trucks (PCE = 3)			*16*	*7*	*23*	*9*	*20*	*29*	*475*
	Passenger Car Total			189	33	222	35	197	232	1,852
	Truck Total (PCE)			22	9	31	13	28	41	654
	Subtotal			211	42	253	48	225	273	2,506
42	March Business Center	Gen. Lt. Industrial	16.732 TSF	14	2	16	2	14	16	117
	- Warehouse Vehicle Mix (ITE LU 150)[5]	Warehousing	87.429 TSF							
	Passenger Cars:			17	4	21	6	17	23	248
	2-Axle Trucks (PCE = 1.5)			*1*	*0*	*1*	*0*	*1*	*1*	*16*
	3-Axle Trucks (PCE = 2)			*2*	*1*	*3*	*1*	*2*	*3*	*29*
	4-Axle Trucks (PCE = 3)			*8*	*2*	*10*	*3*	*8*	*11*	*115*
	- Warehouse Vehicle Mix (ITE LU 152)[4]	High-Cube Warehouse	1,380.246 TSF							
	Passenger Cars:			80	30	110	37	73	110	1,435
	2-Axle Trucks (PCE = 1.5)			*10*	*4*	*14*	*6*	*12*	*18*	*291*
	3-Axle Trucks (PCE = 2)			*11*	*4*	*15*	*7*	*12*	*19*	*312*
	4-Axle Trucks (PCE = 3)			*55*	*21*	*76*	*33*	*66*	*99*	*1,598*
	Passenger Car Total			111	36	147	45	104	149	1,800
	Truck Total (PCE)			87	32	119	50	101	151	2,361
	Subtotal			198	68	266	95	205	300	4,161
43	PA 07-0079 (Indian Business Park)									
	- Warehouse Vehicle Mix (ITE LU 152)[4]	High-Cube Warehouse	1,560.046 TSF							
	Passenger Cars:			86	39	125	39	86	125	1,622
	2-Axle Trucks (PCE = 1.5)			*11*	*5*	*16*	*6*	*14*	*20*	*329*
	3-Axle Trucks (PCE = 2)			*11*	*5*	*16*	*6*	*16*	*22*	*353*
	4-Axle Trucks (PCE = 3)			*59*	*27*	*86*	*34*	*78*	*112*	*1,807*
	Net Truck Trips PCE's			81	37	118	46	108	154	2,489
	Subtotal			167	76	243	85	194	279	4,111

TABLE 4-4: CUMULATIVE DEVELOPMENT TRIP GENERATION SUMMARY

#	Project/Location	Land Use[1]	Quantity[2]	AM Peak Hour			PM Peak Hour			Daily
				In	Out	Total	In	Out	Total	
City of Moreno Valley Cumulative Projects (Continued)										
44	TM 33810	SFDR	16 DU	3	9	12	10	6	16	152
45	TM 34151	SFDR	37 DU	7	21	28	23	14	37	352
46	Legacy Park / TR36760	SFDR	186 DU	35	104	139	117	69	186	1,771
47	Moreno Valley Walmart[9]	Free-Standing Discount Superstore	189.520 TSF	197	154	351	404	421	825	9,618
		Gas/Service Station w/Food Mart and Car Wash	16 VFP	97	93	190	113	109	222	2,445
	- Internal Capture (10%)[9]			(30)	(24)	(54)	(51)	(53)	(104)	(1,207)
	- Pass-by (62% AM; 56% PM/Daily)[9]			(52)	(52)	(104)	(55)	(55)	(110)	(1,232)
	Subtotal			212	171	383	411	422	833	9,624
48	TM 34988	Condo/Townhouse	251 DU	18	93	111	88	43	131	1,458
49	TM 33417	Condo/Townhouse	10 DU	1	4	5	4	2	6	58
50	TM 33607	Condo/Townhouse	54 DU	4	20	24	19	9	28	314
City of Moreno Valley Total				2,994	1,588	4,582	2,338	3,715	6,053	66,403
Cumulative Development Grand Total				**9,414**	**3,434**	**12,848**	**5,381**	**10,915**	**16,296**	**157,499**

[1] SFDR = Single Family Detached Residential; R & D = Research and Development

[2] DU = Dwelling Units; TSF = Thousand Square Feet; VFP = Vehicle Fueling Positions; RM = Rooms

[3] Source: Steak N' Shake Restaurant Approved Traffic Impact Study Scope, Kunzman Associates, Inc., August 4, 2014.

[4] Vehicle Mix (ITE LU 152) Source: Total truck percentage source from ITE Trip Generation manual. Truck mix (by axle type) source from SCAQMD. PCE rates are per SANBAG.

[5] Vehicle Mix (ITE LU 150) Source: City of Fontana Truck Trip Generation Study for LU 150 (Heavy Warehouse), August 2003. PCE rates are per SANBAG.

[6] Source: Perris Valley Line DEIR, Kleinfelder/STV, July 2011.

[7] Source: Cactus Avenue and Commerce Center Drive Commercial Center TIA, Urban Crossroads, Inc., December 9, 2008 (Revised).

[8] Source: March Lifecare Campus Specific Plan Traffic Impact Analysis, Mountain Pacific, Inc., May 2009 (Revised).

[9] Source: Moreno Valley Walmart Traffic Impact Analysis, Urban Crossroads, Inc., February 2014 (Revised).

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EXHIBIT 4-9: CUMULATIVE DEVELOPMENT PROJECTS ONLY
AVERAGE DAILY TRAFFIC VOLUMES

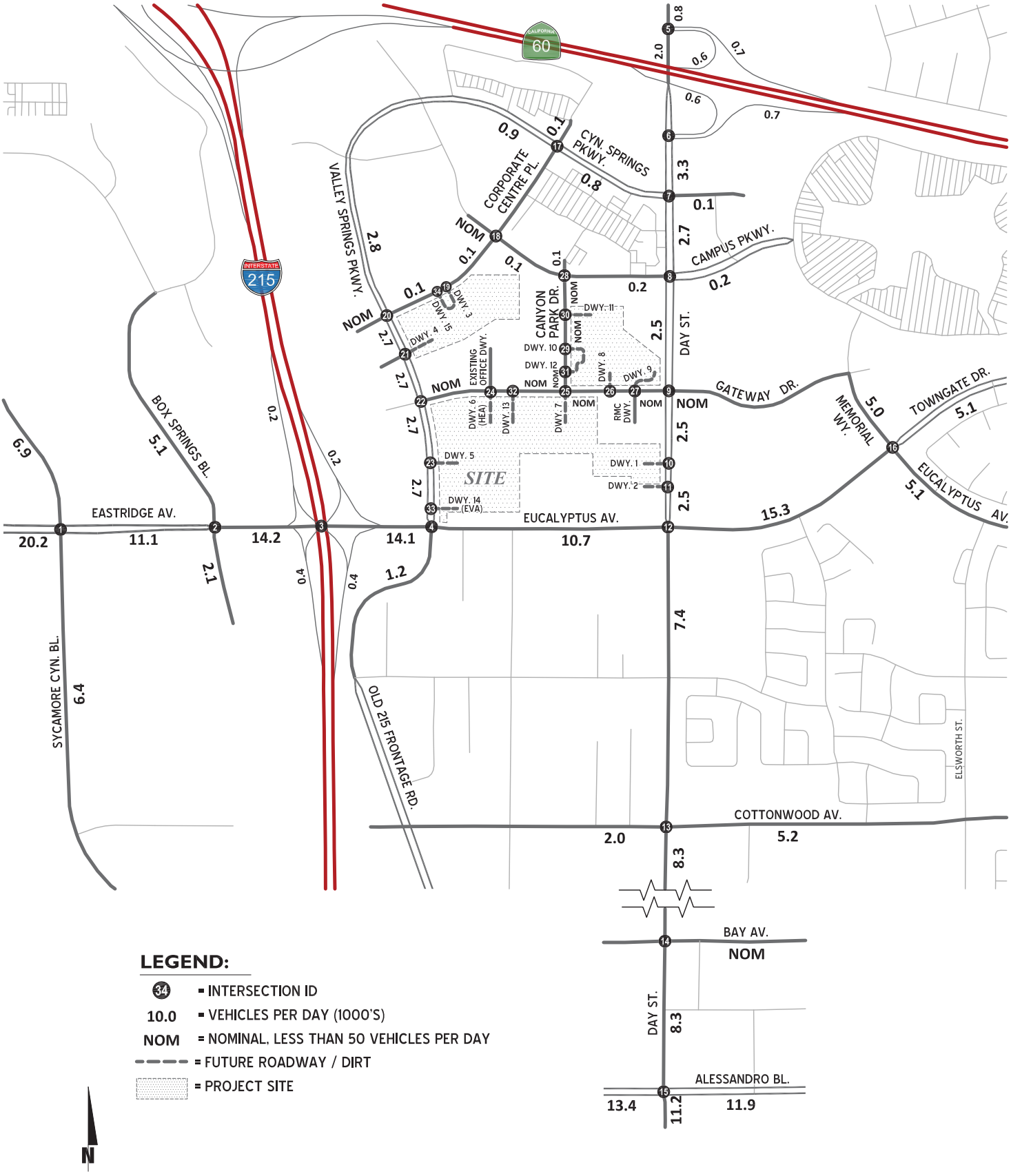


EXHIBIT 4-10: CUMULATIVE DEVELOPMENT PROJECTS ONLY
AM PEAK HOUR INTERSECTION VOLUMES

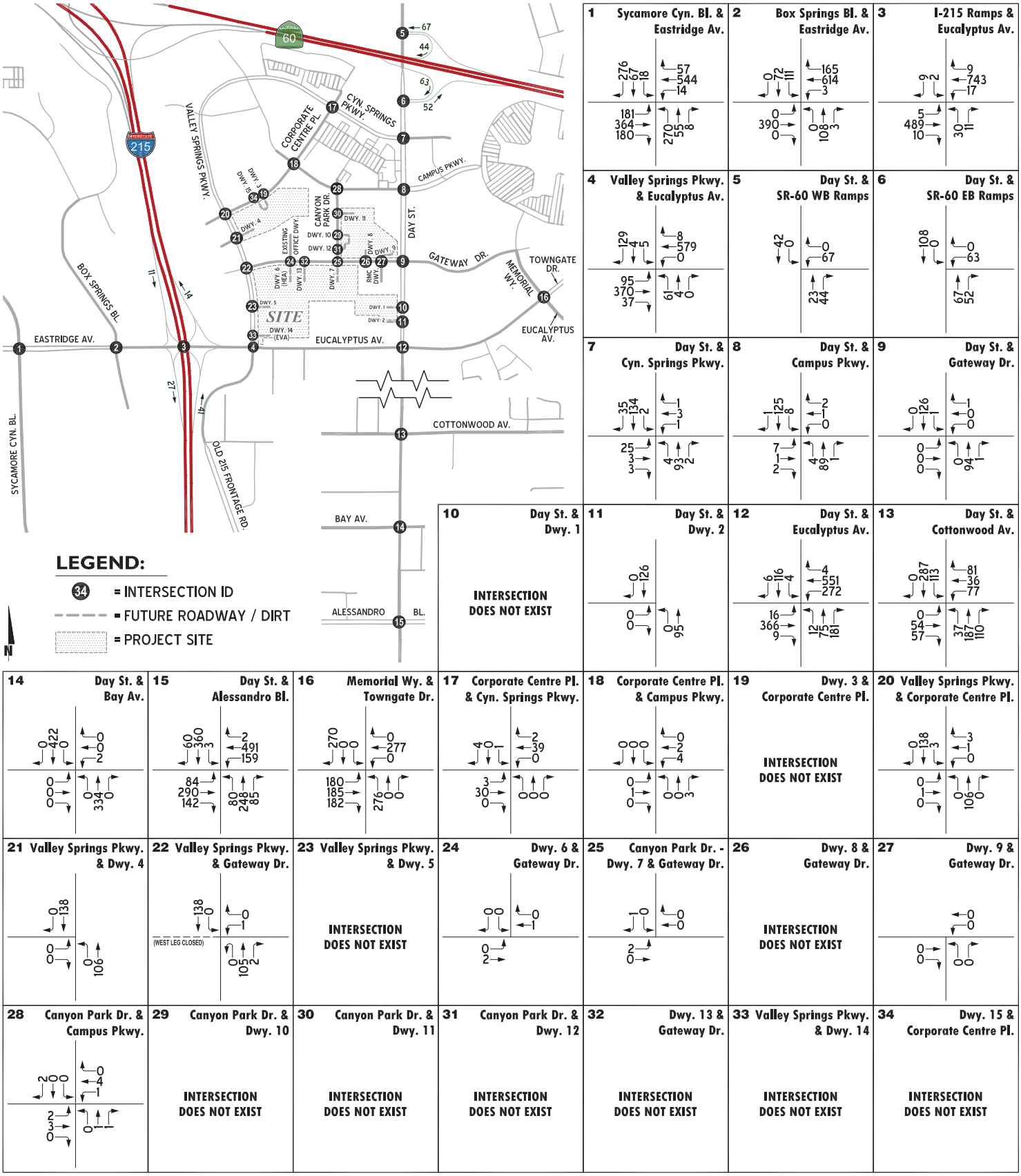
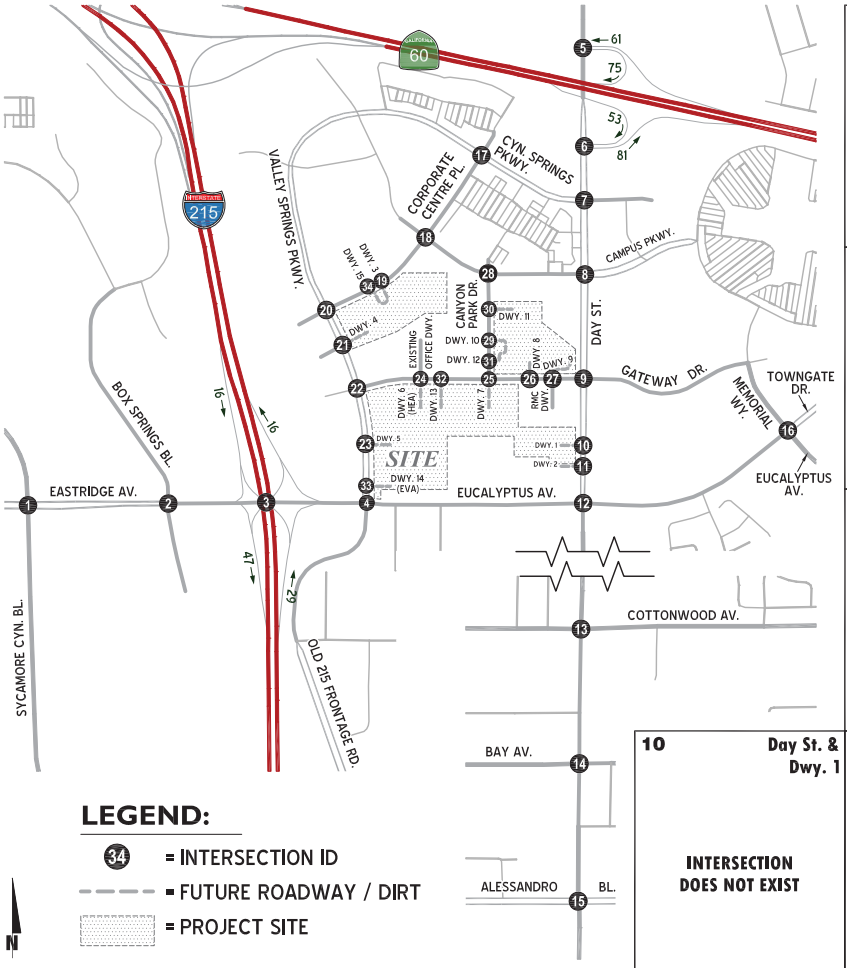
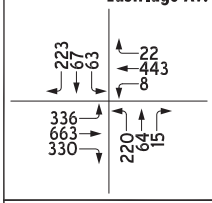


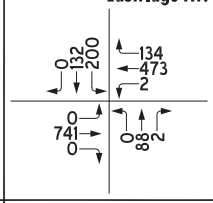
EXHIBIT 4-11: CUMULATIVE DEVELOPMENT PROJECTS ONLY
PM PEAK HOUR INTERSECTION VOLUMES



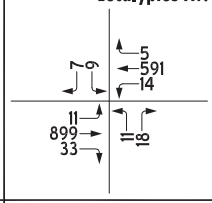
1 Sycamore Cyn. Bl. & Eastridge Av.



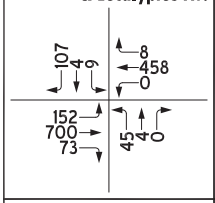
2 Box Springs Bl. & Eastridge Av.



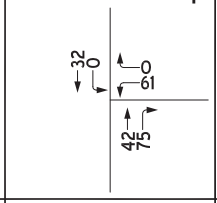
3 I-215 Ramps & Eucalyptus Av.



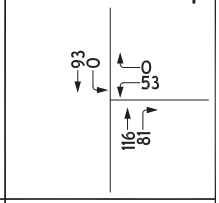
4 Valley Springs Pkwy. & Eucalyptus Av.



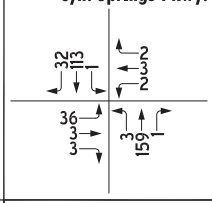
5 Day St. & SR-60 WB Ramps



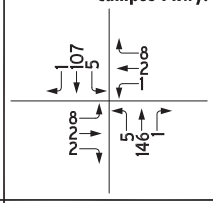
6 Day St. & SR-60 EB Ramps



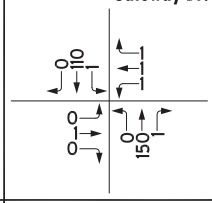
7 Day St. & Cyn. Springs Pkwy.



8 Day St. & Campus Pkwy.



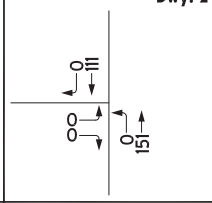
9 Day St. & Gateway Dr.



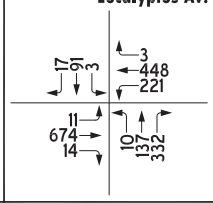
10 Day St. & Dwy. 1

INTERSECTION DOES NOT EXIST

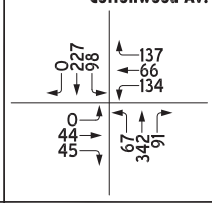
11 Day St. & Dwy. 2



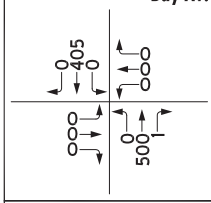
12 Day St. & Eucalyptus Av.



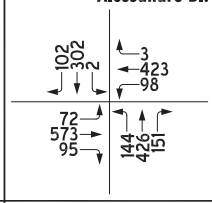
13 Day St. & Cottonwood Av.



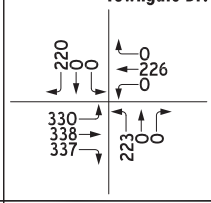
14 Day St. & Bay Av.



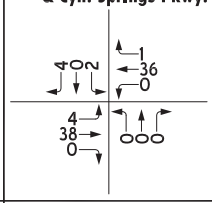
15 Day St. & Alessandro Bl.



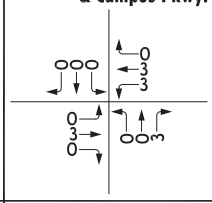
16 Memorial Wy. & Towngate Dr.



17 Corporate Centre Pl. & Cyn. Springs Pkwy.



18 Corporate Centre Pl. & Campus Pkwy.



19 Dwy. 3 & Corporate Centre Pl.

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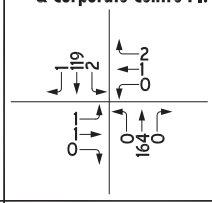
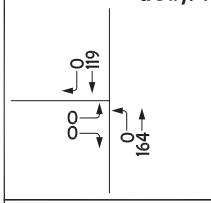
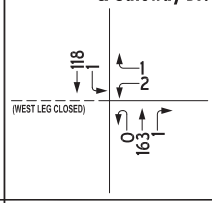
20 Valley Springs Pkwy. & Corporate Centre Pl.



21 Valley Springs Pkwy. & Dwy. 4



22 Valley Springs Pkwy. & Gateway Dr.



23 Valley Springs Pkwy. & Dwy. 5

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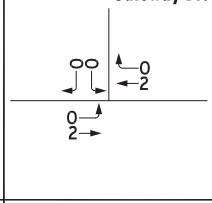
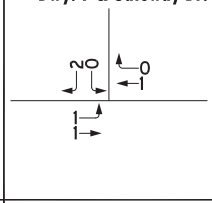
24 Dwy. 6 & Gateway Dr.



25 Canyon Park Dr. - Dwy. 7 & Gateway Dr.



26 Dwy. 8 & Gateway Dr.

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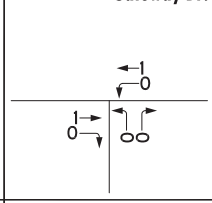
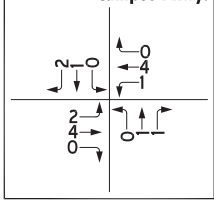
27 Dwy. 9 & Gateway Dr.



28 Canyon Park Dr. & Campus Pkwy.



29 Canyon Park Dr. & Dwy. 10

INTERSECTION DOES NOT EXIST

30 Canyon Park Dr. & Dwy. 11

INTERSECTION DOES NOT EXIST

31 Canyon Park Dr. & Dwy. 12

INTERSECTION DOES NOT EXIST

32 Dwy. 13 & Gateway Dr.

INTERSECTION DOES NOT EXIST

33 Valley Springs Pkwy. & Dwy. 14

INTERSECTION DOES NOT EXIST

34 Dwy. 15 & Corporate Centre Pl.

INTERSECTION DOES NOT EXIST

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5 EXISTING PLUS PROJECT TRAFFIC CONDITIONS

Pursuant to City of Riverside traffic impact analysis guidelines, an analysis of existing traffic volumes plus traffic generated by the proposed Project (E+P) has been included in this analysis. (1) This section discusses the traffic forecasts for E+P conditions and the resulting intersection operations, freeway mainline operations and traffic signal warrants. Project impacts to baseline traffic conditions (i.e., existing conditions) have been identified along with mitigation measures necessary to reduce project-related impacts to less-than-significant.

5.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for E+P conditions are consistent with those shown previously on Exhibit 3-1, with the exception of Project driveway and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for E+P conditions. In other words, no other off-site improvements are assumed beyond those that currently exist with the exception of the intersections and roadways that would be improved by the Project for access.

5.2 EXISTING PLUS PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus Project traffic. Exhibit 5-1 shows the ADT volumes which can be expected for E+P traffic conditions. E+P weekday AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-2 and 5-3, respectively.

5.3 INTERSECTION OPERATIONS ANALYSIS

E+P peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TIA. The intersection analysis results are summarized in Table 5-1. Based on a comparison of E+P to Existing (2014) traffic conditions, the Project is anticipated to cause the intersection of Valley Springs Parkway / Eucalyptus Avenue (#4) to change from acceptable LOS (i.e., LOS "D") to unacceptable (i.e., LOS "E" or "F") during the peak hours. As such, the Project's potential to directly impact the intersection of Valley Springs Parkway / Eucalyptus Avenue (#4) is considered significant.

The following improvement is anticipated to reduce the peak hour delay, and thereby improve the location's LOS to LOS "D" or better for Existing plus Project traffic conditions:

Valley Springs Parkway / Eucalyptus Avenue (#4) – The following improvement is necessary to reduce the project's impact to less-than-significant:

- SB Approach: Provide overlap phasing for the existing dual right turn lanes.

The intersection operations analysis worksheets for E+P traffic conditions are included in Appendix "5.1" of this TIA.

EXHIBIT 5-1: EXISTING PLUS PROJECT AVERAGE DAILY TRAFFIC VOLUMES

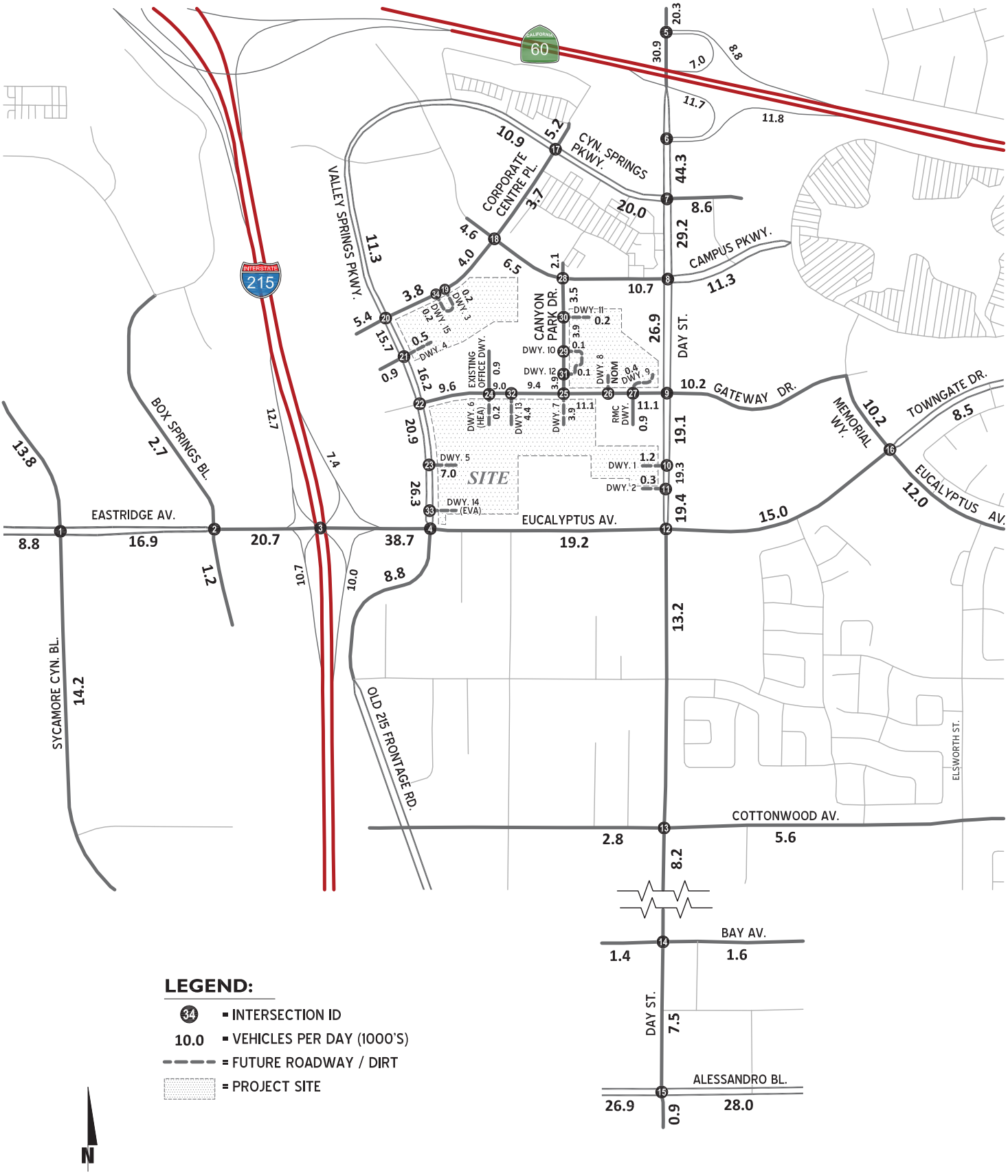
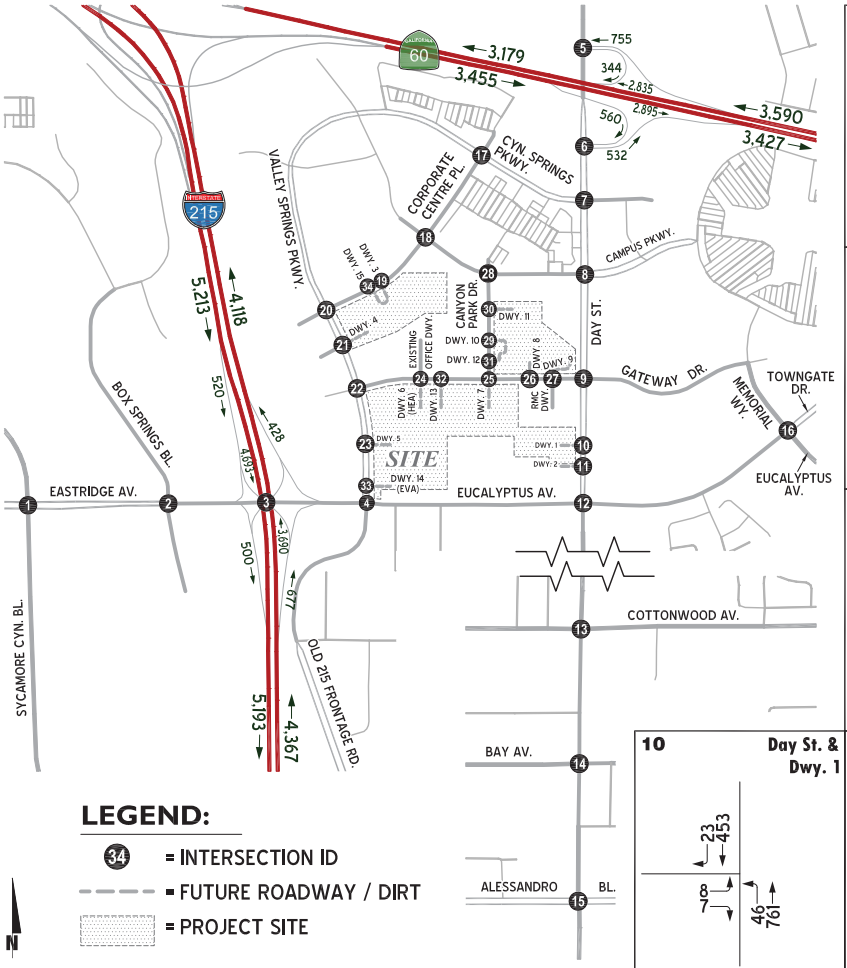


EXHIBIT 5-2: EXISTING PLUS PROJECT AM PEAK HOUR INTERSECTION VOLUMES

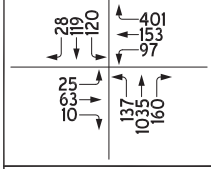


LEGEND:

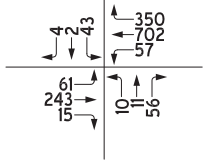
- (34) = INTERSECTION ID
- = FUTURE ROADWAY / DIRT
- = PROJECT SITE

N

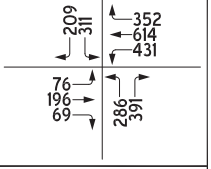
1 Sycamore Cyn. Bl. & Eastridge Av.



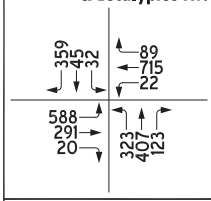
2 Box Springs Bl. & Eastridge Av.



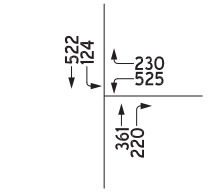
3 I-215 Ramps & Eucalyptus Av.



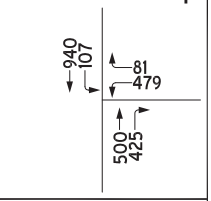
4 Valley Springs Pkwy. & Eucalyptus Av.



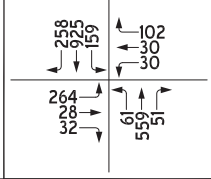
5 Day St. & SR-60 WB Ramps



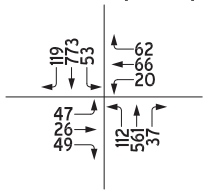
6 Day St. & SR-60 EB Ramps



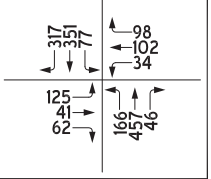
7 Day St. & Cyn. Springs Pkwy.



8 Day St. & Campus Pkwy.

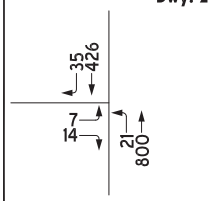


9 Day St. & Gateway Dr.

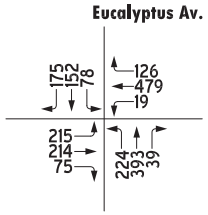


10 Day St. & Dwy. 1

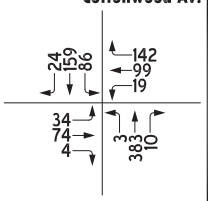
11 Day St. & Dwy. 2



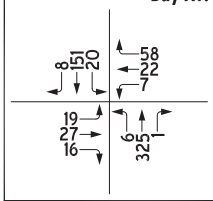
12 Day St. & Eucalyptus Av.



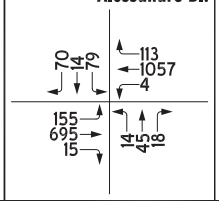
13 Day St. & Cottonwood Av.



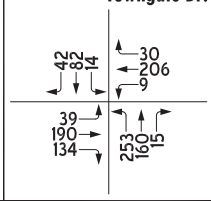
14 Day St. & Bay Av.



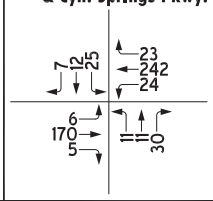
15 Day St. & Alessandro Bl.



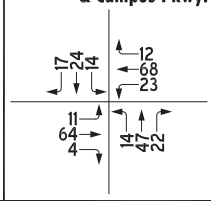
16 Memorial Wy. & Towngate Dr.



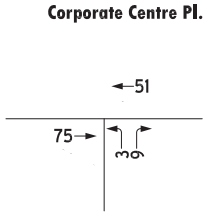
17 Corporate Centre Pl. & Cyn. Springs Pkwy.



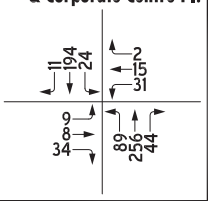
18 Corporate Centre Pl. & Campus Pkwy.



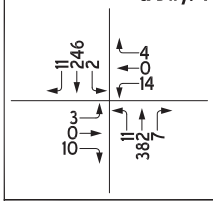
19 Dwy. 3 & Corporate Centre Pl.



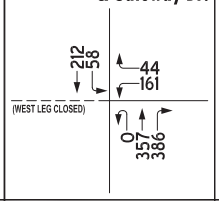
20 Valley Springs Pkwy. & Corporate Centre Pl.



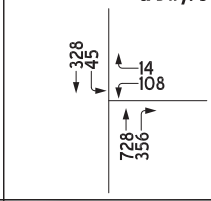
21 Valley Springs Pkwy. & Dwy. 4



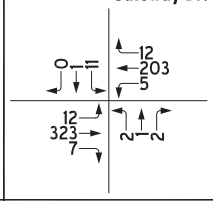
22 Valley Springs Pkwy. & Gateway Dr.



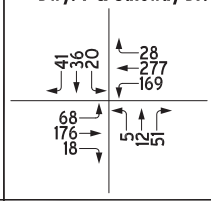
23 Valley Springs Pkwy. & Dwy. 5



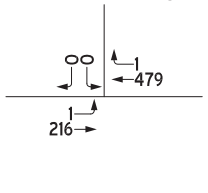
24 Dwy. 6 & Gateway Dr.



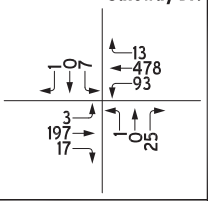
25 Canyon Park Dr. - Dwy. 7 & Gateway Dr.



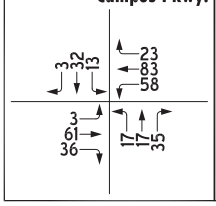
26 Dwy. 8 & Gateway Dr.



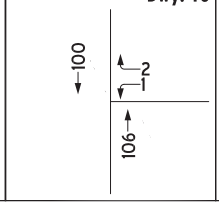
27 Dwy. 9 & Gateway Dr.



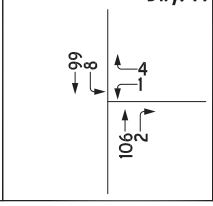
28 Canyon Park Dr. & Campus Pkwy.



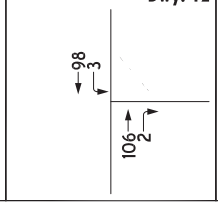
29 Canyon Park Dr. & Dwy. 10



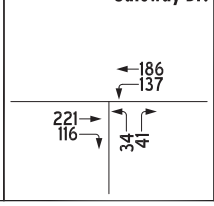
30 Canyon Park Dr. & Dwy. 11



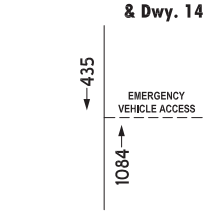
31 Canyon Park Dr. & Dwy. 12



32 Dwy. 13 & Gateway Dr.



33 Valley Springs Pkwy. & Dwy. 14



34 Dwy. 15 & Corporate Centre Pl.

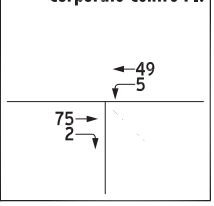
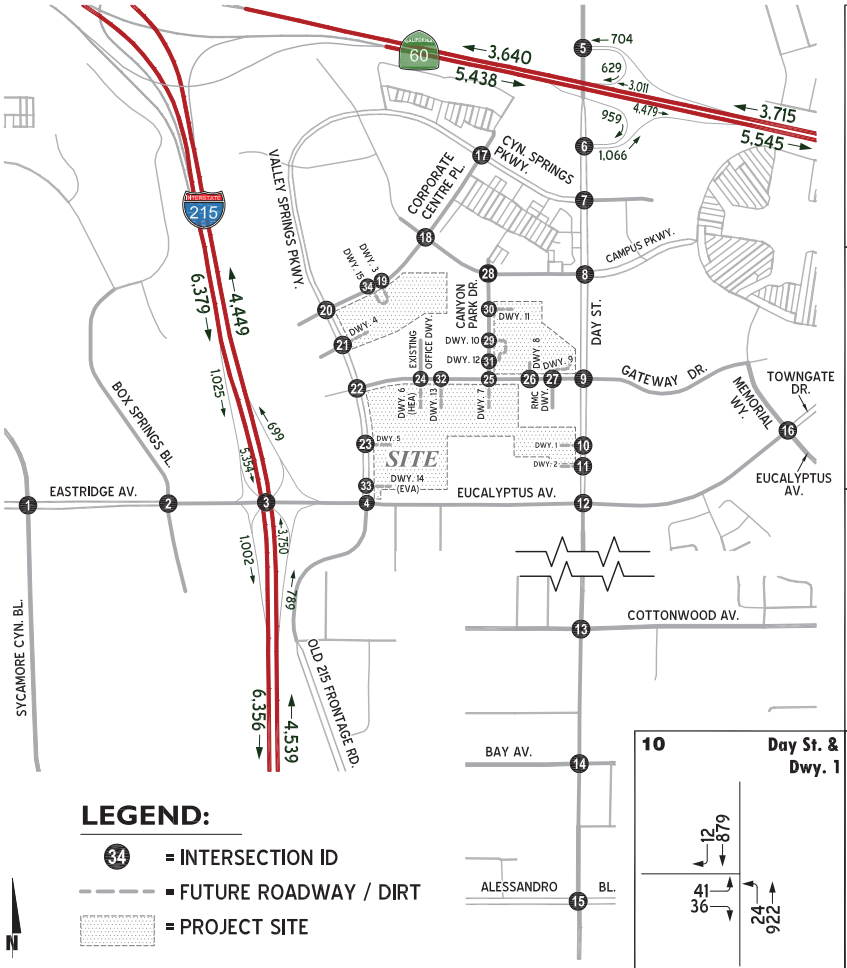


EXHIBIT 5-3: EXISTING PLUS PROJECT PM PEAK HOUR INTERSECTION VOLUMES



LEGEND:

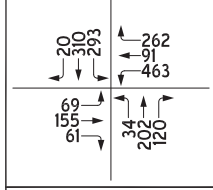
34 = INTERSECTION ID

= FUTURE ROADWAY / DIRT

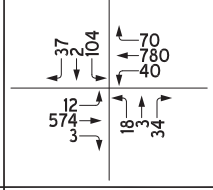
= PROJECT SITE

N

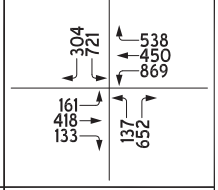
1 Sycamore Cyn. Bl. & Eastridge Av.



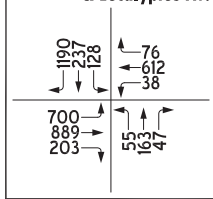
2 Box Springs Bl. & Eastridge Av.



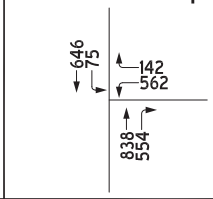
3 I-215 Ramps & Eucalyptus Av.



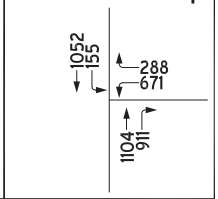
4 Valley Springs Pkwy. & Eucalyptus Av.



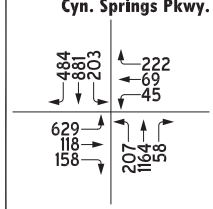
5 Day St. & SR-60 WB Ramps



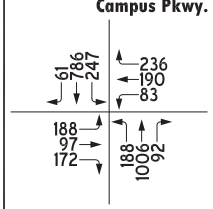
6 Day St. & SR-60 EB Ramps



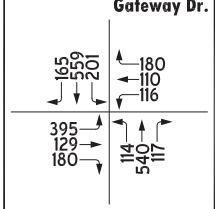
7 Day St. & Cyn. Springs Pkwy.



8 Day St. & Campus Pkwy.

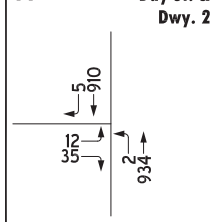


9 Day St. & Gateway Dr.

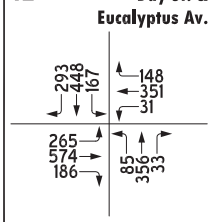


10 Day St. & Dwy. 1

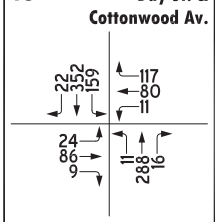
11 Day St. & Dwy. 2



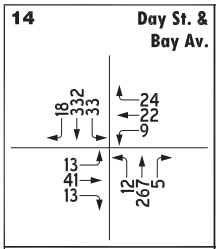
12 Day St. & Eucalyptus Av.



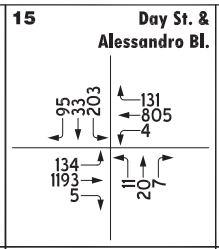
13 Day St. & Cottonwood Av.



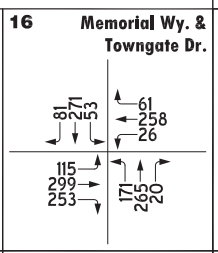
14 Day St. & Bay Av.



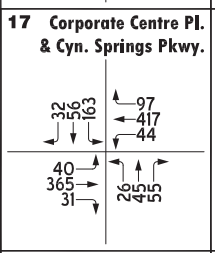
15 Day St. & Alessandro Bl.



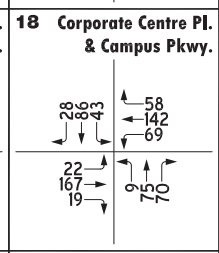
16 Memorial Wy. & Towngate Dr.



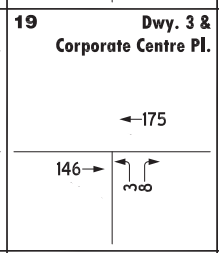
17 Corporate Centre Pl. & Cyn. Springs Pkwy.



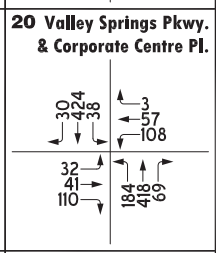
18 Corporate Centre Pl. & Campus Pkwy.



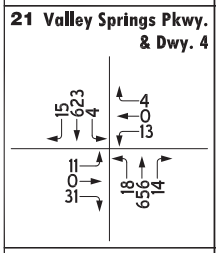
19 Dwy. 3 & Corporate Centre Pl.



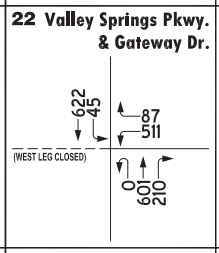
20 Valley Springs Pkwy. & Corporate Centre Pl.



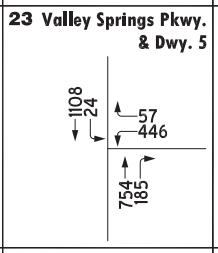
21 Valley Springs Pkwy. & Dwy. 4



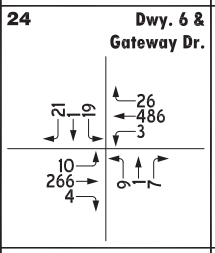
22 Valley Springs Pkwy. & Gateway Dr.



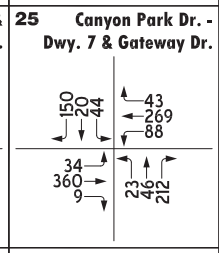
23 Valley Springs Pkwy. & Dwy. 5



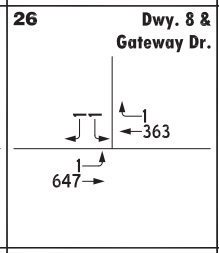
24 Dwy. 6 & Gateway Dr.



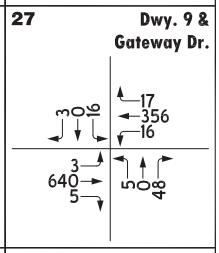
25 Canyon Park Dr. - Dwy. 7 & Gateway Dr.



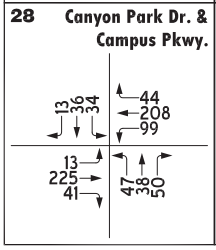
26 Dwy. 8 & Gateway Dr.



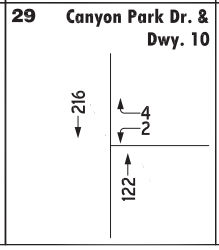
27 Dwy. 9 & Gateway Dr.



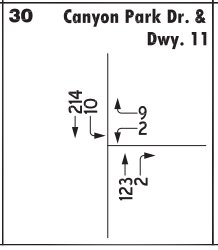
28 Canyon Park Dr. & Campus Pkwy.



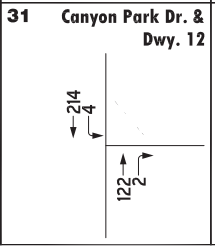
29 Canyon Park Dr. & Dwy. 10



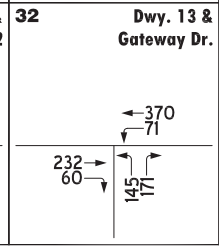
30 Canyon Park Dr. & Dwy. 11



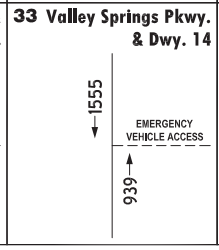
31 Canyon Park Dr. & Dwy. 12



32 Dwy. 13 & Gateway Dr.



33 Valley Springs Pkwy. & Dwy. 14



34 Dwy. 15 & Corporate Centre Pl.

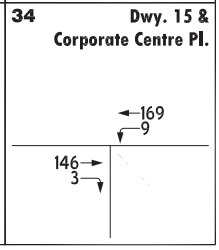


TABLE 5-1: INTERSECTION ANALYSIS FOR EXISTING PLUS PROJECT CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs)		Level of Service[2]	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Sycamore Cyn. Bl. / Eastridge Av.	TS	2	2	1>	2	2	1>	2	3	1	2	2	1>	46.3	30.5	D	C
2	Box Springs Bl. / Eastridge Av.	TS	1	1	1	1	2	0	1	2	1	1	2	0	21.6	22.3	C	C
3	I-215 NB & SB Ramps / Eucalyptus Av.	TS	2	0	0	2	0	0	1	2	0	2	2	0	34.3	35.4	C	D
	➢ I-215 SB Ramps / Eucalyptus Av.	CSS	0	0	0	0	0	1	0	3	0	0	2	0	17.6	14.4	C	B
	➢ I-215 NB Ramps / Eucalyptus Av.	TS	0	0	2	0	0	0	0	2	0	0	4	1>>	0.2	0.4	A	A
4	Valley Springs Pkwy. / Eucalyptus Av.																	
	- Without Improvements	TS	1	2	d	1	1	2	2	2	1	1	2	1	51.9	**>80**	D	**F**
	- With Improvements	TS	1	2	d	1	1	**2>**	2	2	1	1	2	1	43.3	22.6	D	C
5	Day St. / SR-60 WB Ramps	TS	0	2	1>	1	2	0	0	0	0	2	0	1>	17.7	12.2	B	B
6	Day St. / SR-60 EB Ramps	TS	0	2	1>	1	3	0	0	0	0	2	0	1>	19.0	13.0	B	B
7	Day St. / Cyn. Springs Pkwy.	TS	1	3	0	1	3.5	1.5>	2	1	1	1	1	1	14.0	31.1	B	C
8	Day St. / Campus Pkwy.	TS	2	3	d	2	3	1>	2	1	d	1	2	1	18.1	26.8	B	C
9	Day St. / Gateway Dr.	TS	1	3	0	2	3	0	1	2	0	1	2	0	19.7	36.3	B	D
10	Day St. / Dwy. 1	**CSS**	**1**	2	0	0	3	0	0	**1!**	0	0	0	0	13.6	23.7	B	C
11	Day St. / Dwy. 2	**CSS**	1	2	0	0	3	0	0	1!	0	0	0	0	12.3	17.1	B	C
12	Day St. / Eucalyptus Av.	TS	1	2	d	1	2	1>	1	2	d	1	2	1	33.6	31.9	C	C
13	Day St. / Cottonwood Av.	TS	1	1	0	1	1	0	1	1	0	1	1	1	26.3	24.7	C	C
14	Day St. / Bay Av.	AWS	0	1!	0	0	1!	0	0.5	0.5	d	0.5	0.5	d	11.6	12.0	B	B
15	Day St. / Alessandro Bl.	TS	1	1	d	1	1	0	1	3	0	1	2	1	15.7	17.9	B	B
16	Memorial Wy. / Towngate Dr.	TS	1	2	0	1	2	0	1	3	0	1	3	0	34.4	30.2	C	C
17	Corporate Ctr. Pl. / Cyn. Springs Pkwy.	TS	1	2	0	1	1	0	1	3	0	1	3	0	40.8	34.3	D	C
18	Corporate Ctre Pl. / Campus Pkwy.	AWS	1	2	0	1	2	0	1	2	0	1	2	0	8.2	10.0	A	A
19	Dwy. 3 / Corporate Ctr. Pl.	**CSS**	**1**	0	**1**	0	0	0	0	2	0	0	2	0	9.3	10.0	A	A
20	Valley Springs Pkwy. / Corporate Ctr. Pl.	TS	1	3	0	1	3	0	1	1	0	1	2	d	16.2	20.4	B	C
21	Valley Springs Pkwy. / Dwy. 4	CSS	0	3	0	1	3	0	0	1!	0	0	**1!**	0	14.3	19.0	B	C
22	Valley Springs Pkwy. / Gateway Dr.	TS	1	3	0	1	3	0	0	0	0	1	0	1	12.0	12.8	B	B
23	Valley Springs Pkwy. / Dwy. 5	**TS**	1	3	0	1	3	0	0	0	0	**1**	0	**1**	8.4	12.6	A	B
24	Dwy. 6 / Gateway Dr.	CSS	0	**1!**	0	0	1!	0	1	2	0	1	2	0	12.7	17.5	B	C
25	Canyon Park Dr. - Dwy. 7 / Gateway Dr.	**TS**	**1**	**1**	**1**	1	**1**	1	1	2	0	**1**	2	0	24.0	22.1	C	C
26	Dwy. 8 / Gateway Dr.	**CSS**	0	0	0	0	**1!**	0	1	2	0	0	2	0	8.5	11.1	A	B
27	Dwy. 9 / Gateway Dr.	CSS	0	1!	0	0	**1!**	0	1	2	0	1	2	0	20.3	17.7	C	C
28	Canyon Park Dr. / Campus Pkwy.	AWS	1	2	0	0.5	0.5	d	1	2	0	1	2	0	8.4	10.3	A	B
29	Canyon Park Dr. / Dwy. 10	**CSS**	0	2	0	0	2	0	0	0	0	0	**1!**	0	8.9	9.1	A	A
30	Canyon Park Dr. / Dwy. 11	**CSS**	0	2	0	1	2	0	0	0	0	0	**1!**	0	7.5	9.0	A	A
31	Canyon Park Dr. / Dwy. 12	UNC	0	2	0	1	2	0	0	0	0	0	0	0	7.5	7.5	A	A
32	Dwy. 13 / Gateway Dr.	**CSS**	0	**1!**	0	0	0	0	0	2	0	1	2	0	12.1	17.2	B	C
33	Valley Springs Pkwy. / Dwy. 14	**CSY**	EMERGENCY VEHICLE ACCESS ONLY												N/A	N/A	N/A	N/A
34	Dwy. 15 / Corporate Centre Pl.	UNC	0	0	0	0	0	0	0	2	0	1	2	0	7.4	7.6	A	A

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane**1** = Improvement

[2] Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. Delay and level of service is calculated using Synchro 8.0 analysis software

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[3] TS = Traffic Signal; CSY = Cross-street Yield (implied); CSS = Cross-street Stop; AWS = All-Way Stop; UNC = Uncontrolled (Inbound Driveway)

5.4 ROADWAY SEGMENT CAPACITY ANALYSIS

The Existing plus Project conditions roadway segment capacity analysis are presented on Table 5-2. As shown on Table 5-2, the study area roadway segments are anticipated to continue to operate at acceptable LOS.

5.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

For Existing plus Project traffic conditions, the following unsignalized project driveway locations are anticipated to meet traffic signal warrants (see Appendix "5.2"):

ID	Intersection Location	Jurisdiction
23	Valley Springs Parkway / Driveway 5	City of Riverside
25	Canyon Park Drive - Driveway 7 / Gateway Drive	City of Riverside

5.6 BASIC FREEWAY SEGMENT ANALYSIS

E+P mainline directional volumes for the weekday AM and PM peak hours are also provided on Exhibits 5-2 and 5-3, respectively.

The E+P basic freeway segment analysis results are presented on Table 5-3. As shown on Table 5-3, there are no new freeway mainline segments anticipated to operate at unacceptable level of service during the peak hours with existing geometry, in addition to the freeway mainline segment location identified as operating at unacceptable LOS under Existing (2014) conditions.

E+P basic freeway segment analysis worksheets are provided in Appendix "5.3".

5.7 FREEWAY MERGE/DIVERGE ANALYSIS

Ramp merge and diverge operations were also evaluated for E+P traffic conditions and the results of this analysis are presented in Table 5-4. As shown in Table 5-4, there are no new ramp locations anticipated to exceed acceptable levels of service, in addition to the ramp location identified as operating at unacceptable LOS under Existing (2014) conditions.

E+P freeway ramp junction operations analysis worksheets are provided in Appendix "5.4".

5.8 EXISTING PLUS PROJECT IMPACTS AND RECOMMENDED IMPROVEMENTS

Based on the City of Riverside's significance criteria as discussed in Section 2.8 *Thresholds of Significance*, the intersection of Valley Springs Parkway / Eucalyptus Avenue (#4) was found to be impacted by the Project for E+P traffic conditions. An improvement strategy has been recommended at the intersection that has been identified as cumulatively impacted in an effort to reduce each location's peak hour delay and improve the associated LOS grade to LOS "D" or better. The effectiveness of the recommended improvement strategy to address E+P direct traffic impact is discussed below and also presented previously in Table 5-1. Recommended on-site and off-site improvements are shown on Exhibit 5-4.

TABLE 5-2: ROADWAY VOLUME/CAPACITY ANALYSIS FOR EXISTING PLUS PROJECT CONDITIONS

Roadway	Segment	Through Travel Lanes[1]	LOS "E" Capacity[2]	ADT[3]	Volume/ Capacity Ratio
Eastridge Av. - Eucalyptus Av.	West of Sycamore Cyn. Bl.	5	45,800	8,800	0.19
	B/w Box Springs Bl. & I-215	4	36,600	20,700	0.57
	B/w I-215 & Valley Springs Pkwy.	5	45,800	38,700	0.84
	West of Day St.	4	36,600	19,200	0.52
	East of Day St.	5	45,800	15,000	0.33
Valley Springs Pkwy.	North of Eucalyptus Av.	5	45,800	26,300	0.57
Day St.	B/w SR-60 EB Ramps & Cyn. Springs Pkwy.	6	54,900	44,300	0.81
	North of Eucalyptus Av.	5	45,800	19,400	0.42
	South of Eucalyptus Av.	4	36,400	13,200	0.36
	South of Cottonwood Av.	2	11,500	8,200	0.71
Gateway Dr.	West of Day St.	4	36,400	11,300	0.31

[1] Number of Through lanes: 2 = Existing
[2] LOS "E" capacity has been estimated based on the City of Riverside TIA Preparation Guide, Exhibit D - City of Riverside Roadway Capacity.
[3] Average Daily Traffic (ADT) expressed in vehicles per day.

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TABLE 5-3: BASIC FREEWAY SEGMENT ANALYSIS FOR EXISTING PLUS PROJECT CONDITIONS

Freeway	Direction	Mainline Segment Location	Lanes[1]	Volume		Density[2]		LOS[3]	
				AM	PM	AM	PM	AM	PM
I-215 Freeway	NB	South of Eucalyptus Av.	3	4,367	4,539	25.4	26.7	C	D
		Between Ramps	3	3,690	3,750	20.7	21.1	C	C
		North of Eucalyptus Av.	3	4,118	4,449	23.6	26.0	C	C
	SB	North of Eucalyptus Av.	5	5,213	6,379	17.4	21.6	B	C
		Between Ramps	3	4,693	5,354	27.5	34.2	D	D
		South of Eucalyptus Av.	3	5,193	6,356	32.6	48.4	D	**F**
SR-60 Freeway	WB	East of Day St.	4	3,590	3,715	14.7	15.2	B	B
		Between Ramps	3	2,835	3,011	15.5	16.4	B	B
		West of Day St.	3	3,179	3,640	17.4	20.0	B	C
	EB	West of Day St.	6	3,455	5,438	9.4	14.8	A	B
		Between Ramps	4	2,895	4,479	11.9	18.4	B	C
		East of Day St.	5	3,427	5,545	11.2	18.2	B	C

[1] Number of lanes are in the specified direction and is based on existing conditions.

[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).

[3] Level of service determined using HCS 2010: Basic Freeway Segments software, Version 6.65

BOLD = LOS E or F

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TABLE 5-4: FREEWAY RAMP JUNCTION MERGE/DIVERGE ANALYSIS FOR EXISTING PLUS PROJECT CONDITIONS

Freeway	Direction	Ramp Location	Junction Type	Lanes on Freeway	Lanes on Ramp	Volume		Density [1]		LOS [2]	
						AM	PM	AM	PM	AM	PM
I-215 Freeway	NB	NB Off Ramp at Eucalyptus Av.	Diverge	3	1	677	789	31.5	32.9	D	D
		NB On Ramp at Eucalyptus Av.	Merge	3	1	428	699	26.2	29.5	C	D
	SB	SB Off Ramp at Eucalyptus Av.	Diverge	5	2	520	1,025	9.8	13.1	A	B
		SB On Ramp at Eucalyptus Av.	Merge	3	1	500	1,002	31.2	40.0	D	**E**
SR-60 Freeway	WB	WB Off Ramp at Day St.	Diverge	4	1	755	704	14.7	15.5	B	B
		WB On Ramp at Day St.	Merge	3	1	344	629	17.9	21.8	B	C
	EB	EB Off Ramp at Day St.	Diverge	6	2	560	959	13.7	19.1	B	B
		EB On Ramp at Day St.	Merge	4	1	532	1,066	13.8	24.5	B	C

[1] Density calculated based on the Highway Capacity Manual (HCM) analysis; (pc/mi/ln) = passenger car per mile per lane

[2] Level of service determined using HCS2010 : Ramps and Ramp Junction software, Version 6.60

BOLD = LOS E or F

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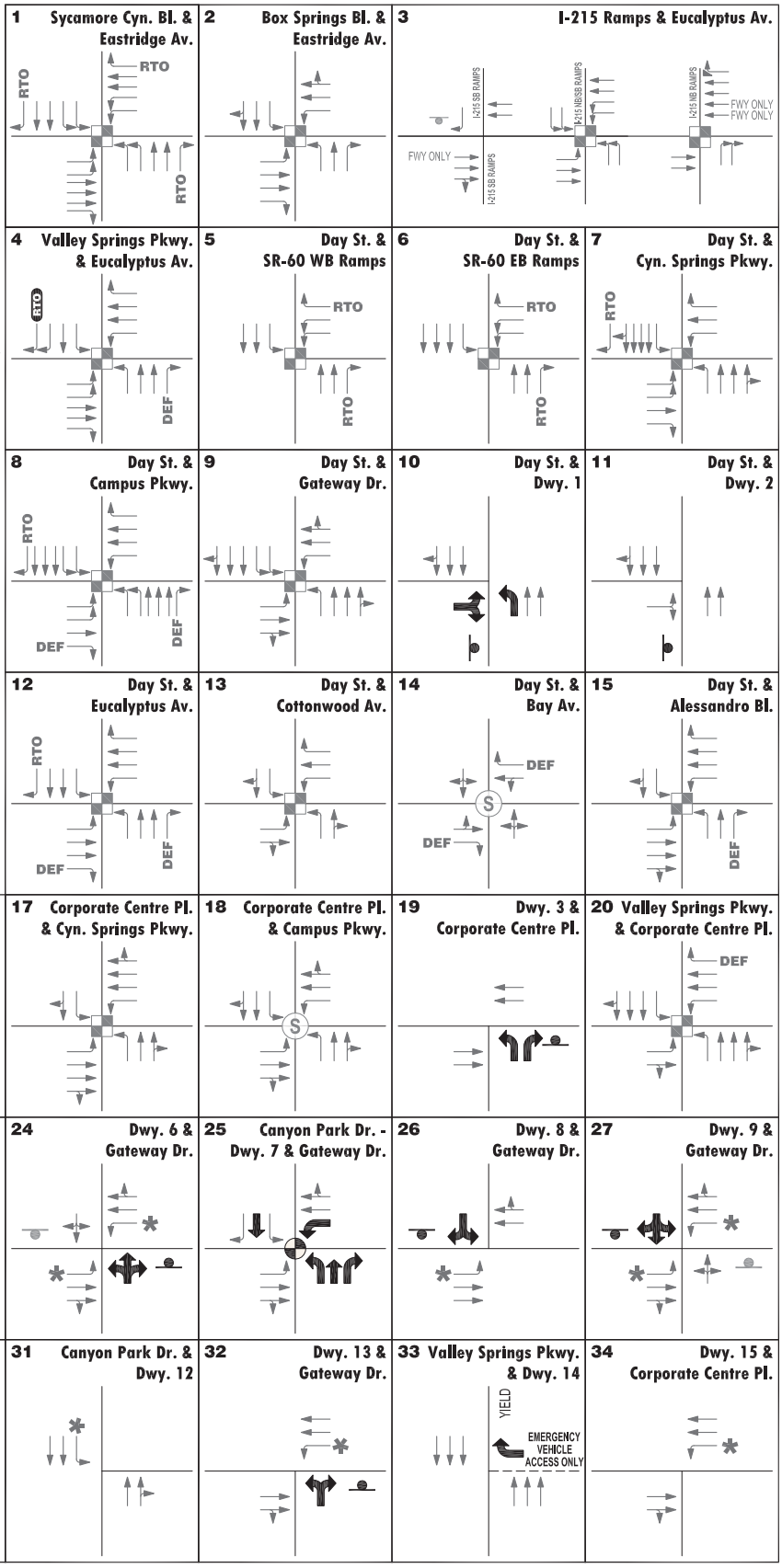
EXHIBIT 5-4: EXISTING PLUS PROJECT RECOMMENDED IMPROVEMENTS

LEGEND:

- = EXISTING TRAFFIC SIGNAL
- = EXISTING PLUS PROJECT TRAFFIC SIGNAL
- S = EXISTING ALL WAY STOP
- = EXISTING STOP SIGN
- = EXISTING PLUS PROJECT STOP SIGN
- = EXISTING LANE
- = EXISTING PLUS PROJECT LANE IMPROVEMENT
- = EXISTING FREE RIGHT TURN LANE
- DEF = DEFACTO RIGHT TURN LANE
- RTO = EXISTING RIGHT TURN OVERLAP
- RTO = EXISTING PLUS PROJECT RIGHT TURN OVERLAP PHASING IMPROVEMENT
- 34 = INTERSECTION ID
- * = LEFT TURN LANE ACCOMMODATED WITHIN TWO-WAY LEFT TURN LANE (TWLTL) MEDIAN



Valley Springs Parkway / Eucalyptus Avenue (#4)

- SB Approach: Provide overlap phasing for the existing dual right turn lanes.

Recommended on-site and off-site improvements are shown on Exhibit 5-4.

5.9 SITE ACCESS IMPROVEMENTS

The following improvements shall occur in conjunction with adjacent Project development activity or as needed for Project access purposes (See Exhibit 5-4).

Day Street / Driveway 1 (#10) – Install stop sign control on the EB approach and construct the intersection with the following geometrics:

- NB Approach: Provide a dedicated left turn lane, in addition to the existing two through lanes.
- SB Approach: Maintain existing three through lanes.
- EB Approach: Provide a shared left/right turn lane.

Day Street / Driveway 2 (#11) – Install stop sign control on the EB approach, connecting the Project internally and maintaining intersection as it exists:

- NB Approach: Maintain the existing two through lanes.
- SB Approach: Maintain existing three through lanes.
- EB Approach: Maintain existing outbound lane.

Driveway 3 / Corporate Centre Place (#19) – Install stop sign control on the NB approach and construct the intersection with the following geometrics:

- NB Approach: Provide one left turn lane and one right turn lane.
- EB Approach: Maintain existing two through lanes.
- WB Approach: Maintain existing two through lanes.

Valley Springs Parkway / Driveway 4 (#21) – Install stop sign control on the WB approach and construct the intersection with the following geometrics:

- NB Approach: Maintain existing three through lanes.
- SB Approach: Maintain existing left turn lane and three through lanes.
- EB Approach: Maintain existing shared left/through/right lane.
- WB Approach: Provide a shared left/through/right lane.

Valley Springs Parkway / Driveway 5 (#23) – Install a traffic signal and construct the Intersection with the following geometrics:

- NB Approach: Maintain existing three through lanes.
- SB Approach: Maintain existing left turn lane and three through lanes.
- WB Approach: Provide one left turn lane and one right turn lane.

Driveway 6 / Gateway Drive (#24) – Install stop sign control on the NB approach and construct the intersection with the following geometrics (south leg for hospital emergency access only):

- NB Approach: Provide a shared left/through/right turn lane.
- SB Approach: Maintain existing shared left/through/right turn lane.
- EB Approach: Maintain existing two through lanes with left turn lane accommodated within the TWLTL median.
- WB Approach: Maintain existing two through lanes with left turn lane accommodated within the TWLTL median.

Canyon Park Drive - Driveway 7 / Gateway Drive (#25) – Install a traffic signal and construct the intersection with the following geometrics:

- NB Approach: Provide a dedicated left turn lane, one through lane, and one right turn lane.
- SB Approach: Modify striping to provide one left turn lane and one through lane, in addition to the existing right turn lane.
- EB Approach: Maintain existing left turn lane and two through lanes.
- WB Approach: Modify striping to provide a dedicated left turn lane, in addition to the existing two through lanes.

Driveway 8 / Gateway Drive (#26) – Install stop sign control on the SB approach and construct the intersection with the following geometrics:

- SB Approach: Provide a shared left/right turn lane.
- EB Approach: Maintain existing two through lanes with left turn lane accommodated within the TWLTL median
- WB Approach: Maintain existing two through lanes.

Driveway 9 / Gateway Drive (#27) – Install stop sign control on the SB approach and construct the intersection with the following geometrics:

- NB Approach: Maintain existing shared left/through/right turn lane.
- SB Approach: Provide a shared left/through/right turn lane.

- EB Approach: Maintain existing two through lanes with left turn lane accommodated within the TWLTL median.
- WB Approach: Maintain existing two through lanes with left turn lane accommodated within the TWLTL median.

Canyon Park Drive / Driveway 10 (#29) – Install stop sign control on the WB approach and construct the intersection with the following geometrics:

- NB Approach: Maintain existing two through lanes.
- SB Approach: Maintain existing two through lanes.
- WB Approach: Provide a shared left/right turn lane.

Canyon Park Drive / Driveway 11 (#30) – Install stop sign control on the WB approach and construct the intersection with the following geometrics:

- NB Approach: Maintain existing two through lanes.
- SB Approach: Maintain existing two through lanes with left turns accommodated within the TWLTL median.
- WB Approach: Provide a shared left/right turn lane.

Canyon Park Drive / Driveway 12 (#31) – Construct the intersection with the following geometrics:

- NB Approach: Maintain existing two through lanes.
- SB Approach: Maintain existing two through lanes with left turns accommodated within the TWLTL median.
- WB Approach: Provide a shared inbound lane.

Driveway 13 / Gateway Drive (#32) – Install stop sign control on the NB approach and construct the intersection with the following geometrics:

- NB Approach: Provide a shared left/through/right turn lane.
- EB Approach: Maintain existing two through lanes.
- WB Approach: Maintain existing two through lanes with left turn lane accommodated within the TWLTL median.

Valley Springs Parkway / Driveway 14 (#33) – Provide emergency vehicle access driveway.

Driveway 15 / Corporate Centre Place (#34) – Construct the intersection with the following geometrics:

- EB Approach: Maintain existing two through lanes.
- WB Approach: Maintain existing two through lanes. Left turn lane is accommodated within the existing two-way left turn lane (TWLTL) median.

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6 CUMULATIVE PLUS PROJECT TRAFFIC CONDITIONS

This section discusses the methods used to develop Cumulative Plus Project (Opening Year) Without and With Project traffic forecasts, and the resulting intersection operations and freeway mainline operations.

6.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Cumulative Plus Project conditions are consistent with those shown previously on Exhibit 3-1, with the exception of Project driveway and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for Cumulative Plus Project traffic conditions.

6.2 CUMULATIVE WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

The weekday ADT volumes which can be expected for Opening Year Without Project traffic conditions are shown on Exhibit 6-1. Exhibits 6-2 and 6-3 show the weekday AM and PM peak hour intersection turning movement volumes for Opening Year Without Project traffic conditions.

6.3 CUMULATIVE PLUS PROJECT TRAFFIC VOLUME FORECASTS

The ADT volumes which can be expected for Opening Year With Project traffic conditions are shown on Exhibit 6-4. Exhibits 6-5 and 6-6 show the weekday AM and PM peak hour intersection turning movement volumes for Opening Year With Project traffic conditions.

6.4 INTERSECTION OPERATIONS ANALYSIS

LOS calculations were conducted for the study intersections to evaluate their operations under Opening Year Without Project conditions with roadway and intersection geometrics consistent with Section 6.1 *Roadway Improvements*.

6.4.1 CUMULATIVE WITHOUT PROJECT TRAFFIC CONDITIONS

As shown in Table 6-1, the following study area intersections are anticipated to operate at service levels which do not meet City level of service criteria for cumulative conditions without the Project:

ID	Intersection Location	Level of Service
3	I-215 Ramps / Eastridge Avenue - Eucalyptus Avenue ➢ I-215 SB Ramps / Eucalyptus Avenue	LOS "F"
4	Valley Springs Parkway / Eucalyptus Avenue	LOS "E"
13	Day St. / Cottonwood Avenue	LOS "E"
14	Day St. / Bay Avenue	LOS "F"
15	Day St. / Alessandro Boulevard	LOS "E"
16	Memorial Way / Towngate Drive	LOS "E"

EXHIBIT 6-1: OPENING YEAR WITHOUT PROJECT
AVERAGE DAILY TRAFFIC VOLUMES

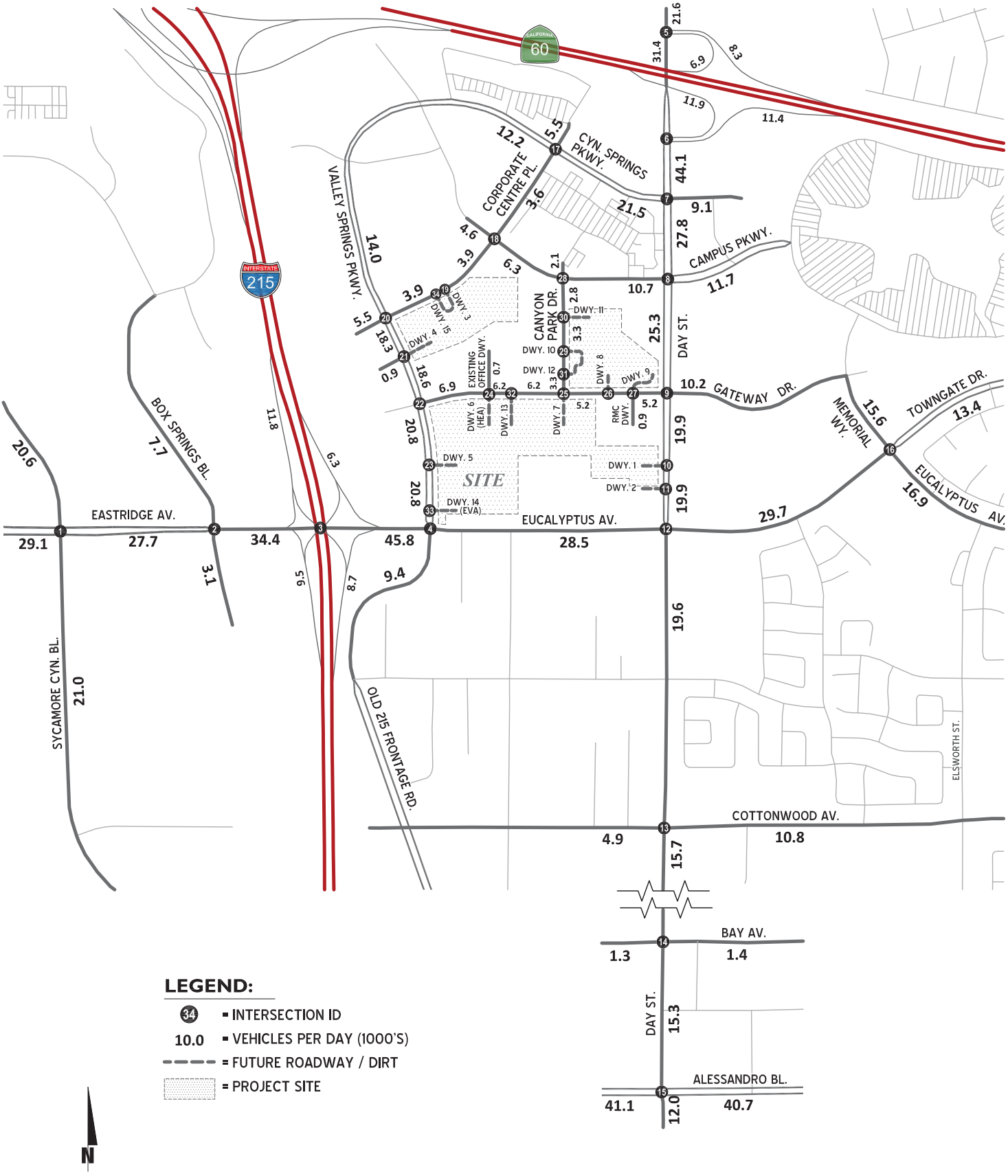
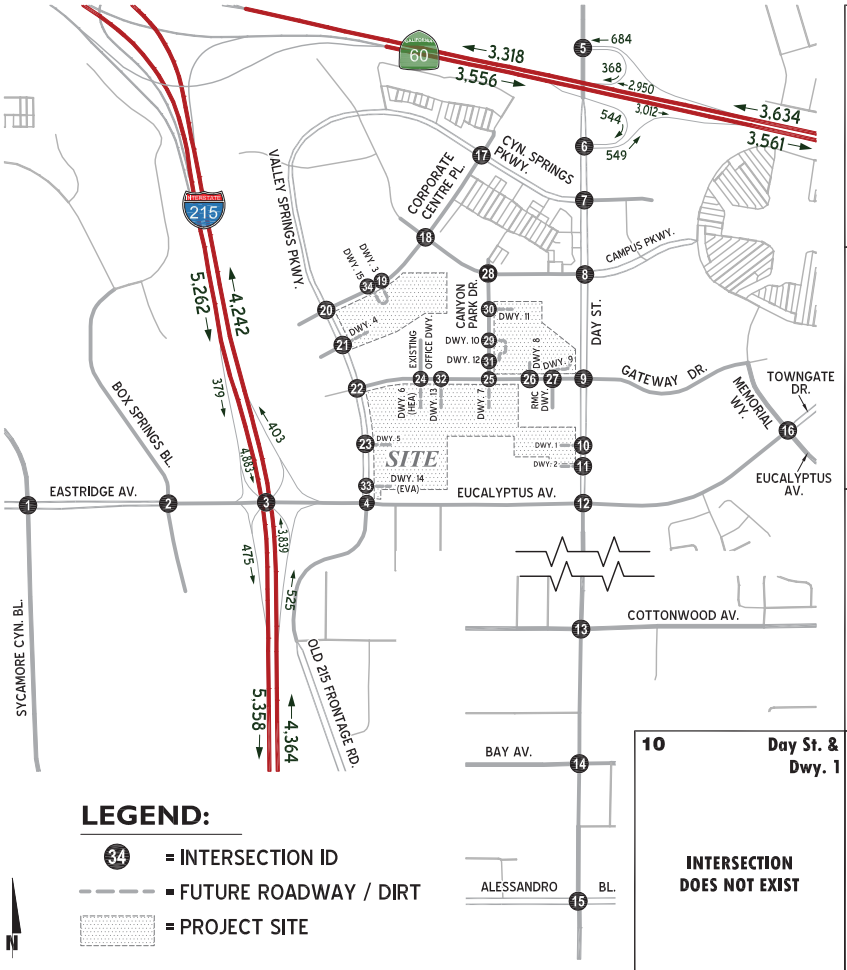


EXHIBIT 6-2: OPENING YEAR WITHOUT PROJECT
AM PEAK HOUR INTERSECTION VOLUMES



LEGEND:

34 = INTERSECTION ID

= FUTURE ROADWAY / DIRT

= PROJECT SITE

N

1 Sycamore Cyn. Bl. & Eastridge Av.

305	191	112
207	419	190
464	700	112
413	1132	164

2 Box Springs Bl. & Eastridge Av.

4	74	145
63	590	16
526	1327	59
10	119	51

3 I-215 Ramps & Eucalyptus Av.

226	153	
84	620	82
319	1358	393
	328	197

4 Valley Springs Pkwy. & Eucalyptus Av.

367	35	20
298	614	58
44	1305	23
397	381	127

5 Day St. & SR-60 WB Ramps

564	129	
239	445	
	392	239

6 Day St. & SR-60 EB Ramps

897	111	
84	460	
	547	438

7 Day St. & Cyn. Springs Pkwy.

301	808	167
297	32	35
107	34	32
67	581	55

8 Day St. & Campus Pkwy.

116	649	63
48	24	49
67	59	20
116	588	39

9 Day St. & Gateway Dr.

76	460	81
52	36	32
103	86	33
78	558	49

10 Day St. & Dwy. 1

INTERSECTION DOES NOT EXIST

11 Day St. & Dwy. 2

	28	528
7		
	9	
	22	
	782	

12 Day St. & Eucalyptus Av.

169	254	77
180	575	82
108	1011	292
226	425	232

13 Day St. & Cottonwood Av.

25	432	198
34	131	61
217	139	97
40	521	120

14 Day St. & Bay Av.

5	565	17
9	28	17
49	23	9
6	628	1

15 Day St. & Alessandro Bl.

129	371	78
234	1013	158
99	1591	163
95	284	104

16 Memorial Wy. & Towngate Dr.

314	85	15
221	372	310
31	459	9
506	166	16

17 Corporate Centre Pl. & Cyn. Springs Pkwy.

11	12	27
9	207	5
26	291	23
11	11	28

18 Corporate Centre Pl. & Campus Pkwy.

18	23	5
11	57	4
9	70	23
15	46	17

19 Dwy. 3 & Corporate Centre Pl.

INTERSECTION DOES NOT EXIST

20 Valley Springs Pkwy. & Corporate Centre Pl.

11	319	28
9	9	26
5	17	28
89	366	41

21 Valley Springs Pkwy. & Dwy. 4

11	362	
3	10	
	11	
	493	

22 Valley Springs Pkwy. & Gateway Dr.

324	48	
42	99	
0	462	261

(WEST LEG CLOSED)

23 Valley Springs Pkwy. & Dwy. 5

INTERSECTION DOES NOT EXIST

24 Dwy. 6 & Gateway Dr.

0	2	
12	191	
10	141	

25 Canyon Park Dr. - Dwy. 7 & Gateway Dr.

43	21	
70	124	
29	109	

26 Dwy. 8 & Gateway Dr.

INTERSECTION DOES NOT EXIST

27 Dwy. 9 & Gateway Dr.

95	18	
144	97	
1	26	

28 Canyon Park Dr. & Campus Pkwy.

5	24	14
5	57	18
24	85	42
11	16	29

29 Canyon Park Dr. & Dwy. 10

INTERSECTION DOES NOT EXIST

30 Canyon Park Dr. & Dwy. 11

INTERSECTION DOES NOT EXIST

31 Canyon Park Dr. & Dwy. 12

INTERSECTION DOES NOT EXIST

32 Dwy. 13 & Gateway Dr.

INTERSECTION DOES NOT EXIST

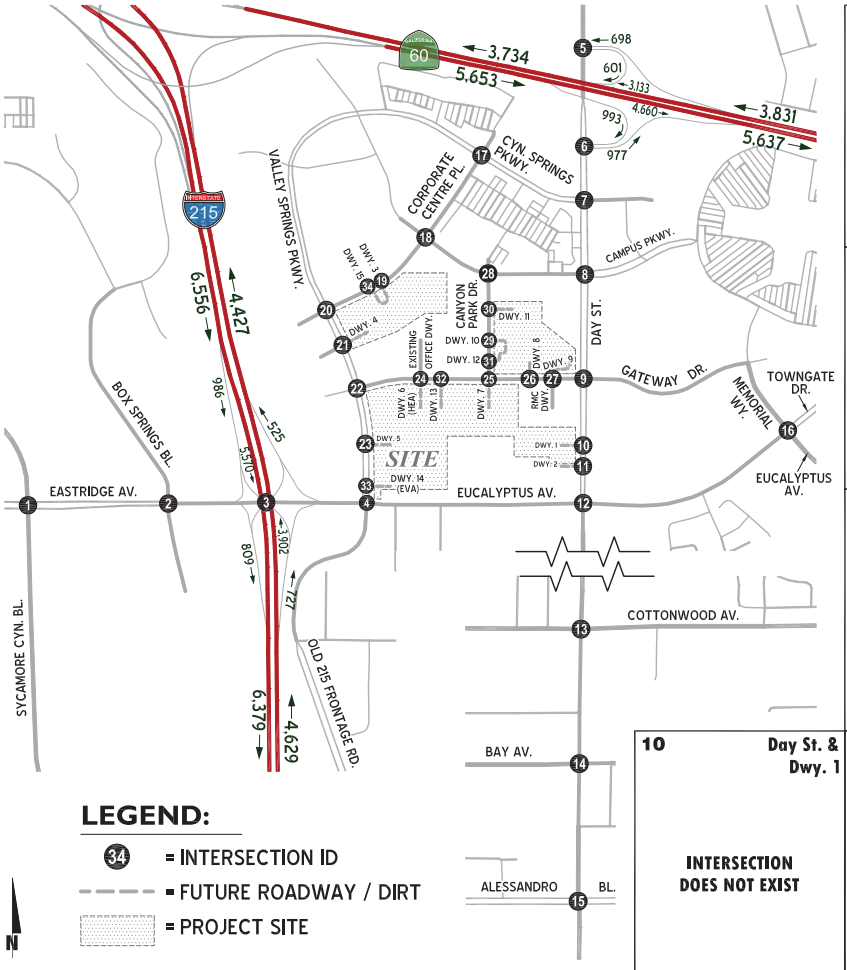
33 Valley Springs Pkwy. & Dwy. 14

INTERSECTION DOES NOT EXIST

34 Dwy. 15 & Corporate Centre Pl.

INTERSECTION DOES NOT EXIST

EXHIBIT 6-3: OPENING YEAR WITHOUT PROJECT
PM PEAK HOUR INTERSECTION VOLUMES



LEGEND:

34 = INTERSECTION ID

= FUTURE ROADWAY / DIRT

= PROJECT SITE

N

1 Sycamore Cyn. Bl. & Eastridge Av.

244 390 350 →		← 255 524 476
408 818 393 ←		→ 255 274 134

2 Box Springs Bl. & Eastridge Av.

38 134 303 →		← 194 1218 31
12 1308 3 →		← 19 91 32

3 I-215 Ramps & Eucalyptus Av.

323 663 →		← 346 967 638
179 1293 171 →		← 154 573

4 Valley Springs Pkwy. & Eucalyptus Av.

830 191 70 →		← 56 1019 38
656 1589 284 →		← 102 149 49

5 Day St. & SR-60 WB Ramps

693 78 →		← 148 550
		← 888 523

6 Day St. & SR-60 EB Ramps

1081 161 →		← 300 693
		← 1111 816

7 Day St. & Cyn. Springs Pkwy.

532 868 212 →		← 233 75 49
687 126 167 →		← 217 1006 61

8 Day St. & Campus Pkwy.

51 776 262 →		← 254 192 87
191 89 175 →		← 193 839 96

9 Day St. & Gateway Dr.

36 972 210 →		← 188 104 121
93 110 70 →		← 59 668 121

10 Day St. & Dwy. 1

INTERSECTION DOES NOT EXIST

11 Day St. & Dwy. 2

1 899 →		
12 9 →		← 2 1035

12 Day St. & Eucalyptus Av.

245 482 142 →		← 141 791 253
249 123 185 →		← 89 473 366

13 Day St. & Cottonwood Av.

22 511 249 →		← 251 149 145
24 133 54 →		← 78 605 108

14 Day St. & Bay Av.

6 695 20 →		← 19 23 9
8 43 14 →		← 12 753 6

15 Day St. & Alessandro Bl.

186 323 186 →		← 128 1261 102
204 1814 100 →		← 155 441 158

16 Memorial Wy. & Towngate Dr.

304 282 55 →		← 63 476 27
450 609 559 →		← 382 276 21

17 Corporate Centre Pl. & Cyn. Springs Pkwy.

37 58 172 →		← 102 470 43
46 418 32 →		← 27 47 54

18 Corporate Centre Pl. & Campus Pkwy.

29 86 40 →		← 48 137 65
23 171 20 →		← 9 75 66

19 Dwy. 3 & Corporate Centre Pl.

INTERSECTION DOES NOT EXIST

20 Valley Springs Pkwy. & Corporate Centre Pl.

32 549 42 →		← 5 60 106
34 44 109 →		← 179 573 66

21 Valley Springs Pkwy. & Dwy. 4

16 748 →		
11 32 →		← 19 806

22 Valley Springs Pkwy. & Gateway Dr.

740 41 →		← 76 352
(WEST LEG CLOSED)		← 0 749 111

23 Valley Springs Pkwy. & Dwy. 5

INTERSECTION DOES NOT EXIST

24 Dwy. 6 & Gateway Dr.

22 15 →		← 16 320
10 167 →		

25 Canyon Park Dr. - Dwy. 7 & Gateway Dr.

155 46 →		← 45 182
33 149 →		

26 Dwy. 8 & Gateway Dr.

INTERSECTION DOES NOT EXIST

27 Dwy. 9 & Gateway Dr.

		← 183 17
223 5 →		← 5 50

28 Canyon Park Dr. & Campus Pkwy.

16 33 35 →		← 46 211 86
16 230 31 →		← 24 28 30

29 Canyon Park Dr. & Dwy. 10

INTERSECTION DOES NOT EXIST

30 Canyon Park Dr. & Dwy. 11

INTERSECTION DOES NOT EXIST

31 Canyon Park Dr. & Dwy. 12

INTERSECTION DOES NOT EXIST

32 Dwy. 13 & Gateway Dr.

INTERSECTION DOES NOT EXIST

33 Valley Springs Pkwy. & Dwy. 14

INTERSECTION DOES NOT EXIST

34 Dwy. 15 & Corporate Centre Pl.

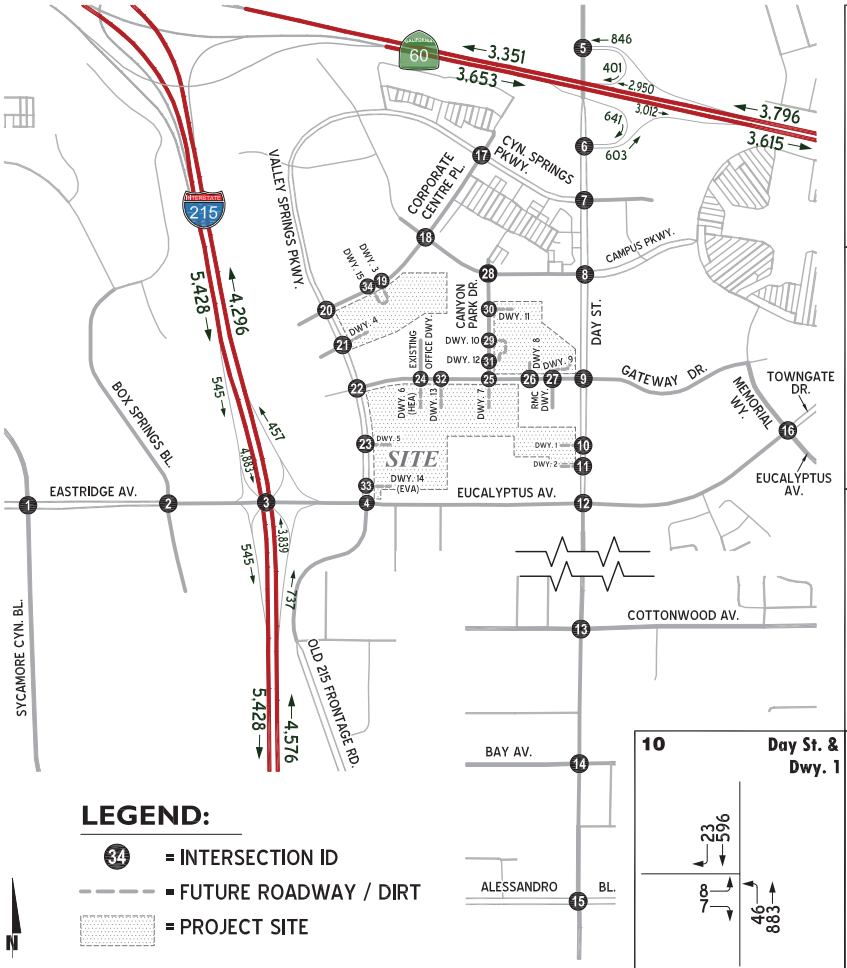
INTERSECTION DOES NOT EXIST

08890 - volumes.dwg

URBAN CROSSROADS

EXHIBIT 6-4: OPENING YEAR WITH PROJECT AVERAGE DAILY TRAFFIC VOLUMES

EXHIBIT 6-5: OPENING YEAR WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES



LEGEND:

- (34) = INTERSECTION ID
- = FUTURE ROADWAY / DIRT
- = PROJECT SITE

N

1 Sycamore Cyn. Bl. & Eastridge Av.

2 Box Springs Bl. & Eastridge Av.

3 I-215 Ramps & Eucalyptus Av.

4 Valley Springs Pkwy. & Eucalyptus Av.

5 Day St. & SR-60 WB Ramps

6 Day St. & SR-60 EB Ramps

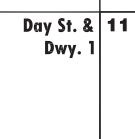
7 Day St. & Cyn. Springs Pkwy.

8 Day St. & Campus Pkwy.

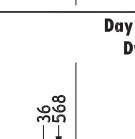
9 Day St. & Gateway Dr.

10 Day St. & Dwy. 1

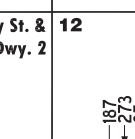
11 Day St. & Dwy. 2



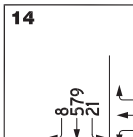
12 Day St. & Eucalyptus Av.



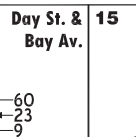
13 Day St. & Cottonwood Av.



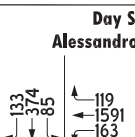
14 Day St. & Bay Av.



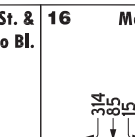
15 Day St. & Alessandro Bl.



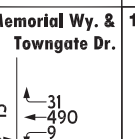
16 Memorial Wy. & Towngate Dr.



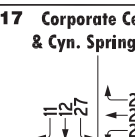
17 Corporate Centre Pl. & Cyn. Springs Pkwy.



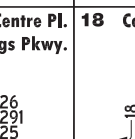
18 Corporate Centre Pl. & Campus Pkwy.



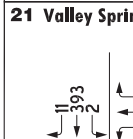
19 Dwy. 3 & Corporate Centre Pl.



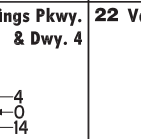
20 Valley Springs Pkwy. & Corporate Centre Pl.



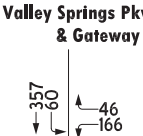
21 Valley Springs Pkwy. & Dwy. 4



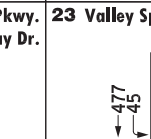
22 Valley Springs Pkwy. & Gateway Dr.



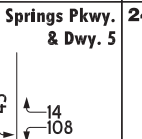
23 Valley Springs Pkwy. & Dwy. 5



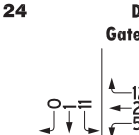
24 Dwy. 6 & Gateway Dr.



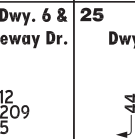
25 Canyon Park Dr. - Dwy. 7 & Gateway Dr.



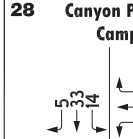
26 Dwy. 8 & Gateway Dr.



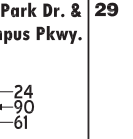
27 Dwy. 9 & Gateway Dr.



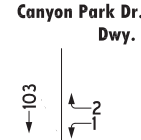
28 Canyon Park Dr. & Campus Pkwy.



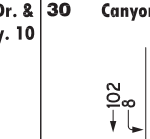
29 Canyon Park Dr. & Dwy. 10



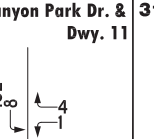
30 Canyon Park Dr. & Dwy. 11



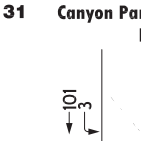
31 Canyon Park Dr. & Dwy. 12



32 Dwy. 13 & Gateway Dr.



33 Valley Springs Pkwy. & Dwy. 14



34 Dwy. 15 & Corporate Centre Pl.

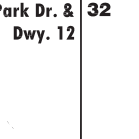
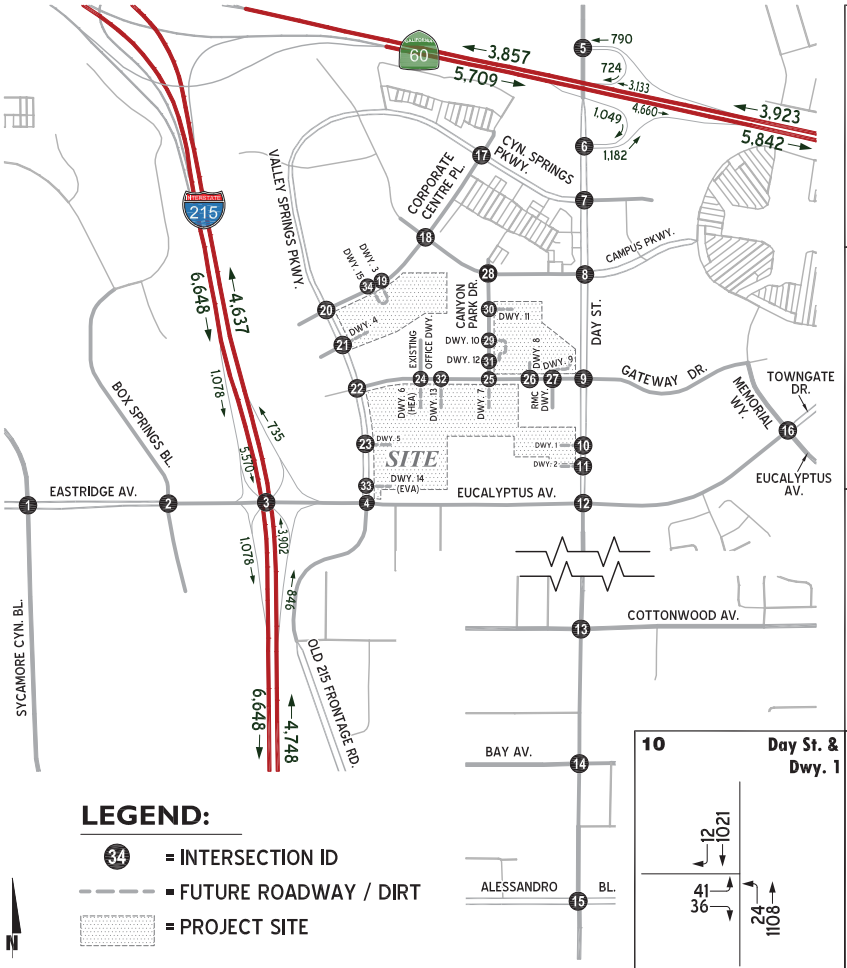


EXHIBIT 6-6: OPENING YEAR WITH PROJECT
PM PEAK HOUR INTERSECTION VOLUMES



LEGEND:

- (34) = INTERSECTION ID
- = FUTURE ROADWAY / DIRT
- = PROJECT SITE

N

1 Sycamore Cyn. Bl. & Eastridge Av.

244 390 367 →		← 293 537 489
408 824 393 ←		→ 255 274 140

2 Box Springs Bl. & Eastridge Av.

38 134 308 →		← 206 1282 43
12 1337 3 ←		→ 19 91 37

3 I-215 Ramps & Eucalyptus Av.

323 755 →		← 556 1056 907
179 1332 171 ←		→ 154 692

4 Valley Springs Pkwy. & Eucalyptus Av.

1325 248 139 →		← 86 1092 39
872 1624 284 ←		→ 102 173 49

5 Day St. & SR-60 WB Ramps

704 78 →		← 148 642
		→ 913 646

6 Day St. & SR-60 EB Ramps

1183 161 →		← 300 749
		→ 1259 1021

7 Day St. & Cyn. Springs Pkwy.

535 1023 212 →		← 233 75 49
690 126 167 ←		→ 218 1356 61

8 Day St. & Campus Pkwy.

64 919 262 →		← 254 199 87
203 102 181 ←		→ 200 1179 97

9 Day St. & Gateway Dr.

166 691 210 →		← 188 115 122
399 134 183 ←		→ 116 710 123

10 Day St. & Dwy. 1

		← 12 1021
41 36 →		→ 24 1108

11 Day St. & Dwy. 2

		← 5 1052
12 35 →		→ 2 1119

12 Day St. & Eucalyptus Av.

319 554 175 →		← 156 812 253
285 1269 207 ←		→ 98 506 366

13 Day St. & Cottonwood Av.

23 590 263 →		← 258 149 145
25 33 54 ←		→ 78 640 108

14 Day St. & Bay Av.

18 748 34 →		← 25 23 9
13 43 14 ←		→ 12 777 6

15 Day St. & Alessandro Bl.

200 336 212 →		← 139 1261 102
211 1814 100 ←		→ 155 447 158

16 Memorial Wy. & Towngate Dr.

304 282 55 →		← 63 494 27
450 648 599 ←		→ 400 276 21

17 Corporate Centre Pl. & Cyn. Springs Pkwy.

37 58 172 →		← 102 470 46
46 418 32 ←		→ 27 47 57

18 Corporate Centre Pl. & Campus Pkwy.

29 89 45 →		← 60 150 74
23 177 20 ←		→ 9 78 75

19 Dwy. 3 & Corporate Centre Pl.

		← 185
155 →		→ 3 8

20 Valley Springs Pkwy. & Corporate Centre Pl.

32 560 42 →		← 5 60 112
34 44 114 ←		→ 191 598 72

21 Valley Springs Pkwy. & Dwy. 4

16 766 4 →		← 4 0 13
11 0 32 ←		→ 19 845 14

22 Valley Springs Pkwy. & Gateway Dr.

764 48 →		← 91 527
(WEST LEG CLOSED)		→ 0 787 215

23 Valley Springs Pkwy. & Dwy. 5

1266 24 →		← 57 446
		→ 945 185

24 Dwy. 6 & Gateway Dr.

22 20 →		← 27 500 3
10 274 4 ←		→ 9 1 7

25 Canyon Park Dr. - Dwy. 7 & Gateway Dr.

158 20 46 →		← 45 277 88
36 367 9 ←		→ 23 46 212

26 Dwy. 8 & Gateway Dr.

1 1 →		← 1 371
1 657 →		

27 Dwy. 9 & Gateway Dr.

3 0 16 →		← 17 364 17
3 650 5 ←		→ 5 0 50

28 Canyon Park Dr. & Campus Pkwy.

16 38 35 →		← 46 220 103
16 238 42 ←		→ 48 40 52

29 Canyon Park Dr. & Dwy. 10

226 →		← 4 2
		→ 126

30 Canyon Park Dr. & Dwy. 11

224 10 →		← 9 2
		→ 127 2

31 Canyon Park Dr. & Dwy. 12

224 4 →		
		→ 126 2

32 Dwy. 13 & Gateway Dr.

		← 385 71
241 60 →		→ 145 171

33 Valley Springs Pkwy. & Dwy. 14

1713 →	EMERGENCY VEHICLE ACCESS	
		→ 1130

34 Dwy. 15 & Corporate Centre Pl.

		← 179 9
155 3 →		

TABLE 6-1: INTERSECTION ANALYSIS FOR OPENING YEAR WITHOUT PROJECT CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs)		Level of Service[2]	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Sycamore Cyn. Bl. / Eastridge Av.	TS	2	2	1>	2	2	1>	2	3	1	2	2	1>	45.0	33.6	D	C
2	Box Springs Bl. / Eastridge Av.	TS	1	1	1	1	2	0	1	2	1	1	2	0	36.7	37.9	D	D
3	I-215 NB & SB Ramps / Eucalyptus Av.	TS	2	0	0	2	0	0	1	2	0	2	2	0	34.2	33.1	C	C
	➢ I-215 SB Ramps / Eucalyptus Av.																	
	- Without Improvements	CSS	0	0	0	0	0	1	0	3	0	0	2	0	**>80**	30.9	**F**	D
	- With Improvements	**TS**	0	0	0	0	0	1	0	3	0	0	2	0	13.9	14.5	B	B
	➢ I-215 NB Ramps / Eucalyptus Av.	TS	0	0	2	0	0	0	0	2	0	0	4	1>>	0.3	1.0	A	A
4	Valley Springs Pkwy. / Eucalyptus Av.																	
	- Without Improvements	TS	1	2	d	1	1	2	2	2	1	1	2	1	**68.6**	**76.1**	**E**	**E**
	- With Improvements	TS	**2**	2	**0**	1	1	**2>**	2	2	1	1	2	1	37.9	18.0	D	B
5	Day St. / SR-60 WB Ramps	TS	0	2	1>	1	2	0	0	0	0	2	0	1>	16.4	11.6	B	B
6	Day St. / SR-60 EB Ramps	TS	0	2	1>	1	3	0	0	0	0	2	0	1>	19.4	15.8	B	B
7	Day St. / Cyn. Springs Pkwy.	TS	1	3	0	1	3.5	1.5>	2	1	1	1	1	1	19.7	35.4	B	D
8	Day St. / Campus Pkwy.	TS	2	3	d	2	3	1>	2	1	d	1	2	1	17.7	27.0	B	C
9	Day St. / Gateway Dr.	TS	1	3	0	2	3	0	1	2	0	1	2	0	18.2	29.0	B	C
10	Day St. / Dwy. 1		Intersection Does Not Exist															
11	Day St. / Dwy. 2	CSY	1	2	0	0	3	0	0	1!	0	0	0	0	13.5	19.5	B	C
12	Day St. / Eucalyptus Av.	TS	1	2	d	1	2	1>	1	2	d	1	2	1	38.6	51.5	D	D
13	Day St. / Cottonwood Av.																	
	- Without Improvements	TS	1	1	0	1	1	0	1	1	0	1	1	1	42.3	**58.5**	D	**E**
	- With Improvements	TS	1	1	**1**	1	1	0	1	1	0	1	1	1	36.0	44.2	D	D
14	Day St. / Bay Av.																	
	- Without Improvements	AWS	0	1!	0	0	1!	0	0.5	0.5	d	0.5	0.5	d	**53.7**	**54.1**	**F**	**F**
	- With Improvements	AWS	0	**2**	0	0	**2**	0	0.5	0.5	d	0.5	0.5	d	19.6	21.3	C	C
15	Day St. / Alessandro Bl.																	
	- Without Improvements	TS	1	1	d	1	1	0	1	3	0	1	2	1	**56.3**	53.3	**E**	D
	- With Improvements	TS	1	1	d	1	1	0	**2**	3	0	1	2	1	46.5	47.8	D	D
16	Memorial Wy. / Towngate Dr.																	
	- Without Improvements	TS	1	2	0	1	2	0	1	3	0	1	3	0	48.4	**59.9**	D	**E**
	- With Improvements	TS	1	2	0	1	2	0	1	**2**	**1>**	1	3	0	44.4	50.2	D	D
17	Corporate Ctr. Pl. / Cyn. Springs Pkwy.	TS	1	2	0	1	1	0	1	3	0	1	3	0	40.5	35.8	D	D
18	Corporate Ctre Pl. / Campus Pkwy.	AWS	1	2	0	1	2	0	1	2	0	1	2	0	8.1	9.9	A	A
19	Dwy. 3 / Corporate Ctr. Pl.		Intersection Does Not Exist															
20	Valley Springs Pkwy. / Corporate Ctr. Pl.	TS	1	2	0	1	2	0	1	1	0	1	2	d	16.1	18.4	B	B

TABLE 6-1: INTERSECTION ANALYSIS FOR OPENING YEAR WITHOUT PROJECT CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs)		Level of Service[2]	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
21	Valley Springs Pkwy. / Dwy. 4	CSS	0	2	0	1	2	d	0	1!	0	0	0	0	11.7	15.0	B	B
22	Valley Springs Pkwy. / Gateway Dr.	TS	1	2	0	1	3	0	0	0	0	1	0	1	17.3	8.9	B	A
23	Valley Springs Pkwy. / Dwy. 5		Intersection Does Not Exist															
24	Dwy. 6 / Gateway Dr.	CSS	0	0	0	0	1!	0	1	2	0	0	2	0	10.2	11.1	B	B
25	Canyon Park Dr. - Dwy. 7 / Gateway Dr.	CSS	0	0	0	1	0	1	1	2	0	0	2	0	10.8	11.5	B	B
26	Dwy. 8 / Gateway Dr.		Intersection Does Not Exist															
27	Dwy. 9 / Gateway Dr.	CSS	0	1!	0	0	0	0	0	2	0	1	2	0	8.9	9.4	A	A
28	Canyon Park Dr. / Campus Pkwy.	AWS	1	2	0	0.5	0.5	d	1	2	0	1	2	0	8.2	10.0	A	A
29	Canyon Park Dr. / Dwy. 10		Intersection Does Not Exist															
30	Canyon Park Dr. / Dwy. 11		Intersection Does Not Exist															
31	Canyon Park Dr. / Dwy. 12		Intersection Does Not Exist															
32	Dwy. 13 / Gateway Dr.		Intersection Does Not Exist															
33	Valley Springs Pkwy. / Dwy. 14		Intersection Does Not Exist															
34	Dwy. 15 / Corporate Centre Pl.		Intersection Does Not Exist															

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane; **1** = Improvement

[2] Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. Delay and level of service is calculated using Synchro 8.0 analysis software.

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[3] TS = Traffic Signal; CSY = Cross-street Yield (implied); CSS = Cross-street Stop; AWS = All-Way Stop

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The intersection operations analysis worksheets for Opening Year Without Project traffic conditions are included in Appendix "6.1" of this TIA.

6.4.2 CUMULATIVE PLUS PROJECT TRAFFIC CONDITIONS

For Opening Year With Project Conditions, Table 6-2 indicates that the addition of Project traffic would not result in any additional deficiencies beyond those previously identified under Opening Year Without Project traffic conditions. Although the intersection LOS is at an unacceptable level (LOS "E" or "F") with or without project, the change in peak hour delay is considered to be a significant project impact based upon City of Riverside criteria for projects that propose uses or intensities above that contained in the General Plan (Table 2-7 of this report). For City of Moreno Valley intersections, an impact is identified if the Project contributes 50 or more peak hour trips to these deficient intersections. Recommendations related to these intersections are included in Section 6.9.

The intersection operations analysis worksheets for Opening Year With Project traffic conditions are included in Appendix "6.2" of this TIA.

6.5 ROADWAY SEGMENT CAPACITY ANALYSIS

The Opening Year Without Project conditions roadway segment capacity analysis are presented on Table 6-3. As shown on Table 6-3, the following study area roadway segments are anticipated to exceed the theoretical daily segment LOS thresholds:

ID	Roadway Segment	Jurisdiction
3	Eastridge Avenue, between I-215 & Valley Springs Parkway	City of Riverside/Moreno Valley
10	Day Street, south of Cottonwood Avenue.	City of Moreno Valley

For Opening Year With Project Conditions, Table 6-4 indicates that the addition of Project traffic would not cause any additional roadway segments to exceed the theoretical daily segment LOS thresholds, in comparison to Opening Year Without Project traffic conditions.

It should be noted that the roadway segment capacities are approximate figures only, and are used at the General Plan level to assist in determining the roadway functional classification (number of through lanes) needed to meet traffic demand. For Opening Year Without and With Project conditions, roadway segments that are estimated to exceed the daily volume threshold values are further reviewed based on the more detailed peak hour intersection analysis, which explicitly account for factors that affect roadway during peak periods. Review of the peak hour intersection analysis results indicate that the recommended intersection improvements identified under Cumulative (Opening Year) conditions provide acceptable level of service for both study area intersections and roadway segments.

TABLE 6-2: INTERSECTION ANALYSIS FOR OPENING YEAR WITH PROJECT CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs)		Level of Service[2]	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Sycamore Cyn. Bl. / Eastridge Av.	TS	2	2	1>	2	2	1>	2	3	1	2	2	1>	45.0	33.6	D	C
2	Box Springs Bl. / Eastridge Av.	TS	1	1	1	1	2	0	1	2	1	1	2	0	39.8	42.1	D	D
3	I-215 NB & SB Ramps / Eucalyptus Av.	TS	2	0	0	2	0	0	1	2	0	2	2	0	36.2	46.0	D	D
	➢ I-215 SB Ramps / Eucalyptus Av.																	
	- Without Improvements	CSS	0	0	0	0	0	1	0	3	0	0	2	0	**>80**	**37.2**	**F**	**E**
	- With Improvements	**TS**	0	0	0	0	0	1	0	3	0	0	2	0	14.2	15.3	B	B
	➢ I-215 NB Ramps / Eucalyptus Av.	TS	0	0	2	0	0	0	0	2	0	0	4	1>>	0.3	1.2	A	A
4	Valley Springs Pkwy. / Eucalyptus Av.																	
	- Without Improvements	TS	1	2	d	1	1	2	2	2	1	1	2	1	**>100**	**>100**	**F**	**F**
	- With Improvements	TS	**2**	2	**0**	1	1	**2>**	2	2	1	1	2	1	51.8	47.7	D	D
5	Day St. / SR-60 WB Ramps	TS	0	2	1>	1	2	0	0	0	0	2	0	1>	20.1	12.7	C	B
6	Day St. / SR-60 EB Ramps	TS	0	2	1>	1	3	0	0	0	0	2	0	1>	19.8	16.0	B	B
7	Day St. / Cyn. Springs Pkwy.	TS	1	3	0	1	3.5	1.5>	2	1	1	1	1	1	19.9	38.5	B	D
8	Day St. / Campus Pkwy.	TS	2	3	d	2	3	1>	2	1	d	1	2	1	18.3	27.8	B	C
9	Day St. / Gateway Dr.	TS	1	3	0	2	3	0	1	2	0	1	2	0	15.4	34.9	B	C
10	Day St. / Dwy. 1	**CSS**	**1**	2	0	0	3	0	0	**1!**	0	0	0	0	13.6	19.8	B	C
11	Day St. / Dwy. 2	**CSS**	1	2	0	0	3	0	0	1!	0	0	0	0	11.5	15.0	B	B
12	Day St. / Eucalyptus Av.	TS	1	2	d	1	2	1>	1	2	d	1	2	1	41.9	54.5	D	D
13	Day St. / Cottonwood Av.																	
	- Without Improvements	TS	1	1	0	1	1	0	1	1	0	1	1	1	47.3	**63.8**	D	**E**
	- With Improvements	TS	1	1	**1**	1	1	0	1	1	0	1	1	1	38.6	48.4	D	D
14	Day St. / Bay Av.																	
	- Without Improvements	AWS	0	1!	0	0	1!	0	0.5	0.5	d	0.5	0.5	d	**54.0**	**54.3**	**F**	**F**
	- With Improvements	AWS	0	**2**	0	0	**2**	0	0.5	0.5	d	0.5	0.5	d	23.1	26.1	C	D
15	Day St. / Alessandro Bl.																	
	- Without Improvements	TS	1	1	d	1	1	0	1	3	0	1	2	1	**57.9**	**60.4**	**E**	**E**
	- With Improvements	TS	1	1	d	1	1	0	**2**	3	0	1	2	1	47.5	53.7	D	D
16	Memorial Wy. / Towngate Dr.																	
	- Without Improvements	TS	1	2	0	1	2	0	1	3	0	1	3	0	53.0	**68.2**	D	**E**
	- With Improvements	TS	1	2	0	1	2	0	1	**2**	**1>**	1	3	0	48.4	52.3	D	D
17	Corporate Ctr. Pl. / Cyn. Springs Pkwy.	TS	1	2	0	1	1	0	1	3	0	1	3	0	40.4	35.8	D	D
18	Corporate Ctre Pl. / Campus Pkwy.	AWS	1	2	0	1	2	0	1	2	0	1	2	0	8.3	10.2	A	B
19	Dwy. 3 / Corporate Ctr. Pl.	**CSS**	**1**	0	**1**	0	0	0	0	2	0	0	2	0	9.4	10.1	A	B
20	Valley Springs Pkwy. / Corporate Ctr. Pl.	TS	1	3	0	1	3	0	1	1	0	1	2	d	17.7	26.7	B	C
21	Valley Springs Pkwy. / Dwy. 4	CSS	0	3	0	1	3	0	0	1!	0	0	**1!**	0	17.8	25.4	C	D

TABLE 6-2: INTERSECTION ANALYSIS FOR OPENING YEAR WITH PROJECT CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs)		Level of Service[2]	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
22	Valley Springs Pkwy. / Gateway Dr.	TS	1	3	0	1	3	0	0	0	0	1	0	1	18.9	22.8	B	C
23	Valley Springs Pkwy. / Dwy. 5	**TS**	1	3	0	1	3	0	0	0	0	**1**	0	**1**	7.5	16.4	A	B
24	Dwy. 6 / Gateway Dr.	CSS	0	**1!**	0	0	1!	0	1	2	0	1	2	0	12.8	18.2	B	C
25	Canyon Park Dr. - Dwy. 7 / Gateway Dr.	**TS**	**1**	**1**	**1**	1	**1**	1	1	2	0	**1**	2	0	24.1	22.0	C	C
26	Dwy. 8 / Gateway Dr.	**CSS**	0	0	0	0	**1!**	0	1	2	0	0	2	0	8.5	11.2	A	B
27	Dwy. 9 / Gateway Dr.	CSS	0	1!	0	0	**1!**	0	1	2	0	1	2	0	20.9	18.1	C	C
28	Canyon Park Dr. / Campus Pkwy.	AWS	1	2	0	0.5	0.5	d	1	2	0	1	2	0	8.6	10.6	A	B
29	Canyon Park Dr. / Dwy. 10	**CSS**	0	2	0	0	2	0	0	0	0	0	**1!**	0	9.0	9.1	A	A
30	Canyon Park Dr. / Dwy. 11	**CSS**	0	2	0	1	2	0	0	0	0	0	**1!**	0	8.9	9.0	A	A
31	Canyon Park Dr. / Dwy. 12	UNC	0	2	0	1	2	0	0	0	0	0	0	0	7.5	7.5	A	A
32	Dwy. 13 / Gateway Dr.	**CSS**	0	**1!**	0	0	0	0	0	2	0	1	2	0	12.2	17.5	B	C
33	Valley Springs Pkwy. / Dwy. 14	**CSY**	EMERGENCY VEHICLE ACCESS ONLY												N/A	N/A	N/A	N/A
34	Dwy. 15 / Corporate Centre Pl.	UNC	0	0	0	0	0	0	0	2	0	1	2	0	7.4	7.6	A	A

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane; **1** = Improvement

[2] Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. Delay and level of service is calculated using Synchro 8.0 analysis software.

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[3] TS = Traffic Signal; CSY = Cross-street Yield (implied); CSS = Cross-street Stop; AWS = All-Way Stop; UNC = Uncontrolled (Inbound Driveway)

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TABLE 6-3: ROADWAY VOLUME/CAPACITY ANALYSIS FOR OPENING YEAR WITHOUT PROJECT CONDITIONS

Roadway	Segment	Through Travel Lanes[1]	LOS "E" Capacity[2]	ADT[3]	Volume/ Capacity Ratio
Eastridge Av. - Eucalyptus Av.	West of Sycamore Cyn. Bl.	5	45,800	29,100	0.64
	B/w Box Springs Bl. & I-215	4	36,600	34,400	0.94
	B/w I-215 & Valley Springs Pkwy.	5	45,800	**45,800**	**1.00**
	West of Day St.	4	36,600	28,500	0.78
	East of Day St.	5	45,800	29,700	0.65
Valley Springs Pkwy.	North of Eucalyptus Av.	5	45,800	20,800	0.45
Day St.	B/w SR-60 EB Ramps & Cyn. Springs Pkwy.	6	54,900	44,100	0.80
	North of Eucalyptus Av.	5	45,800	19,900	0.43
	South of Eucalyptus Av.	4	36,400	19,600	0.54
	South of Cottonwood Av.	2	11,500	**15,700**	**1.37**
Gateway Dr.	West of Day St.	4	36,400	5,200	0.14

[1] Number of Through lanes: 2 = Existing
[2] LOS "E" capacity has been estimated based on the City of Riverside TIA Preparation Guide, Exhibit D - City of Riverside Roadway Capacity.
[3] Average Daily Traffic (ADT) expressed in vehicles per day.
BOLD = Estimated to exceed threshold daily LOS values and subject to further evaluation of peak hour performance at key intersections along these routes.

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TABLE 6-4: ROADWAY VOLUME/CAPACITY ANALYSIS FOR OPENING YEAR WITH PROJECT CONDITIONS

Roadway	Segment	Through Travel Lanes[1]	LOS "E" Capacity[2]	ADT[3]	Volume/ Capacity Ratio
Eastridge Av. - Eucalyptus Av.	West of Sycamore Cyn. Bl.	5	45,800	29,300	0.64
	B/w Box Springs Bl. & I-215	4	36,600	35,700	0.98
	B/w I-215 & Valley Springs Pkwy.	5	45,800	**54,000**	**1.18**
	West of Day St.	4	36,600	30,600	0.84
	East of Day St.	5	45,800	30,900	0.67
Valley Springs Pkwy.	North of Eucalyptus Av.	5	45,800	29,700	0.65
Day St.	B/w SR-60 EB Ramps & Cyn. Springs Pkwy.	6	54,900	49,200	0.90
	North of Eucalyptus Av.	5	45,800	22,500	0.49
	South of Eucalyptus Av.	4	36,400	21,000	0.58
	South of Cottonwood Av.	2	11,500	**16,800**	**1.46**
Gateway Dr.	West of Day St.	4	36,400	11,500	0.32

[1] Number of Through lanes: 2 = Existing
[2] LOS "E" capacity has been estimated based on the City of Riverside TIA Preparation Guide, Exhibit D - City of Riverside Roadway Capacity.
[3] Average Daily Traffic (ADT) expressed in vehicles per day.
BOLD = Estimated to exceed threshold daily LOS values and subject to further evaluation of peak hour performance at key intersections along these routes.

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6.6 TRAFFIC SIGNAL WARRANTS ANALYSIS

For Opening Year Without and With Project traffic conditions, there are no new intersections anticipated to meet traffic signal warrants, in addition to the intersections identified under Existing plus Project conditions. The traffic signal warrant analysis worksheets for Opening Year Without and With Project traffic conditions are included in Appendix "6.3" and Appendix "6.4", respectively.

6.7 BASIC FREEWAY SEGMENT ANALYSIS

Opening Year Without Project mainline directional volumes for the weekday AM and PM peak hours are also provided on Exhibits 6-2 and 6-3, respectively.

The Cumulative (Opening Year) conditions basic freeway segment analysis results are presented on Table 6-5. As shown on Table 6-5, the I-215 SB freeway mainline segment, between the off and on ramp on Eucalyptus Avenue is anticipated to operate at unacceptable level of service during the peak hours with existing geometry, in addition to the freeway mainline segment location identified previously under Existing (2014) conditions.

Opening Year With Project mainline directional volumes for the weekday AM and PM peak hours are also provided on Exhibits 6-5 and 6-6, respectively.

The Opening Year With Project basic freeway segment analysis results are presented on Table 6-6. As shown on Table 6-6, there are no new freeway mainline segments anticipated to operate at unacceptable level of service during the peak hours with existing geometry, in comparison to the freeway mainline segment locations identified under Opening Year Without Project conditions. However, the Project's contribution to the existing deficiencies is considered cumulatively considerable.

Opening Year Without Project basic freeway segment analysis worksheets are provided in Appendix "6.5". Opening Year With Project basic freeway segment analysis worksheets are provided in Appendix "6.6".

6.8 FREEWAY MERGE/DIVERGE ANALYSIS

Ramp merge and diverge operations were also evaluated for Opening Year Without and With Project traffic conditions and the results of this analysis are presented in Table 6-7 and Table 6-8, respectively. As shown in Tables 6-7 and 6-8, there are no new ramp locations anticipated to exceed acceptable levels of service, in comparison to the ramp location identified under Existing (2014) conditions. However, the Project's contribution to the existing deficiencies is considered cumulatively considerable.

Opening Year Without Project freeway ramp junction operations analysis worksheets are provided in Appendix "6.7". Opening Year With Project freeway ramp junction operations analysis worksheets are provided in Appendix "6.8".

TABLE 6-5: BASIC FREEWAY SEGMENT ANALYSIS FOR OPENING YEAR WITHOUT PROJECT CONDITIONS

Freeway	Direction	Mainline Segment Location	Lanes[1]	Volume		Density[2]		LOS[3]	
				AM	PM	AM	PM	AM	PM
I-215 Freeway	NB	South of Eucalyptus Av.	3	4,364	4,629	25.3	27.4	C	D
		Between Ramps	3	3,839	3,902	21.7	22.1	C	C
		North of Eucalyptus Av.	3	4,242	4,427	24.4	25.8	C	C
	SB	North of Eucalyptus Av.	5	5,262	6,556	17.6	22.3	B	C
		Between Ramps	3	4,883	5,570	29.6	36.7	D	**E**
		South of Eucalyptus Av.	3	5,358	6,379	34.3	48.9	D	**F**
SR-60 Freeway	WB	East of Day St.	4	3,634	3,831	14.9	15.7	B	B
		Between Ramps	3	2,950	3,133	16.1	17.1	B	B
		West of Day St.	3	3,318	3,734	18.1	20.6	C	C
	EB	West of Day St.	6	3,556	5,653	9.7	15.4	A	B
		Between Ramps	4	3,012	4,660	12.3	19.1	B	C
		East of Day St.	5	3,561	5,637	11.7	18.5	B	C

[1] Number of lanes are in the specified direction and is based on existing conditions.

[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).

[3] Level of service determined using HCS 2010: Basic Freeway Segments software, Version 6.65

BOLD = LOS E or F

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TABLE 6-6: BASIC FREEWAY SEGMENT ANALYSIS FOR OPENING YEAR WITH PROJECT CONDITIONS

Freeway	Direction	Mainline Segment Location	Lanes[1]	Volume		Density[2]		LOS[3]	
				AM	PM	AM	PM	AM	PM
I-215 Freeway	NB	South of Eucalyptus Av.	3	4,576	4,748	27.0	28.4	D	D
		Between Ramps	3	3,839	3,902	21.7	22.1	C	C
		North of Eucalyptus Av.	3	4,296	4,637	24.8	27.5	C	D
	SB	North of Eucalyptus Av.	5	5,428	6,648	18.1	22.7	C	C
		Between Ramps	3	4,883	5,570	29.6	36.7	D	**E**
		South of Eucalyptus Av.	3	5,428	6,648	35.1	54.4	**E**	**F**
SR-60 Freeway	WB	East of Day St.	4	3,796	3,923	15.5	16.1	B	B
		Between Ramps	3	2,950	3,133	16.1	17.1	B	B
		West of Day St.	3	3,351	3,857	18.3	21.3	C	C
	EB	West of Day St.	6	3,653	5,709	10.0	15.6	A	B
		Between Ramps	4	3,012	4,660	12.3	19.1	B	C
		East of Day St.	5	3,615	5,842	11.8	19.2	B	C

[1] Number of lanes are in the specified direction and is based on existing conditions.

[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).

[3] Level of service determined using HCS 2010: Basic Freeway Segments software, Version 6.65

BOLD = LOS E or F

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TABLE 6-7: FREEWAY RAMP JUNCTION MERGE/DIVERGE ANALYSIS FOR OPENING YEAR WITHOUT PROJECT CONDITIONS

Freeway	Direction	Ramp Location	Junction Type	Lanes on Freeway	Lanes on Ramp	Volume		Density [1]		LOS [2]	
						AM	PM	AM	PM	AM	PM
I-215 Freeway	NB	NB Off Ramp at Eucalyptus Av.	Diverge	3	1	525	727	31.2	32.8	D	D
		NB On Ramp at Eucalyptus Av.	Merge	3	1	403	525	26.8	28.1	C	D
	SB	SB Off Ramp at Eucalyptus Av.	Diverge	5	2	379	986	10.0	13.1	A	B
		SB On Ramp at Eucalyptus Av.	Merge	3	1	475	809	32.0	38.4	D	**E**
SR-60 Freeway	WB	WB Off Ramp at Day St.	Diverge	4	1	684	698	14.5	15.4	B	B
		WB On Ramp at Day St.	Merge	3	1	368	601	18.7	21.6	B	C
	EB	EB Off Ramp at Day St.	Diverge	6	2	544	993	12.7	19.4	B	B
		EB On Ramp at Day St.	Merge	4	1	549	977	14.4	23.7	B	C

[1] Density calculated based on the Highway Capacity Manual (HCM) analysis; (pc/mi/ln) = passenger car per mile per lane

[2] Level of service determined using HCS2010 : Ramps and Ramp Junction software, Version 6.60

BOLD = LOS E or F

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TABLE 6-8: FREEWAY RAMP JUNCTION MERGE/DIVERGE ANALYSIS FOR OPENING YEAR WITH PROJECT CONDITIONS

Freeway	Direction	Ramp Location	Junction Type	Lanes on Freeway	Lanes on Ramp	Volume		Density [1]		LOS [2]	
						AM	PM	AM	PM	AM	PM
I-215 Freeway	NB	NB Off Ramp at Eucalyptus Av.	Diverge	3	1	737	846	32.6	33.6	D	D
		NB On Ramp at Eucalyptus Av.	Merge	3	1	457	735	27.3	29.8	C	D
	SB	SB Off Ramp at Eucalyptus Av.	Diverge	5	2	545	1,078	10.6	13.4	B	B
		SB On Ramp at Eucalyptus Av.	Merge	3	1	545	1,078	32.6	40.6	D	**E**
SR-60 Freeway	WB	WB Off Ramp at Day St.	Diverge	4	1	846	790	16.1	16.3	B	B
		WB On Ramp at Day St.	Merge	3	1	401	724	19.0	22.6	B	C
	EB	EB Off Ramp at Day St.	Diverge	6	2	641	1,049	13.1	19.9	B	B
		EB On Ramp at Day St.	Merge	4	1	603	1,182	14.8	25.4	B	C

[1] Density calculated based on the Highway Capacity Manual (HCM) analysis; (pc/mi/ln) = passenger car per mile per lane

[2] Level of service determined using HCS2010 : Ramps and Ramp Junction software, Version 6.60

BOLD = LOS E or F

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6.9 CUMULATIVE PLUS PROJECT IMPACTS AND RECOMMENDED IMPROVEMENTS

Improvement strategies have been recommended at intersections that have been identified as cumulatively impacted in an effort to reduce each location's peak hour delay and improve the associated LOS grade to LOS "D" or better. Although the intersection LOS is at an unacceptable level (LOS "E" or "F") with or without project, the change in peak hour delay is considered to be a significant project impact based upon City of Riverside criteria for projects that propose uses or intensities above that contained in the General Plan (Table 2-7 of this report).

The effectiveness of the recommended improvements to address Opening Year cumulative traffic impacts are discussed below and presented previously in Table 6-2. Improvement strategies identified in Table 6-2 have been recommended at intersections that have been identified as cumulatively impacted to reduce each location's peak hour delay to less than significant. It should be noted that the improvements shown in Table 6-2 are consistent with those improvements for Opening Year Without Project conditions (Table 6-1).

I-215 SB Ramps / Eucalyptus Avenue (#3)

- Participate in the installation of a traffic signal to serve the southbound right turn only off-ramp and westbound through traffic. This configuration is similar to the existing I-215 northbound right-turn only off-ramp / Eucalyptus Avenue.

Valley Springs Parkway / Eucalyptus Avenue (#4)

- NB Approach: Modify striping to provide a 2nd left turn lane, in addition to the existing two through lanes.
- SB Approach: Provide overlap phasing for the existing dual right turn lanes.

Day Street / Cottonwood Avenue (#13)

- NB Approach: Widen Day Street to provide a separate right turn lane, in addition to the existing left turn lane and one through lane.

Day Street / Alessandro Boulevard (#15)

- EB Approach: Modify striping and existing raised median to provide a 2nd left turn lane, in addition to the existing three through lanes.

Memorial Way / Towngate Drive (#16)

- EB Approach: Convert the existing 3rd through lane to provide a dedicated right turn lane with overlap phasing, in addition to the existing left turn lane and two through lanes.

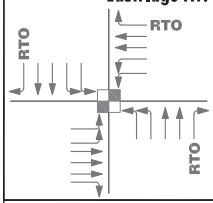
The recommended improvements for Cumulative (Opening Year) Without and With Project conditions are shown on Exhibit 6-7 and 6-8, respectively.

EXHIBIT 6-7: OPENING YEAR (2016) WITHOUT PROJECT RECOMMENDED IMPROVEMENTS

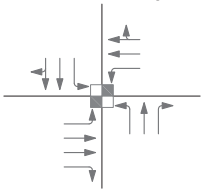
LEGEND:

- EXISTING TRAFFIC SIGNAL
- CUMULATIVE (OPENING YEAR - 2016) WITHOUT PROJECT TRAFFIC SIGNAL
- S = EXISTING ALL WAY STOP
- EXISTING STOP SIGN
- EXISTING LANE
- CUMULATIVE (OPENING YEAR - 2016) WITHOUT PROJECT LANE IMPROVEMENT
- EXISTING FREE RIGHT TURN LANE
- RTO = EXISTING RIGHT TURN OVERLAP
- RTO = CUMULATIVE (OPENING YEAR - 2016) WITHOUT PROJECT RIGHT TURN OVERLAP PHASING IMPROVEMENT
- 34 = INTERSECTION ID
- DEF = DEFACTO RIGHT TURN LANE
- * = LEFT TURN LANE ACCOMMODATED WITHIN TWO-WAY LEFT TURN LANE (TWLTL) MEDIAN

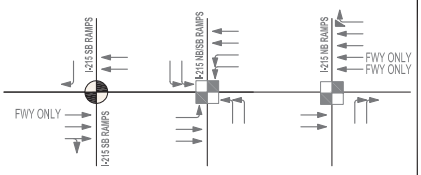
1 Sycamore Cyn. Bl. & Eastridge Av.



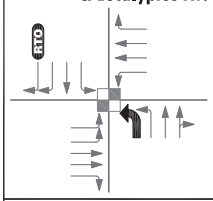
2 Box Springs Bl. & Eastridge Av.



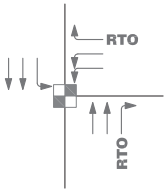
3 I-215 Ramps & Eucalyptus Av.



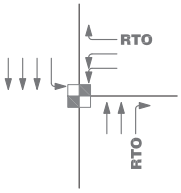
4 Valley Springs Pkwy. & Eucalyptus Av.



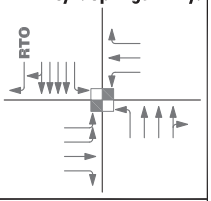
5 Day St. & SR-60 WB Ramps



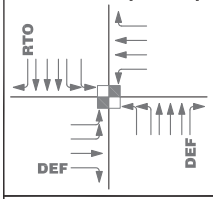
6 Day St. & SR-60 EB Ramps



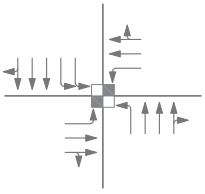
7 Day St. & Cyn. Springs Pkwy.



8 Day St. & Campus Pkwy.



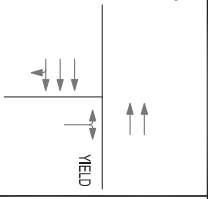
9 Day St. & Gateway Dr.



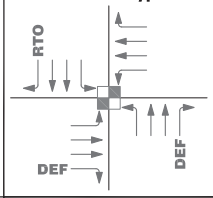
10 Day St. & Dwy. 1

INTERSECTION DOES NOT EXIST

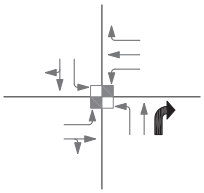
11 Day St. & Dwy. 2



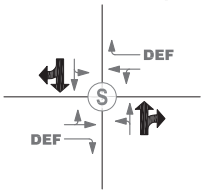
12 Day St. & Eucalyptus Av.



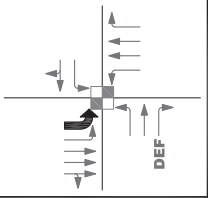
13 Day St. & Cottonwood Av.



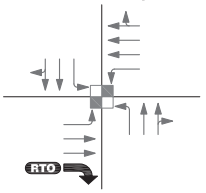
14 Day St. & Bay Av.



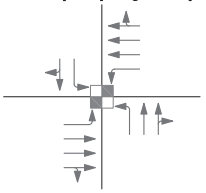
15 Day St. & Alessandro Bl.



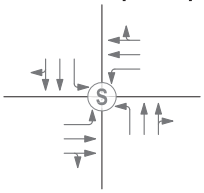
16 Memorial Wy. & Towngate Dr.



17 Corporate Centre Pl. & Cyn. Springs Pkwy.



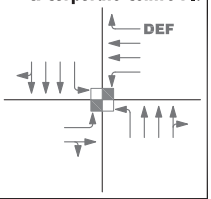
18 Corporate Centre Pl. & Campus Pkwy.



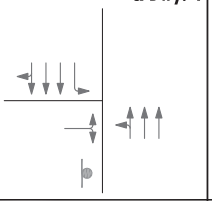
19 Dwy. 3 & Corporate Centre Pl.

INTERSECTION DOES NOT EXIST

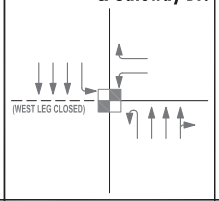
20 Valley Springs Pkwy. & Corporate Centre Pl.



21 Valley Springs Pkwy. & Dwy. 4



22 Valley Springs Pkwy. & Gateway Dr.



23 Valley Springs Pkwy. & Dwy. 5

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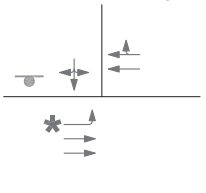
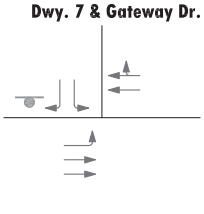
24 Dwy. 6 & Gateway Dr.



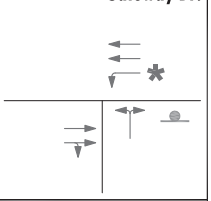
25 Canyon Park Dr. - Dwy. 7 & Gateway Dr.



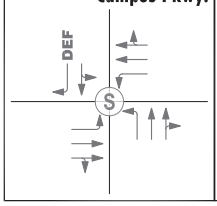
26 Dwy. 8 & Gateway Dr.

INTERSECTION DOES NOT EXIST

27 Dwy. 9 & Gateway Dr.



28 Canyon Park Dr. & Campus Pkwy.



29 Canyon Park Dr. & Dwy. 10

INTERSECTION DOES NOT EXIST

30 Canyon Park Dr. & Dwy. 11

INTERSECTION DOES NOT EXIST

31 Canyon Park Dr. & Dwy. 12

INTERSECTION DOES NOT EXIST

32 Dwy. 13 & Gateway Dr.

INTERSECTION DOES NOT EXIST

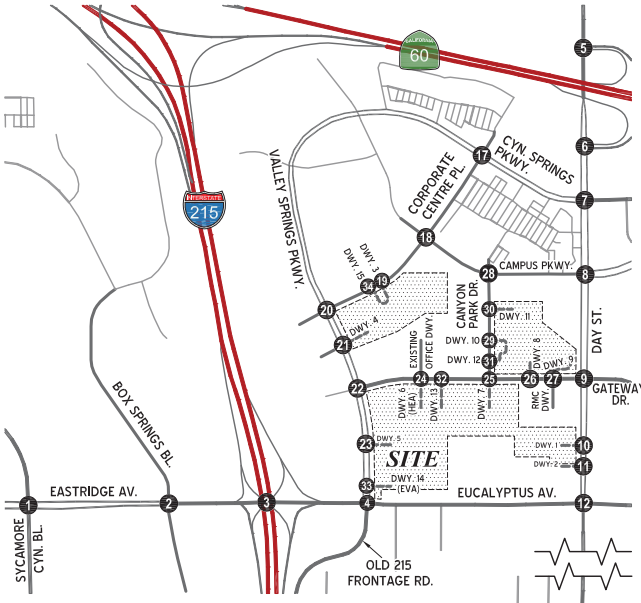
33 Valley Springs Pkwy. & Dwy. 14

INTERSECTION DOES NOT EXIST

34 Dwy. 15 & Corporate Centre Pl.

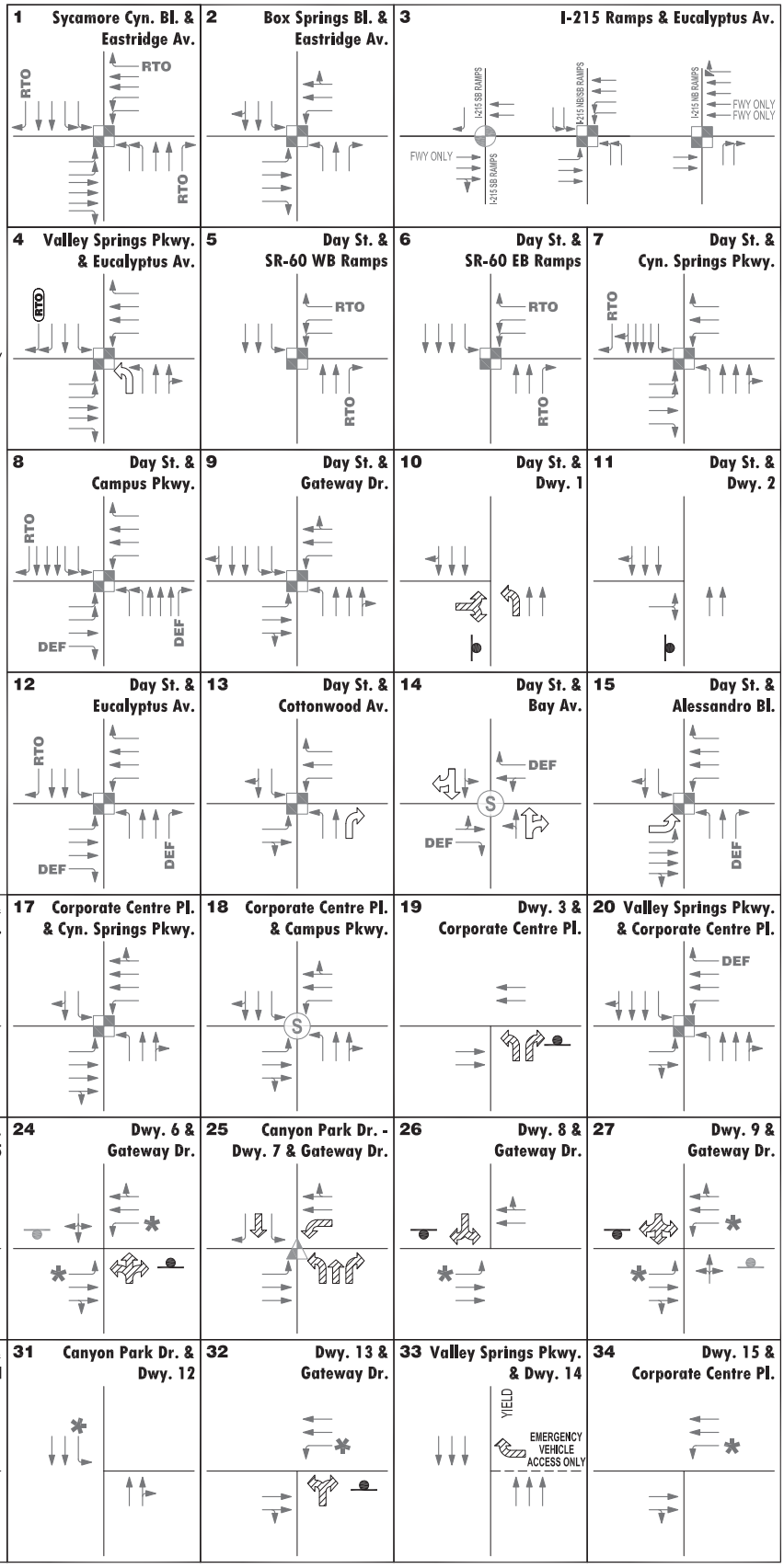
INTERSECTION DOES NOT EXIST

EXHIBIT 6-8: OPENING YEAR (2016) WITH PROJECT RECOMMENDED IMPROVEMENTS



LEGEND:

- EXISTING TRAFFIC SIGNAL
- CUMULATIVE (OPENING YEAR - 2016) WITHOUT PROJECT TRAFFIC SIGNAL
- EXISTING PLUS PROJECT TRAFFIC SIGNAL
- EXISTING ALL WAY STOP
- EXISTING STOP SIGN
- EXISTING PLUS PROJECT STOP SIGN
- EXISTING LANE
- CUMULATIVE (OPENING YEAR - 2016) WITHOUT PROJECT LANE IMPROVEMENT
- EXISTING PLUS PROJECT LANE IMPROVEMENT
- EXISTING FREE RIGHT TURN LANE
- RTO EXISTING RIGHT TURN OVERLAP
- (RTO) CUMULATIVE (OPENING YEAR - 2016) WITHOUT PROJECT RIGHT TURN OVERLAP PHASING IMPROVEMENT
- DEF DEFACTO RIGHT TURN LANE
- (34) INTERSECTION ID
- * LEFT TURN LANE ACCOMMODATED WITHIN TWO-WAY LEFT TURN LANE (TWLTL) MEDIAN



As the proposed Project would contribute to the existing and forecasted deficient freeway segments, the Project's contribution to these cumulative traffic impacts are considered cumulatively considerable.

Neither Caltrans nor the State has adopted a fee program that can ensure that locally-contributed impact fees will be tied to improvements to freeway mainlines, and only Caltrans has the jurisdiction over mainline improvements. Because Caltrans has exclusive control over state highway improvements, ensuring that fair share contributions to mainline improvements are actually part of a program tied to implementation of mitigation is within the jurisdiction of Caltrans. As such, the City of Riverside may decide whether specific overriding economic, legal, social, technological, or other benefits of the project outweigh the unavoidable adverse cumulative traffic impacts associated with the Project.

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7 GENERAL PLAN BUILDOUT TRAFFIC CONDITIONS

This section discusses the methods used to develop General Plan Buildout Without and With Project traffic forecasts, and the resulting intersection operations and freeway mainline operations.

7.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for General Plan Buildout conditions are consistent with those shown previously on Exhibit 3-1, with the exception of Project driveway and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for General Plan Buildout traffic conditions.

7.2 GENERAL PLAN BUILDOUT WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

The weekday ADT volumes which can be expected for General Plan Buildout Without Project traffic conditions are shown on Exhibit 7-1. Exhibits 7-2 and 7-3 show the weekday AM and PM peak hour intersection turning movement volumes for General Plan Buildout Without Project traffic conditions.

7.3 GENERAL PLAN BUILDOUT WITH PROJECT TRAFFIC VOLUME FORECASTS

The ADT volumes which can be expected for General Plan Buildout With Project traffic conditions are shown on Exhibit 7-4. Exhibits 7-5 and 7-6 show the weekday AM and PM peak hour intersection turning movement volumes for General Plan Buildout With Project traffic conditions.

7.4 INTERSECTION OPERATIONS ANALYSIS

LOS calculations were conducted for the study intersections to evaluate their operations under General Plan Buildout Without Project conditions with roadway and intersection geometrics consistent with Section 7.1 *Roadway Improvements*.

7.4.1 GENERAL PLAN BUILDOUT WITHOUT PROJECT TRAFFIC CONDITIONS

Based on the assessment of General Plan Buildout without Project traffic conditions (see Table 7-1), the intersection of Day Street / Eucalyptus Avenue (#12) was found to operate at a deficient LOS (LOS "E" or worse) during the peak hours, in addition to the deficient intersections previously identified under Opening Year without Project conditions.

The intersection operations analysis worksheets for General Plan Buildout Without Project traffic conditions are included in Appendix "7.1" of this TIA.

7.4.2 GENERAL PLAN BUILDOUT WITH PROJECT TRAFFIC CONDITIONS

For General Plan Buildout With Project conditions, Table 7-2 indicates that the addition of Project traffic would not result in any additional deficiencies beyond those previously identified under General Plan Buildout Without Project traffic conditions. Although the intersection LOS is at an unacceptable level (LOS "E" or "F") with or without project, the change in peak hour delay is considered to be a significant project impact based upon City of Riverside criteria for projects that propose uses or intensities above that contained in the General Plan (Table 2-7 of this report). For City of Moreno Valley intersections, an impact is identified if the Project

EXHIBIT 7-1: GENERAL PLAN BUILDOUT WITHOUT PROJECT AVERAGE DAILY TRAFFIC VOLUMES

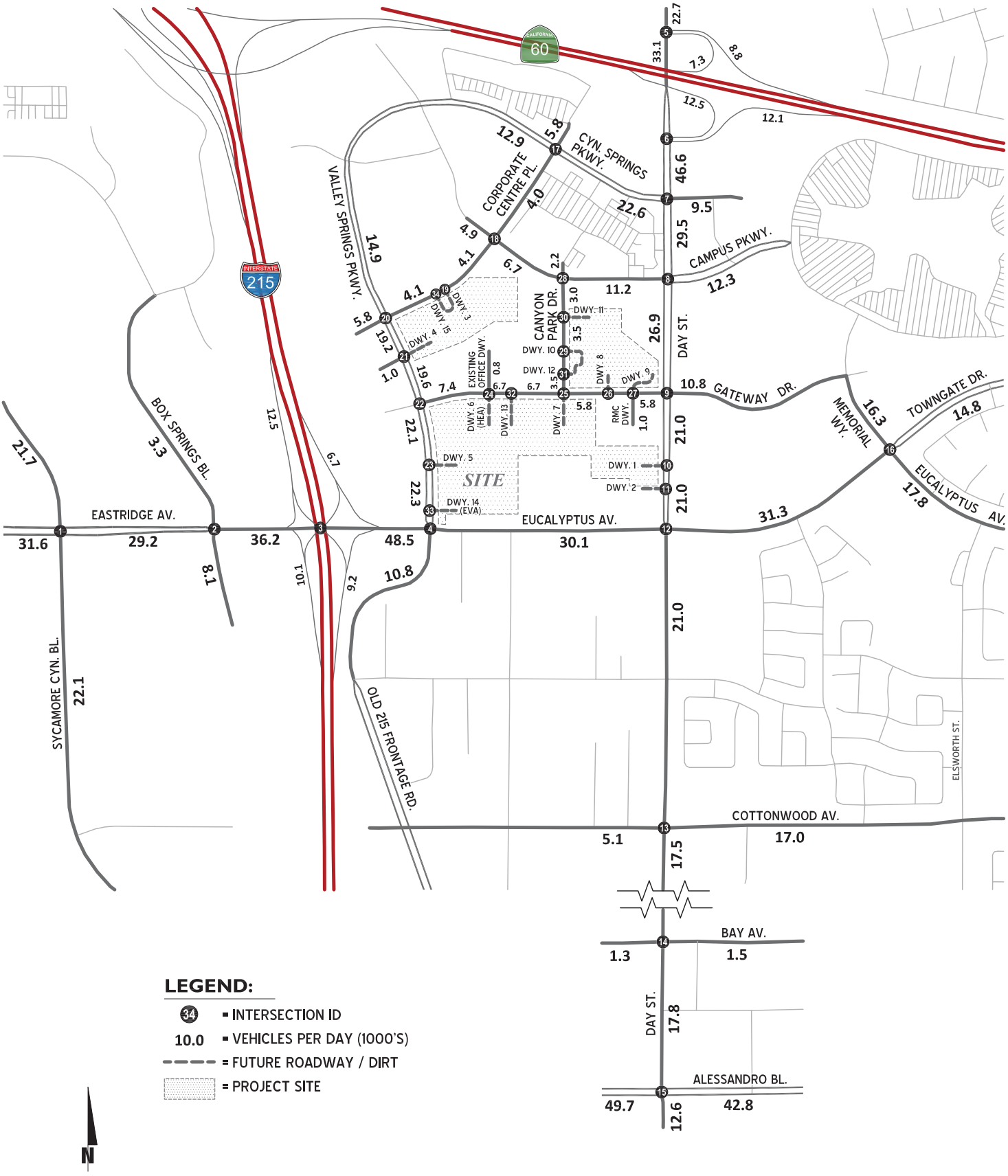
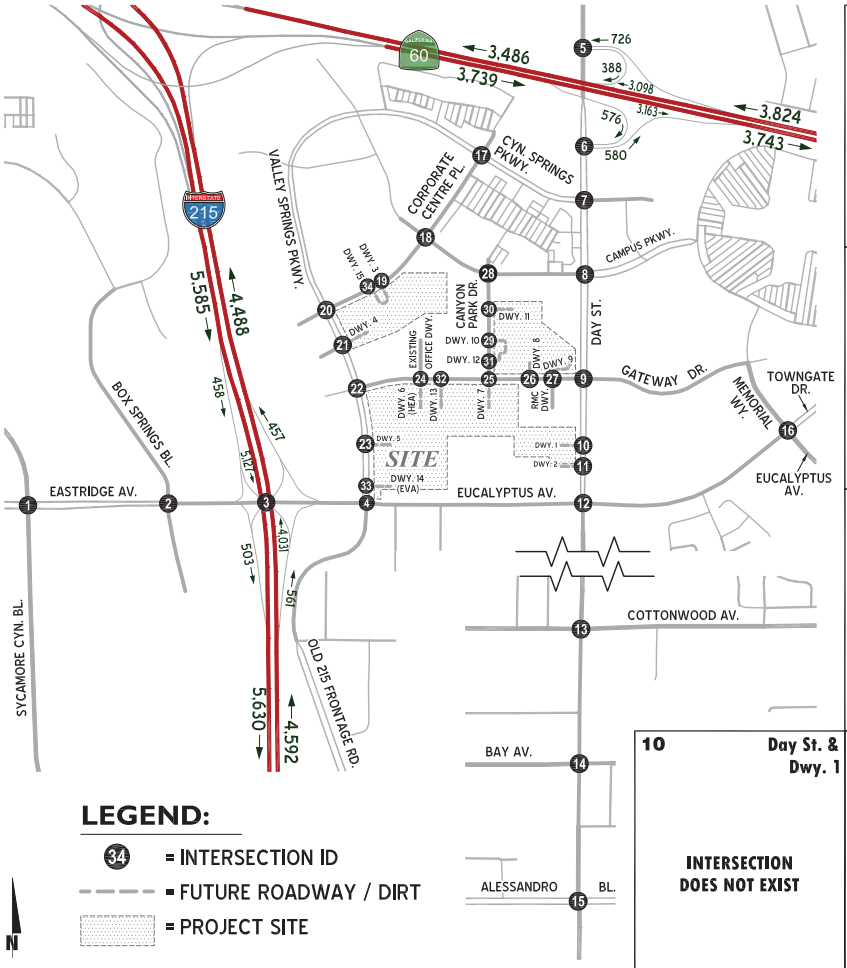


EXHIBIT 7-2: GENERAL PLAN BUILDOUT WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES



LEGEND:

34 = INTERSECTION ID

= FUTURE ROADWAY / DIRT

= PROJECT SITE

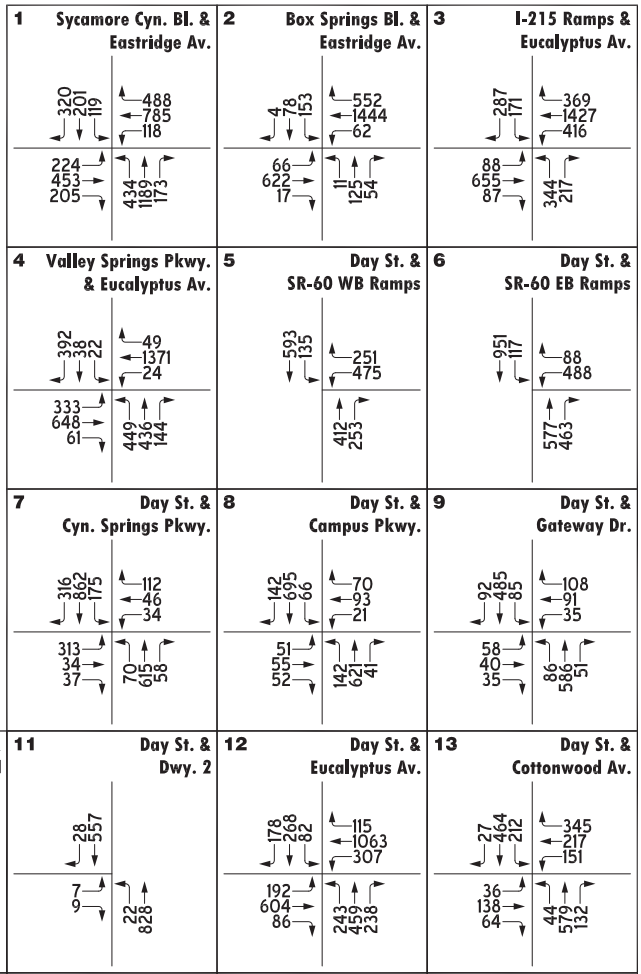
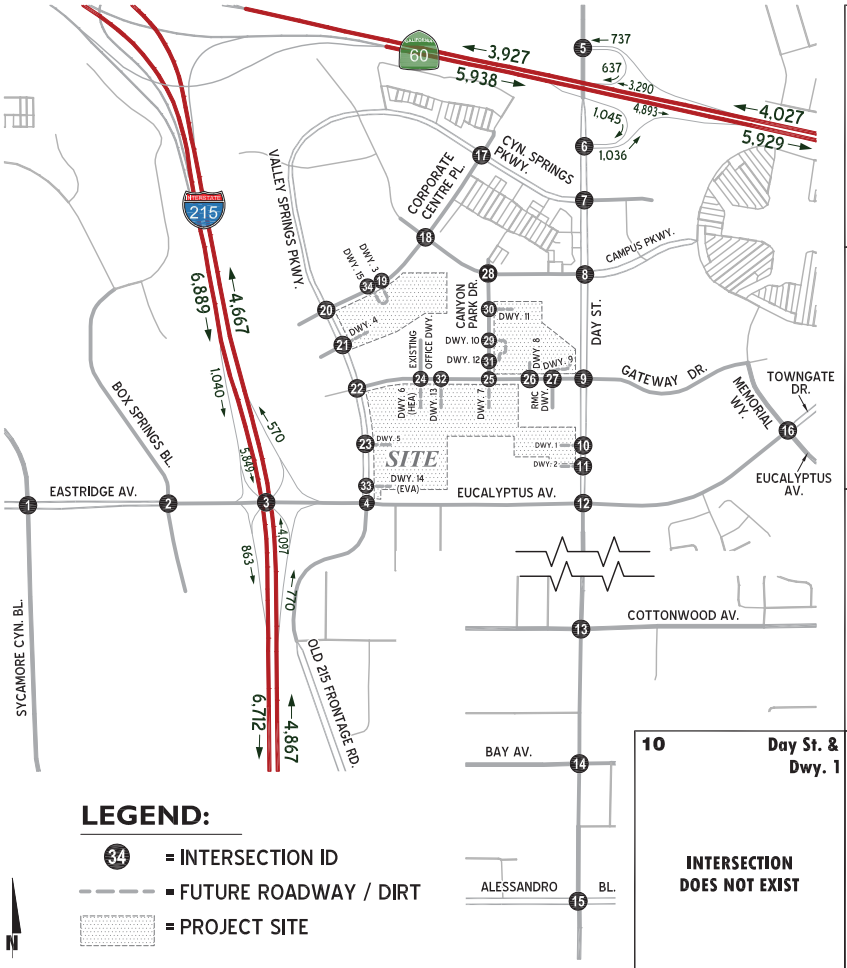


EXHIBIT 7-3: GENERAL PLAN BUILDOUT WITHOUT PROJECT
PM PEAK HOUR INTERSECTION VOLUMES



LEGEND:

34 = INTERSECTION ID

= FUTURE ROADWAY / DIRT

= PROJECT SITE

N

1 Sycamore Cyn. Bl. & Eastridge Av.

256	410	368
441	884	424
270	551	500
268	288	141

2 Box Springs Bl. & Eastridge Av.

40	141	318
13	1375	3
207	1282	33
20	96	35

3 I-215 Ramps & Eucalyptus Av.

339	701	
188	1360	180
382	1020	683
162	608	

4 Valley Springs Pkwy. & Eucalyptus Av.

896	203	77
700	1670	298
60	1074	40
115	171	55

5 Day St. & SR-60 WB Ramps

728	82	
155	582	
934	555	

6 Day St. & SR-60 EB Ramps

1142	169	
315	730	
1174	867	

7 Day St. & Cyn. Springs Pkwy.

561	919	223
722	132	175
245	89	51
228	1074	64

8 Day St. & Campus Pkwy.

54	822	275
201	94	184
267	202	91
203	898	101

9 Day St. & Gateway Dr.

44	707	221
113	118	79
197	110	127
65	704	127

10 Day St. & Dwy. 1

INTERSECTION DOES NOT EXIST

11 Day St. & Dwy. 2

1	952	
12	9	
2	1091	

12 Day St. & Eucalyptus Av.

261	510	151
263	1286	195
149	832	266
96	508	392

13 Day St. & Cottonwood Av.

24	552	267
25	140	57
395	232	226
86	669	119

14 Day St. & Bay Av.

8	770	23
9	45	15
20	24	9
14	877	7

15 Day St. & Alessandro Bl.

218	377	220
248	2195	121
135	1324	107
163	463	166

16 Memorial Wy. & Towngate Dr.

319	296	58
473	641	589
69	525	30
402	290	22

17 Corporate Centre Pl. & Cyn. Springs Pkwy.

39	61	181
48	439	54
107	494	55
40	67	60

18 Corporate Centre Pl. & Campus Pkwy.

50	92	42
24	180	21
76	161	115
9	79	70

19 Dwy. 3 & Corporate Centre Pl.

INTERSECTION DOES NOT EXIST

20 Valley Springs Pkwy. & Corporate Centre Pl.

34	599	44
36	46	115
25	91	112
189	624	70

21 Valley Springs Pkwy. & Dwy. 4

17	809	
12	34	
20	871	

22 Valley Springs Pkwy. & Gateway Dr.

800	43	
(WEST LEG CLOSED)		
81	378	
0	810	122

23 Valley Springs Pkwy. & Dwy. 5

INTERSECTION DOES NOT EXIST

24 Dwy. 6 & Gateway Dr.

23	19	
11	183	
17	345	

25 Canyon Park Dr. - Dwy. 7 & Gateway Dr.

163	49	
35	167	
47	196	

26 Dwy. 8 & Gateway Dr.

INTERSECTION DOES NOT EXIST

27 Dwy. 9 & Gateway Dr.

256	5	
203	18	
5	55	

28 Canyon Park Dr. & Campus Pkwy.

17	35	37
17	243	33
66	308	131
26	30	33

29 Canyon Park Dr. & Dwy. 10

INTERSECTION DOES NOT EXIST

30 Canyon Park Dr. & Dwy. 11

INTERSECTION DOES NOT EXIST

31 Canyon Park Dr. & Dwy. 12

INTERSECTION DOES NOT EXIST

32 Dwy. 13 & Gateway Dr.

INTERSECTION DOES NOT EXIST

33 Valley Springs Pkwy. & Dwy. 14

INTERSECTION DOES NOT EXIST

34 Dwy. 15 & Corporate Centre Pl.

INTERSECTION DOES NOT EXIST

EXHIBIT 7-4: GENERAL PLAN BUILDOUT WITH PROJECT AVERAGE DAILY TRAFFIC VOLUMES

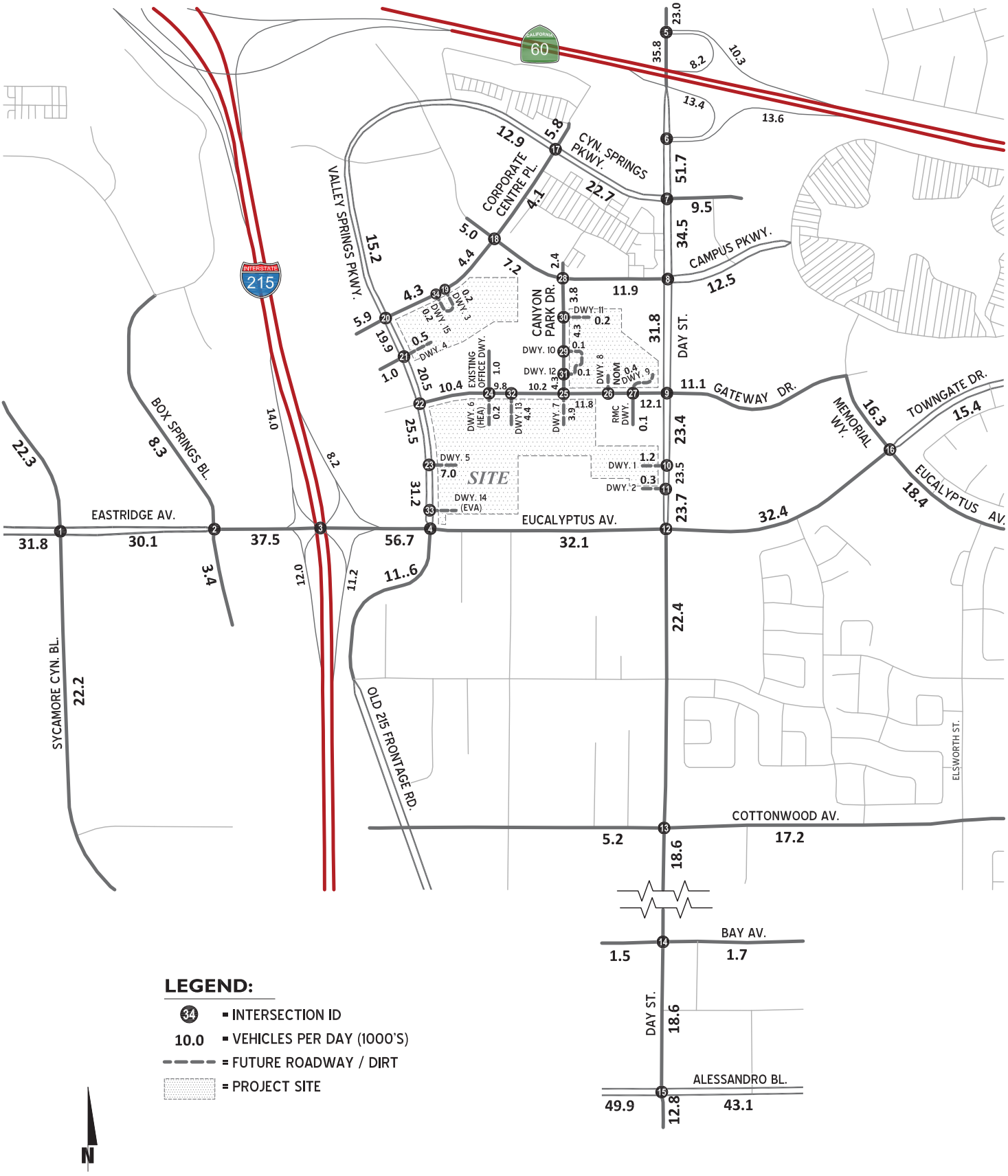
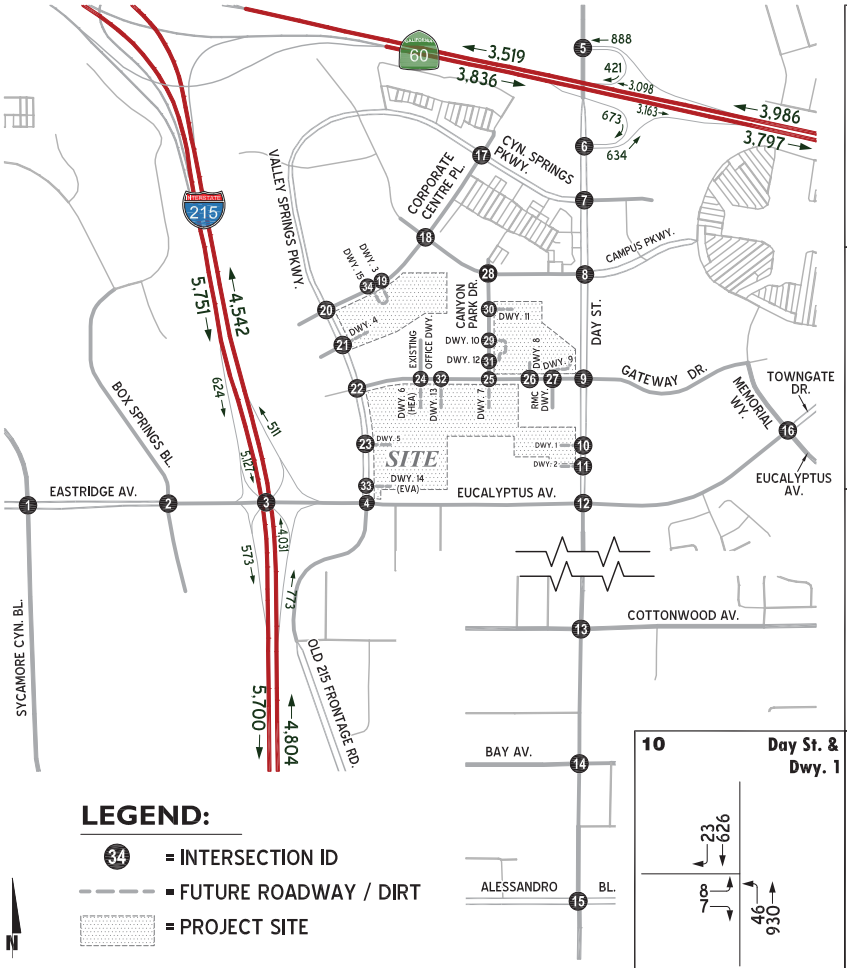


EXHIBIT 7-5: GENERAL PLAN BUILDOUT WITH PROJECT
AM PEAK HOUR INTERSECTION VOLUMES



1 Sycamore Cyn. Bl. & Eastridge Av.
320 201 149 → 498 788 121
224 463 205 → 434 1189 183

2 Box Springs Bl. & Eastridge Av.
4 78 163 → 555 1461 65
66 673 17 → 11 125 64

3 I-215 Ramps & Eucalyptus Av.
287 337 → 423 1450 486
88 725 87 → 344 429

4 Valley Springs Pkwy. & Eucalyptus Av.
522 53 40 → 103 1388 24
726 704 61 → 449 481 145

5 Day St. & SR-60 WB Ramps
613 135 → 251 637
418 286

6 Day St. & SR-60 EB Ramps
1133 117 → 88 585
616 517

7 Day St. & Cyn. Springs Pkwy.
318 139 175 → 112 46 34
316 34 38 → 70 705 58

8 Day St. & Campus Pkwy.
150 964 66 → 70 103 22
59 559 56 → 146 702 41

9 Day St. & Gateway Dr.
336 515 85 → 108 110 37
133 46 66 → 177 597 51

10 Day St. & Dwy. 1
23 626 → 46 930
8 7 →

11 Day St. & Dwy. 2
36 597 → 22 968
7 14 →

12 Day St. & Eucalyptus Av.
196 287 90 → 141 1100 307
249 617 91 → 261 516 238

13 Day St. & Cottonwood Av.
27 484 216 → 356 217 151
37 138 64 → 44 641 132

14 Day St. & Bay Av.
9 637 23 → 63 24 9
20 29 18 → 7 777 1

15 Day St. & Alessandro Bl.
154 434 99 → 125 1671 171
296 1226 191 → 100 309 109

16 Memorial Wy. & Towngate Dr.
330 89 16 → 34 539 10
232 402 337 → 565 174 17

17 Corporate Centre Pl. & Cyn. Springs Pkwy.
12 13 28 → 27 308 36
9 218 25 → 27 27 34

18 Corporate Centre Pl. & Campus Pkwy.
39 27 15 → 43 104 79
12 70 4 → 16 51 29

19 Dwy. 3 & Corporate Centre Pl.
→ 110
87 → 3 9

20 Valley Springs Pkwy. & Corporate Centre Pl.
22 356 29 → 5 69 34
9 12 37 → 131 399 48

21 Valley Springs Pkwy. & Dwy. 4
12 413 2 → 4 0 14
3 150 15 → 22 571 7

22 Valley Springs Pkwy. & Gateway Dr.
379 63 → 48 174
(WEST LEG CLOSED)
0 552 418

23 Valley Springs Pkwy. & Dwy. 5
507 45 → 14 108
955 356 →

24 Dwy. 6 & Gateway Dr.
0 12 → 13 225 5
13 349 7 → 2 1 2

25 Canyon Park Dr. - Dwy. 7 & Gateway Dr.
46 36 24 → 30 295 169
77 190 18 → 5 12 51

26 Dwy. 8 & Gateway Dr.
0 0 → 1 510
1 232 →

27 Dwy. 9 & Gateway Dr.
1 0 7 → 13 509 102
3 211 19 → 1 0 27

28 Canyon Park Dr. & Campus Pkwy.
5 35 15 → 35 201 88
5 69 39 → 18 20 39

29 Canyon Park Dr. & Dwy. 10
108 → 2 1
117 →

30 Canyon Park Dr. & Dwy. 11
107 8 → 4 1
117 2 →

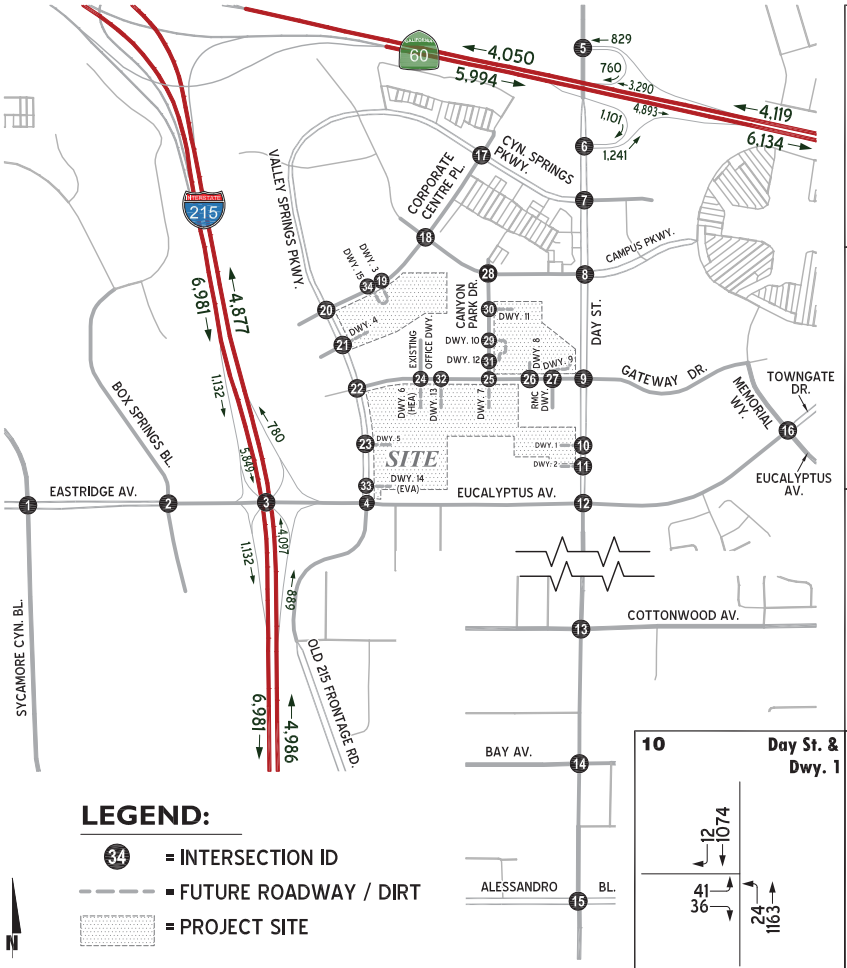
31 Canyon Park Dr. & Dwy. 12
106 3 →
117 2 →

32 Dwy. 13 & Gateway Dr.
→ 209 137
247 116 → 34 41

33 Valley Springs Pkwy. & Dwy. 14
615 → EMERGENCY VEHICLE ACCESS
1310 →

34 Dwy. 15 & Corporate Centre Pl.
→ 108 5
87 2 →

EXHIBIT 7-6: GENERAL PLAN BUILDOUT WITH PROJECT
PM PEAK HOUR INTERSECTION VOLUMES



LEGEND:

34 = INTERSECTION ID

= FUTURE ROADWAY / DIRT

= PROJECT SITE

N

1 Sycamore Cyn. Bl. & Eastridge Av.

256 410 385 →		← 308 564 513
441 890 424 ←		→ 268 288 147

2 Box Springs Bl. & Eastridge Av.

40 141 323 →		← 219 1346 45
13 1404 3 →		← 20 96 40

3 I-215 Ramps & Eucalyptus Av.

339 793 →		← 592 1109 952
188 1399 180 →		← 162 727

4 Valley Springs Pkwy. & Eucalyptus Av.

1391 260 146 →		← 90 1147 41
916 1705 298 →		← 115 195 55

5 Day St. & SR-60 WB Ramps

739 82 →		← 155 674
		← 959 678

6 Day St. & SR-60 EB Ramps

1244 169 →		← 315 786
		← 1322 1072

7 Day St. & Cyn. Springs Pkwy.

564 1074 223 →		← 245 89 51
725 132 175 →		← 229 1424 64

8 Day St. & Campus Pkwy.

67 965 275 →		← 267 209 91
213 107 190 →		← 210 1238 102

9 Day St. & Gateway Dr.

174 726 221 →		← 197 121 128
419 142 192 →		← 122 746 129

10 Day St. & Dwy. 1

12 1074 →		
41 36 ←		← 24 1163

11 Day St. & Dwy. 2

5 1105 →		
12 35 ←		← 2 1175

12 Day St. & Eucalyptus Av.

335 582 184 →		← 164 853 266
299 1332 217 →		← 105 541 392

13 Day St. & Cottonwood Av.

25 631 281 →		← 402 232 226
26 140 57 →		← 86 704 119

14 Day St. & Bay Av.

20 823 37 →		← 26 24 9
14 45 15 →		← 14 901 7

15 Day St. & Alessandro Bl.

232 390 246 →		← 146 1324 107
255 2195 121 →		← 163 469 166

16 Memorial Wy. & Towngate Dr.

319 296 58 →		← 69 543 30
473 680 629 →		← 420 290 22

17 Corporate Centre Pl. & Cyn. Springs Pkwy.

39 61 181 →		← 107 494 58
48 439 54 →		← 40 67 63

18 Corporate Centre Pl. & Campus Pkwy.

50 95 47 →		← 88 174 124
24 186 21 →		← 9 82 79

19 Dwy. 3 & Corporate Centre Pl.

		← 240
163 →		← 3 8

20 Valley Springs Pkwy. & Corporate Centre Pl.

34 610 44 →		← 25 91 118
36 46 120 →		← 201 649 76

21 Valley Springs Pkwy. & Dwy. 4

17 827 4 →		← 4 0 13
12 0 34 →		← 20 910 14

22 Valley Springs Pkwy. & Gateway Dr.

824 50 →		← 96 553
(WEST LEG CLOSED)		← 0 848 226

23 Valley Springs Pkwy. & Dwy. 5

1351 24 →		← 57 446
		← 1017 185

24 Dwy. 6 & Gateway Dr.

23 24 →		← 28 525 3
11 290 4 →		← 9 1 7

25 Canyon Park Dr. - Dwy. 7 & Gateway Dr.

166 20 49 →		← 47 291 88
38 385 9 →		← 23 46 212

26 Dwy. 8 & Gateway Dr.

1 1 →		← 1 391
1 691 →		

27 Dwy. 9 & Gateway Dr.

3 0 16 →		← 17 384 18
3 683 5 →		← 5 0 55

28 Canyon Park Dr. & Campus Pkwy.

17 40 37 →		← 66 317 148
17 251 44 →		← 50 42 55

29 Canyon Park Dr. & Dwy. 10

237 →		← 4 2
		← 130

30 Canyon Park Dr. & Dwy. 11

235 10 →		← 9 2
		← 132 2

31 Canyon Park Dr. & Dwy. 12

235 4 →		
		← 130 2

32 Dwy. 13 & Gateway Dr.

		← 411 71
261 60 →		← 145 171

33 Valley Springs Pkwy. & Dwy. 14

1797 →		
	EMERGENCY VEHICLE ACCESS	
		← 1201

34 Dwy. 15 & Corporate Centre Pl.

		← 234 9
163 3 →		

TABLE 7-1: INTERSECTION ANALYSIS FOR GENERAL PLAN BUILDOUT WITHOUT PROJECT CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs)		Level of Service[2]	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Sycamore Cyn. Bl. / Eastridge Av.	TS	2	2	1>	2	2	1>	2	3	1	2	2	1>	46.2	33.8	D	C
2	Box Springs Bl. / Eastridge Av.	TS	1	1	1	1	2	0	1	2	1	1	2	0	39.9	45.5	D	D
3	I-215 NB & SB Ramps / Eucalyptus Av.	TS	2	0	0	2	0	0	1	2	0	2	2	0	37.3	46.8	D	D
	➢ I-215 SB Ramps / Eucalyptus Av.																	
	- Without Improvements	CSS	0	0	0	0	0	1	0	3	0	0	2	0	**>80**	**38.6**	**F**	**E**
	- With Improvements	**TS**	0	0	0	0	0	1	0	3	0	0	2	0	14.5	15.0	B	B
	➢ I-215 NB Ramps / Eucalyptus Av.	TS	0	0	2	0	0	0	0	2	0	0	4	1>>	0.3	1.1	A	A
4	Valley Springs Pkwy. / Eucalyptus Av.																	
	- Without Improvements	TS	1	2	d	1	1	2	2	2	1	1	2	1	**>80**	**>80**	**F**	**F**
	- With Improvements	TS	**2**	2	**0**	1	1	**2>**	2	2	1	1	2	1	41.7	22.1	D	C
5	Day St. / SR-60 WB Ramps	TS	0	2	1>	1	2	0	0	0	0	2	0	1>	21.0	13.0	C	B
6	Day St. / SR-60 EB Ramps	TS	0	2	1>	1	3	0	0	0	0	2	0	1>	20.0	19.9	B	B
7	Day St. / Cyn. Springs Pkwy.	TS	1	3	0	1	3.5	1.5>	2	1	1	1	1	1	24.3	42.9	C	D
8	Day St. / Campus Pkwy.	TS	2	3	d	2	3	1>	2	1	d	1	2	1	18.9	34.6	B	C
9	Day St. / Gateway Dr.	TS	1	3	0	2	3	0	1	2	0	1	2	0	23.6	31.6	C	C
10	Day St. / Dwy. 1		Intersection Does Not Exist															
11	Day St. / Dwy. 2	CSY	1	2	0	0	3	0	0	1!	0	0	0	0	13.8	20.8	B	C
12	Day St. / Eucalyptus Av.																	
	- Without Improvements	TS	1	2	d	1	2	1>	1	2	d	1	2	1	42.0	**58.8**	D	**E**
	- With Improvements	TS	1	2	**1>**	1	2	1>	1	2	d	1	2	1	40.0	45.7	D	D
13	Day St. / Cottonwood Av.																	
	- Without Improvements	TS	1	1	0	1	1	0	1	1	0	1	1	1	**57.7**	**>80**	**E**	**F**
	- With Improvements	TS	1	1	**1**	1	1	0	1	1	**1**	1	1	**1>**	34.3	43.6	C	D
14	Day St. / Bay Av.																	
	- Without Improvements	AWS	0	1!	0	0	1!	0	0.5	0.5	d	0.5	0.5	d	**53.7**	**54.4**	**F**	**F**
	- With Improvements	**TS**	0	**2**	0	0	**2**	0	0.5	0.5	d	0.5	0.5	d	5.8	4.7	A	A
15	Day St. / Alessandro Bl.																	
	- Without Improvements	TS	1	1	d	1	1	0	1	3	0	1	2	1	**77.7**	**>80**	**E**	**F**
	- With Improvements	TS	1	**2**	0	1	1	**1**	**2**	3	0	**2**	**3**	**0**	31.7	51.8	C	D
16	Memorial Wy. / Towngate Dr.																	
	- Without Improvements	TS	1	2	0	1	2	0	1	3	0	1	3	0	**56.6**	**69.7**	**E**	**E**
	- With Improvements	TS	1	2	0	1	**1**	**1>**	1	**2**	**1>**	1	3	0	41.1	50.2	D	D
17	Corporate Ctr. Pl. / Cyn. Springs Pkwy.	TS	1	2	0	1	1	0	1	3	0	1	3	0	39.9	35.9	D	D
18	Corporate Ctre Pl. / Campus Pkwy.	AWS	1	2	0	1	2	0	1	2	0	1	2	0	8.5	10.7	A	B
19	Dwy. 3 / Corporate Ctr. Pl.		Intersection Does Not Exist															
20	Valley Springs Pkwy. / Corporate Ctr. Pl.	TS	1	3	0	1	3	0	1	1	0	1	2	d	18.7	18.7	B	B

TABLE 7-1: INTERSECTION ANALYSIS FOR GENERAL PLAN BUILDOUT WITHOUT PROJECT CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs)		Level of Service[2]	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
21	Valley Springs Pkwy. / Dwy. 4	CSS	0	3	0	1	3	0	0	1!	0	0	0	0	11.1	16.1	B	C
22	Valley Springs Pkwy. / Gateway Dr.	TS	1	3	0	1	3	0	0	0	0	1	0	1	18.2	11.5	B	B
23	Valley Springs Pkwy. / Dwy. 5		Intersection Does Not Exist															
24	Dwy. 6 / Gateway Dr.	CSS	0	0	0	0	1!	0	1	2	0	0	2	0	10.3	11.6	B	B
25	Canyon Park Dr. - Dwy. 7 / Gateway Dr.	**TS**	0	0	0	1	0	1	1	2	0	0	2	0	11.0	11.4	B	B
26	Dwy. 8 / Gateway Dr.		Intersection Does Not Exist															
27	Dwy. 9 / Gateway Dr.	CSS	0	1!	0	0	0	0	0	2	0	1	2	0	8.9	9.5	A	A
28	Canyon Park Dr. / Campus Pkwy.	AWS	1	2	0	0.5	0.5	d	1	2	0	1	2	0	8.7	11.0	A	B
29	Canyon Park Dr. / Dwy. 10		Intersection Does Not Exist															
30	Canyon Park Dr. / Dwy. 11		Intersection Does Not Exist															
31	Canyon Park Dr. / Dwy. 12		Intersection Does Not Exist															
32	Dwy. 13 / Gateway Dr.		Intersection Does Not Exist															
33	Valley Springs Pkwy. / Dwy. 14		Intersection Does Not Exist															
34	Dwy. 15 / Corporate Centre Pl.		Intersection Does Not Exist															

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane; **1** = Improvement

[2] Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. Delay and level of service is calculated using Synchro 8.0 analysis software.

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[3] TS = Traffic Signal; CSY = Cross-street Yield (implied); CSS = Cross-street Stop; AWS = All-Way Stop

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TABLE 7-2: INTERSECTION ANALYSIS FOR GENERAL PLAN BUILDOUT WITH PROJECT CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs)		Level of Service[2]	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Sycamore Cyn. Bl. / Eastridge Av.	TS	2	2	1>	2	2	1>	2	3	1	2	2	1>	46.9	34.0	D	C
2	Box Springs Bl. / Eastridge Av.	TS	1	1	1	1	2	0	1	2	1	1	2	0	51.9	48.5	D	D
3	I-215 NB & SB Ramps / Eucalyptus Av.	TS	2	0	0	2	0	0	1	2	0	2	2	0	40.1	54.7	D	D
	➢ I-215 SB Ramps / Eucalyptus Av.																	
	- Without Improvements	CSS	0	0	0	0	0	1	0	3	0	0	2	0	**>80**	**47.8**	**F**	**E**
	- With Improvements	**TS**	0	0	0	0	0	1	0	3	0	0	2	0	14.8	15.9	B	B
	➢ I-215 NB Ramps / Eucalyptus Av.	TS	0	0	2	0	0	0	0	2	0	0	4	1>>	0.4	1.3	A	A
4	Valley Springs Pkwy. / Eucalyptus Av.																	
	- Without Improvements	TS	1	2	d	1	1	2	2	2	1	1	2	1	**>80**	**>80**	**F**	**F**
	- With Improvements	TS	**2**	2	**0**	1	1	**2>**	2	2	1	1	2	1	54.1	53.9	D	D
5	Day St. / SR-60 WB Ramps	TS	0	2	1>	1	2	0	0	0	0	2	0	1>	23.0	16.7	C	B
6	Day St. / SR-60 EB Ramps	TS	0	2	1>	1	3	0	0	0	0	2	0	1>	26.3	25.4	C	C
7	Day St. / Cyn. Springs Pkwy.	TS	1	3	0	1	3.5	1.5>	2	1	1	1	1	1	31.2	50.9	C	D
8	Day St. / Campus Pkwy.	TS	2	3	d	2	3	1>	2	1	d	1	2	1	19.4	44.0	B	D
9	Day St. / Gateway Dr.	TS	1	3	0	2	3	0	1	2	0	1	2	0	31.8	38.6	C	D
10	Day St. / Dwy. 1	**CSS**	**1**	2	0	0	3	0	0	**1!**	0	0	0	0	15.9	33.3	C	D
11	Day St. / Dwy. 2	**CSS**	1	2	0	0	3	0	0	1!	0	0	0	0	13.9	20.9	B	C
12	Day St. / Eucalyptus Av.																	
	- Without Improvements	TS	1	2	d	1	2	1>	1	2	d	1	2	1	46.6	**65.4**	D	**E**
	- With Improvements	TS	1	2	**1>**	1	2	1>	1	2	d	1	2	1	45.6	50.6	D	D
13	Day St. / Cottonwood Av.																	
	- Without Improvements	TS	1	1	0	1	1	0	1	1	0	1	1	1	**73.0**	**>80**	**E**	**F**
	- With Improvements	TS	1	1	**1**	1	1	0	1	1	**1**	1	1	**1>**	36.9	47.7	D	D
14	Day St. / Bay Av.																	
	- Without Improvements	AWS	0	1!	0	0	1!	0	0.5	0.5	d	0.5	0.5	d	**53.8**	**54.7**	**F**	**F**
	- With Improvements	**TS**	0	**2**	0	0	**2**	0	0.5	0.5	d	0.5	0.5	d	6.3	5.2	A	A
15	Day St. / Alessandro Bl.																	
	- Without Improvements	TS	1	1	d	1	1	0	1	3	0	1	2	1	**>80**	**>80**	**F**	**F**
	- With Improvements	TS	1	**2**	0	1	1	**1**	**2**	3	0	**2**	**3**	**0**	32.5	53.9	C	D
16	Memorial Wy. / Towngate Dr.																	
	- Without Improvements	TS	1	2	0	1	2	0	1	3	0	1	3	0	**62.7**	**79.2**	**E**	**E**
	- With Improvements	TS	1	2	0	1	**1**	**1>**	1	**2**	**1>**	1	3	0	42.6	54.8	D	D
17	Corporate Ctr. Pl. / Cyn. Springs Pkwy.	TS	1	2	0	1	1	0	1	3	0	1	3	0	40.3	35.9	D	D
18	Corporate Ctre Pl. / Campus Pkwy.	AWS	1	2	0	1	2	0	1	2	0	1	2	0	8.7	11.1	A	B
19	Dwy. 3 / Corporate Ctr. Pl.	**CSS**	**1**	0	**1**	0	0	0	0	2	0	0	2	0	9.5	10.2	A	B
20	Valley Springs Pkwy. / Corporate Ctr. Pl.	TS	1	3	0	1	3	0	1	1	0	1	2	d	19.0	27.2	B	C

TABLE 7-2: INTERSECTION ANALYSIS FOR GENERAL PLAN BUILDOUT WITH PROJECT CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs)		Level of Service[2]	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
21	Valley Springs Pkwy. / Dwy. 4	CSS	0	3	0	1	3	0	0	1!	0	0	**1!**	0	16.7	28.7	C	D
22	Valley Springs Pkwy. / Gateway Dr.	TS	1	3	0	1	3	0	0	0	0	1	0	1	21.7	26.9	C	C
23	Valley Springs Pkwy. / Dwy. 5	**TS**	1	3	0	1	3	0	0	0	0	**1**	0	**1**	7.3	18.9	A	B
24	Dwy. 6 / Gateway Dr.	CSS	0	**1!**	0	0	1!	0	1	2	0	1	2	0	13.2	20.3	B	C
25	Canyon Park Dr. - Dwy. 7 / Gateway Dr.	**TS**	**1**	**1**	**1**	1	**1**	1	1	2	0	**1**	2	0	24.0	23.8	C	C
26	Dwy. 8 / Gateway Dr.	**CSS**	0	0	0	0	**1!**	0	1	2	0	0	2	0	8.6	11.4	A	B
27	Dwy. 9 / Gateway Dr.	CSS	0	1!	0	0	**1!**	0	1	2	0	1	2	0	21.3	19.2	C	C
28	Canyon Park Dr. / Campus Pkwy.	AWS	1	2	0	0.5	0.5	d	1	2	0	1	2	0	9.1	11.8	A	B
29	Canyon Park Dr. / Dwy. 10	**CSS**	0	2	0	0	2	0	0	0	0	0	**1!**	0	9.0	9.2	A	A
30	Canyon Park Dr. / Dwy. 11	**CSS**	0	2	0	1	2	0	0	0	0	0	**1!**	0	8.9	9.0	A	A
31	Canyon Park Dr. / Dwy. 12	UNC	0	2	0	1	2	0	0	0	0	0	0	0	7.5	7.5	A	A
32	Dwy. 13 / Gateway Dr.	**CSS**	0	**1!**	0	0	0	0	0	2	0	1	2	0	12.4	18.2	B	C
33	Valley Springs Pkwy. / Dwy. 14	**CSY**	EMERGENCY VEHICLE ACCESS ONLY												N/A	N/A	N/A	N/A
34	Dwy. 15 / Corporate Centre Pl.	UNC	0	0	0	0	0	0	0	2	0	1	2	0	7.4	7.6	A	A

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane; **1** = Improvement

[2] Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. Delay and level of service is calculated using Synchro 8.0 analysis software.

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[3] TS = Traffic Signal; CSY = Cross-street Yield (implied); CSS = Cross-street Stop; AWS = All-Way Stop; UNC = Uncontrolled (Inbound Driveway)

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contributes 50 or more peak hour trips to these deficient intersections. Recommendations related to these intersections are included in Section 7.9.

The intersection operations analysis worksheets for General Plan Buildout With Project traffic conditions are included in Appendix "7.2" of this TIA.

7.5 ROADWAY SEGMENT CAPACITY ANALYSIS

For the purpose of this analysis, the General Plan through travel lanes has been utilized for General Plan Buildout conditions.

The General Plan Buildout Without Project conditions roadway segment capacity analysis are presented on Table 7-3. As shown on Table 7-3, the roadway segment of Day Street, south of Cottonwood Avenue is anticipated to exceed the theoretical daily segment LOS threshold.

For General Plan Buildout With Project Conditions, Table 7-4 indicate that the study area roadway segment of Eastridge Avenue, between I-215 & Valley Springs Parkway is anticipated to exceed the theoretical daily segment LOS threshold, in addition to the one identified for General Plan Buildout Without Project traffic conditions.

As mentioned previously, roadway segment capacities are approximate figures only, and are used at the General Plan level to assist in determining the roadway functional classification (number of through lanes) needed to meet traffic demand. For General Plan Buildout Without and With Project conditions, roadway segments that are estimated to exceed the daily volume threshold values are further reviewed based on the more detailed peak hour intersection analysis, which explicitly account for factors that affect roadway during peak periods. Review of the peak hour intersection analysis results indicate that the recommended intersection improvements identified under General Plan Buildout conditions provide acceptable level of service for the study area intersections and roadway segments.

7.6 TRAFFIC SIGNAL WARRANTS ANALYSIS

For General Plan Buildout Without and With Project traffic conditions, there are no new intersections anticipated to meet traffic signal warrants, in addition to the intersections identified as meeting traffic signal warrants under Existing plus Project conditions. The traffic signal warrant analysis worksheets for General Plan Buildout Without and With Project traffic conditions are included in Appendix "7.3" and Appendix "7.4", respectively.

7.7 BASIC FREEWAY SEGMENT ANALYSIS

General Plan Buildout Without Project mainline directional volumes for the weekday AM and PM peak hours are also provided on Exhibits 7-2 and 7-3, respectively. General Plan Buildout With Project mainline directional volumes for the weekday AM and PM peak hours are also provided on Exhibits 7-5 and 7-6, respectively.

The General Plan Buildout Without and With Project basic freeway segment analysis results are presented on Table 7-5 and Table 7-6. As shown on Table 7-5 and Table 7-6, there are no new freeway mainline segments anticipated to operate at unacceptable level of service during the peak hours with existing geometry, in addition to the freeway mainline segment location

TABLE 7-3: ROADWAY VOLUME/CAPACITY ANALYSIS FOR GENERAL PLAN BUILDOUT WITHOUT PROJECT CONDITIONS

Roadway	Segment	Existing Through Travel Lanes	General Plan Through Travel Lanes[1]	LOS "E" Capacity[2]	ADT[3]	Volume/ Capacity Ratio
Eastridge Av. - Eucalyptus Av.	West of Sycamore Cyn. Bl.	5	6	54,900	31,600	0.58
	B/w Box Springs Bl. & I-215	4	6	54,900	36,200	0.66
	B/w I-215 & Valley Springs Pkwy.	5	6	54,900	48,500	0.88
	West of Day St.	4	6	54,900	30,100	0.55
	East of Day St.	5	6	54,900	31,300	0.57
Valley Springs Pkwy.	North of Eucalyptus Av.	5	5	45,800	22,300	0.49
Day St.	B/w SR-60 EB Ramps & Cyn. Springs Pkwy.	6	6	54,900	46,600	0.85
	North of Eucalyptus Av.	5	6	54,900	21,000	0.38
	South of Eucalyptus Av.	4	4	36,400	21,000	0.58
	South of Cottonwood Av.	2	2	11,500	**17,500**	**1.52**
Gateway Dr.	West of Day St.	4	4	36,400	5,800	0.16

[1] General Plan through lanes are used in the capacity analysis.
[2] LOS "E" capacity has been estimated based on the City of Riverside TIA Preparation Guide, Exhibit D - City of Riverside Roadway Capacity.
[3] Average Daily Traffic (ADT) expressed in vehicles per day.
BOLD = Estimated to exceed threshold daily LOS values and subject to further evaluation of peak hour performance at key intersections along these routes.

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TABLE 7-4: ROADWAY VOLUME/CAPACITY ANALYSIS FOR GENERAL PLAN BUILDOUT WITH PROJECT CONDITIONS

Roadway	Segment	Existing Through Travel Lanes	General Plan Through Travel Lanes[1]	LOS "E" Capacity[2]	ADT[3]	Volume/ Capacity Ratio
Eastridge Av. - Eucalyptus Av.	West of Sycamore Cyn. Bl.	5	6	54,900	31,800	0.58
	B/w Box Springs Bl. & I-215	4	6	54,900	37,500	0.68
	B/w I-215 & Valley Springs Pkwy.	5	6	54,900	**56,700**	**1.03**
	West of Day St.	4	6	54,900	32,100	0.58
	East of Day St.	5	6	54,900	32,400	0.59
Valley Springs Pkwy.	North of Eucalyptus Av.	5	5	45,800	31,200	0.68
Day St.	B/w SR-60 EB Ramps & Cyn. Springs Pkwy.	6	6	54,900	51,700	0.94
	North of Eucalyptus Av.	5	6	54,900	23,700	0.43
	South of Eucalyptus Av.	4	4	36,400	22,400	0.62
	South of Cottonwood Av.	2	2	11,500	**18,600**	**1.62**
Gateway Dr.	West of Day St.	4	4	36,400	12,100	0.33

[1] General Plan through lanes are used in the capacity analysis.
[2] LOS "E" capacity has been estimated based on the City of Riverside TIA Preparation Guide, Exhibit D - City of Riverside Roadway Capacity.
[3] Average Daily Traffic (ADT) expressed in vehicles per day.
BOLD = Estimated to exceed threshold daily LOS values and subject to further evaluation of peak hour performance at key intersections along these routes.

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TABLE 7-5: BASIC FREEWAY SEGMENT ANALYSIS FOR GENERAL PLAN BUILDOUT WITHOUT PROJECT CONDITIONS

Freeway	Direction	Mainline Segment Location	Lanes[1]	Volume		Density[2]		LOS[3]	
				AM	PM	AM	PM	AM	PM
I-215 Freeway	NB	South of Eucalyptus Av.	3	4,592	4,867	27.1	29.4	D	D
		Between Ramps	3	4,031	4,097	22.9	23.4	C	C
		North of Eucalyptus Av.	3	4,488	4,667	26.3	27.7	D	D
	SB	North of Eucalyptus Av.	5	5,585	6,889	18.7	23.7	C	C
		Between Ramps	3	5,127	5,849	31.9	40.3	D	**E**
		South of Eucalyptus Av.	3	5,630	6,712	37.4	55.8	**E**	**F**
SR-60 Freeway	WB	East of Day St.	4	3,824	4,027	15.7	16.5	B	B
		Between Ramps	3	3,098	3,290	16.9	18.0	B	B
		West of Day St.	3	3,486	3,927	19.1	21.8	C	C
	EB	West of Day St.	6	3,739	5,938	10.2	16.2	A	B
		Between Ramps	4	3,163	4,893	13.0	20.2	B	C
		East of Day St.	5	3,743	5,929	12.3	19.5	B	C

[1] Number of lanes are in the specified direction and is based on existing conditions.

[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).

[3] Level of service determined using HCS 2010: Basic Freeway Segments software, Version 6.65

BOLD = LOS E or F

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TABLE 7-6: BASIC FREEWAY SEGMENT ANALYSIS FOR GENERAL PLAN BUILDOUT WITH PROJECT CONDITIONS

Freeway	Direction	Mainline Segment Location	Lanes[1]	Volume		Density[2]		LOS[3]	
				AM	PM	AM	PM	AM	PM
I-215 Freeway	NB	South of Eucalyptus Av.	3	4,804	4,986	28.9	30.5	D	D
		Between Ramps	3	4,031	4,097	22.9	23.4	C	C
		North of Eucalyptus Av.	3	4,542	4,877	26.7	29.5	D	D
	SB	North of Eucalyptus Av.	5	5,751	6,981	19.3	24.0	C	C
		Between Ramps	3	5,127	5,849	31.9	40.3	D	**E**
		South of Eucalyptus Av.	3	5,700	6,981	38.3	62.9	**E**	**F**
SR-60 Freeway	WB	East of Day St.	4	3,986	4,119	16.3	16.9	B	B
		Between Ramps	3	3,098	3,290	16.9	18.0	B	B
		West of Day St.	3	3,519	4,050	19.3	22.6	C	C
	EB	West of Day St.	6	3,836	5,994	10.5	16.4	A	B
		Between Ramps	4	3,163	4,893	13.0	20.2	B	C
		East of Day St.	5	3,797	6,134	12.4	20.2	B	C

[1] Number of lanes are in the specified direction and is based on existing conditions.

[2] Density is measured by passenger cars per mile per lane (pc/mi/ln).

[3] Level of service determined using HCS 2010: Basic Freeway Segments software, Version 6.65

BOLD = LOS E or F

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identified as operating at an unacceptable LOS during the peak hours under Cumulative (Opening Year) conditions. However, the Project's contribution to the existing deficiencies is considered cumulatively considerable.

General Plan Buildout Without Project basic freeway segment analysis worksheets are provided in Appendix "7.5". General Plan Buildout With Project basic freeway segment analysis worksheets are provided in Appendix "7.6".

7.8 FREEWAY MERGE/DIVERGE ANALYSIS

Ramp merge and diverge operations were also evaluated for General Plan Buildout Without and With Project traffic conditions and the results of this analysis are presented in Table 7-7 and Table 7-8, respectively. As shown in Tables 7-7 and 7-8, there are no new ramp locations anticipated to exceed acceptable levels of service, in addition to the ramp location identified as operating at an unacceptable LOS during the peak hours under Existing (2014) conditions.

General Plan Buildout Without Project freeway ramp junction operations analysis worksheets are provided in Appendix "7.7". General Plan Buildout With Project freeway ramp junction operations analysis worksheets are provided in Appendix "7.8".

7.9 GENERAL PLAN BUILDOUT IMPACTS AND RECOMMENDED IMPROVEMENTS

Improvement strategies have been recommended at intersections that have been identified as cumulatively impacted in an effort to reduce each location's peak hour delay and improve the associated LOS grade to LOS "D" or better. Although the intersection LOS is at an unacceptable level (LOS "E" or "F") with or without project, the change in peak hour delay is considered to be a significant project impact based upon City of Riverside criteria for projects that propose uses or intensities above that contained in the General Plan (Table 2-7 of this report). For City of Moreno Valley intersections, an impact is identified if the Project contributes 50 or more peak hour trips to these deficient intersections.

The effectiveness of the recommended improvements to address General Plan Buildout cumulative traffic impacts are discussed below and presented previously in Table 7-2. Improvement strategies identified in Table 7-2 have been recommended at intersections that have been identified as cumulatively impacted to reduce each location's peak hour delay to less than significant, in addition to the improvements previously identified under Cumulative (Opening Year) conditions.

Day Street / Eucalyptus Avenue (#12)

- NB Approach: Modify striping to provide a dedicated right turn lane with overlap phasing.

Day Street / Cottonwood Avenue (#13)

- EB Approach: Widen Cottonwood Avenue to provide a separate right turn lane, in addition to the existing left turn lane and one through lane.
- WB Approach: Provide overlap phasing for the existing right turn lane.

TABLE 7-7: FREEWAY RAMP JUNCTION MERGE/DIVERGE ANALYSIS FOR GENERAL PLAN BUILDOUT WITHOUT PROJECT CONDITIONS

Freeway	Direction	Ramp Location	Junction Type	Lanes on Freeway	Lanes on Ramp	Volume		Density [1]		LOS [2]	
						AM	PM	AM	PM	AM	PM
I-215 Freeway	NB	NB Off Ramp at Eucalyptus Av.	Diverge	3	1	561	770	32.3	34.0	D	D
		NB On Ramp at Eucalyptus Av.	Merge	3	1	457	570	28.3	29.5	D	D
	SB	SB Off Ramp at Eucalyptus Av.	Diverge	5	2	458	1,040	11.1	14.2	B	B
		SB On Ramp at Eucalyptus Av.	Merge	3	1	503	863	33.5	40.9	D	**E**
SR-60 Freeway	WB	WB Off Ramp at Day St.	Diverge	4	1	726	737	15.6	16.5	B	B
		WB On Ramp at Day St.	Merge	3	1	388	637	19.7	22.7	B	C
	EB	EB Off Ramp at Day St.	Diverge	6	2	576	1,045	13.4	20.4	B	C
		EB On Ramp at Day St.	Merge	4	1	580	1,036	15.2	25.1	B	C

[1] Density calculated based on the Highway Capacity Manual (HCM) analysis; (pc/mi/ln) = passenger car per mile per lane

[2] Level of service determined using HCS2010 : Ramps and Ramp Junction software, Version 6.60

BOLD = LOS E or F

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TABLE 7-8: FREEWAY RAMP JUNCTION MERGE/DIVERGE ANALYSIS FOR GENERAL PLAN BUILDOUT WITH PROJECT CONDITIONS

Freeway	Direction	Ramp Location	Junction Type	Lanes on Freeway	Lanes on Ramp	Volume		Density [1]		LOS [2]	
						AM	PM	AM	PM	AM	PM
I-215 Freeway	NB	NB Off Ramp at Eucalyptus Av.	Diverge	3	1	773	889	33.7	34.8	D	D
		NB On Ramp at Eucalyptus Av.	Merge	3	1	511	780	28.7	31.2	D	D
	SB	SB Off Ramp at Eucalyptus Av.	Diverge	5	2	624	1,132	11.7	14.5	B	B
		SB On Ramp at Eucalyptus Av.	Merge	3	1	573	1,132	34.1	43.1	D	**E**
SR-60 Freeway	WB	WB Off Ramp at Day St.	Diverge	4	1	888	829	17.1	17.4	B	B
		WB On Ramp at Day St.	Merge	3	1	421	760	19.9	23.7	B	C
	EB	EB Off Ramp at Day St.	Diverge	6	2	673	1,101	13.7	20.9	B	C
		EB On Ramp at Day St.	Merge	4	1	634	1,241	15.6	26.7	B	C

[1] Density calculated based on the Highway Capacity Manual (HCM) analysis; (pc/mi/ln) = passenger car per mile per lane

[2] Level of service determined using HCS2010 : Ramps and Ramp Junction software, Version 6.60

BOLD = LOS E or F

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Day Street / Alessandro Boulevard (#15)

- NB Approach: Modify striping to provide a 2nd through lane, in addition to the existing left turn lane and through lane.
- SB Approach: Widen Day Street to provide a dedicated right turn lane.
- WB Approach: Modify striping and existing raised median to provide a 2nd left turn lane and widen Alessandro Boulevard to provide a 3rd through lane. It should be noted that Alessandro Boulevard is classified a 6-Lane Arterial roadway.

Memorial Way / Towngate Drive (#16)

- SB Approach: Convert the existing 2nd through lane to provide a dedicated right turn lane with overlap phasing, in addition to the existing left turn lane and one through lane.

For the intersection of Day Street / Bay Avenue (#14), the project related delay increase is less than 1 second (see Tables 7-1 and 7-2), which is not considered a significant project impact based upon City of Riverside standards (see Table 2-7). However, the following improvements are recommended to enable the intersection to operate at an acceptable LOS (LOS "D" or better):

Day Street / Bay Avenue (#14)

- Installation of a traffic signal.
- NB Approach: Widen Day Street to provide a 2nd through lane.
- SB Approach: Widen Day Street to provide a 2nd through lane.

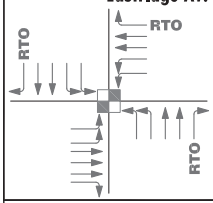
The recommended improvements for General Plan Buildout Without and With Project conditions are shown on Exhibit 7-7 and 7-8, respectively.

EXHIBIT 7-7: GENERAL PLAN BUILDOUT WITHOUT PROJECT RECOMMENDED IMPROVEMENTS

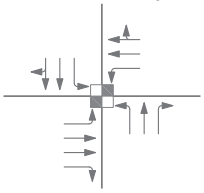
LEGEND:

- EXISTING TRAFFIC SIGNAL
- GENERAL PLAN BUILDOUT WITHOUT PROJECT TRAFFIC SIGNAL
- CUMULATIVE (OPENING YEAR - 2016) WITHOUT PROJECT TRAFFIC SIGNAL
- EXISTING ALL WAY STOP
- EXISTING STOP SIGN
- EXISTING LANE
- GENERAL PLAN BUILDOUT WITHOUT PROJECT LANE IMPROVEMENT
- CUMULATIVE (OPENING YEAR - 2016) WITHOUT PROJECT LANE IMPROVEMENT
- EXISTING FREE RIGHT TURN LANE
- RTO = EXISTING RIGHT TURN OVERLAP
- RTO = GENERAL PLAN BUILDOUT WITHOUT PROJECT RIGHT TURN OVERLAP PHASING IMPROVEMENT
- RTO = CUMULATIVE (OPENING YEAR - 2016) WITHOUT PROJECT RIGHT TURN OVERLAP PHASING IMPROVEMENT
- 34 = INTERSECTION ID
- DEF = DEFACTO RIGHT TURN LANE
- * = LEFT TURN LANE ACCOMMODATED WITHIN TWO-WAY LEFT TURN LANE (TWLTL) MEDIAN

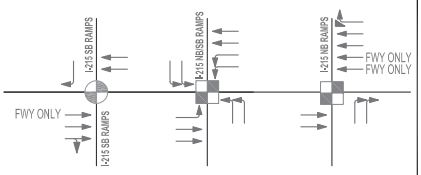
1 Sycamore Cyn. Bl. & Eastridge Av.



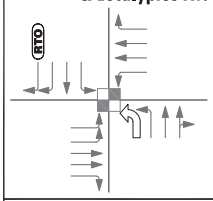
2 Box Springs Bl. & Eastridge Av.



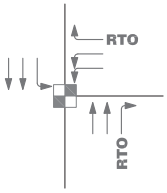
3 I-215 Ramps & Eucalyptus Av.



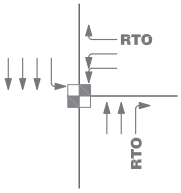
4 Valley Springs Pkwy. & Eucalyptus Av.



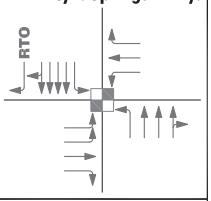
5 Day St. & SR-60 WB Ramps



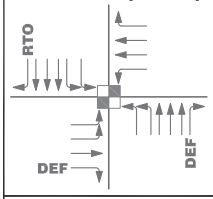
6 Day St. & SR-60 EB Ramps



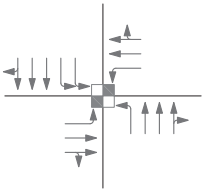
7 Day St. & Cyn. Springs Pkwy.



8 Day St. & Campus Pkwy.



9 Day St. & Gateway Dr.



10 Day St. & Dwy. 1

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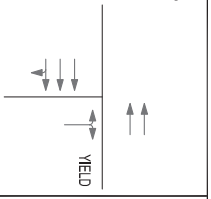
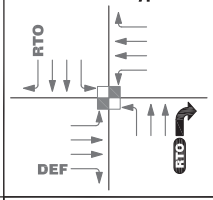
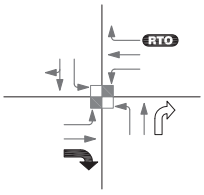
11 Day St. & Dwy. 2



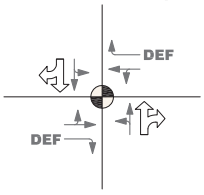
12 Day St. & Eucalyptus Av.



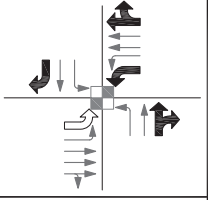
13 Day St. & Cottonwood Av.



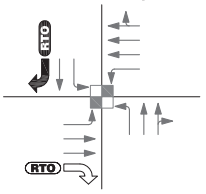
14 Day St. & Bay Av.



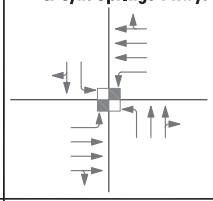
15 Day St. & Alessandro Bl.



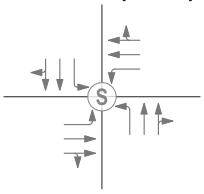
16 Memorial Wy. & Towngate Dr.



17 Corporate Centre Pl. & Cyn. Springs Pkwy.



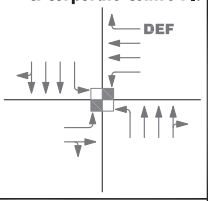
18 Corporate Centre Pl. & Campus Pkwy.



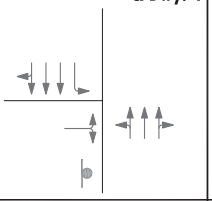
19 Dwy. 3 & Corporate Centre Pl.

INTERSECTION DOES NOT EXIST

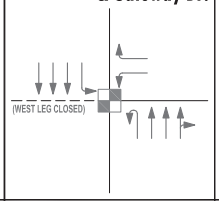
20 Valley Springs Pkwy. & Corporate Centre Pl.



21 Valley Springs Pkwy. & Dwy. 4



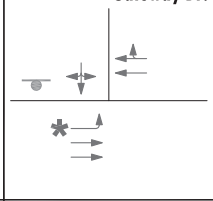
22 Valley Springs Pkwy. & Gateway Dr.



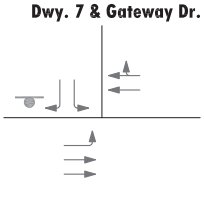
23 Valley Springs Pkwy. & Dwy. 5

INTERSECTION DOES NOT EXIST

24 Dwy. 6 & Gateway Dr.



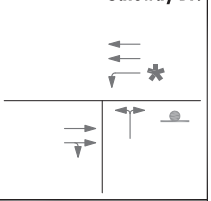
25 Canyon Park Dr. - Dwy. 7 & Gateway Dr.



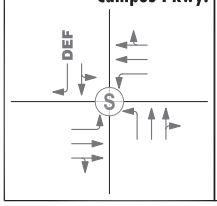
26 Dwy. 8 & Gateway Dr.

INTERSECTION DOES NOT EXIST

27 Dwy. 9 & Gateway Dr.



28 Canyon Park Dr. & Campus Pkwy.



29 Canyon Park Dr. & Dwy. 10

INTERSECTION DOES NOT EXIST

30 Canyon Park Dr. & Dwy. 11

INTERSECTION DOES NOT EXIST

31 Canyon Park Dr. & Dwy. 12

INTERSECTION DOES NOT EXIST

32 Dwy. 13 & Gateway Dr.

INTERSECTION DOES NOT EXIST

33 Valley Springs Pkwy. & Dwy. 14

INTERSECTION DOES NOT EXIST

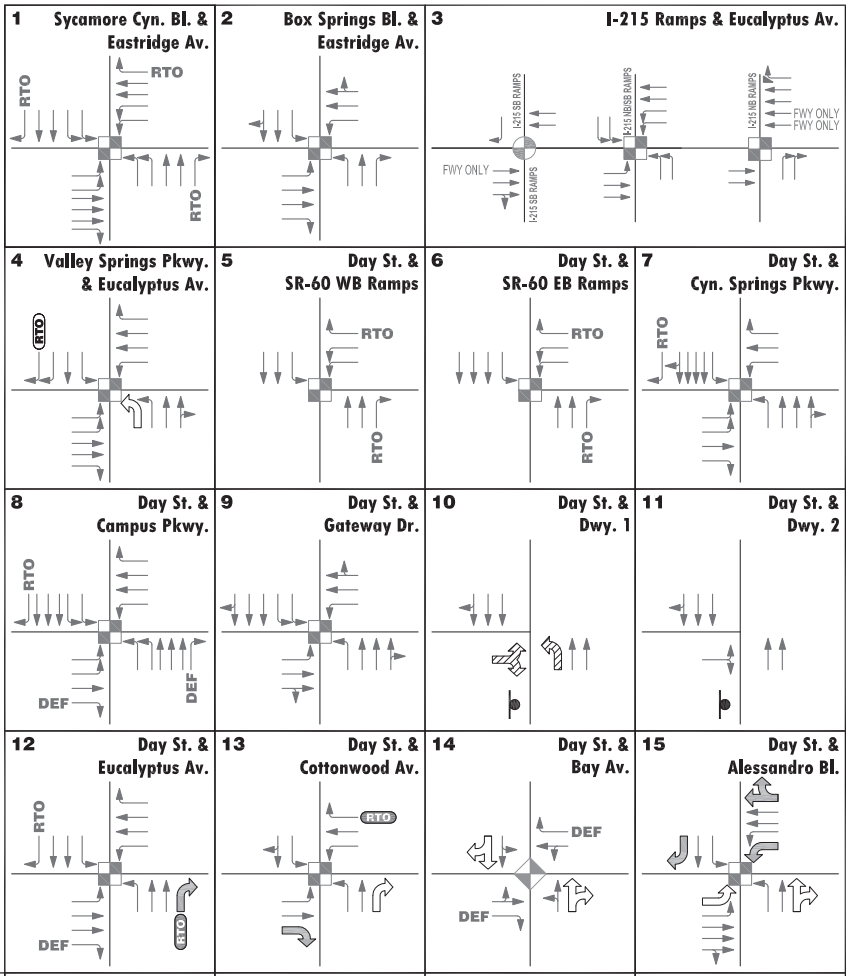
34 Dwy. 15 & Corporate Centre Pl.

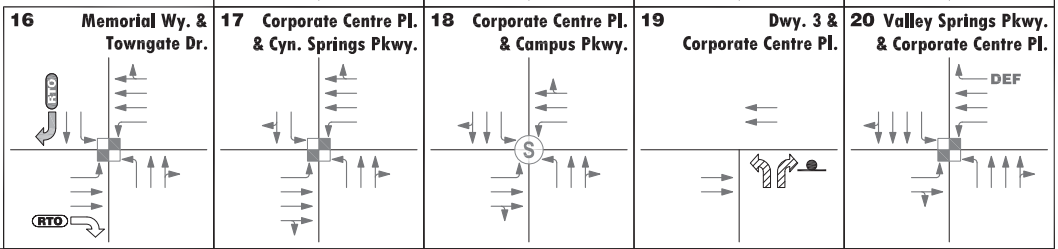
INTERSECTION DOES NOT EXIST

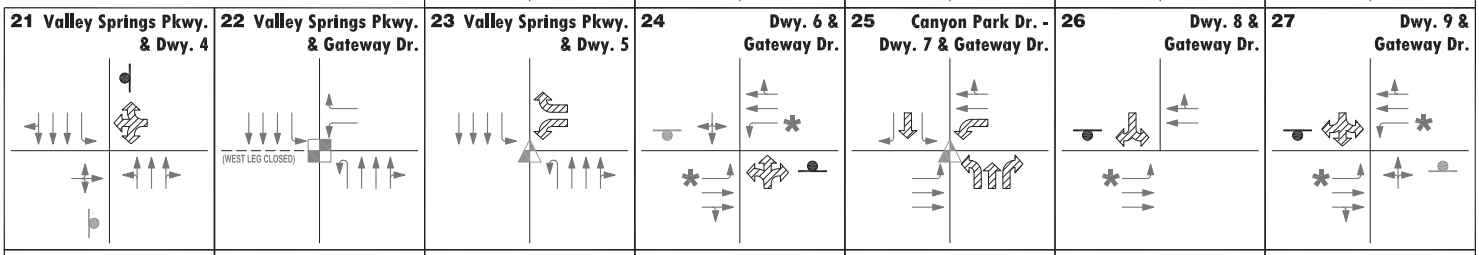
EXHIBIT 7-8: GENERAL PLAN BUILDOUT WITH PROJECT RECOMMENDED IMPROVEMENTS

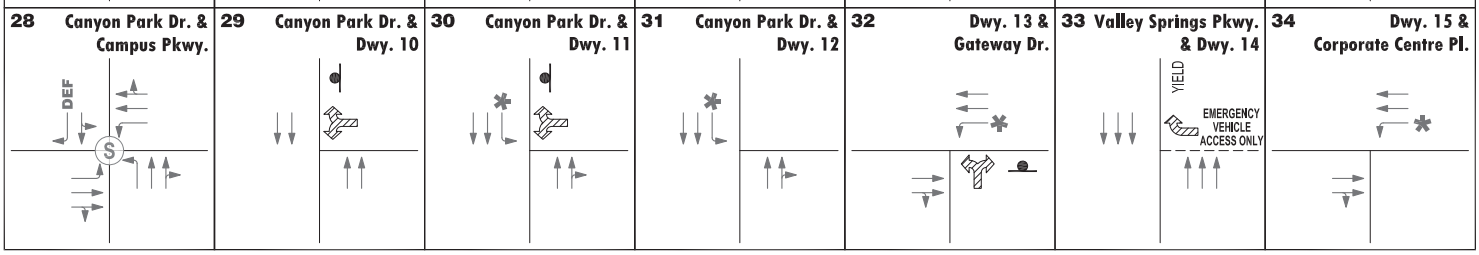
LEGEND:

- = EXISTING TRAFFIC SIGNAL
- = GENERAL PLAN BUILDOUT WITHOUT PROJECT TRAFFIC SIGNAL
- = CUMULATIVE (OPENING YEAR - 2016) WITHOUT PROJECT TRAFFIC SIGNAL
- = EXISTING PLUS PROJECT TRAFFIC SIGNAL
- (S) = EXISTING ALL WAY STOP
- = EXISTING STOP SIGN
- = EXISTING PLUS PROJECT STOP SIGN
- = EXISTING LANE
- = GENERAL PLAN BUILDOUT WITHOUT PROJECT LANE IMPROVEMENT
- = CUMULATIVE (OPENING YEAR - 2016) WITHOUT PROJECT LANE IMPROVEMENT
- = EXISTING PLUS PROJECT LANE IMPROVEMENT
- = EXISTING FREE RIGHT TURN LANE
- RTO = EXISTING RIGHT TURN OVERLAP
- RTO = GENERAL PLAN BUILDOUT WITHOUT PROJECT RIGHT TURN OVERLAP PHASING IMPROVEMENT
- RTO = CUMULATIVE (OPENING YEAR - 2016) WITHOUT PROJECT RIGHT TURN OVERLAP PHASING IMPROVEMENT
- 34 = INTERSECTION ID
- DEF = DEFACTO RIGHT TURN LANE
- * = LEFT TURN LANE ACCOMMODATED WITHIN TWO-WAY LEFT TURN LANE (TWLTL) MEDIAN









8 SITE ACCESS CIRCULATION

The Project is proposed to have access along Day Street, Corporate Centre Place, Valley Springs Parkway, Gateway Drive, and Canyon Park Drive. Regional access to the Project site will be provided by the I-215 Freeway via Eucalyptus Avenue and SR-60 via Day Street. The site adjacent roadways of Valley Springs Parkway, Gateway Drive, Corporate Centre Place, Canyon Park Drive, and Day Street appear to be built to their ultimate cross-sections as indicated in the City of Riverside General Plan Circulation Element as shown previously on Exhibit 3-3.

8.1 SITE ACCESS RECOMMENDATIONS

The recommended site access driveway improvements for the Project are described below and shown on Exhibit 8-1. Construction of on-site and site adjacent improvements shall occur in conjunction with adjacent Project development activity or as needed for Project access purposes.

Day Street / Driveway 1 (#10) – Install stop sign control on the EB approach and construct the intersection with the following geometrics:

- NB Approach: Provide a dedicated left turn lane, in addition to the existing two through lanes.
- SB Approach: Maintain existing three through lanes.
- EB Approach: Provide a shared left/right turn lane.

Day Street / Driveway 2 (#11) – Install stop sign control on the EB approach, connecting the Project internally and maintaining intersection as it exists:

- NB Approach: Maintain the existing two through lanes.
- SB Approach: Maintain existing three through lanes.
- EB Approach: Maintain existing outbound lane .

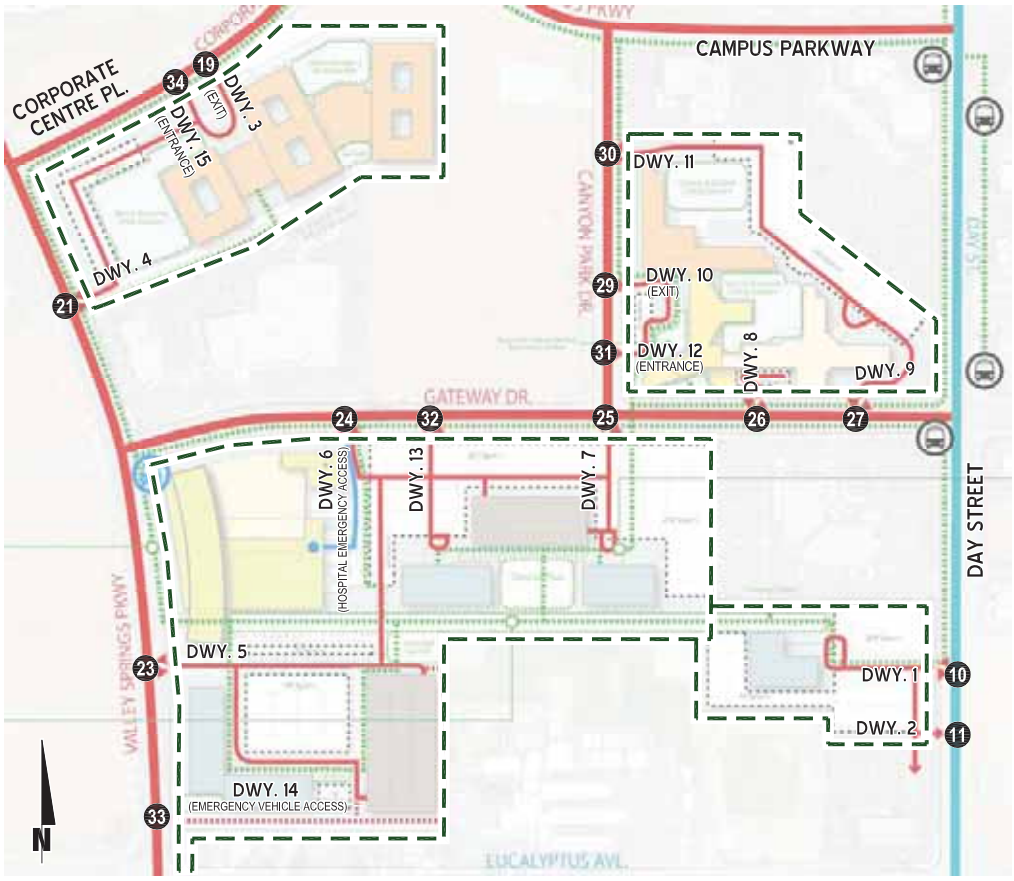
Driveway 3 / Corporate Centre Place (#19) – Install stop sign control on the NB approach and construct the intersection with the following geometrics:

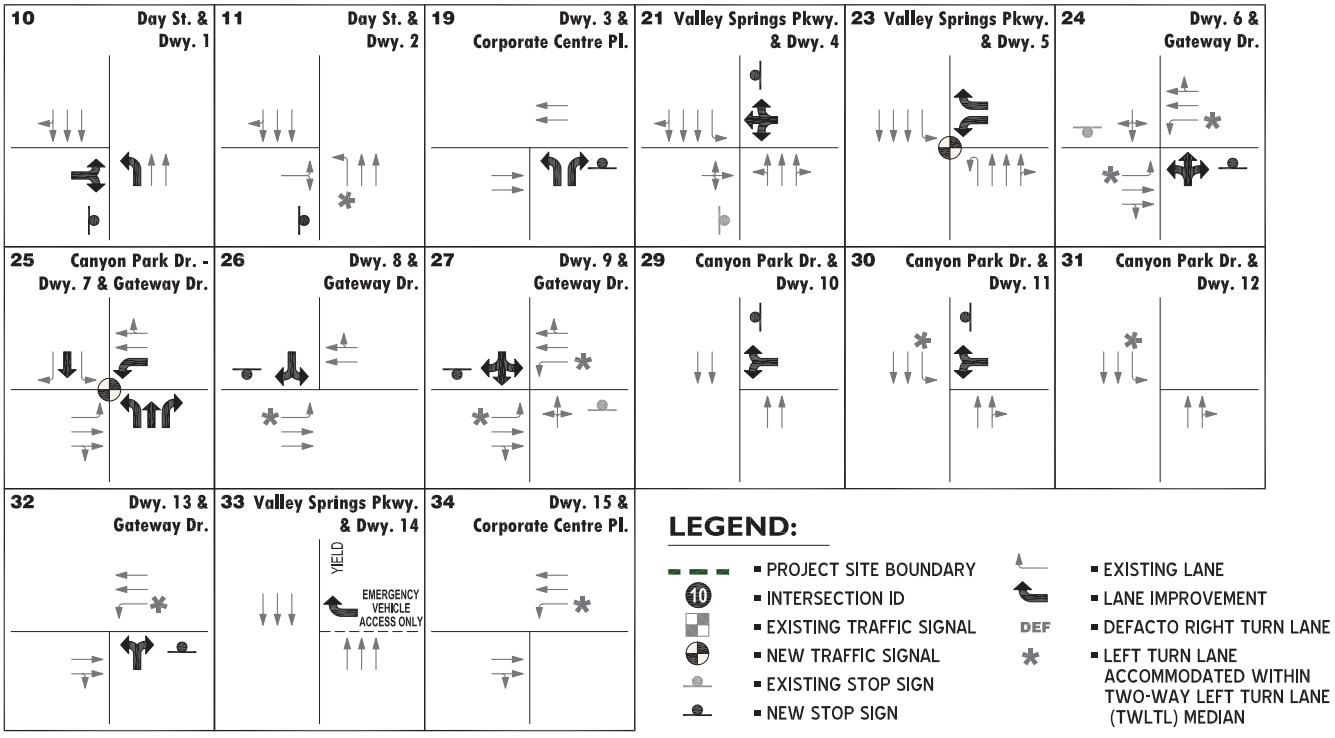
- NB Approach: Provide one left turn lane and one right turn lane.
- EB Approach: Maintain existing two through lanes.
- WB Approach: Maintain existing two through lanes.

Valley Springs Parkway / Driveway 4 (#21) – Install stop sign control on the WB approach and construct the intersection with the following geometrics:

- NB Approach: Maintain existing three through lanes.

EXHIBIT 8-1: SITE ACCESS CIRCULATION RECOMMENDATIONS





- SB Approach: Maintain existing left turn lane and three through lanes.
- EB Approach: Maintain existing shared left/through/right lane.
- WB Approach: Provide a shared left/through/right lane.

Valley Springs Parkway / Driveway 5 (#23) – Install a traffic signal and construct the intersection with the following geometrics:

- NB Approach: Maintain existing three through lanes.
- SB Approach: Maintain existing left turn lane and three through lanes.
- WB Approach: Provide one left turn lane and one right turn lane.

Driveway 6 / Gateway Drive (#24) – Install stop sign control on the NB approach and construct the intersection with the following geometrics (south leg for hospital emergency access only):

- NB Approach: Provide a shared left/through/right turn lane.
- SB Approach: Maintain existing shared left/through/right turn lane.
- EB Approach: Maintain existing two through lanes with left turn lane accommodated within the TWLTL median.
- WB Approach: Maintain existing two through lanes with left turn lane accommodated within the TWLTL median.

Canyon Park Drive - Driveway 7 / Gateway Drive (#25) – Install a traffic signal and construct the intersection with the following geometrics:

- NB Approach: Provide a dedicated left turn lane, one through lane, and one right turn lane.
- SB Approach: Modify striping to provide one left turn lane and one through lane, in addition to the existing right turn lane.
- EB Approach: Maintain existing left turn lane and two through lanes.
- WB Approach: Modify striping to provide a dedicated left turn lane, in addition to the existing two through lanes.

Driveway 8 / Gateway Drive (#26) – Install stop sign control on the SB approach and construct the intersection with the following geometrics:

- SB Approach: Provide a shared left/right turn lane.
- EB Approach: Maintain existing two through lanes with left turn lane accommodated within the TWLTL median
- WB Approach: Maintain existing two through lanes.

Driveway 9 / Gateway Drive (#27) – Install stop sign control on the SB approach and construct the intersection with the following geometrics:

- NB Approach: Maintain existing shared left/through/right turn lane.
- SB Approach: Provide a shared left/through/right turn lane.
- EB Approach: Maintain existing two through lanes with left turn lane accommodated within the TWLTL median.
- WB Approach: Maintain existing two through lanes with left turn lane accommodated within the TWLTL median.

Canyon Park Drive / Driveway 10 (#29) – Install stop sign control on the WB approach and construct the intersection with the following geometrics:

- NB Approach: Maintain existing two through lanes.
- SB Approach: Maintain existing two through lanes.
- WB Approach: Provide a shared left/right turn lane.

Canyon Park Drive / Driveway 11 (#30) – Install stop sign control on the WB approach and construct the intersection with the following geometrics:

- NB Approach: Maintain existing two through lanes.
- SB Approach: Maintain existing two through lanes with left turns accommodated within the TWLTL median.
- WB Approach: Provide a shared left/right turn lane.

Canyon Park Drive / Driveway 12 (#31) – Construct the intersection with the following geometrics:

- NB Approach: Maintain existing two through lanes.
- SB Approach: Maintain existing two through lanes with left turns accommodated within the TWLTL median.
- WB Approach: Provide a shared inbound lane.

Driveway 13 / Gateway Drive (#32) – Install stop sign control on the NB approach and construct the intersection with the following geometrics:

- NB Approach: Provide a shared left/through/right turn lane.
- EB Approach: Maintain existing two through lanes.
- WB Approach: Maintain existing two through lanes with left turn lane accommodated within the TWLTL median.

Valley Springs Parkway / Driveway 14 (#33) – Provide emergency vehicle access driveway.

Driveway 15 / Corporate Centre Place (#34) – Construct the intersection with the following geometrics:

- EB Approach: Maintain existing two through lanes.
- WB Approach: Maintain existing two through lanes. Left turn lane is accommodated within the existing two-way left turn lane (TWLTL) median.

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the Project site.

8.2 PROGRESSION ANALYSIS ALONG EUCALYPTUS AVENUE AND DAY STREET

For the purpose of this analysis, a traffic signal progression analysis has been conducted for the following locations under Cumulative Plus Project conditions and General Plan Buildout with Project conditions, with the identified intersection improvements, to evaluate vehicular queuing by considering the signal timing and physical spacing of intersections:

- Eastridge Avenue–Eucalyptus Avenue, between Box Springs Boulevard and Valley Springs Parkway.
- Day Street, between SR-60 WB Ramps and Cottonwood Avenue.

The progression analysis conducted along Eucalyptus Avenue and Day Street through the study area are utilized to evaluate the turning pocket lengths necessary to accommodate 95th percentile peak hour queues and to demonstrate acceptable peak hour operations in the study area. The progression analysis was conducted for the weekday AM and PM peak hours.

The traffic modeling and signal timing optimization software package Synchro plus SimTraffic (Version 8 Build 801) has been utilized for the progression analysis. The simulation model includes the intersections along Eastridge Avenue–Eucalyptus Avenue, between Box Springs Boulevard and Valley Springs Parkway and Day Street, between SR-60 WB Ramps and Cottonwood Avenue. Synchro is a macroscopic traffic software program that is based on the signalized intersection capacity analysis as specified in the Chapter 18 and Chapter 31 of the HCM 2010 and the unsignalized intersection capacity analysis as specified in Chapter 19, Chapter 20, and Chapter 32 of the HCM 2010. Macroscopic level models represent traffic in terms of aggregate measures for each movement at the study intersections. Equations are used to determine measures of effectiveness such as delay and queue length in Synchro. The level of service (LOS) and capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network.

SimTraffic is a traffic simulation software application that utilizes the Synchro network. SimTraffic is designed to model networks of signalized and unsignalized intersections, with the primary purpose of checking and fine tuning signal operations. SimTraffic uses the input parameters from Synchro to generate random simulations. The random simulations generated by SimTraffic have been utilized to determine the 95th percentile queue lengths observed along these roadway segments. A SimTraffic simulation has been recorded five times, during the weekday AM and PM peak hours, and has been seeded for 5-minute periods with 10-minute

recording intervals. The queuing length results are based on an average of these five simulations.

The recommended traffic signal timing for the intersections along Eastridge Avenue–Eucalyptus Avenue, between Box Springs Boulevard and Valley Springs Parkway and Day Street, between SR-60 WB Ramps and Cottonwood Avenue have been included in Appendix "6.2" for Cumulative Plus Project Conditions and Appendix "7.2" for General Plan With Project Conditions. The progression analysis results Tables 8-1 and 8-2 summarize the resulting the 95th percentile queue lengths for Cumulative plus Project and General Plan Buildout with Project conditions, respectively.

TABLE 8-1: PROGRESSION ANALYSIS RESULTS FOR OPENING YEAR WITH PROJECT CONDITIONS[1]

ID	Location	Turning Movement Lane	Existing Storage Length[2]	95th Percentile Queue Length	
				AM	PM
	Eastridge Avenue - Eucalyptus Avenue				
2	- Box Springs Bl.	EBL	90	156	61
		EBT	1,220	279	514
		WBL	150	115	123
		WBT	760	505	285
3	- I-215 NB & SB Ramps	EBL	260	121	178
		EBT	800	196	207
		WBL	275	234	290
		WBT	820	309	201
4	- Valley Springs Pkwy.	EBL	300	561	263
		EBT	515	668	271
		EBR	360	34	73
		WBL	100	80	162
		WBT	1,990	565	852
	Day Street				
5	- SR-60 WB Ramps	NBT	850	104	108
		NBR	175	88	171
		SBL	200	120	128
		SBT	970	139	138
6	- SR-60 EB Ramps	NBT	375	178	380
		NBR	375	230	297
		SBL	425	144	165
		SBT	850	121	130
7	- Cyn. Springs Pkwy.	NBL	170	79	152
		NBT	590	118	509
		SBL	170	197	241
		SBT	375	152	255
8	- Campus Pkwy.	NBL	130	79	121
		NBT	890	109	236
		SBL	190	64	170
		SBT	590	83	263
		SBR	590	12	51
9	- Gateway Dr.	NBL	190	135	142
		NBT	1,100	160	245
		SBL	260	65	122
		SBT	890	356	229
12	- Eucalyptus Av.	NBL	100	201	173
		NBT	520	273	252
		SBL	200	97	395
		SBT	1,100	267	456
13	- Cottonwood Av.	NBL	80	73	148
		NBT	1,240	368	614
		SBL	100	178	168
		SBT	1,225	215	219

[1] Queue length calculated using SimTraffic.
[2] Existing pocket length storage (for turning movements) or link distance (for through movements).

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TABLE 8-2: PROGRESSION ANALYSIS RESULTS FOR GENERAL PLAN BUILDOUT WITH PROJECT CONDITIONS[1]

ID	Location	Turning Movement Lane	Existing Storage Length[2]	95th Percentile Queue Length	
				AM	PM
	Eastridge Avenue - Eucalyptus Avenue				
2	- Box Springs Bl.	EBL	90	161	67
		EBT	1,220	361	441
		WBL	150	163	42
		WBT	760	474	260
3	- I-215 NB & SB Ramps	EBL	260	133	155
		EBT	800	177	204
		WBL	275	193	333
		WBT	820	346	191
4	- Valley Springs Pkwy.	EBL	300	557	286
		EBT	515	591	254
		EBR	360	31	69
		WBL	100	83	148
		WBT	1,990	914	554
	Day Street				
5	- SR-60 WB Ramps	NBT	850	82	121
		NBR	175	113	147
		SBL	200	152	111
		SBT	970	152	160
6	- SR-60 EB Ramps	NBT	375	194	332
		NBR	375	127	267
		SBL	425	137	214
		SBT	850	113	146
7	- Cyn. Springs Pkwy.	NBL	170	95	194
		NBT	590	163	552
		SBL	170	184	287
		SBT	375	110	349
8	- Campus Pkwy.	NBL	130	87	104
		NBT	890	94	211
		SBL	190	70	141
		SBT	590	76	256
		SBR	590	15	29
9	- Gateway Dr.	NBL	190	160	124
		NBT	1,100	158	247
		SBL	260	84	125
		SBT	890	288	268
12	- Eucalyptus Av.	NBL	100	196	140
		NBT	520	267	245
		SBL	200	120	348
		SBT	1,100	221	438
13	- Cottonwood Av.	NBL	80	124	137
		NBT	1,240	503	817
		SBL	100	194	173
		SBT	1,225	260	304

[1] Queue length calculated using SimTraffic.
[2] Existing pocket length storage (for turning movements) or link distance (for through movements).

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9 FINDINGS AND RECOMMENDATIONS

This section provides a summary of the analysis results for Existing (2014), Existing Plus Project (E+P), Cumulative (Opening Year), and General Plan Buildout traffic conditions.

9.1 EXISTING (2014) CONDITIONS

For Existing (2014) traffic conditions, the study area intersections operate at acceptable LOS (LOS "D" or better) during the peak hours.

The freeway segments analyzed for this study were found to operate at an acceptable LOS (i.e., LOS "D" or better) during the peak hours with the existing number of lanes in each direction, with the exception of the I-215 SB freeway mainline segment, south of Eucalyptus Avenue. The I-215 SB On-Ramp at Eucalyptus Avenue also exceeds the acceptable levels of service, with existing geometry.

9.2 EXISTING PLUS PROJECT CONDITIONS

Consistent with City of Riverside traffic study guidelines, the E+P scenario has been used to determine Project impacts for the purposes of this analysis. Based on a comparison of E+P to Existing (2014) traffic conditions, the Project is anticipated to cause the intersection of Valley Springs Parkway / Eucalyptus Avenue (#4) to change from acceptable LOS (i.e., LOS "D") to unacceptable (i.e., LOS "E" or "F") during the peak hours.

The following improvement is anticipated to reduce the peak hour delay, and thereby improve the location's LOS to LOS "D" or better for Existing plus Project traffic conditions:

Valley Springs Parkway / Eucalyptus Avenue (#4) – The following improvement is necessary to reduce the project's impact to less-than-significant:

- SB Approach: Provide overlap phasing for the existing dual right turn lanes.

In addition, the following unsignalized project driveway intersections are anticipated to meet traffic signal warrants:

ID	Intersection Location	Jurisdiction
23	Valley Springs Parkway / Driveway 5	City of Riverside
25	Canyon Park Drive - Driveway 7 / Gateway Drive	City of Riverside

Site access recommendations are listed in Section 8.1 of this report, and they are also shown on Exhibit 8-1.

9.3 CUMULATIVE (OPENING YEAR) CONDITIONS

Based on the assessment of Opening Year without Project traffic conditions, the intersections identified in Table 9-1 were found to operate at a deficient LOS (LOS "E" or worse) during the peak hours:

TABLE 9-1: DEFICIENT INTERSECTIONS FOR OPENING YEAR WITHOUT PROJECT

ID	Intersection Location	Level of Service	Significant Impact?[1]
3	I-215 Ramps / Eastridge Avenue - Eucalyptus Avenue ➢ I-215 SB Ramps / Eucalyptus Avenue	LOS "F" – AM Peak Hours	YES
4	Valley Springs Parkway / Eucalyptus Avenue	LOS "E" – AM & PM Peak Hours	YES
13	Day St. / Cottonwood Avenue	LOS "E" – PM Peak Hours	YES
14	Day St. / Bay Avenue	LOS "F" – AM & PM Peak Hours	NO
15	Day St. / Alessandro Boulevard	LOS "E" – AM Peak Hours	YES
16	Memorial Way / Towngate Drive	LOS "E" – PM Peak Hours	YES

[1] The City of Riverside's specialized significance criteria dictates that if the addition of Project traffic (as measured by 50 peak hour trips) results an increase in delay by more than two (2.0) seconds, the impact is considered significant.

For Opening Year With Project Conditions, the addition of Project traffic would not result in any additional deficiencies beyond those previously identified under Opening Year Without Project traffic conditions. The recommended improvements listed below are necessary to reduce the off-site traffic impacts (see Table 9-1) associated with the development of the Project to less than significant for Opening Year traffic conditions, in addition to the improvements previously identified under Existing plus Project conditions.

I-215 SB Ramps / Eucalyptus Avenue (#3)

- Participate in the installation of a traffic signal to serve the southbound right turn only off-ramp and westbound through traffic. This configuration would be similar to the existing I-215 northbound right-turn only off-ramp / Eucalyptus Avenue intersection design.

Valley Springs Parkway / Eucalyptus Avenue (#4)

- NB Approach: Modify striping to provide a 2nd left turn lane, in addition to the existing two through lanes.

Day Street / Cottonwood Avenue (#13)

- NB Approach: Widen Day Street to provide a separate right turn lane, in addition to the existing left turn lane and one through lane.

Day Street / Alessandro Boulevard (#15)

- EB Approach: Modify striping and existing raised median to provide a 2nd left turn lane, in addition to the existing three through lanes.

Memorial Way / Towngate Drive (#16)

- EB Approach: Convert the existing 3rd through lane to provide a dedicated right turn lane with overlap phasing, in addition to the existing left turn lane and two through lanes.

The I-215 SB freeway mainline segment, between the off and on ramp on Eucalyptus Avenue is anticipated to operate at unacceptable level of service during the peak hours with existing geometry, in addition to the freeway mainline segment location identified previously under Existing (2014) conditions.

9.4 GENERAL PLAN BUILDOUT CONDITIONS

Based on the assessment of General Plan Buildout without Project traffic conditions, the intersection of Day Street / Eucalyptus Avenue (#12) was found to operate at a deficient LOS (LOS "E" or worse) during the peak hours, in addition to the deficient intersections previously identified under Opening Year without Project conditions. The deficient intersections under General Plan Buildout without Project traffic conditions are presented in Table 9-2.

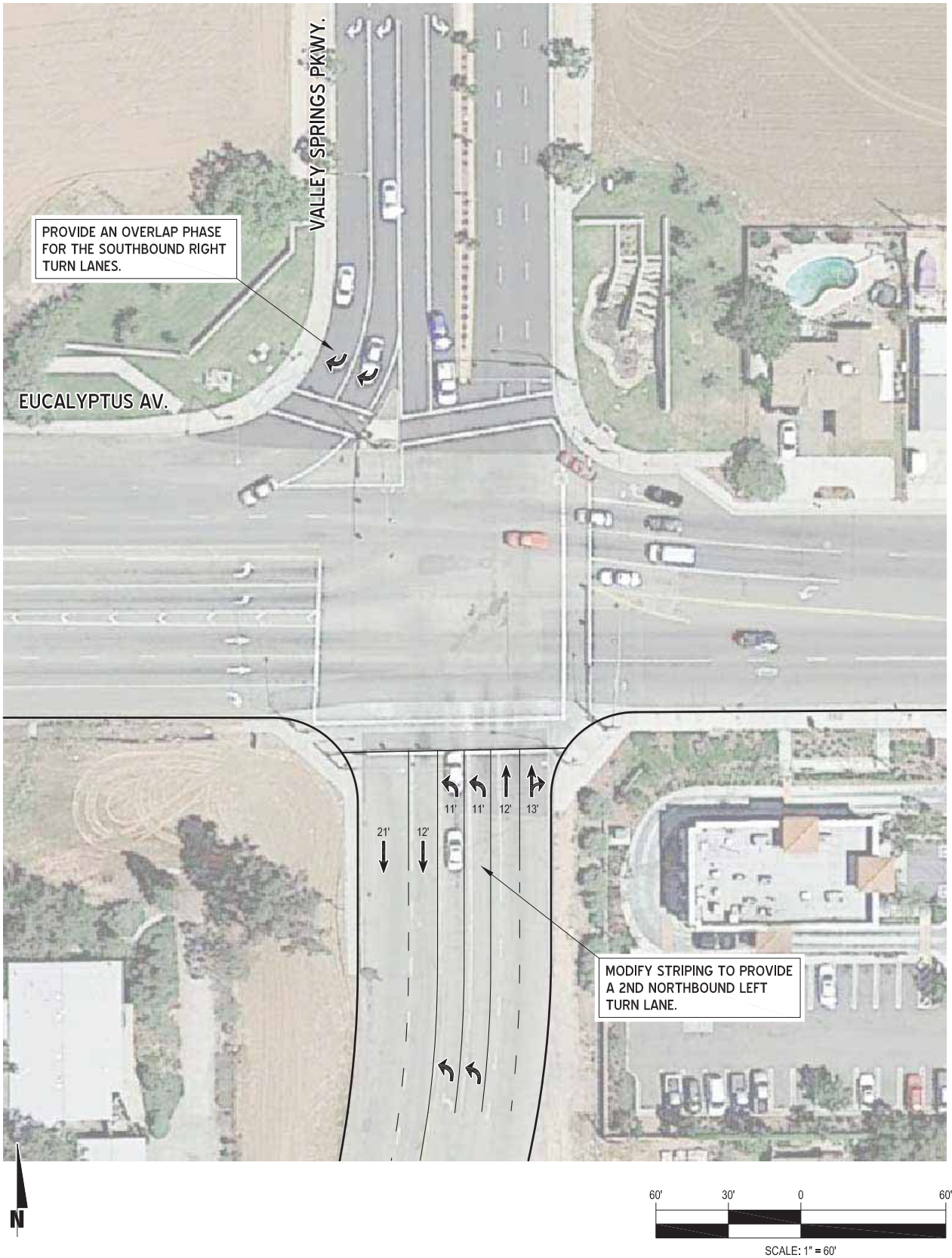
TABLE 9-2: DEFICIENT INTERSECTIONS FOR GENERAL PLAN BUILDOUT WITHOUT PROJECT

ID	Intersection Location	Level of Service	Significant Impact?[1]
3	I-215 Ramps / Eastridge Avenue - Eucalyptus Avenue ➢ I-215 SB Ramps / Eucalyptus Avenue	LOS "F" – AM Peak Hours LOS "E" – PM Peak Hours	YES
4	Valley Springs Parkway / Eucalyptus Avenue	LOS "F" – AM & PM Peak Hours	YES
12	Day St. / Eucalyptus Avenue	LOS "E" – PM Peak Hours	YES
13	Day St. / Cottonwood Avenue	LOS "E" – AM Peak Hours LOS "F" – PM Peak Hours	YES
14	Day St. / Bay Avenue	LOS "F" – AM & PM Peak Hours	NO
15	Day St. / Alessandro Boulevard	LOS "E" – AM Peak Hours LOS "F" – PM Peak Hours	YES
16	Memorial Way / Towngate Drive	LOS "E" – AM & PM Peak Hours	YES

[1] The City of Riverside's specialized significance criteria dictates that if the addition of Project traffic (as measured by 50 peak hour trips) results an increase in delay by more than two (2.0) seconds, the impact is considered significant.

The same intersections that were found to operate at a deficient LOS under General Plan Buildout without Project traffic conditions were also projected to operate at a deficient LOS under General Plan Buildout with Project traffic conditions. The recommended improvements listed below are necessary to reduce the off-site traffic impacts associated with the development of the Project to less than significant for General Plan Buildout traffic conditions, in addition to the improvements previously identified under Cumulative Plus Project (Opening Year) conditions. Exhibits 9-1 through 9-6 illustrates the conceptual striping plans of the recommended off-site improvements for General Plan Buildout conditions.

EXHIBIT 9-1: CONCEPTUAL STRIPING PLAN FOR VALLEY SPRINGS PARKWAY AND EUCALYTPUS AVENUE (#4)



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URBAN CROSSROADS

EXHIBIT 9-2: CONCEPTUAL STRIPING PLAN FOR DAY STREET AND EUCALYPTUS AVENUE (#12)

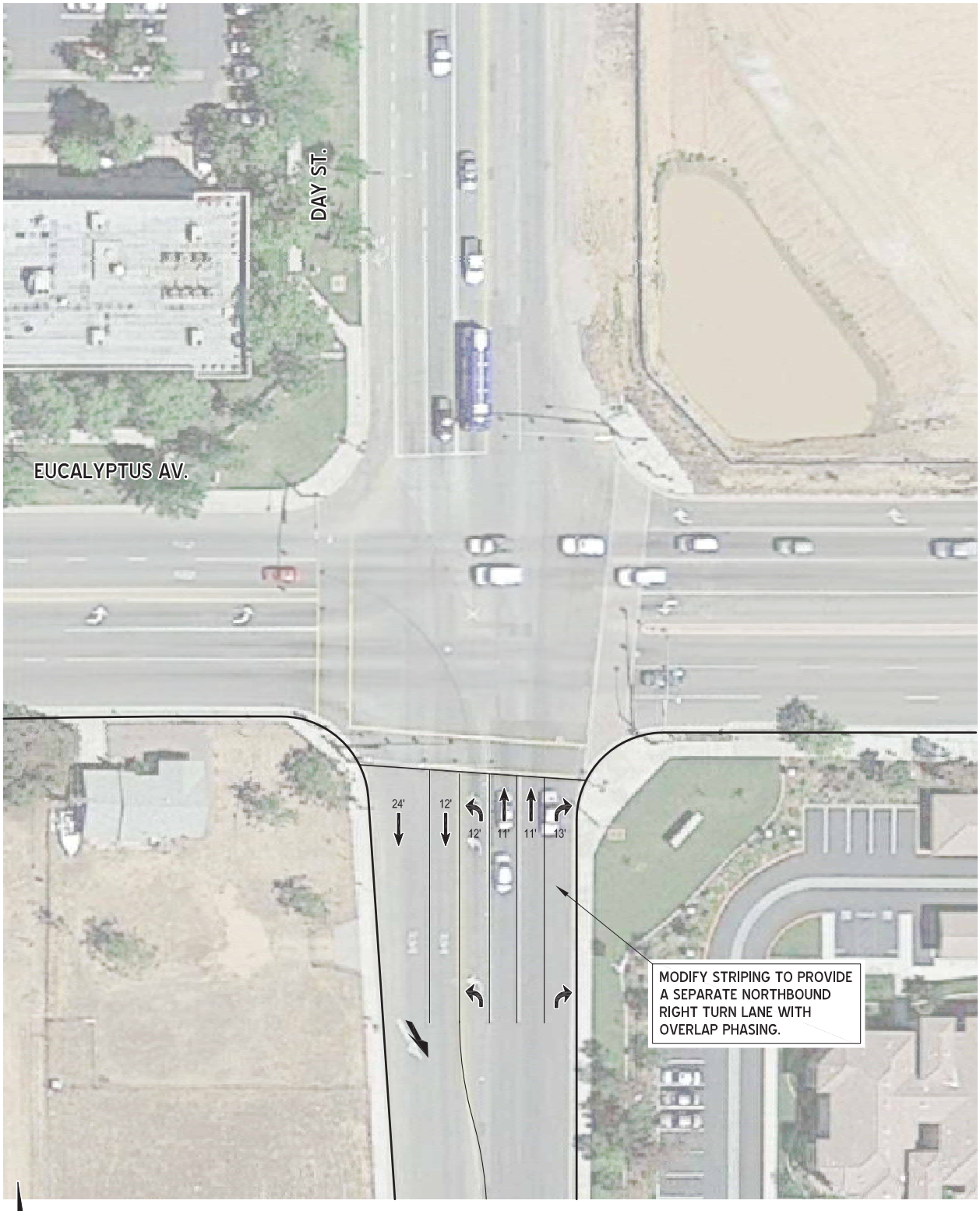

EXHIBIT 9-3: CONCEPTUAL STRIPING PLAN FOR DAY STREET AND COTTONWOOD AVENUE (#13)

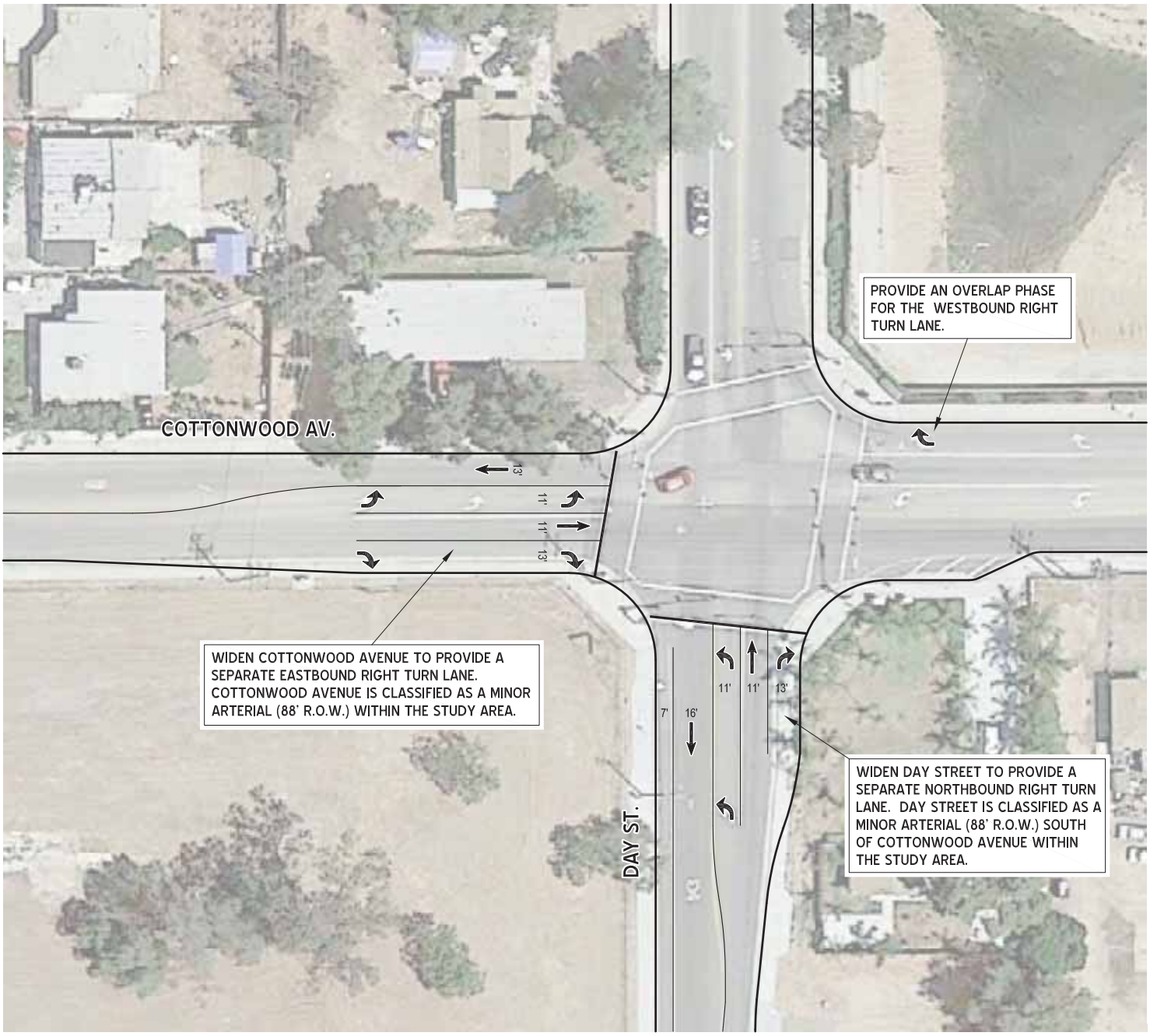

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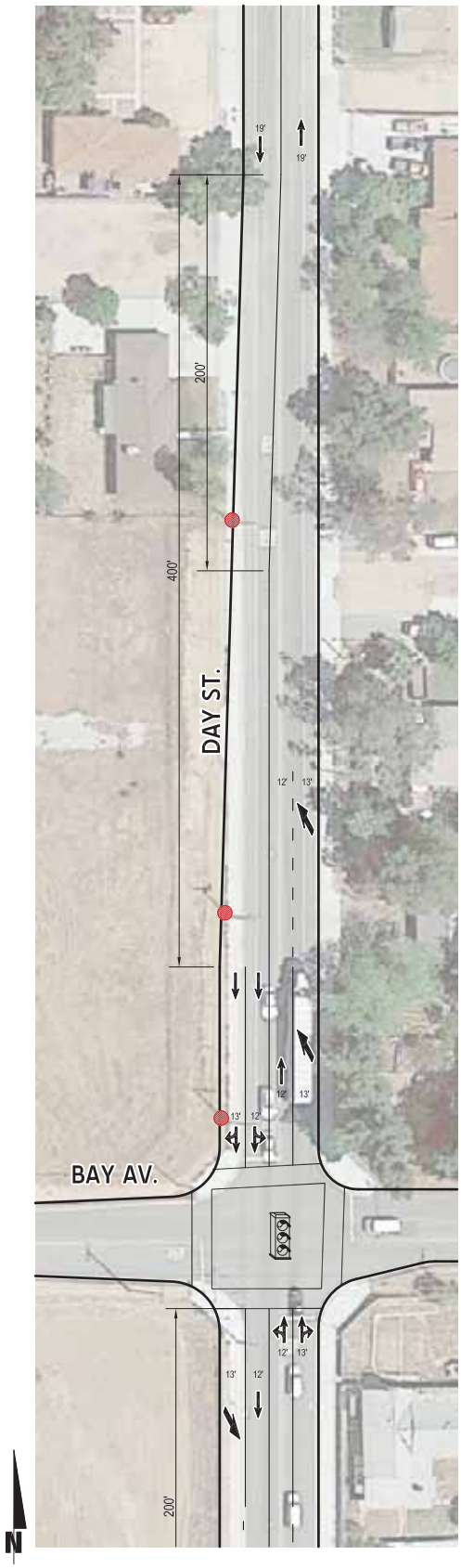
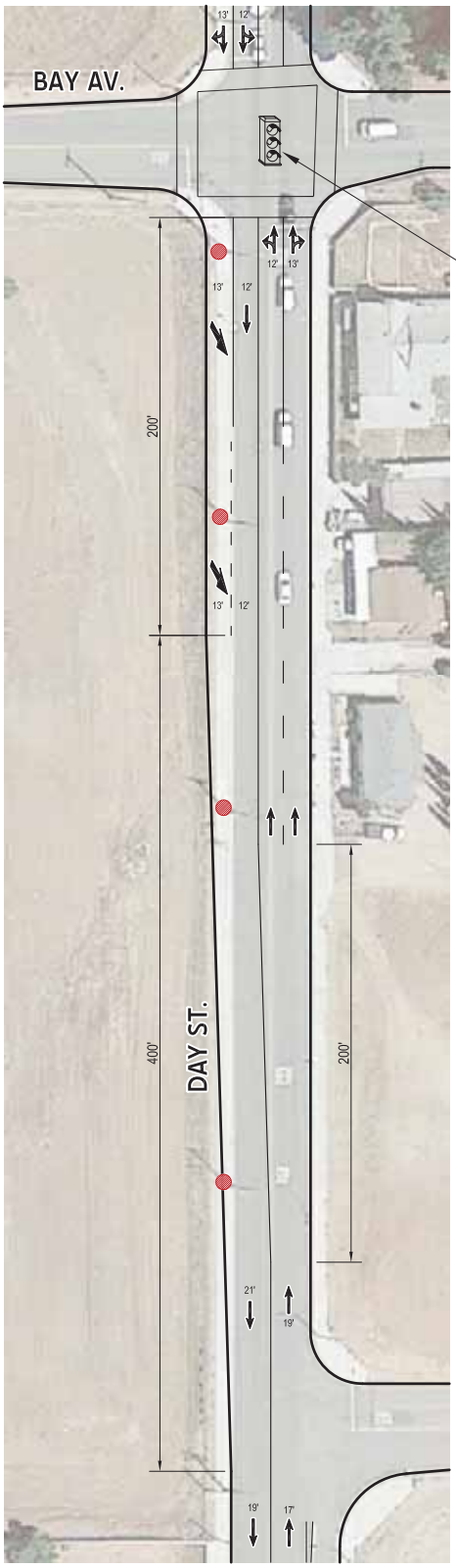
EXHIBIT 9-4: CONCEPTUAL STRIPING PLAN FOR DAY STREET AND BAY AVENUE (#14)





INSTALL A TRAFFIC SIGNAL.

WIDEN DAY STREET FROM 2-LANE TO 4-LANE ROADWAY. DAY STREET IS CLASSIFIED AS A MINOR ARTERIAL (88' R.O.W.) SOUTH OF COTTONWOOD AVENUE WITHIN THE STUDY AREA.

LEGEND:

● = EXISTING UTILITY POLES TO BE RELOCATED WITH DAY STREET WIDENING

90' 45' 0 90'

SCALE: 1" = 90'

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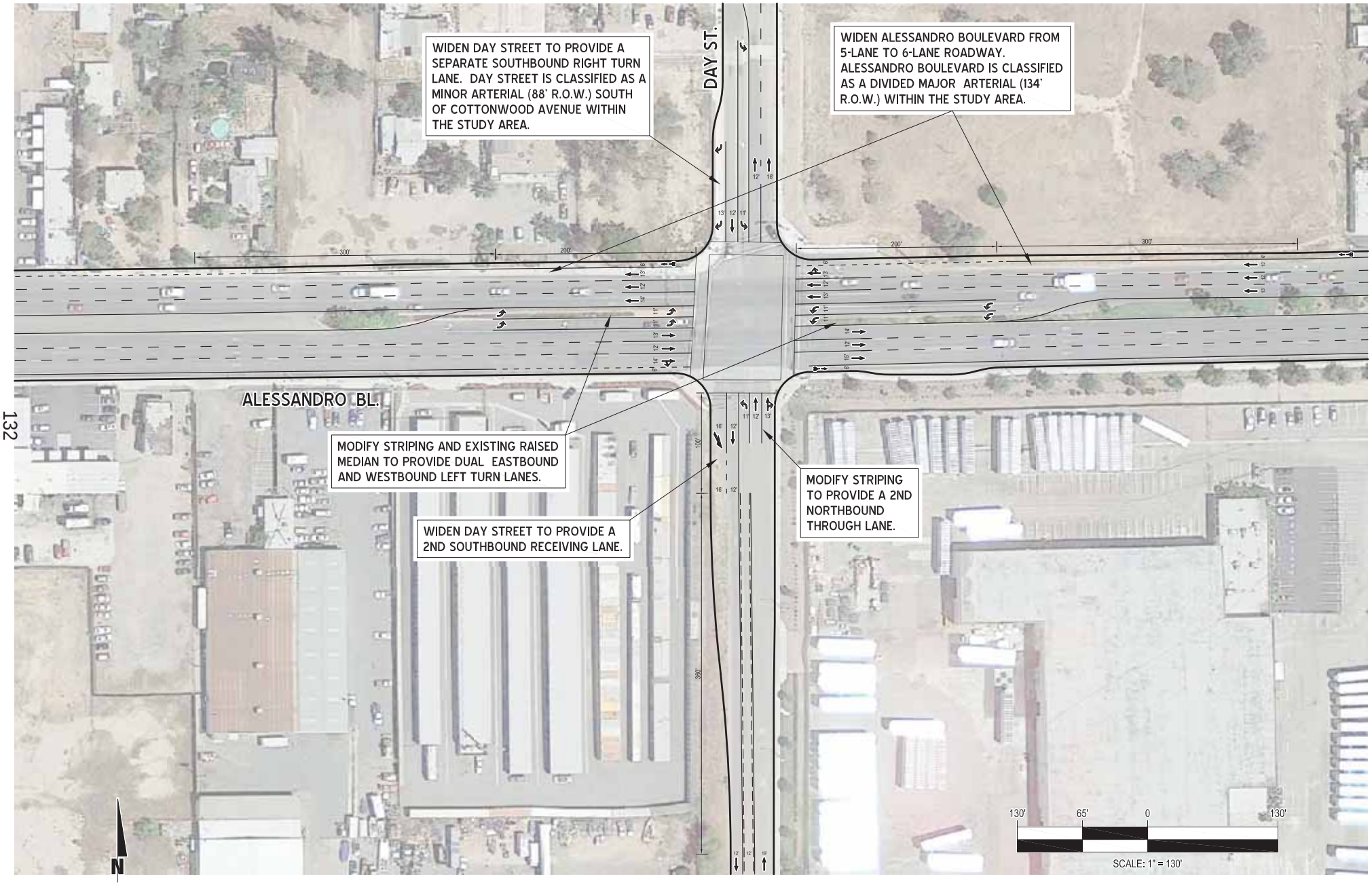
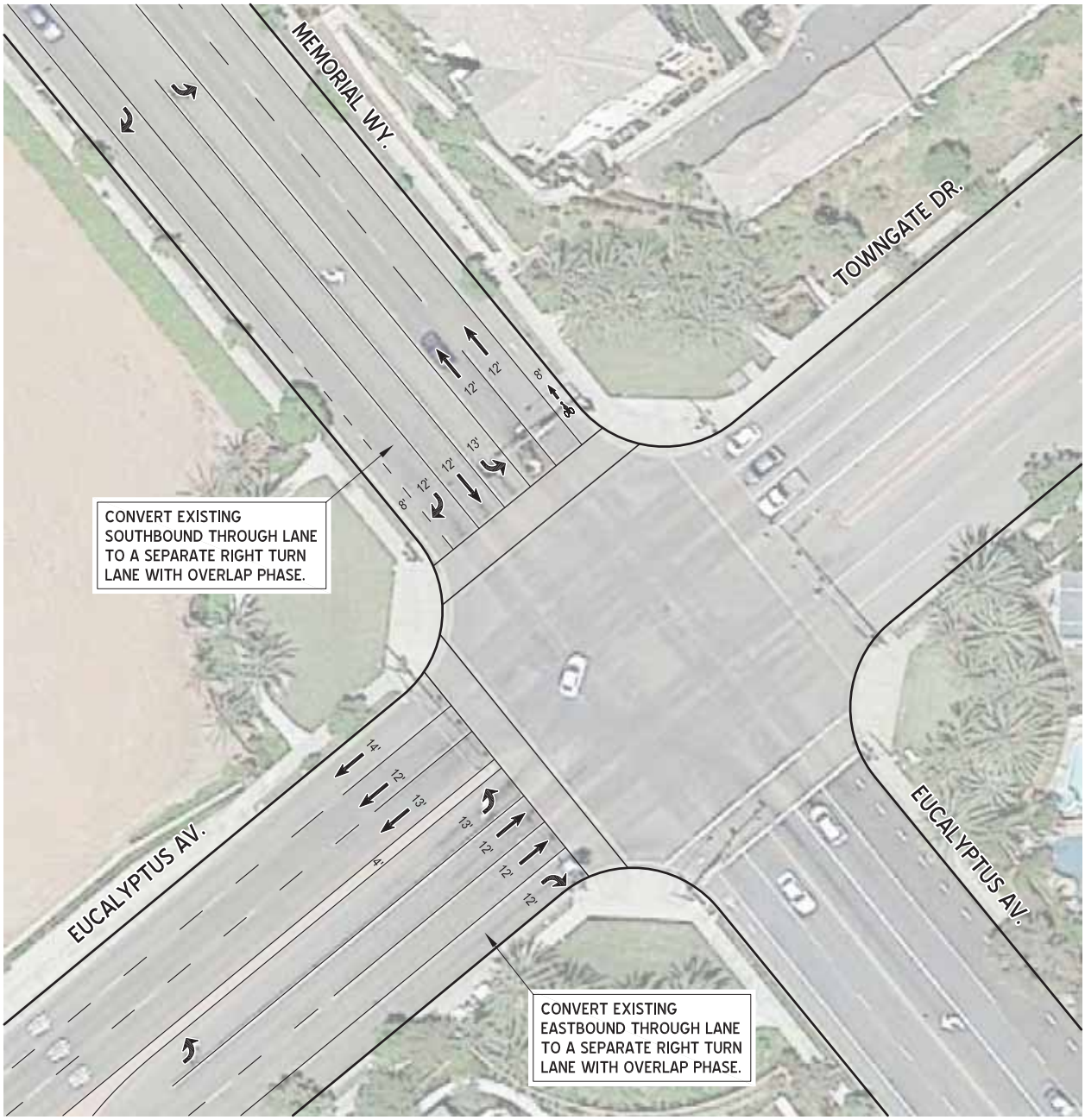
URBAN CROSSROADS

EXHIBIT 9-5: CONCEPTUAL STRIPING PLAN FOR DAY STREET AND ALESSANDRO BOULEVARD (#15)



URBAN CROSSROADS

EXHIBIT 9-6: CONCEPTUAL STRIPING PLAN FOR MEMORIAL WAY AND TOWNGATE DRIVE (#16)



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URBAN CROSSROADS

Day Street / Eucalyptus Avenue (#12)

- NB Approach: Modify striping to provide a dedicated right turn lane with overlap phasing.

Day Street / Cottonwood Avenue (#13)

- EB Approach: Widen Cottonwood Avenue to provide a separate right turn lane, in addition to the existing left turn lane and one through lane.
- WB Approach: Provide overlap phasing for the existing right turn lane.

Day Street / Alessandro Boulevard (#15)

- NB Approach: Modify striping to provide a 2nd through lane, in addition to the existing left turn lane and through lane.
- SB Approach: Widen Day Street to provide a dedicated right turn lane.
- WB Approach: Modify striping and existing raised median to provide a 2nd left turn lane and widen Alessandro Boulevard to provide a 3rd through lane. It should be noted that Alessandro Boulevard is classified a 6-Lane

Memorial Way / Towngate Drive (#16)

- SB Approach: Convert the existing 2nd through lane to provide a dedicated right turn lane with overlap phasing, in addition to the existing left turn lane and one through lane.

For the intersection of Day Street / Bay Avenue (#14), the project related delay increase is less than 1 second (see Tables 7-1 and 7-2), which is not considered a significant project impact based upon City of Riverside standards (see Table 2-7). However, the following improvements are recommended to enable the intersection to operate at an acceptable LOS (LOS "D" or better):

Day Street / Bay Avenue (#14)

- Installation of a traffic signal.
- NB Approach: Widen Day Street to provide a 2nd through lane.
- SB Approach: Widen Day Street to provide a 2nd through lane.

The I-215 SB freeway mainline segment, between the off and on ramp on Eucalyptus Avenue is anticipated to continue to operate at unacceptable level of service during the peak hours with existing geometry under General Plan Buildout with or without project traffic conditions.

9.5 RECOMMENDED MITIGATION MEASURES

This section provides a summary of recommended mitigation measures necessary to address Project impacts for Existing Plus Project traffic conditions. Section 2.0 *Methodologies* provide information on the methodologies used in the analysis and Section 5.0 *Existing plus Project* Traffic Analysis includes the detailed analysis. The recommended mitigation measure necessary to reduce the direct project-related impact to less-than-significant is discussed below.

9.5.1 OFF-SITE IMPROVEMENTS

Project Impact - Valley Springs Parkway / Eucalyptus Avenue (#4) – Per City of Riverside TIA guidelines (1), a significant impact at a study intersection is when the addition of project related trips causes peak hour LOS to degrade from acceptable (LOS "A" through "D") to unacceptable levels (LOS "E" or "F"). Based on a comparison of E+P to Existing (2014) traffic conditions, the Project is anticipated to cause the intersection of Valley Springs Parkway / Eucalyptus Avenue (#4) to change from acceptable LOS (i.e., LOS "D") to unacceptable (i.e., LOS "E" or "F") during the peak hours. Therefore, the impact is considered significant.

Mitigation Measure – Valley Springs Parkway / Eucalyptus Avenue (#4) – The following improvement is necessary to improve the location's LOS to LOS "D" or better and reduce the increase in delay to pre-project condition, thus reducing the Project's impact to less-than-significant:

- Implement overlap phasing on the southbound right turn lanes.

Cumulative Impacts – Cumulative intersection improvements are needed without or with the Project to serve Cumulative (Opening Year) and General Plan Buildout traffic conditions as described in Section 9.3 and 9.4 above. However, the City of Riverside's specialized significance criteria dictates that if the addition of Project traffic (as measured by 50 peak hour trips) results an increase in delay by more than two (2.0) seconds, the impact is considered significant (see Tables 9-1 and 9-2).

Mitigation Measure – The following mitigation measure is recommended to reduce the off-site impacts associated with the development of the Project under Cumulative (Opening) and General Plan Buildout traffic conditions:

- The Project applicant shall participate by the City of Riverside DIF and regional TUMF programs by paying applicable fees, supplemented by participation in additional intersection improvement costs as needed (see Section 9.5.4 below). Payment of fees to these fee programs should be considered as mitigation for the Project's proportionate share of cumulative impacts where applicable. If the City finds that the payment of DIF and TUMF fees alone do not adequately address the Project's proportionate share, a fair share contribution may be imposed in order to mitigate the Project's share of cumulative impacts.

  Additional discussion of the relevant pre-existing transportation impact fee programs is provided below. It is our understanding that the City does not maintain a list of DIF eligible facilities. As such, the application of established program fees towards the improvements in Sections 9.3 and 9.4 above will be at the City's discretion.

As the proposed Project would contribute to the existing and forecasted deficient freeway segments, the Project's contribution to these cumulative traffic impacts are considered cumulatively considerable and unavoidable.

Neither Caltrans nor the State has adopted a fee program that can ensure that locally-contributed impact fees will be tied to improvements to freeway mainlines, and only Caltrans

has the jurisdiction over mainline improvements. Because Caltrans has exclusive control over state highway improvements, ensuring that fair share contributions to mainline improvements are actually part of a program tied to implementation of mitigation is within the jurisdiction of Caltrans. As such, the City of Riverside may decide whether specific overriding economic, legal, healthcare, social, technological, or other benefits of the project outweigh the unavoidable adverse cumulative freeway traffic impacts associated with the project.

9.5.2 CITY OF RIVERSIDE DEVELOPMENT IMPACT FEE (DIF) PROGRAM

The City of Riverside's Development Impact Fee (DIF) program is comprised of two separate transportation components, which include the Traffic and Railroad Signal Mitigation Fee and the Transportation Facilities Fee. The City's two transportation fee components address local transportation needs city-wide. The City's DIF program has a unique approach toward fee collection. Non-residential development is subject to the Traffic and Railroad Signal Mitigation Fee component, but is not assessed the Transportation Facilities Fee component.

The Project applicant will be subject to the City's DIF fee program, and will pay the requisite City DIF fees at the rates then in effect pursuant to the City's ordinance.

9.5.3 COUNTY OF RIVERSIDE TRANSPORTATION UNIFORM MITIGATION FEE (TUMF) PROGRAM

The Western Riverside Council of Governments (WRCOG) is responsible for establishing and updating TUMF rates. The City may grant to developers a credit against the specific components of fees for the dedication of land or the construction of facilities identified in the list of improvements funded by each of these fee programs. Fees are based upon projected land uses and a related transportation needs to address growth based upon a 2009 Nexus study.

TUMF is an ambitious regional program created to address cumulative impacts of growth throughout Western Riverside County. Program guidelines are being handled on an iterative basis. Exemptions, credits, reimbursements and local administration are being deferred to primary agencies. The City of Riverside serves this function for the proposed Project. Fees submitted to the City are passed on to the WRCOG as the ultimate program administrator.

TUMF guidelines empower a local zone committee to prioritize and arbitrate certain projects. The Project is located in the Northwest Zone. The zone has developed a 5-year capital improvement program to prioritize public construction of certain roads. TUMF is focused on improvements necessitated by regional growth. Eastridge Avenue – Eucalyptus Avenue and Alessandro Boulevard are designated TUMF roadways and facilities within the Project's traffic study area.

9.5.4 FAIR SHARE CONTRIBUTION

Project mitigation may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair share contribution toward future improvements or a combination of these approaches. Improvements constructed by development should be eligible for a fee credit or reimbursement through the program where appropriate (to be determined at the City's discretion).

When off-site improvements are identified with a minor share of responsibility assigned to proposed development, the approving jurisdiction may elect to collect a fair share contribution or require the development to construct improvements. Detailed fair share calculations, for each peak hour, has been provided on Table 9-3 for the cumulatively impacted intersections shown previously on Table 7-2. To the extent that the project constructs facilities which are eligible for reimbursement from other programs such as TUMF facilities, fee credit or reimbursement should be accommodated (for example, see Riverside Code Section 16.68.040.H). In addition, the proposed signalized driveway intersections at Valley Springs Parkway / Driveway 5 (#23) and Canyon Park Drive – Driveway 7 / Gateway Drive (#25) have also been included in Table 9-3. As shown on Table 9-3, the project contributes approximately 15.6% of the new traffic at the intersection of I-215 Southbound Ramps / Eucalyptus Avenue (#3), 33.1% of the new traffic at the intersection of Valley Springs Parkway / Eucalyptus Avenue (#4), 13.4% of the new traffic at the intersection of Day Street / Eucalyptus Avenue (#12) 7.2% of the new traffic at the intersection of Day Street / Cottonwood Avenue (#13), 9.0% of the new traffic at the intersection of Day Street / Bay Avenue (#14), 2.4% of the new traffic at the intersection of Day Street / Alessandro Boulevard (#15), 5.6% of the new traffic at the intersection of Memorial Way / Towngate Drive (#16), 65.7% of the new traffic at the intersection of Valley Springs Parkway / Driveway 5 (#23), and 91.0% of the new traffic at the intersection of Canyon Park Drive – Driveway 7 / Gateway Drive (#25). In addition, the project will be fully responsible for the overlap phasing improvement for the southbound right turn lanes at the intersection of Valley Springs Parkway / Eucalyptus Avenue (#4) to mitigate the project's direct impact to pre-project conditions.

A rough order of magnitude cost has been prepared to determine an estimated contribution value based upon the Project's fair share of traffic as part of the project approval process. Table 9-4 summarizes the long-range cumulative impact needs shown on Table 7-2 and a rough order of magnitude cost estimate for each of the recommended improvements. It should be noted that the proposed traffic signals at the two Project Driveway locations are also included in Table 9-4. As shown on Table 9-4, the total cost of needed study area intersection and roadway improvements for General Plan Buildout conditions is $3,495,000. Based on the project fair share percentages shown on Table 9-3, the project's fair share costs for the recommended improvements has been calculated on Table 9-4. As shown on Table 9-5, the project's fair share cost is estimated at $544,243. However, these estimates are a rough order of magnitude only as they are intended only for discussion purposes and do not imply any legal responsibility or formula for contributions or mitigation.

9.6 PROJECT IMPACT CONSIDERATIONS AT NON-DEFICIENT INTERSECTIONS

At various intersection locations where the projected level of service is acceptable pursuant to the City of Riverside General Plan, the project-related change in average intersection delay triggers the City's sliding scale criteria for a potential project impact. Seven non-deficient intersections where this condition occurs are listed below:

- #2 – Box Springs Boulevard / Eastridge Avenue
- #7 – Day Street / Canyon Springs Parkway
- #8 – Day Street / Campus Parkway
- #9 – Day Street / Gateway Drive
- #20 – Valley Springs Parkway / Corporate Center Place
- #21 – Valley Springs Parkway / Driveway 4
- #22 – Valley Springs Parkway / Gateway Drive

TABLE 9-3: PROJECT FAIR SHARE CALCULATIONS

#	Intersection	Peak Hour	Existing (2014) Traffic	Project Only Traffic	General Plan Buildout With Project Traffic	Total New Traffic[1]	Project Fair Share (%)[2]	Significant Impact?[3]
3	I-215 Ramps / Eucalyptus Av.							
	➢ I-215 SB Ramps / Eucalyptus Av.	AM	1,655	147	3,404	1,749	8.4%	YES
		PM	1,803	338	3,969	2,166	**15.6%**	
4	Valley Springs Pkwy. / Eucalyptus Av.	AM	2,285	729	4,696	2,411	30.2%	YES
		PM	3,338	1,000	6,359	3,021	**33.1%**	
12	Day St. / Eucalyptus Av.	AM	1,931	258	4,093	2,162	11.9%	YES
		PM	2,576	361	5,270	2,694	**13.4%**	
13	Day St. / Cottonwood Av.	AM	939	98	2,507	1,568	6.3%	YES
		PM	1,038	137	2,929	1,891	**7.2%**	
14	Day St. / Bay Av.	AM	576	84	1,617	1,041	8.1%	NO
		PM	675	114	1,935	1,260	**9.0%**	
15	Day St. / Alessandro Bl.	AM	2,224	55	4,885	2,661	2.1%	YES
		PM	2,564	77	5,814	3,250	**2.4%**	
16	Memorial Wy. / Towngate Dr.	AM	1,090	84	2,745	1,655	5.1%	YES
		PM	1,758	115	3,829	2,071	**5.6%**	
23	Valley Springs Pkwy. / Dwy. 5	AM	865	714	1,985	1,120	63.8%	Project Dwy.
		PM	1,603	971	3,080	1,477	**65.7%**	
25	Canyon Park Dr. - Dwy. 7 / Gateway Dr.	AM	377	524	953	576	**91.0%**	Project Dwy.
		PM	581	717	1,374	793	90.4%	

[1] Total New Traffic = General Plan Buildout - Existing (2014) Traffic

[2] Percent Project Fair Share = Project Traffic / Total New Traffic

BOLD = Project Fair Share

[3] The City of Riverside's specialized significance criteria dictates that if the addition of Project traffic (as measured by 50 peak hour trips) results an increase in delay by more than two (2.0) seconds, the impact is considered significant.

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TABLE 9-4: SUMMARY OF RECOMMENDED OFF-SITE IMPROVEMENTS FOR GENERAL PLAN BUILDOUT CONDITIONS AND ASSOCIATED COST ESTIMATES

#	Intersection	Recommended Improvements	Cost Estimate[1]
3	I-215 Ramps / Eucalyptus Av.		
	➢ I-215 SB Ramps / Eucalyptus Av.	Install a traffic signal to serve the SBR off-ramp and WBT traffic	$200,000
		Subtotal	**$200,000**
4	Valley Springs Pkwy. / Eucalyptus Av.	Modify the traffic signal to accommodate overlap phasing for SB right turn lanes.	$10,000
		Restripe to provide a 2nd NBL	$5,000
		Subtotal	**$15,000**
12	Day St. / Eucalyptus Av.	Restripe to provide a separate NBR	$5,000
		Modify the traffic signal to accommodate overlap phasing for NB right turn lane.	$10,000
		Subtotal	**$15,000**
13	Day St. / Cottonwood Av.	Construct 1 NBR	$150,000
		Construct 1 EBR	$150,000
		Modify the traffic signal to accommodate overlap phasing for WB right turn lane.	$10,000
		Subtotal	**$310,000**
14	Day St. / Bay Av.	Install a traffic signal	$200,000
		Construct 2nd NBT and receiving lane	$300,000
		Construct 2nd SBT and receiving lane	$300,000
		Relocate 7 existing utility poles on the west side of Day Street (3 poles to the north and 4 poles to the south of Bay Avenue @ $100,000 each pole)	$700,000
		Subtotal	**$1,500,000**
15	Day St. / Alessandro Bl.	Restripe to provide a 2nd NBT, and construct 2nd SBT receiving lane	$175,000
		Construct 1 SBR	$150,000
		Restripe and modify existing raised median to provide a 2nd EBL	$100,000
		Restripe and modify existing raised median to provide a 2nd WBL	$100,000
		Construct a 3rd WBT and receiving lane along Alessandro Bl. (roadway widening).	$500,000
		Subtotal	**$1,025,000**
16	Memorial Wy. / Towngate Dr.	Restripe through lane to a separate SBR	$5,000
		Modify the traffic signal to accommodate overlap phasing for SB right turn lane.	$10,000
		Restripe through lane to a separate EBR	$5,000
		Modify the traffic signal to accommodate overlap phasing for EB right turn lane.	$10,000
		Subtotal	**$30,000**
23	Valley Springs Pkwy. / Dwy. 5	Install a traffic signal	$200,000
		Subtotal	**$200,000**
25	Canyon Park Dr. - Dwy. 7 / Gateway Dr.	Install a traffic signal	$200,000
		Subtotal	**$200,000**
TOTAL			**$3,495,000**

[1] Rough order of magnitude cost estimate.

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TABLE 9-5: PROJECT FAIR SHARE COST ESTIMATE FOR GENERAL PLAN BUILDOUT CONDITIONS

#	Intersection Location	Total Cost[1]	Project Fair Share %[2]	Project Fair Share Cost[3]
3	I-215 Ramps / Eucalyptus Av.			
	➢ I-215 SB Ramps / Eucalyptus Av.	$200,000	15.6%	$31,210
4	Valley Springs Pkwy. / Eucalyptus Av.			
	- Traffic Signal Modification (SBR overlap)	$10,000	100.0%	$10,000
	- Restripe to provide a 2nd NBL	$5,000	33.1%	$1,655
12	Day St. / Eucalyptus Av.	$15,000	13.4%	$2,010
13	Day St. / Cottonwood Av.	$310,000	7.2%	$22,459
14	Day St. / Bay Av.	$1,500,000	9.0%	$135,714
15	Day St. / Alessandro Bl.	$1,025,000	2.4%	$24,285
16	Memorial Wy. / Towngate Dr.	$30,000	5.6%	$1,666
23	Valley Springs Pkwy. / Dwy. 5	$200,000	65.9%	$131,707
25	Canyon Park Dr. - Dwy. 7 / Gateway Dr.	$200,000	91.8%	$183,538
TOTAL		**$3,495,000**		**$544,243**

[1] Total rough order of magnitude cost estimate shown on Table 9-2.
[2] Project fair share percentage (higher of the two peak hours) shown on Table 9-1.
[3] Project Fair Share Cost = Total Cost x Project Fair Share %

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As noted in Section 2.7.1 of this report, the City of Riverside General Plan Circulation and Community Mobility Element Policy CCM 2.3 requires that LOS D or better be maintained on Arterial Streets wherever possible. At key locations, such as City Arterials that are used by regional freeway bypass traffic and at heavily traveled freeway interchanges, LOS E is allowed during the peak hour as the acceptable standard on a case-by-case basis. Locations that may warrant the LOS E standard include portions of Arlington Avenue/Alessandro Boulevard, Van Buren Boulevard throughout the City, portions of La Sierra Avenue and selected freeway interchanges. The City also recognizes that along key freeway-feeder segments during peak commute hours, LOS F may be expected due to regional travel patterns.

In addition to volume increases, changes in average delay at an intersection can occur with new development based upon numerous operational considerations including the following:

- The type of intersection control and lane configuration can increase or decrease intersection delay for various users.
- At an intersection with an additional leg for a new project driveway, the presence of project related traffic can cause an increase in delay. On the occasions where this occurs at an intersection controlled by a Cross-Street Stop (CSS), the delays are focused on the cross-streets and the delay on the major street may not be impacted.
- Delay calculations can also be affected by traffic flow patterns. The LOS and capacity analysis performed by Synchro takes into consideration the interrelationships of signalized intersections within a network. For example, a lane improvement at a nearby intersection can result in a better grouping of vehicles, where autos arrive at an intersection in a more consolidated fashion and therefore require less green time.

Table 9-6 summarizes intersection analysis with and without additional improvements needed to address changes in delay for non-deficient intersections. The intersection operations analysis worksheets supporting Table 9-6 are included in Appendix "9.1" of this TIA. Detailed fair share calculations, for each peak hour, has been provided on Table 9-7 for the seven non-deficient intersections where the project-related change in average intersection delay triggers the City's sliding scale criteria for a potential project impact.

A rough order of magnitude cost has been prepared to determine an estimated contribution value based upon the Project's fair share of traffic. Table 9-8 summarizes the long-range intersection needs shown on Table 9-6 and a rough order of magnitude cost estimate for each of the recommended improvements. As shown on Table 9-8, the total cost of additional improvements needed to address changes in delay for non-deficient intersections is $65,000.

At **Box Springs Boulevard / Eastridge Avenue (Intersection #2)**, the AM peak hour intersection delay is increased from 39.9 seconds (LOS "D") for Without Project conditions to 51.9 seconds (LOS "D") for With Project conditions. Conversion of one of the two existing southbound through lanes to a second southbound left turn lane (see Exhibit 9-7) would reduce the With Project delay to a level equivalent to or better than Without Project conditions. An approximate cost for this signal modification and restriping improvement at the intersection of Box Springs Boulevard / Eastridge Avenue is $15,000.

TABLE 9-6: INTERSECTION SUMMARY FOR IMPACTS AT NON-DEFICIENT LOCATIONS
GENERAL PLAN BUILDOUT CONDITIONS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Without Project				With Project			
			Northbound			Southbound			Eastbound			Westbound			Delay[2] (Secs)		Level of Service[2]		Delay[2] (Secs)		Level of Service[2]	
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM
2	Box Springs Bl. / Eastridge Av.																					
	- Without Improvements	TS	1	1	1	1	2	0	1	2	1	1	2	0	39.9	45.5	D	D	51.9	48.5	D	D
	- With Improvements[5] (Modify SB approach to provide a 2 left turn lanes)	TS	1	1	1	**2**	1	0	1	2	1	1	2	0	-	-	-	-	31.2	41.6	C	D
7	Day St. / Cyn. Springs Pkwy.																					
	- Without Improvements	TS	1	3	0	1	3.5	1.5>	2	1	1	1	1	1	24.3	42.9	C	D	31.2	50.9	C	D
	- With Improvements[5] (Provide a westbound right turn overlap phase)	TS	1	3	0	1	3.5	1.5>	2	1	1	1	1	**1>**	-	-	-	-	18.1	38.7	B	D
8	Day St. / Campus Pkwy.																					
	- Without Improvements	TS	2	3	d	2	3	1>	2	1	d	1	2	1	18.9	34.6	B	C	19.3	44.2	B	D
	- With Improvements[5] (Provide a westbound right turn overlap phase)	TS	2	3	d	2	3	1>	2	1	d	1	2	**1>**	-	-	-	-	19.1	24.0	B	C
9	Day St. / Gateway Dr.																					
	- Without Improvements	TS	1	3	0	2	3	0	1	2	0	1	2	0	23.6	31.6	C	C	28.7	41.8	C	D
	- With Improvements[5] (Modify traffic signal for the EB/WB approach from protected to split phase and modify EB striping)	TS	1	3	0	2	3	0	**1.5**	**1.5**	0	1	2	0	-	-	-	-	20.1	34.0	C	C
20	Valley Springs Pkwy. / Corporate Ctr. Pl.																					
	- Without Improvements	TS	1	3	0	1	3	0	1	1	0	1	2	d	18.7	18.7	B	B	19.0	27.2	B	C
	- With Improvements[5] (Modify traffic signal for the EB/WB approach from protected to permitted phase)	TS	1	3	0	1	3	0	1	1	0	1	2	d	-	-	-	-	14.4	17.9	B	B
21	Valley Springs Pkwy. / Dwy. 4[6]	CSS	0	3	0	1	3	0	0	1!	0	0	**1!**	0	11.1	16.1	B	C	16.7	28.7	C	D
	- Existing Dwy (eastbound approach)[4]	CSS	0	2	0	1	2	d	0	1!	0	0	**1!**	0	11.1	16.1	B	C	11.6	18.2	B	C
	- Dwy. 4 (westbound approach)[4]	CSS	0	2	0	1	2	d	0	1!	0	0	**1!**	0	-	-	-	-	16.7	28.7	C	D
22	Valley Springs Pkwy. / Gateway Dr.																					
	- Without Improvements	TS	1	3	0	1	3	0	0	0	0	1	0	1	18.2	11.4	B	B	20.9	25.9	C	C
	- With Improvements[5] (Modify WB approach to provide a 2nd left turn lane)	TS	1	3	0	1	3	0	0	0	0	**2**	0	1	-	-	-	-	17.6	11.1	B	B

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane; **1** = Improvement; **1** = Additional Improvement to address project's potential impact to intersections operating at acceptable LOS (A thru D) that exceed the allowed threshold in delay increase.

[2] Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. Delay and level of service is calculated using Synchro 8.0 analysis software.

[3] TS = Traffic Signal; CSS = Cross-street Stop; AWS = All-Way Stop

[4] LOS based on the minor approach operating condition (unsignalized intersection).

[5] Per City of Riverside, improvements are recommended to mitigate the Project's significant impact at intersections opearating at acceptable LOS (LOS A thru D) where the peak hour delay increase as follows: LOS A/B = By 10.0 seconds; LOS C = By 8.0 seconds; LOS D = By 5.0 seconds

[6] It should be noted that the westbound left turn movement from the project driveway 4 is the worst movement with the highest delay (28.7 seconds). Providing physical improvements (such as adding capacity for the westbound left turns) will not solve this problem because the high northbound through traffic along Valley Springs Parkway will impede the westbound left turn movements. Installation of a traffic signal at this location is not recommended because traffic volumes do not warrant signal control. Furthermore, the Project traffic exiting Driveway 4 can utilize driveway 3, located along Corporate Centre Place as an alternative access to exit the Project site. In addition, the total/average control delay at this location is operating at an acceptable LOS. Therefore, a significant impact at this location is not expected and improvements are not recommended.

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TABLE 9-7: ADDITIONAL PROJECT FAIR SHARE CALCULATIONS

#	Intersection	Peak Hour	Existing (2014) Traffic	Project Only Traffic	General Plan Buildout With Project Traffic	Total New Traffic[1]	Project Fair Share (%)[2]
2	Box Springs Bl. / Eastridge Av.	AM	1,460	94	3,282	1,822	5.2%
		PM	1,550	127	3,690	2,140	**5.9%**
7	Day St. / Cyn. Springs Pkwy.	AM	2,126	373	3,045	919	**40.6%**
		PM	3,726	512	4,995	1,269	40.3%
8	Day St. / Campus Pkwy.	AM	1,536	389	2,438	902	43.1%
		PM	2,804	542	3,934	1,130	**48.0%**
9	Day St. / Gateway Dr.	AM	1,367	509	2,261	894	56.9%
		PM	2,101	705	3,317	1,216	**58.0%**
20	Valley Springs Pkwy. / Corporate Centre Pl.	AM	670	47	1,151	481	9.8%
		PM	1,449	65	2,050	601	**10.8%**
22	Valley Springs Pkwy. / Gateway Dr.	AM	951	267	1,634	683	39.1%
		PM	1,713	363	2,597	884	**41.1%**

[1] Total New Traffic = General Plan Buildout - Existing (2014) Traffic

[2] Percent Project Fair Share = Project Traffic / Total New Traffic

BOLD = Project Fair Share

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TABLE 9-8: SUMMARY OF ADDITIONAL RECOMMENDED OFF-SITE IMPROVEMENTS FOR NON-DEFICIENT INTERSECTIONS GENERAL PLAN BUILDOUT CONDITIONS AND ASSOCIATED COST ESTIMATES

#	Intersection	Recommended Improvements	Cost Estimate[1]
2	Box Springs Bl. / Eastridge Av.	Restripe 2nd SB through lane to a 2nd SB left turn lane and traffic signal modification.	$15,000
7	Day St. / Cyn. Springs Pkwy.	Modify traffic signal to accommodate overlap phasing for WB right turn lane.	$10,000
8	Day St. / Campus Pkwy.	Modify traffic signal to accommodate overlap phasing for WB right turn lane.	$10,000
9	Day St. / Gateway Dr.	Modify traffic signal for the EB/WB approach from protected phase to split phase.	$10,000
		Restripe 2nd EB through lane to a shared EB left/through lane.	$5,000
		Subtotal	$15,000
20	Valley Springs Pkwy. / Corporate Centre Pl.	Modify traffic signal for the EB/WB approach from protected phase to permitted phase.	$10,000
22	Valley Springs Pkwy. / Gateway Dr.	Restripe WB approach to provide a 2nd WB left turn lane.	$5,000
TOTAL			**$65,000**

[1] Rough order of magnitude cost estimate.

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EXHIBIT 9-7: CONCEPTUAL STRIPING PLAN FOR BOX SPRINGS BOULEVARD AND EASTRIDGE AVENUE (#2)

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The PM peak hour intersection delay at **Intersection #7 (Day Street / Canyon Springs Parkway)** is increased from 42.9 seconds (LOS "D") for Without Project conditions to 50.9 seconds (LOS "D") for With Project conditions. The addition of right turn overlap phasing (green right turn arrow) for the existing westbound right turn lane would reduce the With Project delay to a level equivalent to or better than Without Project conditions. An approximate cost for the westbound right turn overlap signal phasing at the intersection of Day Street / Canyon Springs Parkway is $10,000.

At **Day Street / Campus Parkway (Intersection #8)**, the PM peak hour intersection delay is increased from 34.6 seconds (LOS "C") for Without Project conditions to 44.0 seconds (LOS "D") for With Project conditions. The addition of right turn overlap phasing for the existing westbound right turn lane would reduce the With Project delay to a level equivalent to or better than Without Project conditions. An approximate cost for the westbound right turn overlap signal phasing at the intersection of Day Street / Campus Parkway is $10,000.

The PM peak hour intersection delay at **Intersection #9 (Day Street / Gateway Drive)** is increased from 31.6 seconds (LOS "C") for Without Project conditions to 44.0 seconds (LOS "D") for With Project conditions. In order to reduce the With Project delay to Without Project conditions, a signal modification is proposed with related eastbound striping improvements. Converting the east / west signal phasing to split phase, in combination with restriping the eastbound approach to include 1 left turn lane, 1 shared left-through lane, and 1 through-right lane (see Exhibit 9-8) would reduce the With Project delay to a level equivalent to or better than Without Project conditions. An approximate cost for the east / west signal modification and eastbound restriping at the intersection of Day Street / Gateway Drive is $15,000.

At **Valley Springs Parkway / Corporate Center Place (Intersection #20)**, the PM peak hour intersection delay is increased from 18.7 seconds (LOS "B") for Without Project conditions to 27.2 seconds (LOS "C") for With Project conditions. A signal modification is proposed for the east / west signal phasing. Converting the east / west signal to a permitted phase would reduce the With Project delay to a level equivalent to or better than Without Project conditions. An approximate cost for the east / west signal modification at the intersection of Valley Springs Parkway / Corporate Center Place is $10,000.

The PM peak hour intersection delay at **Intersection #21 (Valley Springs Parkway / Driveway 4)** is increased from 16.1 seconds (LOS "B") for Without Project conditions to 28.7 seconds (LOS "D") for With Project conditions. The presence of project related traffic causes an increase in delay for the overall intersection. This intersection is controlled by a Cross-Street Stop (CSS), the volume (and therefore delay) on the major street and on the opposite leg is not impacted. Because the delay increase is isolated to the new project driveway traffic, additional lanes do not address the increase, and the new driveway LOS is acceptable, no additional physical or operational improvements are proposed at this intersection.

At **Valley Springs Parkway / Gateway Drive (Intersection #22)**, the PM peak hour intersection delay is increased from 11.5 seconds (LOS "B") for Without Project conditions to 26.9 seconds (LOS "C") for With Project conditions. Restriping to include the existing closed second westbound left turn lane (see Exhibit 9-9) would reduce the With Project delay to a level

EXHIBIT 9-8: CONCEPTUAL STRIPING PLAN FOR DAY STREET AND GATEWAY DRIVE (#9)

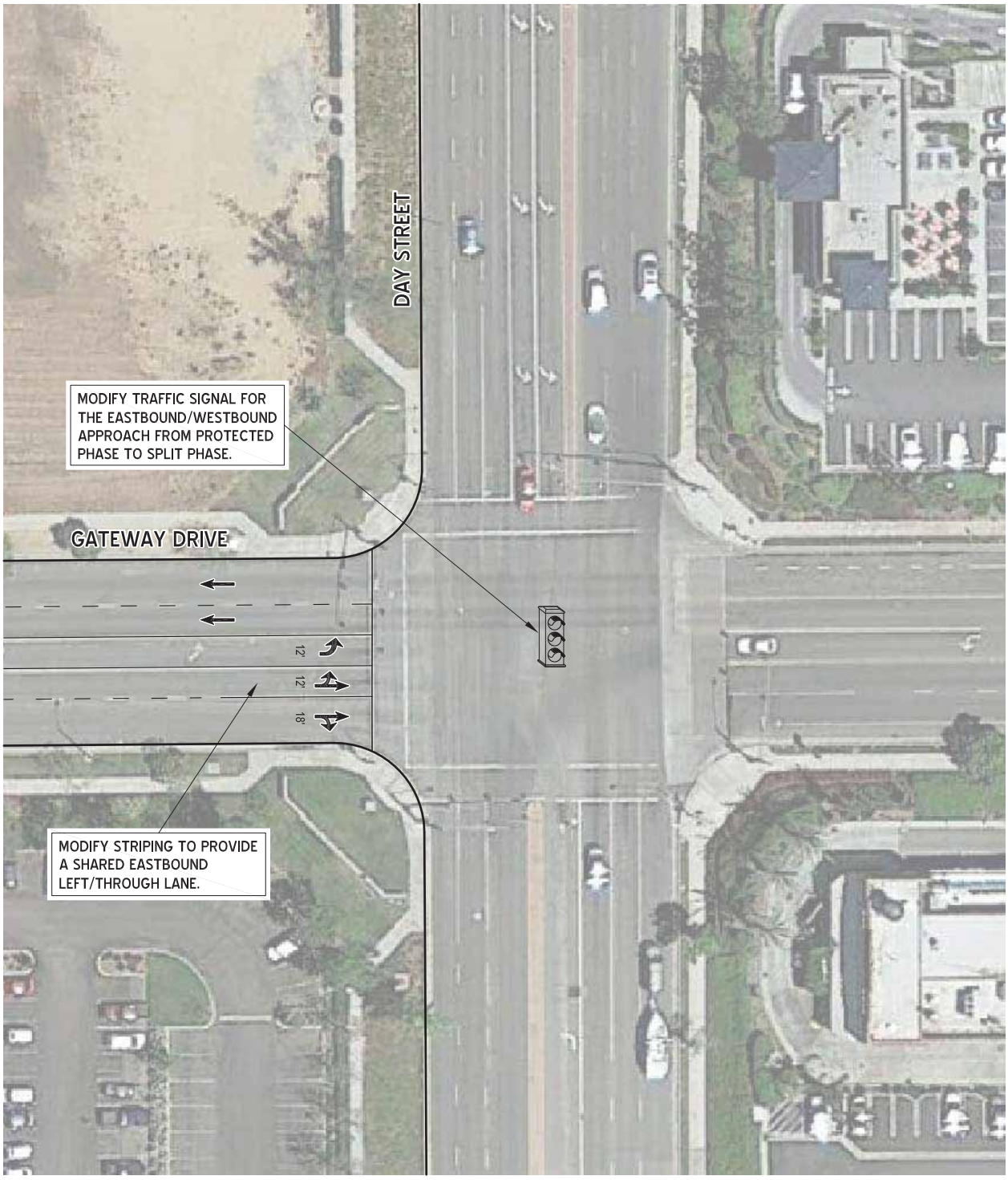

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EXHIBIT 9-9: CONCEPTUAL STRIPING PLAN FOR VALLEY SPRINGS PARKWAY AND GATEWAY DRIVE (#22)

N

60' 30' 0 60'

SCALE: 1" = 60'

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equivalent to or better than Without Project conditions. An approximate cost for reopening the existing second westbound left turn lane at the intersection of Valley Springs Parkway / Gateway Drive is $5,000.

Based on the project fair share percentages shown on Table 9-7, the project's fair share costs for the recommended improvements has been calculated on Table 9-9. As shown on Table 9-9, the project's fair share cost is estimated at $21,326. However, these estimates are a rough order of magnitude only as they are intended only for discussion purposes and do not imply any legal responsibility or formula for contributions or mitigation.

TABLE 9-9: ADDITIONAL PROJECT FAIR SHARE COST ESTIMATE FOR NON-DEFICIENT INTERSECTIONS GENERAL PLAN BUILDOUT CONDITIONS

#	Intersection Location	Total Cost[1]	Project Fair Share %[2]	Project Fair Share Cost[3]
2	Box Springs Bl. / Eastridge Av.	$15,000	5.9%	$890
7	Day St. / Cyn. Springs Pkwy.	$10,000	40.6%	$4,059
8	Day St. / Campus Pkwy.	$10,000	47.5%	$4,755
9	Day St. / Gateway Dr.	$15,000	58.4%	$8,765
20	Valley Springs Pkwy. / Corporate Centre Pl.	$10,000	10.8%	$1,082
22	Valley Springs Pkwy. / Gateway Dr.	$5,000	35.5%	$1,775
TOTAL		**$65,000**		**$21,326**

[1] Total rough order of magnitude cost estimate shown on Table 3

[2] Project fair share percentage (higher of the two peak hours) shown on Table 2

[3] Project Fair Share Cost = Total Cost x Project Fair Share %

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10 REFERENCES

1. **City of Riverside Public Works Department.** *Traffic Impact Analysis Preparation Guide.* Riverside : s.n., December 2014.
2. **California Department of Transportation.** *Guide for the Preparation of Traffic Impact Studies.* December 2002.
3. **Transportation Research Board.** *Highway Capacity Manual (HCM).* Washington, D.C. : National Academy of Sciences, 2010. 978-0-309-16077-3.
4. **Federal Highway Administration.** Manual on Uniform Traffic Control Devices (MUTCD). [book auth.] California Department of Transportation. *California Manual on Uniform Traffic Control Devices (CAMUTCD).* 2012.
5. **California Department of Transportation.** *Freeway Performance Measurement (PeMS).* [Online] [Cited: January 7, 2014.] http://pems.dot.ca.gov/.
6. **Caltrans.** Traffic Data Branch. *Caltrans Traffic Counts.* [Online] [Cited: January 5, 2015.] http://traffic-counts.dot.ca.gov/.
7. **City of Riverside General Plan.** *Riverside General Plan 2025.* Riverside : s.n., Amended November 2012. Circulation and Community Mobility Element.
8. **City of Moreno Valley Traffic Division.** *Transportation Impact Analysis Preparation Guide.* City of Moreno Valley : s.n., August 2007.
9. **Institute of Transportation Engineers.** *Trip Generation.* 9th Edition. 2012.
10. **Southern California Association of Governments.** *2012 Regional Transportation Plan.* April 2012.

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APPENDIX 1.1:

APPROVED TRAFFIC STUDY SCOPING AGREEMENT

SCOPING AGREEMENT FOR TRAFFIC IMPACT STUDY

This letter acknowledges the City of Riverside Public Works Traffic Engineering Division requirements for traffic impact analysis of the following project. The analysis must follow the City Traffic Impact Analysis Preparation Guide dated December 2014.

Case No. P14-0294 (SPA) P14-0295 (EIR) P14-0296 (PPE) P14-0297 (RZ) P14-0298 (LLA) P14-0299 (VR)
Related Cases -
SP No.
EIR No.
GPA No.
CZ No.
Project Name: Canyon Springs Healthcare Campus & Senior LivingTraffic Impact Analysis
Project Location: North of Eucalyptus Av., between Valley Springs Pkwy. & Gateway Dr.
Project Description: Hospital w/ 300 beds, 370,000 sf of Medical Office Buildings & Surgical Center, 250 du Senior Housing, and Assisted Living Facility w/ 250 beds.

	Consultant	Architect
Name:	URBAN CROSSROADS, INC. - John Kain	
Address:	41 Corporate Park, Suite 300	
	Irvine, CA 92606	
Telephone:	(949) 660-1994 ext. 211	

A. Trip Generation Source: ITE *Trip Generation* Manual, 9th Editior **(See Table 1 and Table 2)**

Existing Land Use: **Vacant (Retail/Office)** Proposed Land Use: **Medical Office/Facility**
Existing Zoning: **Specific Plan** Proposed Zoning: **Specific Plan**
Total Daily Trips: **18,528**

	In	Out	Total
AM Trips	**1,013**	**335**	**1,348**
PM Trips	**572**	**1,282**	**1,854**

Internal Trip Allowance Yes [No] (0.0 % Trip Discount)
Pass-By Trip Allowance Yes [No] (0.0 % Trip Discount)
(Attach additional sheet if this is a mutli-use site with a breakdown of trips generated)

B. Trip Geographic Distribution: N **5%** S **35%** E **25%** W **35%**
(See Exhibits C to F)

C. Background Traffic:
Project Build-out Year **2016** Annual Ambient Growth Rate: **2.00%**

Other area projects to be analyzed: See Table 3 and Exhibit G
Please contact Planning Division or use the most recently provided data

Model/Forecast methodology: Not Applicable

D. Build-out Studies: Does this project require a Build-out Study per TIA Guidelines Section 7.2

[Yes] No

E. Study Intersections: (NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments form other agencies). **(See Exhibit A)**

1 Sycamore Cyn. Bl. / Eastridge Av.
2 Box Springs Bl. / Eastridge Av.
3 I-215 Ramps / Eastridge Av.
4 Valley Springs Pkwy. / Eucalyptus Av.
5 Day St. / SR-60 WB Ramps
6 Day St. / SR-60 EB Ramps

E. Study Intersections (Continued)

7	Day St. / Cyn. Springs Pkwy.	19	Dwy. 3 / Corporate Ctr. Pl.
8	Day St. / Campus Pkwy.	20	Valley Springs Pkwy. / Corporate Ctr. Pl.
9	Day St. / Gateway Dr.	21	Valley Springs Pkwy. / Dwy. 4
10	Day St. / Dwy. 1	22	Valley Springs Pkwy. / Gateway Dr.
11	Day St. / Dwy. 2	23	Valley Springs Pkwy. / Dwy. 5
12	Day St. / Eucalyptus Av.	24	Existing Office Dwy. - Dwy. 6 / Gateway Dr.
13	Day St. / Cottonwood Av.	25	Canyon Park Dr. - Dwy. 7 / Gateway Dr.
14	Day St. / Bay Av.	26	Dwy. 8 / Gateway Dr.
15	Day St. / Alessandro Bl.	27	Dwy. 9 / Gateway Dr.
16	Eucalyptus - Memorial Wy. / Eucalyptus - Towngate Dr.	28	Canyon Park Dr. / Campus Pkwy.
17	Corporate Ctr. Pl. / Cyn. Springs Pkwy.	29	Canyon Park Dr. / Dwy. 10
18	Corporate Ctre Pl. / Campus Pkwy.	30	

F. Study Roadway Segments (For GP level study):

1	Eastridge Av., west of Sycamore Cyn. Bl.	7	Gateway Dr., west of Day St.
2	Eastridge Av., b/w Box Springs Bl. & I-215	8	Day St., b/w SR-60 EB Ramps & Cyn. Springs Pkwy.
3	Eastridge Av., b/w I-215 & Valley Springs Pkwy.	9	Day St., north of Eucalyptus Av.
4	Eastridge Av., west of Day St.	10	Day St., south of Eucalyptus Av.
5	Eastridge Av., east of Day St.	11	Day St., south of Cottonwood Av.
6	Valley Springs Pkwy., north of Eucalyptus Av.		

G. Other Jurisdictional Impacts:

Is this project within another City's Sphere of influence or one mile radius of City boundaries? [Yes] **No**

If so, name of City jurisdiction: City of Moreno Valley; Caltrans

Is this project within one mile of a State Highway? Yes (I-215 and SR-60)

H. Site Plan: (please attached a legible 11"x17" copy) **(See Exhibit B)**

I. Specific issues to be addressed in the Study, in addition to the standard analysis described above: (To be filled out by Public Works Traffic Department)

Progression analysis using SimTraffic for the following locations will be included in the TIA:

- Eastridge Avenue, between Box Springs Boulevard and Valley Springs Parkway
- Day Street, between SR-60 WB Ramps and Cottonwood Avenue

Recommended by:

John Kain

Consultant's Representative — **12/22/2014** Date

Scoping Agreement Submitted on — **10/27/2014** Date

Scoping Agreement Resubmitted on — **12/22/2014** Date

Approved By:

City of Riverside
Traffic Engineering Department — 12/22/2014 Date

cc: Planning Division
Land Development Section

URBAN CROSSROADS

41 Corporate Park | Suite 300 | Irvine, CA 92606 | (949) 660-1994
www.urbanXroads.com

December 22, 2014

Mr. Nathan Mustafa
City of Riverside Public Works
3900 Main Street
Riverside, CA 92501

SUBJECT: CANYON SPRINGS HEALTHCARE CAMPUS & SENIOR LIVING TRAFFIC IMPACT ANALYSIS – SCOPING AGREEMENT

Dear Mr. Mustafa:

Urban Crossroads, Inc. is pleased to submit this scoping agreement to City of Riverside for the Canyon Springs Healthcare Campus & Senior Living ("Project"), which is generally located north of Eucalyptus Avenue, between Valley Springs Parkway and Gateway Drive in the City of Riverside. The Project is proposed to consist of large contiguous parcels with improved street frontage and adequate infrastructure in a master planned business park. Two nearby 10-acre parcels within Canyon Springs will provide land for the related senior living and assisted living facilities.

The purpose of this agreement is to obtain comments from City of Riverside, to ensure that the traffic study fully addresses the potential impacts of the proposed Project. The remainder of this agreement describes the proposed analysis methodology, trip generation, trip distribution, and traffic assignment/project trips on the surrounding roadway network, which have been used to establish the proposed project study area and analysis locations. This traffic study scope of work has been based on the City of Riverside Traffic Impact Analysis Preparation Guide (dated December 2014).

Exhibit A depicts the location of the proposed Project in relation to the existing roadway network. The preliminary site plan for the proposed Project is shown on Exhibit B.

STUDY AREA

The traffic impact study area was defined in conformance with the requirements of the City's TIA guidelines. Based on these guidelines, the minimum area to be studied shall include any intersection of "Collector" or higher classification street, with "Collector" or higher classification streets, at which the proposed project will add 50 or more peak hour trips. Exhibit A presents the study area intersection analysis locations.

ANALYSIS SCENARIOS

Consistent with the City of Riverside TIA guidelines, the analysis of peak hour operations at study area intersections will be provided for the following analysis scenarios:

- Existing (2014) Conditions (Baseline)
- Existing plus Project Conditions
- Opening Year (2016) Without Project (EAC) Conditions

- Opening Year (2016) With Project (EACP) Conditions
- General Plan Buildout (2025) Without Project Conditions
- General Plan Buildout (2025) With Project Conditions

TRIP GENERATION

For analysis purposes, the Canyon Springs Healthcare Campus & Senior Living was divided into 4 traffic zones, as depicted on Exhibit B.

In order to develop the traffic characteristics of the proposed project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) Trip Generation (9th Edition, 2012) manual for the proposed and previously approved land uses. Table 1 presents the ITE trip generation rates. Table 2 summarizes the trip generation based on the square footages associated with the proposed Project.

As shown on Table 2, the proposed Project is anticipated to generate a total of approximately 13,167 trip-ends per day with 1,164 vehicles per hour during the AM peak hour and 1,576 vehicles per hour during the PM peak hour. Table 2 also indicates that the proposed Project is anticipated to generate 5,628 more trip-ends per day with 212 more vehicles per hour during the AM peak hour and 307 more vehicles per hour during the PM peak hour in comparison with the previously approved specific plan land use.

TABLE 1: LAND USE BASED TRIP GENERATION RATES

Land Use	ITE CODE	Quantity	Units[2]	AM Peak Hour			PM Peak Hour			Daily
				In	Out	Total	In	Out	Total	
CURRENTLY PROPOSED PROJECT LAND USE										
Hospital	610	280	BEDS	0.95	0.37	1.32	0.47	0.95	1.42	12.94
Medical Office Building	720	370	TSF	1.89	0.50	2.39	1.00	2.57	3.57	36.13
Senior Adult Housing - Attached	252	234	DU	0.07	0.13	0.20	0.13	0.12	0.25	3.44
Assisted Living	254	267	BEDS	0.12	0.06	0.18	0.15	0.14	0.29	2.74
PREVIOUSLY APPROVED SPECIFIC PLAN LAND USE										
Retail	820	100	TSF	0.97	0.59	1.56	2.88	3.12	6.00	67.91
General Office Building	710	800	TSF	1.11	0.15	1.26	0.21	1.01	1.22	7.97

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 9th Edition (2012).

[2] TSF = Thousand Square Feet; DU = Dwelling Units

TABLE 2: TRIP GENERATION SUMMARY

TRIP GENERATION RESULTS										
Land Use	ITE CODE	Quantity	Units[1]	AM Peak Hour			PM Peak Hour			Daily
				In	Out	Total	In	Out	Total	
CURRENTLY PROPOSED PROJECT LAND USE										
Hospital	610	280	BEDS	266	104	370	132	266	398	3,623
Medical-Dental Office	720	370	TSF	699	185	884	370	951	1,321	13,368
Senior Adult Housing - Attached	252	234	DU	16	30	46	30	28	58	805
Assisted Living	254	267	BEDS	32	16	48	40	37	77	732
CURRENTLY PROPOSED PROJECT TOTAL TRIPS				**1,013**	**335**	**1,348**	**572**	**1,282**	**1,854**	**18,528**
PREVIOUSLY APPROVED SPECIFIC PLAN LAND USE										
Retail	820	100	TSF	97	59	156	288	312	600	6,791
General Office Building	710	800	TSF	888	120	1,008	168	808	976	6,376
PREVIOSULY APPROVED PROJECT TOTAL TRIPS				**985**	**179**	**1,164**	**456**	**1,120**	**1,576**	**13,167**

Land Use	AM Peak Hour			PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	
Currently Proposed Project	1,013	335	1,348	572	1,282	1,854	18,528
Previously Proposed Specific Plan Land Use	985	179	1,164	456	1,120	1,576	13,167
Delta (Current - Previous)	**28**	**156**	**184**	**116**	**162**	**278**	**5,361**
	3%	47%	14%	20%	13%	15%	29%

[1] TSF = Thousand Square Feet; DU = Dwelling Units

TRIP DISTRIBUTION

The trip distribution pattern is heavily influenced by the geographical location of the site, the location of surrounding uses, and the proximity to the regional freeway system. Exhibits C through F display the Project distributions (TAZs 1 to 4) used in this TIA.

ANALYSIS METHODOLOGY

Consistent with the City of Riverside traffic study guidelines, the traffic study will utilize the HCM 2010 methodology for all study intersections.

LEVEL OF SERVICE (LOS) CRITERIA

The City of Riverside and City of Moreno Valley has established specific performance criteria for intersection operations in their General Plan Circulation Element. The City of Riverside has established LOS "D" as the

minimum level of service for its intersections of Collector or higher classification. Therefore, any intersection operating at LOS "E" or worse will be considered deficient for the purposes of this analysis.

THRESHOLDS OF SIGNIFICANCE - INTERSECTIONS

To determine whether the addition of project-related traffic at a study intersection would result in a significant project-related impact, the following thresholds of significance will be utilized:

- A significant project-related impact occurs at a study intersection if the addition of project-generated trips reduces the peak hour level of service of the study intersection to change from acceptable "pre-project" operation (LOS "A", "B", "C" or "D") to deficient operation (LOS "E" or "F");
- A significant project-related impact occurs at a study intersection if the addition of project-generated trips changes the pre-project delay by the value shown below.

INTERSECTION TRAFFIC LEVEL OF SERVICE STANDARD

Pre-Project LOS	Project-Related Delay Increase	Mitigation Measure
LOS A/B	By 10.0 seconds	Reduce delay increase to "pre-project" conditions
LOS C	By 8.0 seconds	Reduce delay increase to "pre-project" conditions
LOS D	By 5.0 seconds	Reduce delay increase to "pre-project" conditions
LOS E	By 2.0 seconds	Reduce delay increase to "pre-project" conditions
LOS F	By 1.0 seconds	Reduce delay increase to "pre-project" conditions

* Source: Exhibit F of City of Riverside Traffic Impact Analysis Preparation Guide (dated December 2014)

The proposed significance thresholds will be applied at study area intersections under E+P traffic conditions for the purposes of determining project-related impacts.

EXISTING COUNT DATA

Intersection turning movement counts has been conducted on November 5th, 2014 at the study area intersection locations for the following **weekday AM** and **PM peak hours**:

- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)

SPECIAL ISSUES

The following special issues will also be addressed as part of the TIA:

- *Site Access Evaluation:* The turn pocket lengths will be determined through peak hour traffic simulations developed using Synchro and SimTraffic software in an effort to identify the required storage capacity for turn lanes at each Project driveway. Recommendations regarding site access and internal circulation features to accommodate peak hour traffic volumes will be included in the traffic study. The progression analysis will include the near-by I-215 freeway interchange on Eucalyptus/Eastridge Avenue, and the nearby SR-60 Freeway interchange on Day Street.

- *Freeway Mainline Assessment*: Basic freeway segment, merge/diverge and off-ramp queuing analyses will be conducted for the segments on either side of Eucalyptus/Eastridge Avenue along the I-215 Freeway, and on either side of Day Street along the SR-60 Freeway.
- *Progression Analysis*: A progression analysis will be conducted for the following locations using Synchro with SimTraffic software:
  - Eastridge Avenue, between Box Springs Boulevard and Valley Springs Parkway.
  - Day Street, between SR-60 WB Ramps and Cottonwood Avenue.

CUMULATIVE PROJECTS

A list of cumulative projects provided on Table 3 (also shown graphically on Exhibit G) and is consistent with the cumulative lists on other recent projects. The cumulative list has been reviewed by City staff.

Future year traffic forecasts have been based upon two (2) years of background (ambient) growth at 2% per year for 2016 traffic conditions. The ambient growth factor is intended to approximate regional traffic growth. The total ambient growth is 4.04% for 2016 traffic conditions (compounded growth of two percent per year over two years or $1.02^{2\ years}$). This ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects. Ambient growth will be added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the development of future projects that have been approved but not yet built and/or for which development applications have been filed and are under consideration by governing agencies.

For intersections within the City of Riverside, traffic projections for General Plan (2025) Without Project conditions will be derived from the City of Riverside GP 2025 Model. For intersections within the City of Moreno Valley, General Plan (2025) Without Project conditions will be derived from the Riverside Transportation Analysis Model (RivTAM), with modifications as necessary to account for City of Moreno Valley GP forecasts.

GENERAL PLAN CIRCULATION NETWORKS

Exhibit H shows the City of Riverside General Plan Circulation Element, and Exhibit I illustrates the City of Riverside roadway cross-sections.

Exhibit J shows the City of Moreno Valley Circulation Element, and Exhibit K illustrates the City of Moreno Valley General Plan roadway cross-sections.

If you have any questions, please contact us at (949) 660-1994.

Respectfully submitted,

URBAN CROSSROADS, INC.

John Kain, AICP
Principal

Marlie Whiteman, P.E.
Senior Associate

TABLE 3: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

ID	Project Name	Land Use[1]	Quantity	Units[2]
CITY OF RIVERSIDE				
1	6287 Day Street (P10-0090; P10-0091)	Gas Station	2	VFP
2	2570 Canyon Springs Parkway (P08-0274; P08-0275)	Bank w/ Drive Thru	2.746	TSF
3	6211 Valley Springs Parkway (Steak N' Shake Restaurant; P14-0536)	Fast Food w/ Drive Thru	3.750	TSF
4	5940-5980 Sycamore Canyon Boulevard (P13-0553; P13-0554; P13-0583; P14-0065)	Apartments	275	DU
5	SE corner of Sycamore Cyn. Bl. & Box Springs Rd. (P13-0607 P13-06008; P0609; P13-0854)	Light Industrial	171.616	TSF
6	6465 Sycamore Canyon Boulevard	Health Club	4.000	TSF
7	2325 Cottonwood Avenue (P12-0507; P12-0508; P12-0509; P12-0510)	High-Cube Warehouse	235.741	TSF
8	Alessandro Bl. (APN 263-091-008, 263-100-019, 263-100-005; P14-0841 to 0848)	Commercial and Industrial Complex	101.580	TSF
9	2100 Alessandro Boulevard	Vocational School	11.505	TSF
10	NW cor Alessandro Blvd & San Gorgonio Dr. (TM34707; Alessandro Business Park)	4 Industrial/ Manufacturing Bldgs	662.018	TSF
11	Alessandro and Gorgonio	Fast Food w/ Drive Thru	4.050	TSF
12	360 Alessandro Boulevard (P12-0419; P12-0557; P12-0558; P12-0559)	Bank w/ Drive Thru	3.858	TSF
13	381 Alessandro Bl. (P07-1181; P07-0593)	Auto Parts Store	1.500	TSF
14	14601 Dauchy Av. - TM36370 (P12-0601; P12-0697; P12-0698)	Residential	10	DU
15	TM32180 (P07-1073)	SFDR	9	DU
16	18875 Moss Road	SFDR	8	DU
17	South of Clarke St., west of Crystal View Terrace (PM34583; P09-0141; P09-173)	SFDR	3	DU
18	18580 Van Buren Boulevard (P08-0402; P13-0822)	Auto Repair Shop	8.142	TSF
19	N. of Van Buren Boulevard; W. of Wood Street (P10-0808; P10-0708)	Fast Food w/Drive Thru	2.361	TSF
20	19985 Van Buren Boulevard (P10-0118; Gless Ranch)	Commercial Retail	425.447	TSF
COUNTY OF RIVERSIDE				
21	PP 22925 (Amstar/Kaliber Development)	Office (258.102 TSF)	258.102	TSF
		Warehousing	409.312	TSF
		General Light Industrial	42.222	TSF
		Retail	10.000	TSF
22	Meridian Business Park North	Industrial Park	5,985.000	TSF
23	Freeway Business Center Southwest corner of Old 215 Frontage Rd. and Alessandro Bl.	High-Cube Warehouse	709.083	TSF
24	Airport Master Plan	Airport Use	559.000	TSF
CITY OF MORENO VALLEY				
25	Edgemont Street, South of Eucalyptus Av.	Apartments	112	DU
26	Moreno Valley/March Field Metrolink Station[3,4]	Commuter Rail Station	1	Station
27	PA 08-0047-0052 (Komar Cactus Plaza)[5]	Hotel	110	RMS
		Fast Food w/Drive Thru	8.000	TSF
		Commercial	42.400	TSF
28	373K Industrial Facility	High-Cube Warehouse	373.030	TSF
29	PA 08-0072 (Overton Moore Properties)	High-Cube Warehouse	520.000	TSF

TABLE 3: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

ID	Project Name	Land Use[1]	Quantity	Units[2]
CITY OF MORENO VALLEY (Continued)				
30	TR 32515	Residential	161	DU
31	Harbor Freight Expansion	High-Cube Warehouse	1,279.910	TSF
32	PA 09-0031	Gas Station	12	VFP
33	Centerpointe Business Park	General Light Industrial	356.000	TSF
34	PA 04-0063 (Centerpointe Buildings 8 and 9)	General Light Industrial	361.384	TSF
35	PA 08-0093 (Centerpointe Business Park II)	General Light Industrial	99.988	TSF
36	March Lifecare Campus Specific Plan[6]	Medical Offices	190.000	TSF
		Commercial Retail	210.000	TSF
		Research & Education	200.000	TSF
		Hospital	50	Beds
		Institutional Residential	660	Beds
37	TR 33771 / Creative Design Associates	Residential	12	DU
38	TR 35663 / Kha	Residential	12	DU
39	TR 31814 / Moreno Valley Investors	Residential	60	DU
40	TM 34748	SFDR	135	DU
41	PA 07-0035; PA 07-0039 (Moreno Valley Industrial Park)	General Light Industrial	204.657	TSF
		High-Cube Warehouse	409.920	TSF
42	March Business Center	General Light Industrial	16.732	TSF
		Warehousing	87.429	TSF
		High-Cube Warehouse	1,380.246	TSF
43	PA 07-0079 (Indian Business Park)	High-Cube Warehouse	1,560.046	TSF
44	TM 33810	SFDR	16	DU
45	TM 34151	SFDR	37	DU
46	Legacy Park / TR36760	Residential	186	DU
47	Moreno Valley Walmart	Free Standing Discount Store	189.520	TSF
		Gas Station/Market/Car Wash	16	VFP
48	TM 34988	Condo/Townhomes	251	DU
49	TM 33417	Condo/Townhomes	10	DU
50	TM 33607	Condo/Townhomes	54	DU

[1] SFDR = Single Family Detached Residential

[2] DU = Dwelling Units; TSF = Thousand Square Feet; VFP = Vehicle Fueling Positions

[3] Source: Steak N' Shake Restaurant Approved Traffic Impact Study Scope, Kunzman Associates, Inc., August 4, 2014.

[4] Source: Perris Valley Line DEIR, Kleinfelder/STV, July 2011.

[5] Source: Cactus Avenue and Commerce Center Drive Commercial Center TIA, Urban Crossroads, Inc., December 9, 2008 (Revised).

[6] Source: March Lifecare Campus Specific Plan Traffic Impact Analysis, Mountain Pacific, Inc., May 2009 (Revised).

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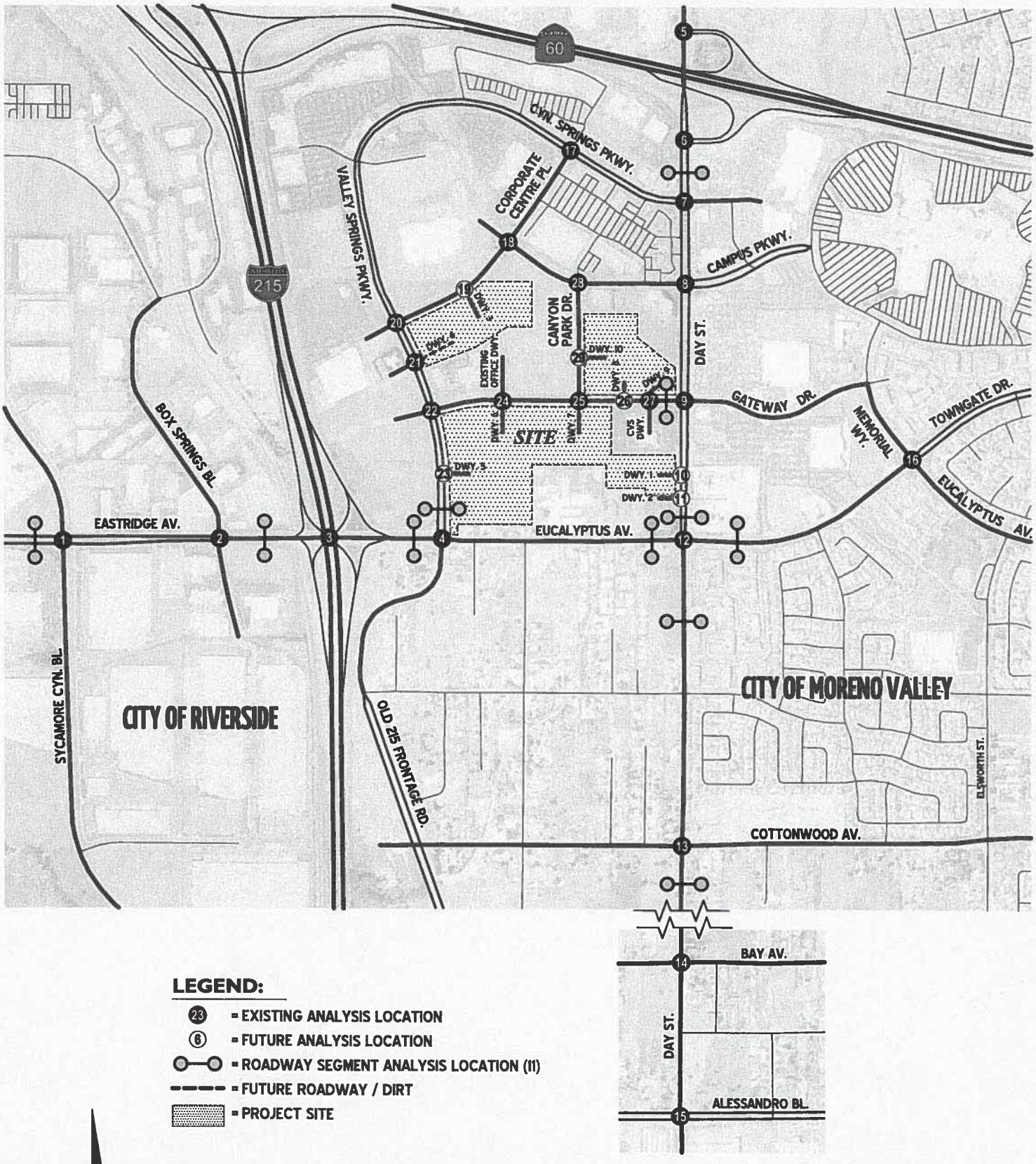
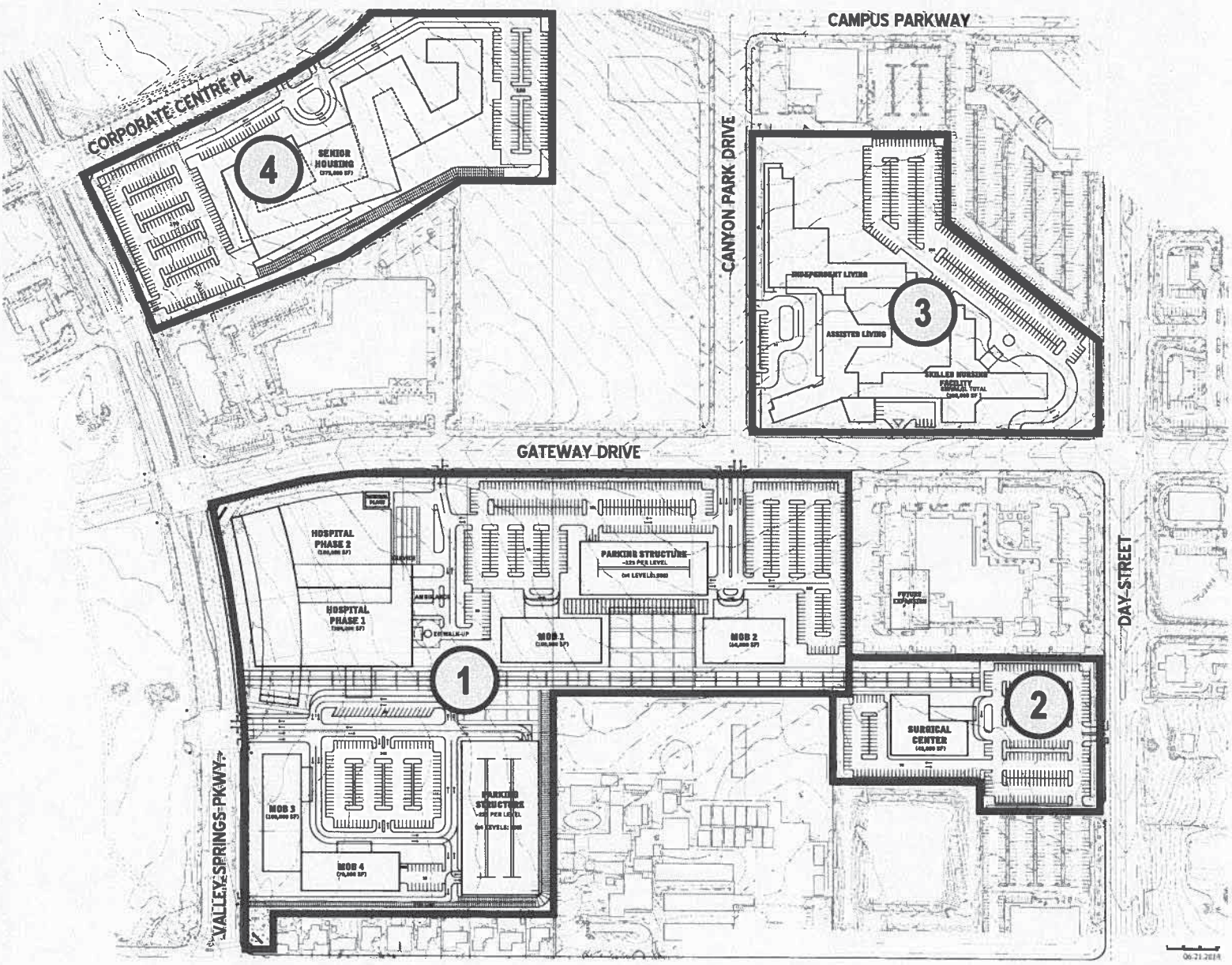
EXHIBIT A: LOCATION MAP



LEGEND:

- (23) = EXISTING ANALYSIS LOCATION
- (6) = FUTURE ANALYSIS LOCATION
- = ROADWAY SEGMENT ANALYSIS LOCATION (11)
- = FUTURE ROADWAY / DIRT
- = PROJECT SITE

EXHIBIT B: SITE PLAN

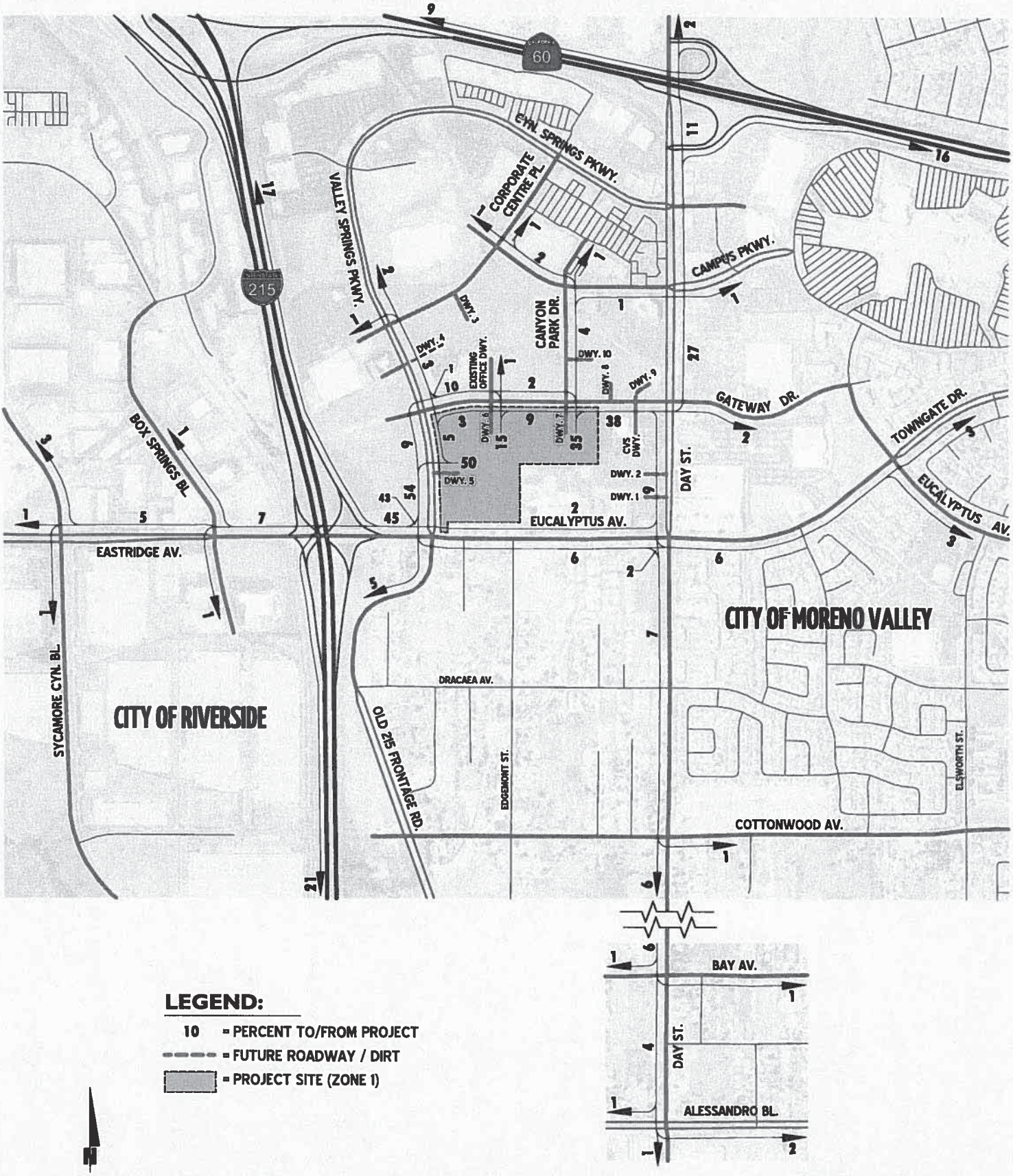


LEGEND:

(4) = PROJECT TRAFFIC ANALYSIS ZONES (TAZ)

N

EXHIBIT C: PROJECT ZONE 1 TRIP DISTRIBUTION PATTERN



LEGEND:

10 = PERCENT TO/FROM PROJECT

= FUTURE ROADWAY / DIRT

= PROJECT SITE (ZONE 1)

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EXHIBIT D: PROJECT ZONE 2 TRIP DISTRIBUTION PATTERN

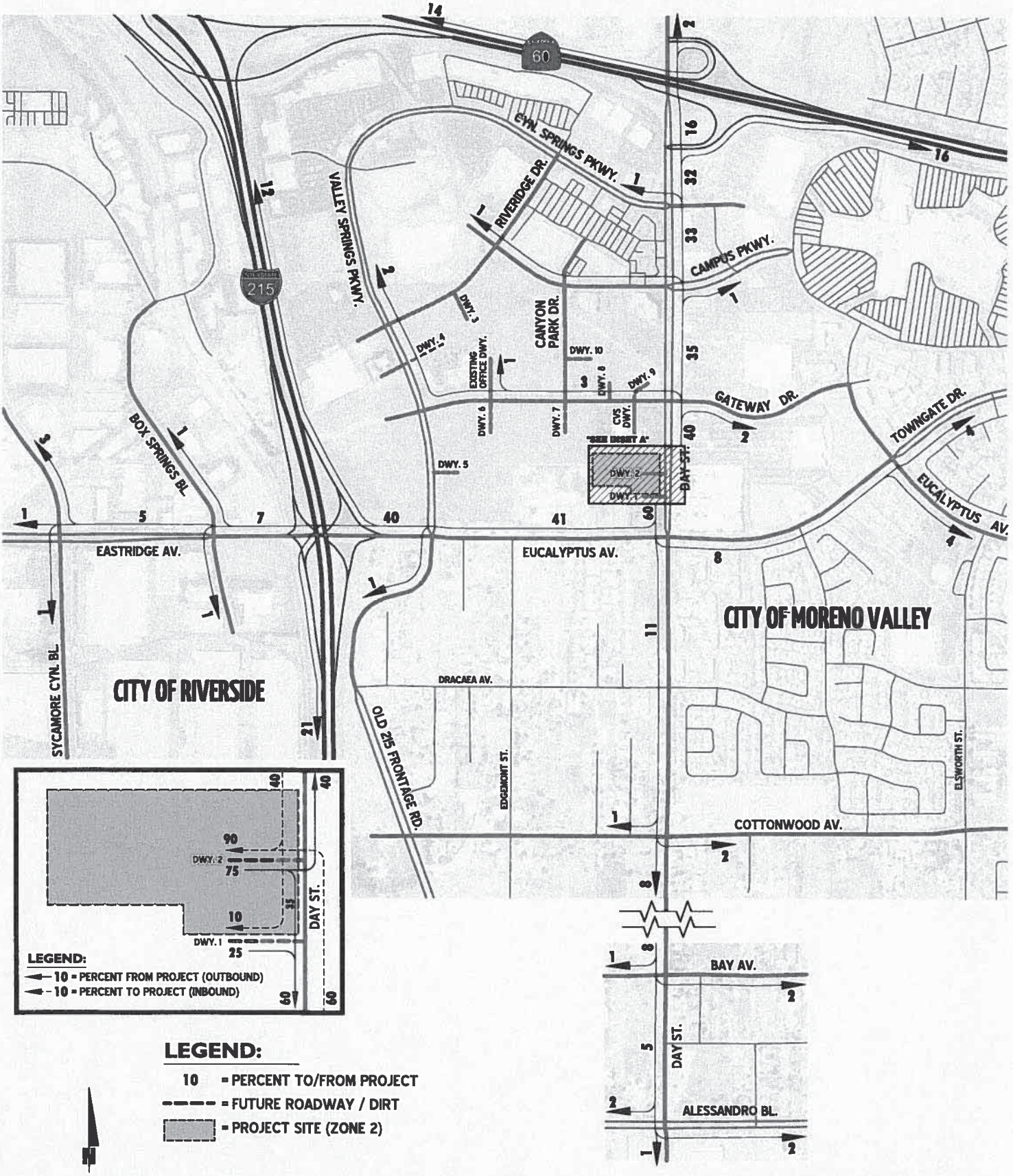

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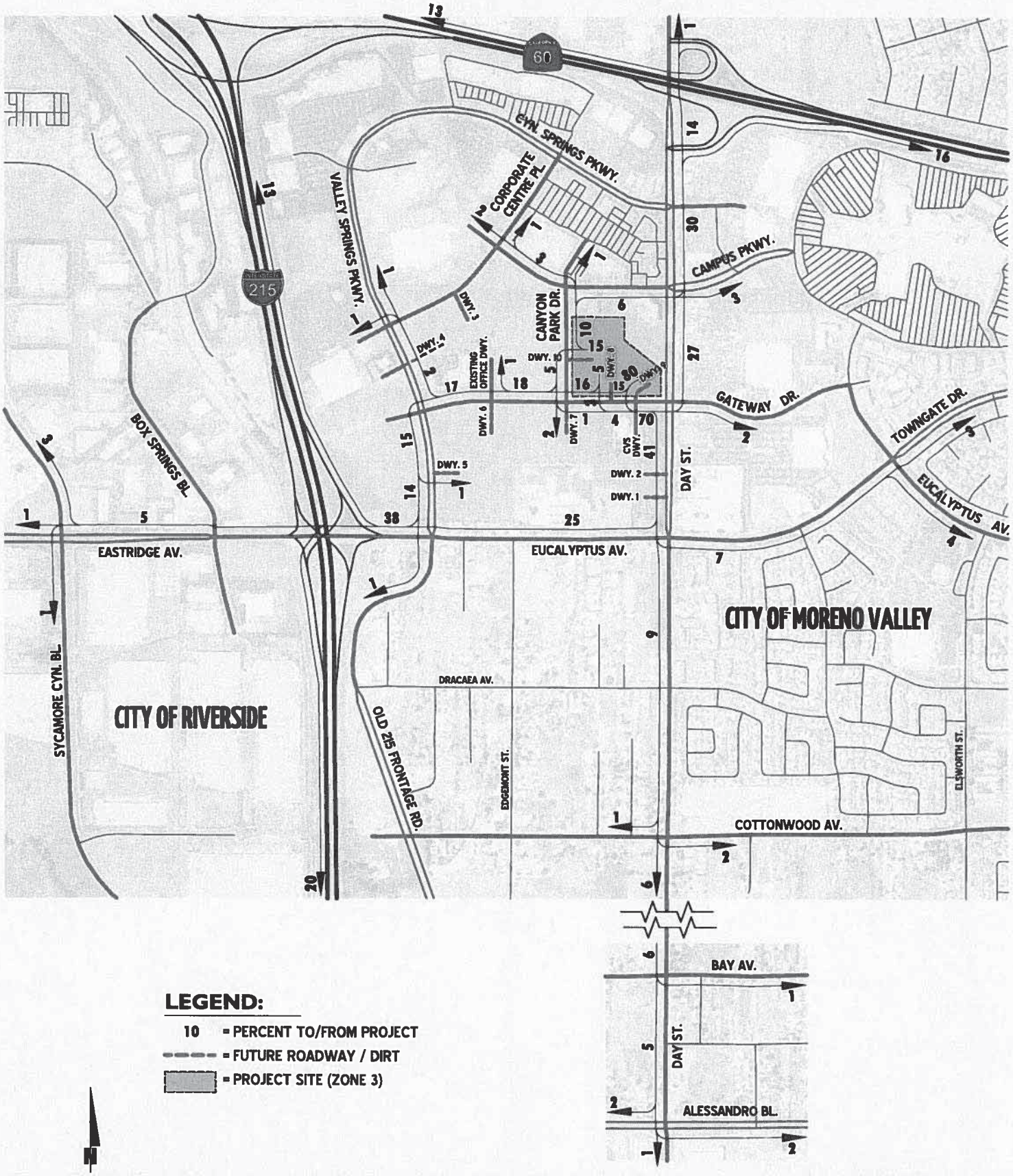
EXHIBIT E: PROJECT ZONE 3 TRIP DISTRIBUTION PATTERN



LEGEND:

10 = PERCENT TO/FROM PROJECT

= FUTURE ROADWAY / DIRT

= PROJECT SITE (ZONE 3)

EXHIBIT F: PROJECT ZONE 4 TRIP DISTRIBUTION PATTERN

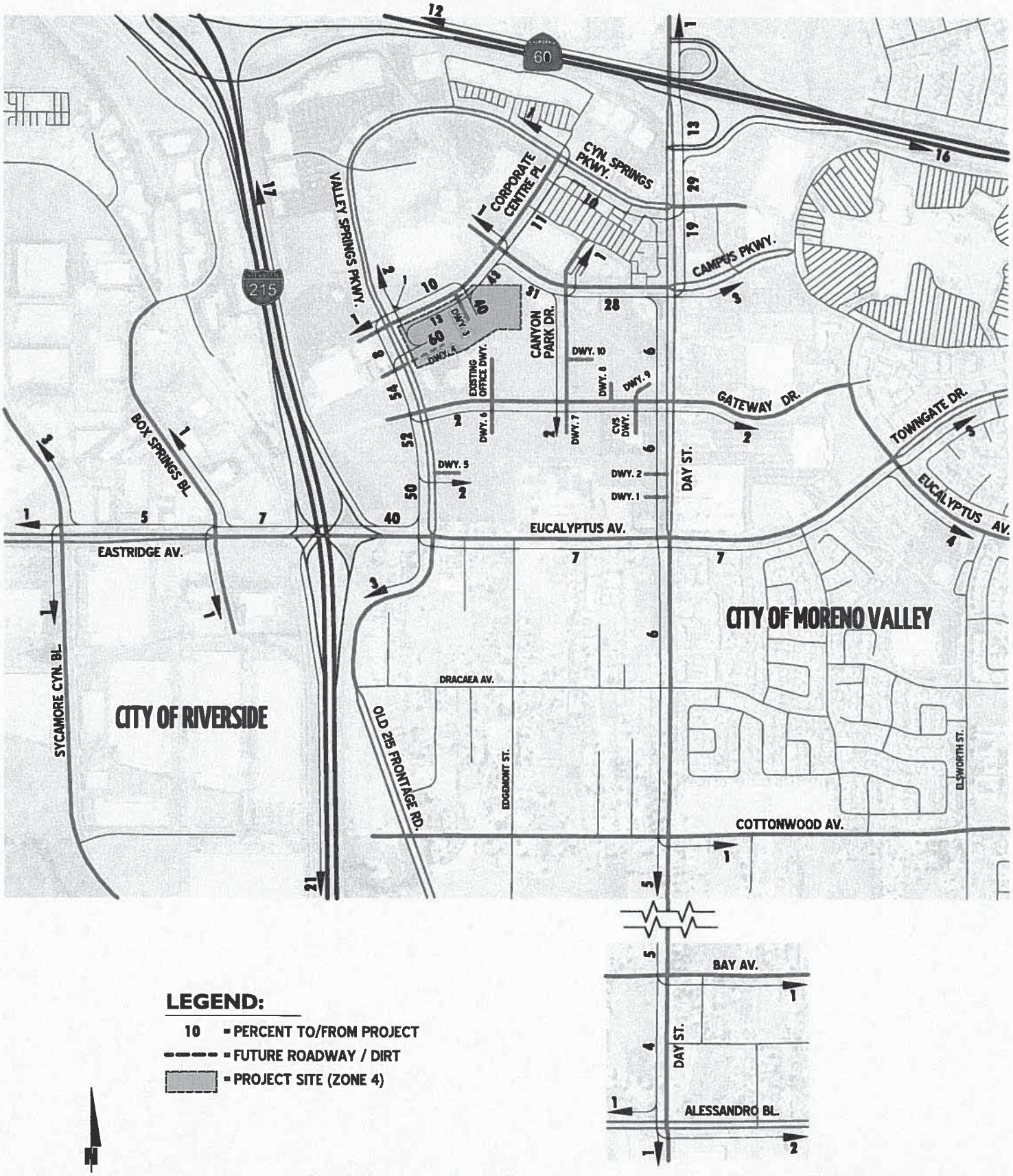


EXHIBIT G: CUMULATIVE DEVELOPMENT PROJECTS LOCATION MAP

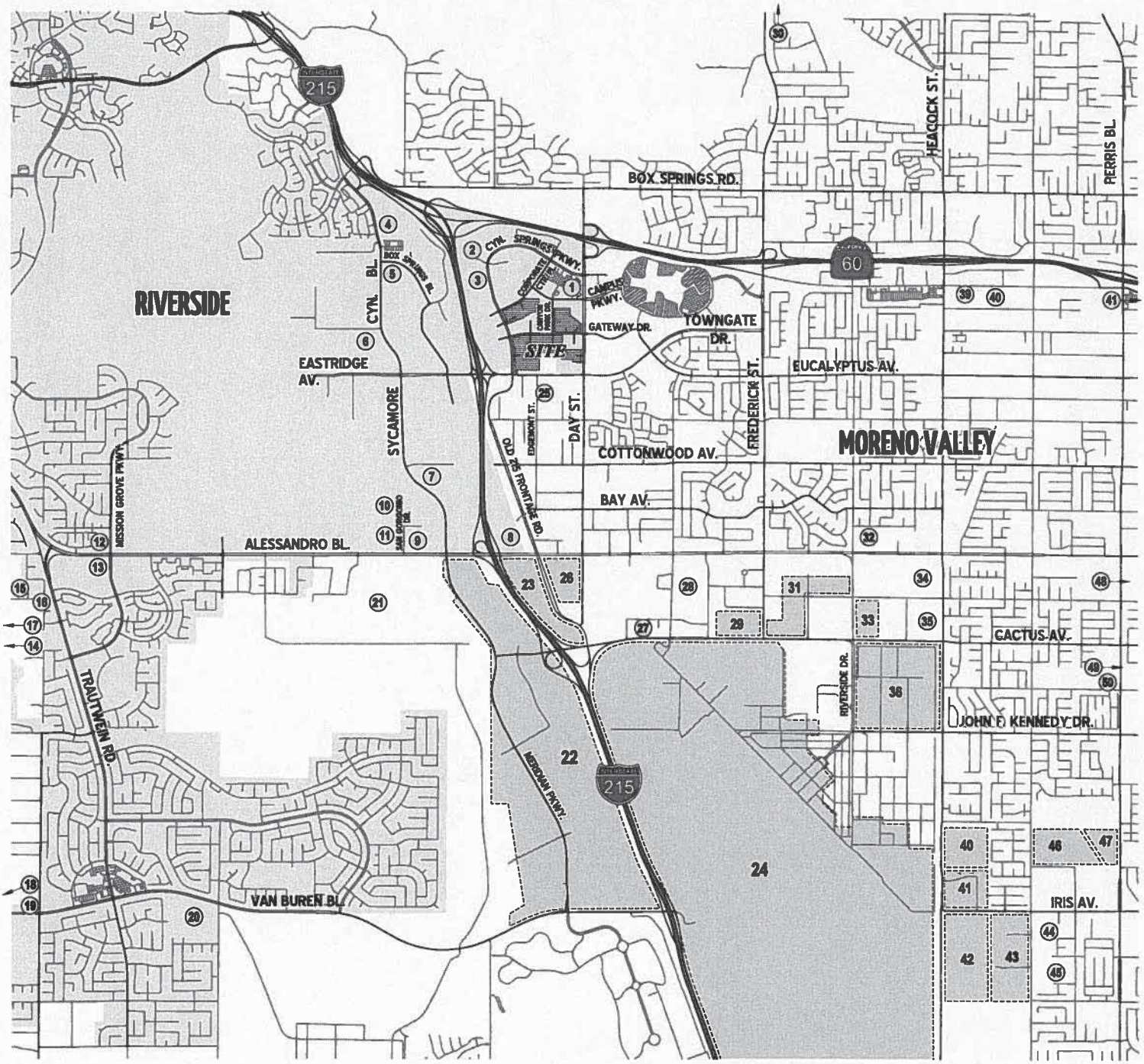


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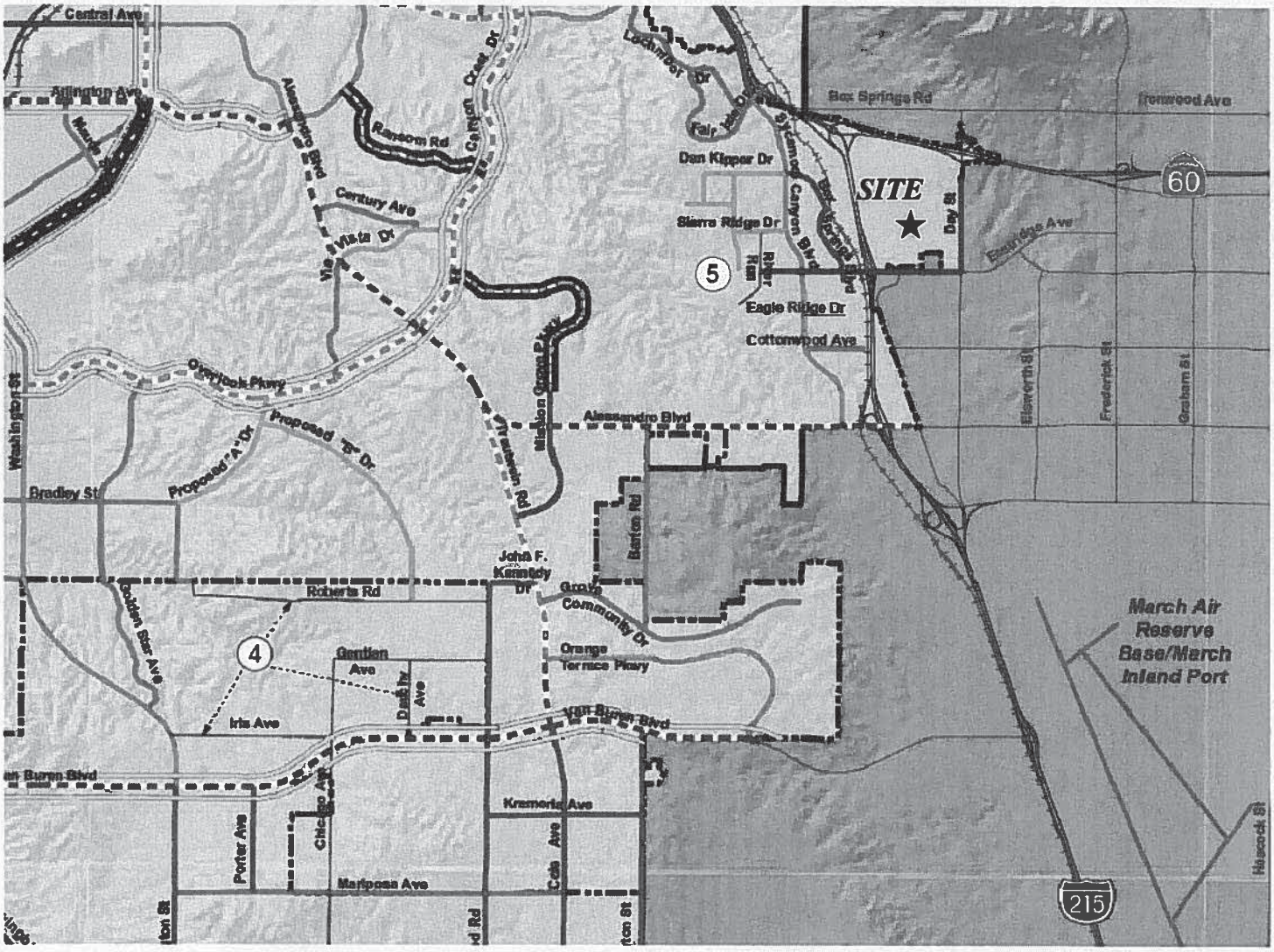
EXHIBIT H: CITY OF RIVERSIDE MASTER PLAN OF ROADWAYS



LEGEND:

——	66 FT LOCAL	2 LANES *
——	66 FT COLLECTOR	2 LANES
——	80 FT COLLECTOR	2 LANES
——	88 FT ARTERIAL	4 LANES
——	100 FT ARTERIAL	4 LANES
——	110 FT ARTERIAL	4 LANES
——	120 FT ARTERIAL	6 LANES
——	144 FT ARTERIAL	8 LANES

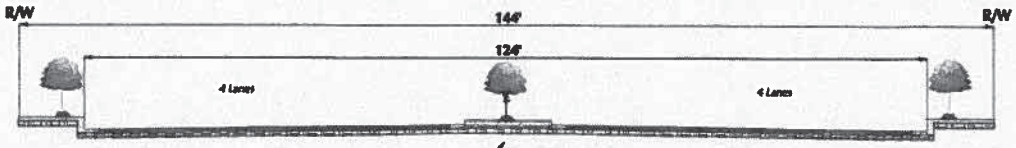
- SCENIC BOULEVARD — REQUIRES SPECIAL LANDSCAPING, ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED.
- SPECIAL BOULEVARD — TWO-LANE DIVIDED ROADWAY OF VARIABLE GEOMETRIC DESIGN
- SPECIAL BOULEVARD — VARIABLE WIDTHS AND DESIGN. CONTACT PUBLIC WORKS FOR DETAIL. SEE OBJECTIVE CCM-3 AND POLICIES CCM-3.1 THROUGH CCM-3.5.
- PARKWAYS — FOR INFORMATION ON PARKWAYS SEE LAND USE ELEMENT.
- CETAP CORRIDOR AREA — CORRIDOR OPTIONS SUBJECT TO SPECIAL STUDY.
- RIVERSIDE CITY BOUNDARY
- RIVERSIDE PROPOSED SPHERE OF INFLUENCE

NOTE:

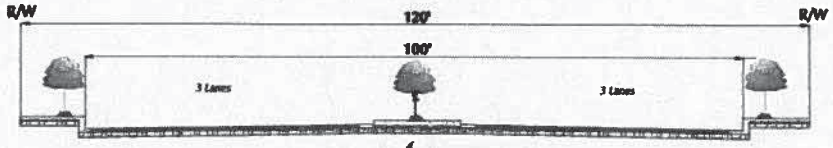
- * LOCAL STREETS ARE NOT SHOWN ON THIS PLAN EXCEPT WHERE NEEDED FOR CLARITY.
- ① MAGNOLIA AVENUE SHALL BE A SPECIAL BLVD, WITH 4 LANES EASTERLY OF HARRISON STREET.
- ② OVERLOOK PARKWAY SHALL BE A 2-LANE, 110-FOOT ARTERIAL WITH A WIDE MEDIAN PARKWAY. THE ALIGNMENT OF OVERLOOK PARKWAY WESTERLY OF WASHINGTON IS NOT YET DETERMINED PENDING PREPARATION OF SPECIFIC PLAN LEVEL STUDY.
- ③ COLUMBIA AVENUE IS SHOWN BY HUNTER BUSINESS PARK SPECIFIC PLAN AS A 134-FOOT ARTERIAL. ACTUAL STREET WIDTH, DUE TO RAILROAD OVERCROSSING , WILL BE DETERMINED BY PUBLIC WORKS.
- ④ THESE STREETS SHALL BE 66-FOOT LOCAL ROADWAYS SERVING AS ALTERNATE ROUTES.
- ⑥ THE STREETS IN SYCAMORE CANYON BUSINESS PARK SPECIFIC PLAN VARY IN SIZE SEE THE SPECIFIC PLAN FOR DETAILS.

SOURCE: CITY OF RIVERSIDE

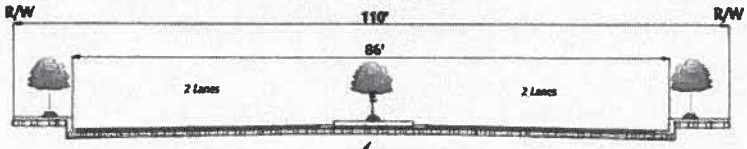
EXHIBIT I: CITY OF RIVERSIDE GENERAL PLAN ROADWAY CROSS-SECTIONS



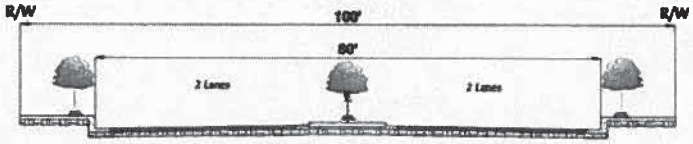
144-FOOT ARTERIAL



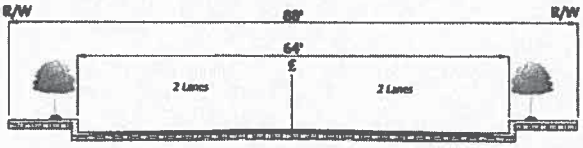
120-FOOT ARTERIAL



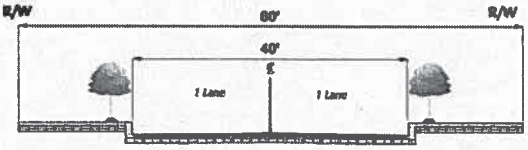
110-FOOT ARTERIAL



100-FOOT ARTERIAL

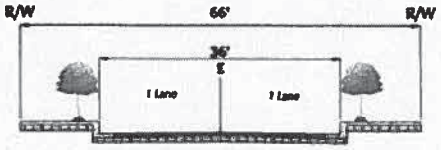


88-FOOT ARTERIAL



80-FOOT COLLECTOR

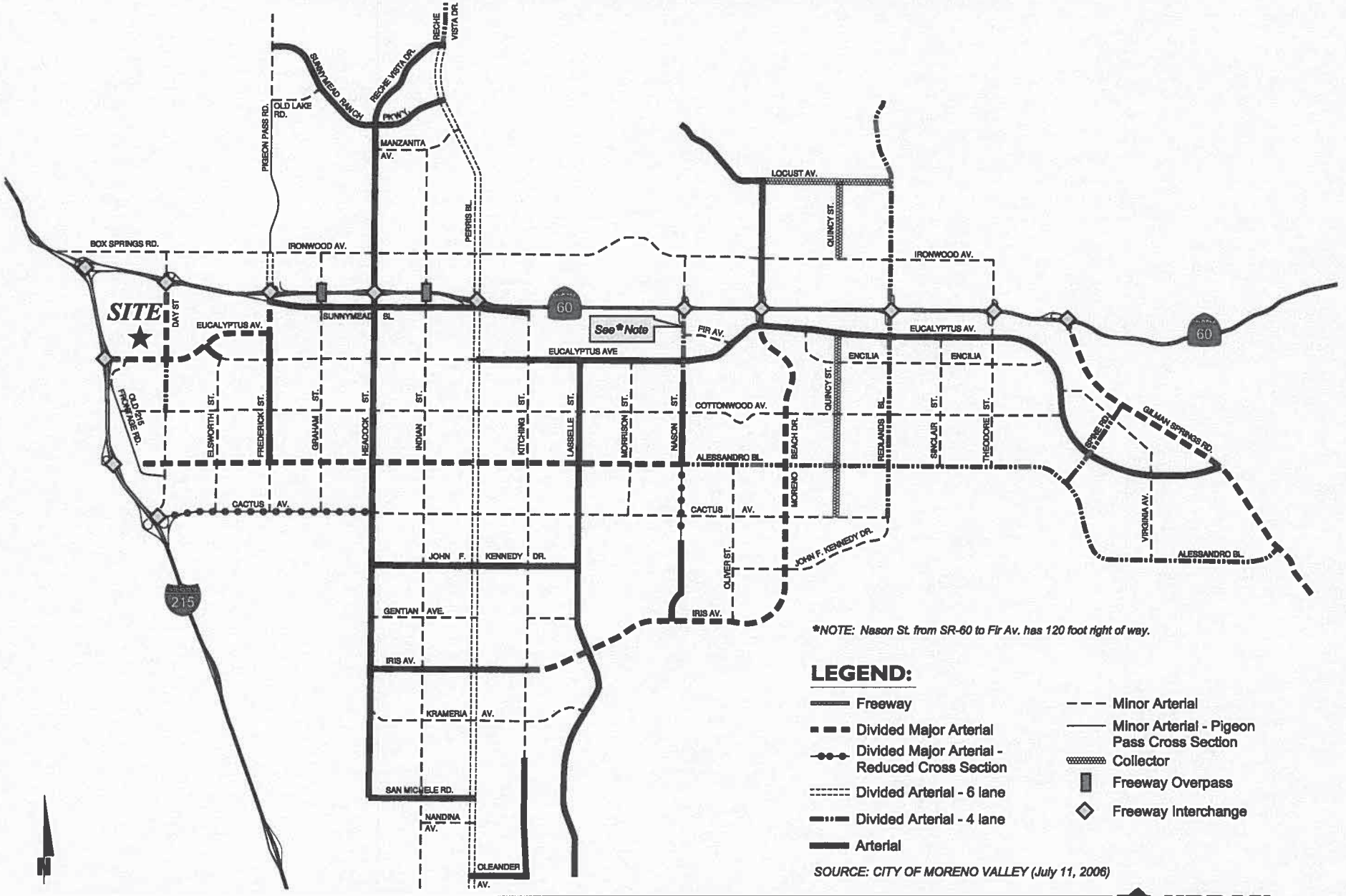
66-FOOT COLLECTOR



LOCAL STREET

SOURCE: CITY OF RIVERSIDE

EXHIBIT J: CITY OF MORENO VALLEY GENERAL PLAN CIRCULATION ELEMENT



*NOTE: Nason St. from SR-60 to Fir Av. has 120 foot right of way.

LEGEND:

- Freeway
- Divided Major Arterial
- Divided Major Arterial - Reduced Cross Section
- Divided Arterial - 6 lane
- Divided Arterial - 4 lane
- Arterial
- Minor Arterial
- Minor Arterial - Pigeon Pass Cross Section
- Collector
- Freeway Overpass
- Freeway Interchange

SOURCE: CITY OF MORENO VALLEY (July 11, 2006)

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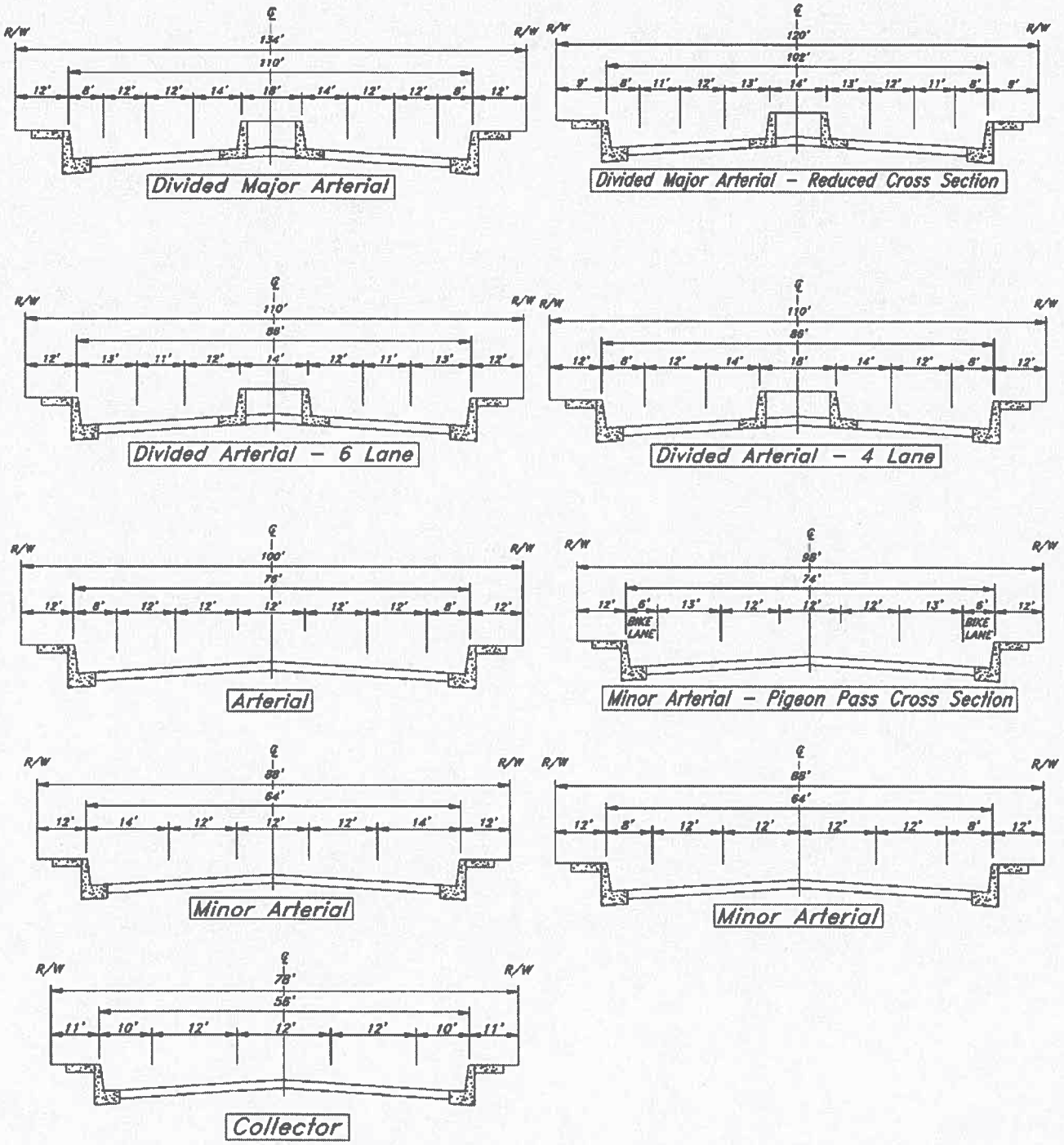
EXHIBIT K: CITY OF MORENO VALLEY GENERAL PLAN ROADWAY CROSS-SECTIONS



SOURCE: CITY OF MORENO VALLEY

APPENDIX 3.1:

EXISTING TRAFFIC COUNTS (NOVEMBER 2014) AND VOLUME DEVELOPMENT WORKSHEETS

INT ID: #1

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Riverside
N/S: Sycamore Canyon Boulevard
E/W: Eastridge Avenue
Weather: Clear

File Name : RIVSCEAAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Sycamore Canyon Boulevard Southbound				Eastridge Avenue Westbound				Sycamore Canyon Boulevard Northbound				Eastridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	13	40	11	64	21	25	107	153	11	210	24	245	12	14	5	31	493
07:15 AM	13	39	2	54	34	16	100	150	19	272	31	322	6	11	2	19	545
07:30 AM	27	23	12	62	26	48	114	188	46	277	28	351	12	11	3	26	627
07:45 AM	31	27	8	66	20	54	93	167	50	226	53	329	4	18	3	25	587
Total	84	129	33	246	101	143	414	658	126	985	136	1247	34	54	13	101	2252
08:00 AM	19	30	6	55	14	32	84	130	22	260	38	320	3	13	2	18	523
08:15 AM	17	20	13	50	18	19	78	115	11	194	32	237	8	7	3	18	420
08:30 AM	13	15	9	37	21	12	80	113	13	164	26	203	11	11	3	25	378
08:45 AM	18	22	13	53	18	25	72	115	17	129	20	166	5	10	1	16	350
Total	67	87	41	195	71	88	314	473	63	747	116	926	27	41	9	77	1671
Grand Total	151	216	74	441	172	231	728	1131	189	1732	252	2173	61	95	22	178	3923
Apprch %	34.2	49	16.8		15.2	20.4	64.4		8.7	79.7	11.6		34.3	53.4	12.4		
Total %	3.8	5.5	1.9	11.2	4.4	5.9	18.6	28.8	4.8	44.1	6.4	55.4	1.6	2.4	0.6	4.5	

	Sycamore Canyon Boulevard Southbound				Eastridge Avenue Westbound				Sycamore Canyon Boulevard Northbound				Eastridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	13	**39**	2	54	**34**	16	100	150	19	272	31	322	6	11	2	19	545
07:30 AM	27	23	**12**	62	26	48	**114**	**188**	46	**277**	28	**351**	**12**	11	**3**	**26**	**627**
07:45 AM	**31**	27	8	**66**	20	**54**	93	167	**50**	226	**53**	329	4	**18**	3	25	587
08:00 AM	19	30	6	55	14	32	84	130	22	260	38	320	3	13	2	18	523
Total Volume	90	119	28	237	94	150	391	635	137	1035	150	1322	25	53	10	88	2282
% App. Total	38	50.2	11.8		14.8	23.6	61.6		10.4	78.3	11.3		28.4	60.2	11.4		
PHF	.726	.763	.583	.898	.691	.694	.857	.844	.685	.934	.708	.942	.521	.736	.833	.846	.910

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City of Riverside
N/S: Sycamore Canyon Boulevard
E/W: Eastridge Avenue
Weather: Clear

File Name : RIVSCEAPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Sycamore Canyon Boulevard Southbound				Eastridge Avenue Westbound				Sycamore Canyon Boulevard Northbound				Eastridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	43	46	3	92	36	15	46	97	9	57	41	107	10	24	3	37	333
04:15 PM	50	41	7	98	37	17	44	98	7	36	29	72	10	23	7	40	308
04:30 PM	50	56	7	113	48	13	37	98	3	48	37	88	10	18	7	35	334
04:45 PM	51	65	5	121	33	15	42	90	8	57	34	99	10	26	7	43	353
Total	194	208	22	424	154	60	169	383	27	198	141	366	40	91	24	155	1328
05:00 PM	77	87	7	171	65	16	55	136	2	58	22	82	16	47	21	84	473
05:15 PM	80	80	2	162	136	9	65	210	10	62	27	99	29	46	11	86	557
05:30 PM	59	73	5	137	138	23	55	216	12	52	37	101	10	31	14	55	509
05:45 PM	60	70	6	136	111	30	49	190	10	30	28	68	14	25	15	54	448
Total	276	310	20	606	450	78	224	752	34	202	114	350	69	149	61	279	1987
Grand Total	470	518	42	1030	604	138	393	1135	61	400	255	716	109	240	85	434	3315
Apprch %	45.6	50.3	4.1		53.2	12.2	34.6		8.5	55.9	35.6		25.1	55.3	19.6		
Total %	14.2	15.6	1.3	31.1	18.2	4.2	11.9	34.2	1.8	12.1	7.7	21.6	3.3	7.2	2.6	13.1	

	Sycamore Canyon Boulevard Southbound				Eastridge Avenue Westbound				Sycamore Canyon Boulevard Northbound				Eastridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	77	**87**	**7**	**171**	65	16	55	136	2	58	22	82	16	**47**	**21**	84	473
05:15 PM	**80**	80	2	162	136	9	**65**	210	10	**62**	27	99	**29**	46	11	**86**	**557**
05:30 PM	59	73	5	137	**138**	23	55	**216**	**12**	52	**37**	**101**	10	31	14	55	509
05:45 PM	60	70	6	136	111	**30**	49	190	10	30	28	68	14	25	15	54	448
Total Volume	276	310	20	606	450	78	224	752	34	202	114	350	69	149	61	279	1987
% App. Total	45.5	51.2	3.3		59.8	10.4	29.8		9.7	57.7	32.6		24.7	53.4	21.9		
PHF	.863	.891	.714	.886	.815	.650	.862	.870	.708	.815	.770	.866	.595	.793	.726	.811	.892

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City of Riverside
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E/W: Eastridge Avenue
Weather: Clear

File Name : RIVSCEAAM
Site Code : 05114445
Start Date : 11/5/2014
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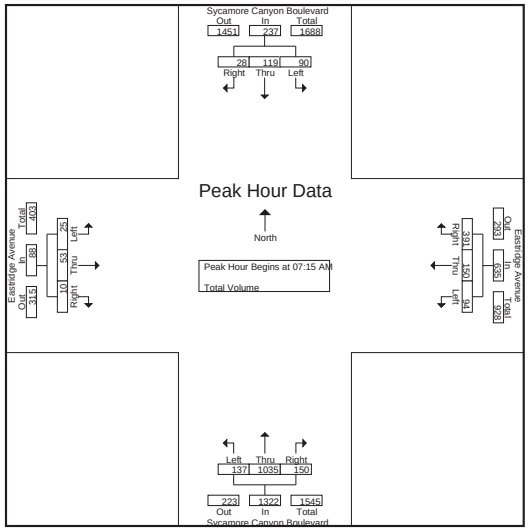

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:15 AM				07:00 AM			
+0 mins.	13	**40**	11	64	21	25	107	153	19	272	31	322	**12**	14	**5**	**31**
+15 mins.	13	39	2	54	**34**	16	100	150	46	**277**	28	**351**	6	11	2	19
+30 mins.	27	23	**12**	62	26	48	**114**	**188**	**50**	226	**53**	329	12	11	3	26
+45 mins.	**31**	27	8	**66**	20	**54**	93	167	22	260	38	320	4	**18**	3	25
Total Volume	84	129	33	246	101	143	414	658	137	1035	150	1322	34	54	13	101
% App. Total	34.1	52.4	13.4		15.3	21.7	62.9		10.4	78.3	11.3		33.7	53.5	12.9	
PHF	.677	.806	.688	.932	.743	.662	.908	.875	.685	.934	.708	.942	.708	.750	.650	.815

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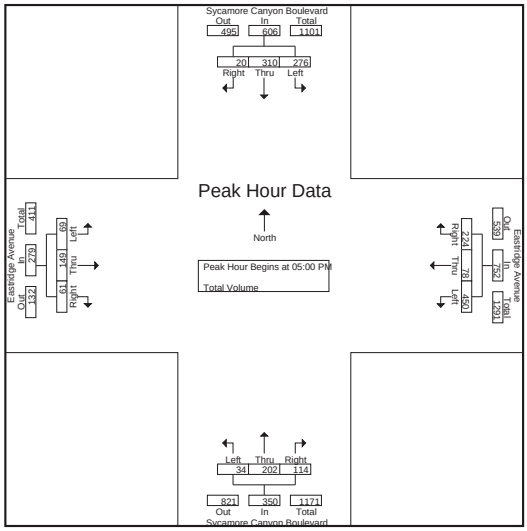
City of Riverside
N/S: Sycamore Canyon Boulevard
E/W: Eastridge Avenue
Weather: Clear

File Name : RIVSCEAPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				04:45 PM				05:00 PM			
+0 mins.	77	**87**	**7**	**171**	65	16	55	136	8	57	34	99	16	**47**	**21**	84
+15 mins.	**80**	80	2	162	136	9	**65**	210	2	58	22	82	**29**	46	11	**86**
+30 mins.	59	73	5	137	**138**	23	55	**216**	10	**62**	27	99	10	31	14	55
+45 mins.	60	70	6	136	111	**30**	49	190	**12**	52	**37**	**101**	14	25	15	54
Total Volume	276	310	20	606	450	78	224	752	32	229	120	381	69	149	61	279
% App. Total	45.5	51.2	3.3		59.8	10.4	29.8		8.4	60.1	31.5		24.7	53.4	21.9	
PHF	.863	.891	.714	.886	.815	.650	.862	.870	.667	.923	.811	.943	.595	.793	.726	.811

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City of Riverside
N/S: Box Springs Boulevard
E/W: Eastridge Avenue
Weather: Clear

File Name : RIVBSEAAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Box Springs Boulevard Southbound				Eastridge Avenue Westbound				Box Springs Boulevard Northbound				Eastridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	7	0	2	9	16	155	65	236	3	4	5	12	5	37	4	46	303
07:15 AM	7	2	0	9	11	150	95	256	4	2	21	27	15	45	3	63	355
07:30 AM	11	0	2	13	13	199	92	304	2	4	16	22	12	45	4	61	400
07:45 AM	8	0	0	8	14	181	95	290	1	1	4	6	29	61	4	94	398
Total	33	2	4	39	54	685	347	1086	10	11	46	67	61	188	15	264	1456
08:00 AM	8	1	3	12	5	104	45	154	1	3	2	6	7	43	0	50	222
08:15 AM	11	1	9	21	7	115	52	174	3	1	9	13	17	36	4	57	265
08:30 AM	9	1	9	19	13	91	42	146	3	0	6	9	7	36	2	45	219
08:45 AM	9	0	1	10	12	123	55	190	1	0	1	2	10	30	2	42	244
Total	37	3	22	62	37	433	194	664	8	4	18	30	41	145	8	194	950
Grand Total	70	5	26	101	91	1118	541	1750	18	15	64	97	102	333	23	458	2406
Apprch %	69.3	5	25.7		5.2	63.9	30.9		18.6	15.5	66		22.3	72.7	5		
Total %	2.9	0.2	1.1	4.2	3.8	46.5	22.5	72.7	0.7	0.6	2.7	4	4.2	13.8	1	19	

	Box Springs Boulevard Southbound				Eastridge Avenue Westbound				Box Springs Boulevard Northbound				Eastridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	7	0	**2**	9	**16**	155	65	236	3	**4**	5	12	5	37	**4**	46	303
07:15 AM	7	**2**	0	9	11	150	**95**	256	**4**	2	**21**	**27**	15	45	3	63	355
07:30 AM	**11**	0	2	**13**	13	**199**	92	**304**	2	4	16	22	12	45	4	61	**400**
07:45 AM	8	0	0	8	14	181	95	290	1	1	4	6	**29**	**61**	4	**94**	398
Total Volume	33	2	4	39	54	685	347	1086	10	11	46	67	61	188	15	264	1456
% App. Total	84.6	5.1	10.3		5	63.1	32		14.9	16.4	68.7		23.1	71.2	5.7		
PHF	.750	.250	.500	.750	.844	.861	.913	.893	.625	.688	.548	.620	.526	.770	.938	.702	.910

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City of Riverside
N/S: Box Springs Boulevard
E/W: Eastridge Avenue
Weather: Clear

File Name : RIVBSEAPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Box Springs Boulevard Southbound				Eastridge Avenue Westbound				Box Springs Boulevard Northbound				Eastridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	22	1	12	35	3	81	15	99	2	1	14	17	9	108	0	117	268
04:15 PM	35	0	6	41	6	83	14	103	6	0	16	22	3	89	2	94	260
04:30 PM	45	0	16	61	4	73	15	92	7	3	30	40	3	111	3	117	310
04:45 PM	35	0	12	47	1	88	24	113	1	0	7	8	9	98	0	107	275
Total	137	1	46	184	14	325	68	407	16	4	67	87	24	406	5	435	1113
05:00 PM	55	1	18	74	4	130	15	149	3	0	8	11	5	147	0	152	386
05:15 PM	11	0	6	17	4	197	11	212	4	1	4	9	1	159	2	162	400
05:30 PM	19	0	4	23	5	204	14	223	6	1	7	14	4	130	1	135	395
05:45 PM	14	1	9	24	15	185	18	218	5	1	10	16	2	109	0	111	369
Total	99	2	37	138	28	716	58	802	18	3	29	50	12	545	3	560	1550
Grand Total	236	3	83	322	42	1041	126	1209	34	7	96	137	36	951	8	995	2663
Apprch %	73.3	0.9	25.8		3.5	86.1	10.4		24.8	5.1	70.1		3.6	95.6	0.8		
Total %	8.9	0.1	3.1	12.1	1.6	39.1	4.7	45.4	1.3	0.3	3.6	5.1	1.4	35.7	0.3	37.4	

	Box Springs Boulevard Southbound				Eastridge Avenue Westbound				Box Springs Boulevard Northbound				Eastridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**55**	**1**	**18**	**74**	4	130	15	149	3	0	8	11	**5**	147	0	152	386
05:15 PM	11	0	6	17	4	197	11	212	4	**1**	4	9	1	**159**	**2**	**162**	**400**
05:30 PM	19	0	4	23	5	**204**	14	**223**	**6**	1	7	14	4	130	1	135	395
05:45 PM	14	1	9	24	**15**	185	**18**	218	5	1	**10**	**16**	2	109	0	111	369
Total Volume	99	2	37	138	28	716	58	802	18	3	29	50	12	545	3	560	1550
% App. Total	71.7	1.4	26.8		3.5	89.3	7.2		36	6	58		2.1	97.3	0.5		
PHF	.450	.500	.514	.466	.467	.877	.806	.899	.750	.750	.725	.781	.600	.857	.375	.864	.969

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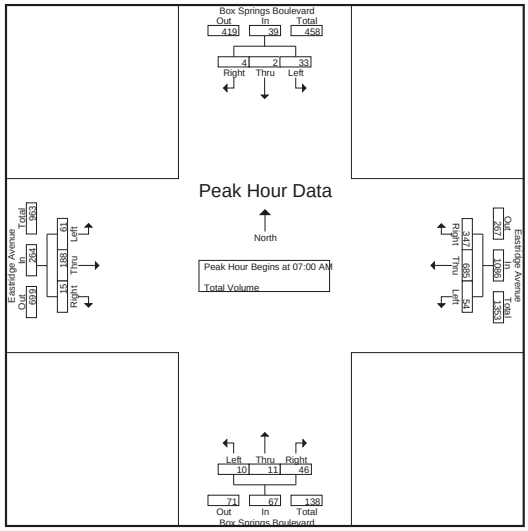
City of Riverside
N/S: Box Springs Boulevard
E/W: Eastridge Avenue
Weather: Clear

File Name : RIVBSEAAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:00 AM				07:00 AM				07:15 AM			
+0 mins.	8	**1**	3	12	**16**	155	65	236	3	**4**	5	12	15	45	3	63
+15 mins.	**11**	1	**9**	**21**	11	150	**95**	256	**4**	2	**21**	**27**	12	45	**4**	61
+30 mins.	9	1	9	19	13	**199**	92	**304**	2	4	16	22	**29**	**61**	4	**94**
+45 mins.	9	0	1	10	14	181	95	290	1	1	4	6	7	43	0	50
Total Volume	37	3	22	62	54	685	347	1086	10	11	46	67	63	194	11	268
% App. Total	59.7	4.8	35.5		5	63.1	32		14.9	16.4	68.7		23.5	72.4	4.1	
PHF	.841	.750	.611	.738	.844	.861	.913	.893	.625	.688	.548	.620	.543	.795	.688	.713

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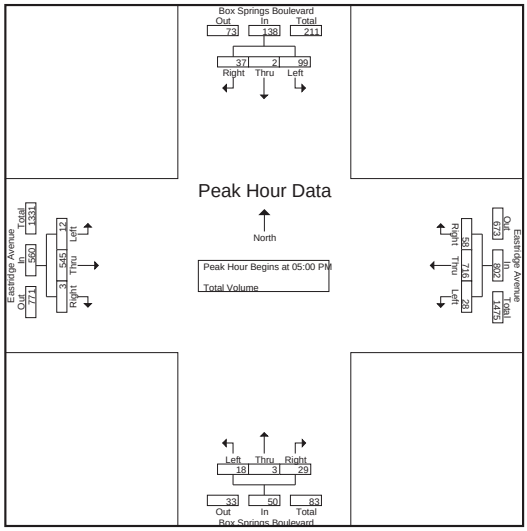
City of Riverside
N/S: Box Springs Boulevard
E/W: Eastridge Avenue
Weather: Clear

File Name : RIVBSEAPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				05:00 PM				04:00 PM				05:00 PM			
+0 mins.	35	0	6	41	4	130	15	149	2	1	14	17	**5**	147	0	152
+15 mins.	45	0	16	61	4	197	11	212	6	0	16	22	1	**159**	**2**	**162**
+30 mins.	35	0	12	47	5	**204**	14	**223**	**7**	**3**	**30**	**40**	4	130	1	135
+45 mins.	**55**	**1**	**18**	**74**	**15**	185	**18**	218	1	0	7	8	2	109	0	111
Total Volume	170	1	52	223	28	716	58	802	16	4	67	87	12	545	3	560
% App. Total	76.2	0.4	23.3		3.5	89.3	7.2		18.4	4.6	77		2.1	97.3	0.5	
PHF	.773	.250	.722	.753	.467	.877	.806	.899	.571	.333	.558	.544	.600	.857	.375	.864

INT ID: #3

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City of Moreno Valley
N/S: I-215 Ramps
E/W: Eastridge Avenue
Weather: Clear

File Name : MRV215EAAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	I-215 Southbound Off / Northbound On Ramps Southbound				Eastridge Avenue Westbound				I-215 Southbound On / Northbound Off Ramps Northbound				Eastridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	27	0	42	69	88	132	66	286	72	0	22	94	19	18	16	53	502
07:15 AM	24	0	50	89	104	170	85	359	67	0	41	108	17	43	14	74	630
07:30 AM	39	0	50	89	104	170	85	359	67	0	41	108	17	43	14	74	630
07:45 AM	45	0	65	110	76	156	70	302	61	0	34	95	18	42	13	73	580
Total	135	0	199	334	361	587	298	1246	275	0	139	414	76	126	69	271	2265
08:00 AM	46	0	34	80	81	106	60	247	57	0	28	85	15	22	12	49	461
08:15 AM	39	0	41	80	59	78	48	185	51	0	44	95	18	33	10	61	421
08:30 AM	31	0	29	60	68	70	48	186	45	0	40	85	18	29	7	54	385
08:45 AM	42	0	58	100	62	80	66	208	61	0	57	118	15	15	9	39	465
Total	158	0	162	320	270	334	222	826	214	0	169	383	66	99	38	203	1732
Grand Total	293	0	361	654	631	921	520	2072	489	0	308	797	142	225	107	474	3997
Apprch %	44.8	0	55.2		30.5	44.4	25.1		61.4	0	38.6		30	47.5	22.6		
Total %	7.3	0	9	16.4	15.8	23	13	51.8	12.2	0	7.7	19.9	3.6	5.6	2.7	11.9	

	I-215 Southbound Off / Northbound On Ramps Southbound				Eastridge Avenue Westbound				I-215 Southbound On / Northbound Off Ramps Northbound				Eastridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	27	0	42	69	88	132	66	286	72	0	22	94	19	18	16	53	502
07:15 AM	24	0	42	66	93	129	77	299	**75**	0	**42**	**117**	**22**	23	**26**	71	553
07:30 AM	39	0	50	89	**104**	**170**	**85**	**359**	67	0	41	108	17	**43**	14	**74**	**630**
07:45 AM	**45**	0	**65**	**110**	76	156	70	302	61	0	34	95	18	42	13	73	580
Total Volume	135	0	199	334	361	587	298	1246	275	0	139	414	76	126	69	271	2265
% App. Total	40.4	0	59.6		29	47.1	23.9		66.4	0	33.6		28	46.5	25.5		
PHF	.750	.000	.765	.759	.868	.863	.876	.868	.917	.000	.827	.885	.864	.733	.663	.916	.899

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City of Moreno Valley
N/S: I-215 Ramps
E/W: Eastridge Avenue
Weather: Clear

File Name : MRV215EAPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	I-215 Southbound Off / Northbound On Ramps Southbound				Eucalyptus Avenue Westbound				I-215 Southbound On / Northbound Off Ramps Northbound				Eastridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	122	0	26	148	161	43	57	261	24	0	107	131	46	60	32	138	678
04:15 PM	85	0	28	113	186	61	64	311	25	0	107	132	33	69	28	130	686
04:30 PM	79	0	21	100	176	41	69	286	25	0	112	137	50	65	44	159	682
04:45 PM	88	0	21	109	159	67	60	286	27	0	136	163	41	74	27	142	700
Total	374	0	96	470	682	212	250	1144	101	0	462	563	170	268	131	569	2746
05:00 PM	110	0	29	139	150	96	82	328	23	0	115	138	55	105	26	186	791
05:15 PM	165	0	94	259	146	95	71	312	32	0	128	160	45	100	32	177	908
05:30 PM	178	0	103	281	144	71	71	286	38	0	150	188	29	96	27	152	907
05:45 PM	176	0	78	254	160	85	87	332	44	0	140	184	32	78	20	130	900
Total	629	0	304	933	600	347	311	1258	137	0	533	670	161	379	105	645	3506
Grand Total	1003	0	400	1403	1282	559	561	2402	238	0	995	1233	331	647	236	1214	6252
Apprch %	71.5	0	28.5		53.4	23.3	23.4		19.3	0	80.7		27.3	53.3	19.4		
Total %	16	0	6.4	22.4	20.5	8.9	9	38.4	3.8	0	15.9	19.7	5.3	10.3	3.8	19.4	

	I-215 Southbound Off / Northbound On Ramps Southbound				Eucalyptus Avenue Westbound				I-215 Southbound On / Northbound Off Ramps Northbound				Eastridge Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	110	0	29	139	150	**96**	82	328	23	0	115	138	**55**	**105**	26	**186**	791
05:15 PM	165	0	94	259	146	95	71	312	32	0	128	160	45	100	**32**	177	**908**
05:30 PM	**178**	0	**103**	**281**	144	71	71	286	38	0	**150**	**188**	29	96	27	152	907
05:45 PM	176	0	78	254	**160**	85	**87**	**332**	**44**	0	140	184	32	78	20	130	900
Total Volume	629	0	304	933	600	347	311	1258	137	0	533	670	161	379	105	645	3506
% App. Total	67.4	0	32.6		47.7	27.6	24.7		20.4	0	79.6		25	58.8	16.3		
PHF	.883	.000	.738	.830	.938	.904	.894	.947	.778	.000	.888	.891	.732	.902	.820	.867	.965

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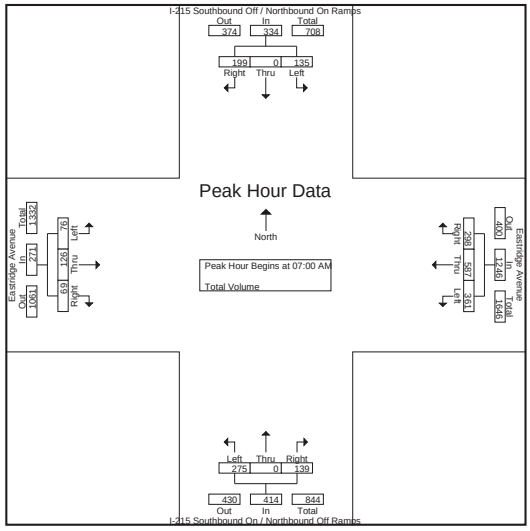
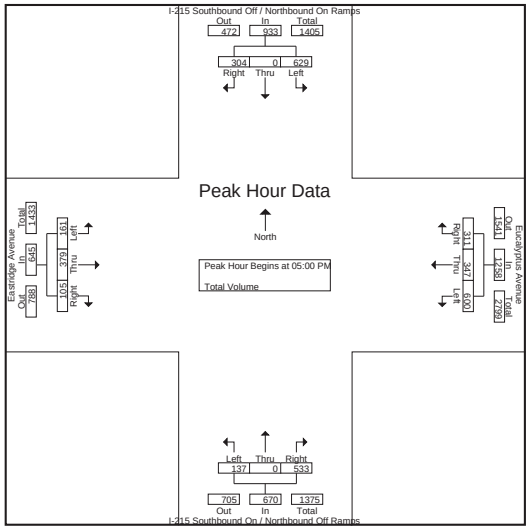
City of Moreno Valley
N/S: I-215 Ramps
E/W: Eastridge Avenue
Weather: Clear

File Name : MRV215EAAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	39	0	50	89	88	132	66	286	72	0	22	94	19	18	16	53
+15 mins.	45	0	**65**	**110**	93	129	77	299	**75**	0	**42**	**117**	**22**	23	**26**	71
+30 mins.	**46**	0	34	80	**104**	**170**	**85**	**359**	67	0	41	108	17	**43**	14	**74**
+45 mins.	39	0	41	80	76	156	70	302	61	0	34	95	18	42	13	73
Total Volume	169	0	190	359	361	587	298	1246	275	0	139	414	76	126	69	271
% App. Total	47.1	0	52.9		29	47.1	23.9		66.4	0	33.6		28	46.5	25.5	
PHF	.918	.000	.731	.816	.868	.863	.876	.868	.917	.000	.827	.885	.864	.733	.663	.916



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				04:30 PM			
+0 mins.	110	0	29	139	150	**96**	82	328	23	0	115	138	50	65	**44**	159
+15 mins.	165	0	94	259	146	95	71	312	32	0	128	160	41	74	27	142
+30 mins.	**178**	0	**103**	**281**	144	71	71	286	38	0	**150**	**188**	**55**	**105**	26	**186**
+45 mins.	176	0	78	254	**160**	85	**87**	**332**	**44**	0	140	184	45	100	32	177
Total Volume	629	0	304	933	600	347	311	1258	137	0	533	670	191	344	129	664
% App. Total	67.4	0	32.6		47.7	27.6	24.7		20.4	0	79.6		28.8	51.8	19.4	
PHF	.883	.000	.738	.830	.938	.904	.894	.947	.778	.000	.888	.891	.868	.819	.733	.892

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City of Moreno Valley
N/S: Valley Springs Parkway
E/W: Eucalyptus Avenue
Weather: Clear

File Name : MRVVSEUAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Valley Springs Parkway Southbound				Eucalyptus Avenue Westbound				Old 215 Frontage Road Northbound				Eucalyptus Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	6	53	61	3	141	2	146	51	50	10	111	24	48	5	77	395
07:15 AM	4	4	49	57	3	181	8	192	89	51	21	161	28	43	7	78	488
07:30 AM	4	10	73	87	2	194	3	199	92	83	20	195	50	69	1	120	601
07:45 AM	3	5	53	61	10	189	4	203	82	107	46	235	48	65	7	120	619
Total	13	25	228	266	18	705	17	740	314	291	97	702	150	225	20	395	2103
08:00 AM	3	11	54	68	7	134	10	151	60	81	35	176	29	58	5	92	487
08:15 AM	1	11	51	63	19	101	7	127	44	86	35	165	59	62	2	123	478
08:30 AM	5	5	55	65	4	95	9	108	34	61	33	128	44	47	8	99	400
08:45 AM	6	7	59	72	6	123	10	139	30	67	18	115	52	70	7	129	455
Total	15	34	219	268	36	453	36	525	168	295	121	584	184	237	22	443	1820
Grand Total	28	59	447	534	54	1158	53	1265	482	586	218	1286	334	462	42	838	3923
Apprch %	5.2	11	83.7		4.3	91.5	4.2		37.5	45.6	17		39.9	55.1	5		
Total %	0.7	1.5	11.4	13.6	1.4	29.5	1.4	32.2	12.3	14.9	5.6	32.8	8.5	11.8	1.1	21.4	

	Valley Springs Parkway Southbound				Eucalyptus Avenue Westbound				Old 215 Frontage Road Northbound				Eucalyptus Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**4**	4	49	57	3	181	8	192	89	51	21	161	28	43	**7**	78	488
07:30 AM	4	10	**73**	**87**	2	**194**	3	199	**92**	83	20	195	**50**	**69**	1	**120**	601
07:45 AM	3	5	53	61	**10**	189	4	**203**	82	**107**	**46**	**235**	48	65	7	120	**619**
08:00 AM	3	**11**	54	68	7	134	**10**	151	60	81	35	176	29	58	5	92	487
Total Volume	14	30	229	273	22	698	25	745	323	322	122	767	155	235	20	410	2195
% App. Total	5.1	11	83.9		3	93.7	3.4		42.1	42	15.9		37.8	57.3	4.9		
PHF	.875	.682	.784	.784	.550	.899	.625	.917	.878	.752	.663	.816	.775	.851	.714	.854	.887

Groups Printed- Total Volume

	Valley Springs Parkway Southbound				Eucalyptus Avenue Westbound				Old 215 Frontage Road Northbound				Eucalyptus Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	8	30	139	177	7	117	9	133	16	42	16	74	124	173	21	318	702
04:15 PM	13	27	165	205	2	136	14	152	13	30	14	57	87	152	4	243	657
04:30 PM	17	29	141	187	2	149	17	168	4	27	10	41	93	184	12	289	685
04:45 PM	11	35	142	188	7	130	17	154	14	50	16	80	127	180	16	323	745
Total	49	121	587	757	18	532	57	607	47	149	56	252	431	689	53	1173	2789
05:00 PM	19	63	205	287	8	152	6	166	10	39	11	60	102	158	26	286	799
05:15 PM	16	42	152	210	14	110	17	141	13	35	13	61	128	227	60	415	827
05:30 PM	9	34	170	213	5	140	11	156	19	38	13	70	128	234	58	420	859
05:45 PM	15	39	168	222	10	137	12	159	13	27	10	50	123	210	59	392	823
Total	59	178	695	932	37	539	46	622	55	139	47	241	481	829	203	1513	3308
Grand Total	108	299	1282	1689	55	1071	103	1229	102	288	103	493	912	1518	256	2686	6097
Apprch %	6.4	17.7	75.9		4.5	87.1	8.4		20.7	58.4	20.9		34	56.5	9.5		
Total %	1.8	4.9	21	27.7	0.9	17.6	1.7	20.2	1.7	4.7	1.7	8.1	15	24.9	4.2	44.1	

	Valley Springs Parkway Southbound				Eucalyptus Avenue Westbound				Old 215 Frontage Road Northbound				Eucalyptus Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**19**	**63**	**205**	**287**	8	**152**	6	**166**	10	**39**	11	60	102	158	26	286	799
05:15 PM	16	42	152	210	**14**	110	**17**	141	13	35	**13**	61	**128**	227	**60**	415	827
05:30 PM	9	34	170	213	5	140	11	156	**19**	38	13	**70**	128	**234**	58	**420**	**859**
05:45 PM	15	39	168	222	10	137	12	159	13	27	10	50	123	210	59	392	823
Total Volume	59	178	695	932	37	539	46	622	55	139	47	241	481	829	203	1513	3308
% App. Total	6.3	19.1	74.6		5.9	86.7	7.4		22.8	57.7	19.5		31.8	54.8	13.4		
PHF	.776	.706	.848	.812	.661	.887	.676	.937	.724	.891	.904	.861	.939	.886	.846	.901	.963

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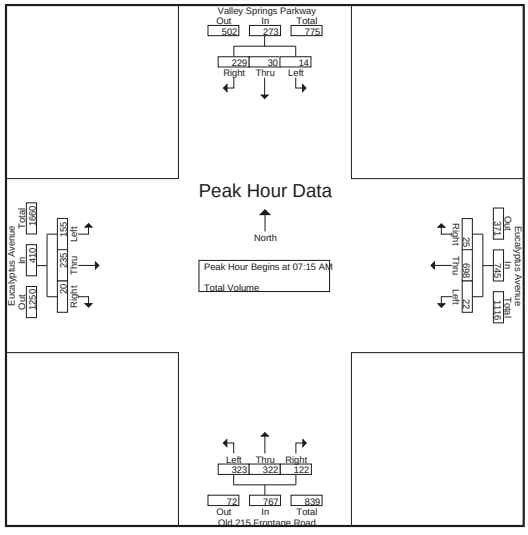
City of Moreno Valley
N/S: Valley Springs Parkway
E/W: Eucalyptus Avenue
Weather: Clear

File Name : MRVVSEUAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:15 AM				07:30 AM				07:30 AM			
+0 mins.	**4**	10	**73**	**87**	3	181	8	192	**92**	83	20	195	50	**69**	1	120
+15 mins.	3	5	53	61	2	**194**	3	199	82	**107**	**46**	**235**	48	65	**7**	120
+30 mins.	3	**11**	54	68	**10**	189	4	**203**	60	81	35	176	29	58	5	92
+45 mins.	1	11	51	63	7	134	**10**	151	44	86	35	165	**59**	62	2	**123**
Total Volume	11	37	231	279	22	698	25	745	278	357	136	771	186	254	15	455
% App. Total	3.9	13.3	82.8		3	93.7	3.4		36.1	46.3	17.6		40.9	55.8	3.3	
PHF	.688	.841	.791	.802	.550	.899	.625	.917	.755	.834	.739	.820	.788	.920	.536	.925

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City of Moreno Valley
N/S: Valley Springs Parkway
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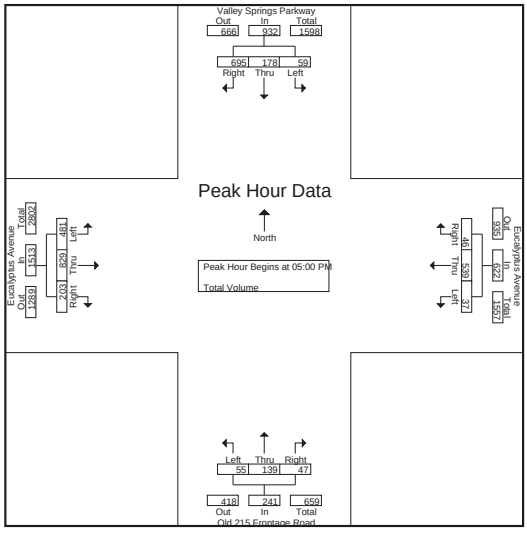
File Name : MRVVSEUPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				04:45 PM				05:00 PM			
+0 mins.	**19**	**63**	**205**	**287**	2	136	14	152	14	**50**	**16**	**80**	102	158	26	286
+15 mins.	16	42	152	210	2	149	**17**	**168**	10	39	11	60	**128**	227	**60**	415
+30 mins.	9	34	170	213	7	130	17	154	13	35	13	61	128	**234**	58	**420**
+45 mins.	15	39	168	222	**8**	**152**	6	166	**19**	38	13	70	123	210	59	392
Total Volume	59	178	695	932	19	567	54	640	56	162	53	271	481	829	203	1513
% App. Total	6.3	19.1	74.6		3	88.6	8.4		20.7	59.8	19.6		31.8	54.8	13.4	
PHF	.776	.706	.848	.812	.594	.933	.794	.952	.737	.810	.828	.847	.939	.886	.846	.901

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City of Moreno Valley
N/S: Day Street
E/W: SR-60 Westbound On / Off Ramps
Weather: Clear

File Name : MRVDA60WAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Day Street Southbound			SR-60 Westbound On / Off Ramps Westbound			Day Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	36	73	109	61	53	114	68	41	109	332
07:15 AM	43	87	130	68	56	124	84	47	131	385
07:30 AM	35	115	150	71	46	117	84	49	133	400
07:45 AM	45	114	159	80	47	127	100	57	157	443
Total	159	389	548	280	202	482	336	194	530	1560
08:00 AM	26	113	139	105	65	170	99	33	132	441
08:15 AM	18	111	129	107	72	179	72	48	120	428
08:30 AM	9	113	122	107	33	140	80	54	134	396
08:45 AM	10	92	102	109	34	143	77	47	124	369
Total	63	429	492	428	204	632	328	182	510	1634
Grand Total	222	818	1040	708	406	1114	664	376	1040	3194
Apprch %	21.3	78.7		63.6	36.4		63.8	36.2		
Total %	7	25.6	32.6	22.2	12.7	34.9	20.8	11.8	32.6	

	Day Street Southbound			SR-60 Westbound On / Off Ramps Westbound			Day Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	35	**115**	150	71	46	117	84	49	133	400
07:45 AM	**45**	114	**159**	80	47	127	**100**	**57**	**157**	**443**
08:00 AM	26	113	139	105	65	170	99	33	132	441
08:15 AM	18	111	129	**107**	**72**	**179**	72	48	120	428
Total Volume	124	453	577	363	230	593	355	187	542	1712
% App. Total	21.5	78.5		61.2	38.8		65.5	34.5		
PHF	.689	.985	.907	.848	.799	.828	.888	.820	.863	.966

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City of Moreno Valley
N/S: Day Street
E/W: SR-60 Westbound On / Off Ramps
Weather: Clear

File Name : MRVDA60WPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Day Street Southbound			SR-60 Westbound On / Off Ramps Westbound			Day Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	14	118	132	125	32	157	138	111	249	538
04:15 PM	10	112	122	133	26	159	141	81	222	503
04:30 PM	19	125	144	116	37	153	175	84	259	556
04:45 PM	10	132	142	128	52	180	164	89	253	575
Total	53	487	540	502	147	649	618	365	983	2172
05:00 PM	32	156	188	110	32	142	186	139	325	655
05:15 PM	21	152	173	118	35	153	220	113	333	659
05:30 PM	15	179	194	119	38	157	203	86	289	640
05:45 PM	7	143	150	123	37	160	204	93	297	607
Total	75	630	705	470	142	612	813	431	1244	2561
Grand Total	128	1117	1245	972	289	1261	1431	796	2227	4733
Apprch %	10.3	89.7		77.1	22.9		64.3	35.7		
Total %	2.7	23.6	26.3	20.5	6.1	26.6	30.2	16.8	47.1	

	Day Street Southbound			SR-60 Westbound On / Off Ramps Westbound			Day Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	**32**	156	188	110	32	142	186	**139**	325	655
05:15 PM	21	152	173	118	35	153	**220**	113	**333**	**659**
05:30 PM	15	**179**	**194**	119	**38**	157	203	86	289	640
05:45 PM	7	143	150	**123**	37	**160**	204	93	297	607
Total Volume	75	630	705	470	142	612	813	431	1244	2561
% App. Total	10.6	89.4		76.8	23.2		65.4	34.6		
PHF	.586	.880	.909	.955	.934	.956	.924	.775	.934	.972

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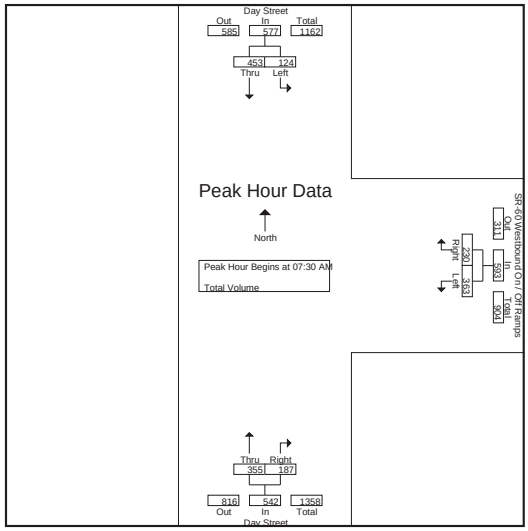
City of Moreno Valley
N/S: Day Street
E/W: SR-60 Westbound On / Off Ramps
Weather: Clear

File Name : MRVDA60WAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			08:00 AM			07:15 AM		
+0 mins.	43	87	130	105	65	170	84	47	131
+15 mins.	35	**115**	150	107	**72**	**179**	84	49	133
+30 mins.	**45**	114	**159**	107	33	140	**100**	**57**	**157**
+45 mins.	26	113	139	**109**	34	143	99	33	132
Total Volume	149	429	578	428	204	632	367	186	553
% App. Total	25.8	74.2		67.7	32.3		66.4	33.6	
PHF	.828	.933	.909	.982	.708	.883	.918	.816	.881

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City of Moreno Valley
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Weather: Clear

File Name : MRVDA60WPM
Site Code : 05114445
Start Date : 11/5/2014
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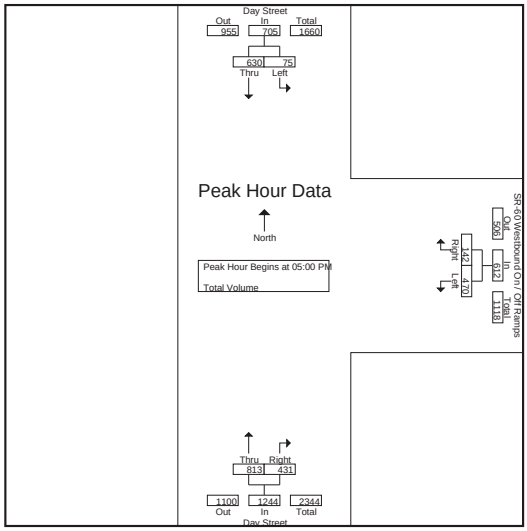

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			04:00 PM			05:00 PM		
+0 mins.	**32**	156	188	125	32	157	186	**139**	325
+15 mins.	21	152	173	**133**	26	159	**220**	113	**333**
+30 mins.	15	**179**	**194**	116	37	153	203	86	289
+45 mins.	7	143	150	128	**52**	**180**	204	93	297
Total Volume	75	630	705	502	147	649	813	431	1244
% App. Total	10.6	89.4		77.3	22.7		65.4	34.6	
PHF	.586	.880	.909	.944	.707	.901	.924	.775	.934

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City of Riverside
N/S: Day Street
E/W: SR-60 Eastbound On / Off Ramps
Weather: Clear

File Name : RIVDA60EAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Day Street Southbound			SR-60 Eastbound On / Off Ramps Westbound			Day Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	17	119	136	81	17	98	97	73	170	404
07:15 AM	20	130	150	67	15	82	114	81	195	427
07:30 AM	33	146	179	67	17	84	125	102	227	490
07:45 AM	28	176	204	106	19	125	128	93	221	550
Total	98	571	669	321	68	389	464	349	813	1871
08:00 AM	20	202	222	86	18	104	120	90	210	536
08:15 AM	25	184	209	110	12	122	103	88	191	522
08:30 AM	34	196	230	80	24	104	107	100	207	541
08:45 AM	24	170	194	95	35	130	94	73	167	491
Total	103	752	855	371	89	460	424	351	775	2090
Grand Total	201	1323	1524	692	157	849	888	700	1588	3961
Apprch %	13.2	86.8		81.5	18.5		55.9	44.1		
Total %	5.1	33.4	38.5	17.5	4	21.4	22.4	17.7	40.1	

	Day Street Southbound			SR-60 Eastbound On / Off Ramps Westbound			Day Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	28	176	204	106	19	**125**	**128**	93	**221**	**550**
08:00 AM	20	**202**	222	86	18	104	120	90	210	536
08:15 AM	25	184	209	**110**	12	122	103	88	191	522
08:30 AM	**34**	196	**230**	80	**24**	104	107	**100**	207	541
Total Volume	107	758	865	382	73	455	458	371	829	2149
% App. Total	12.4	87.6		84	16		55.2	44.8		
PHF	.787	.938	.940	.868	.760	.910	.895	.928	.938	.977

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City of Riverside
N/S: Day Street
E/W: SR-60 Eastbound On / Off Ramps
Weather: Clear

File Name : RIVDA60EPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Day Street Southbound			SR-60 Eastbound On / Off Ramps Westbound			Day Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	29	206	235	137	46	183	197	168	365	783
04:15 PM	26	215	241	168	43	211	198	172	370	822
04:30 PM	26	212	238	169	65	234	200	161	361	833
04:45 PM	23	248	271	148	56	204	192	174	366	841
Total	104	881	985	622	210	832	787	675	1462	3279
05:00 PM	41	226	267	145	56	201	255	161	416	884
05:15 PM	41	233	274	147	75	222	265	173	438	934
05:30 PM	40	253	293	163	49	212	230	188	418	923
05:45 PM	33	238	271	160	95	255	206	184	390	916
Total	155	950	1105	615	275	890	956	706	1662	3657
Grand Total	259	1831	2090	1237	485	1722	1743	1381	3124	6936
Apprch %	12.4	87.6		71.8	28.2		55.8	44.2		
Total %	3.7	26.4	30.1	17.8	7	24.8	25.1	19.9	45	

	Day Street Southbound			SR-60 Eastbound On / Off Ramps Westbound			Day Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	**41**	226	267	145	56	201	255	161	416	884
05:15 PM	41	233	274	147	75	222	**265**	173	**438**	**934**
05:30 PM	40	**253**	**293**	**163**	49	212	230	**188**	418	923
05:45 PM	33	238	271	160	**95**	**255**	206	184	390	916
Total Volume	155	950	1105	615	275	890	956	706	1662	3657
% App. Total	14	86		69.1	30.9		57.5	42.5		
PHF	.945	.939	.943	.943	.724	.873	.902	.939	.949	.979

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City of Riverside
N/S: Day Street
E/W: SR-60 Eastbound On / Off Ramps
Weather: Clear

File Name : RIVDA60EAM
Site Code : 05114445
Start Date : 11/5/2014
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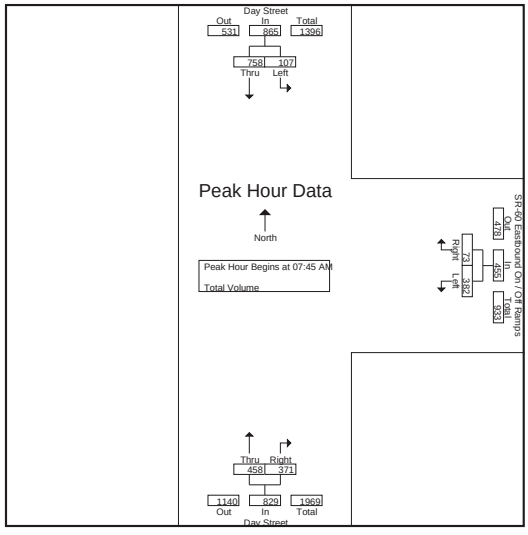

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM			08:00 AM			07:15 AM		
+0 mins.	28	176	204	86	18	104	114	81	195
+15 mins.	20	**202**	222	**110**	12	122	125	**102**	**227**
+30 mins.	25	184	209	80	24	104	**128**	93	221
+45 mins.	**34**	196	**230**	95	**35**	**130**	120	90	210
Total Volume	107	758	865	371	89	460	487	366	853
% App. Total	12.4	87.6		80.7	19.3		57.1	42.9	
PHF	.787	.938	.940	.843	.636	.885	.951	.897	.939

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City of Riverside
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Weather: Clear

File Name : RIVDA60EPM
Site Code : 05114445
Start Date : 11/5/2014
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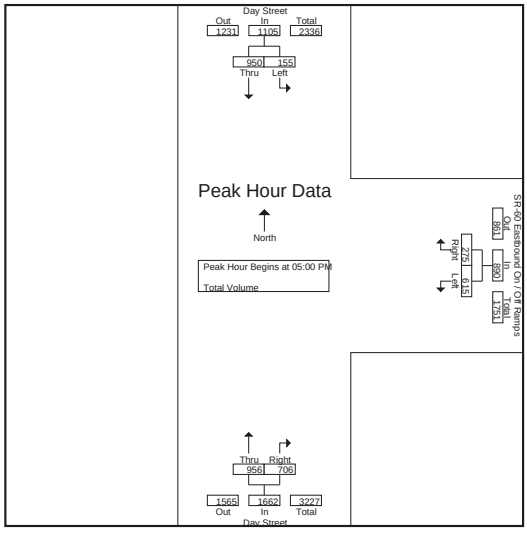

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			05:00 PM			05:00 PM		
+0 mins.	23	248	271	145	56	201	255	161	416
+15 mins.	**41**	226	267	147	75	222	**265**	173	**438**
+30 mins.	41	233	274	**163**	49	212	230	**188**	418
+45 mins.	40	**253**	**293**	160	**95**	**255**	206	184	390
Total Volume	145	960	1105	615	275	890	956	706	1662
% App. Total	13.1	86.9		69.1	30.9		57.5	42.5	
PHF	.884	.949	.943	.943	.724	.873	.902	.939	.949

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City of Moreno Valley
N/S: Day Street
E/W: Canyon Springs Parkway
Weather: Clear

File Name : MRVDACSAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Day Street Southbound				Canyon Springs Parkway Westbound				Day Street Northbound				Canyon Springs Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	33	132	31	196	5	5	27	37	5	81	12	98	49	2	6	57	388
07:15 AM	40	127	34	201	8	6	25	39	8	139	11	158	37	4	6	47	445
07:30 AM	23	122	43	188	13	10	20	43	7	146	6	159	59	6	9	74	464
07:45 AM	47	155	55	257	5	6	22	33	17	138	11	166	63	4	5	72	528
Total	143	536	163	842	31	27	94	152	37	504	40	581	208	16	26	250	1825
08:00 AM	39	182	66	287	9	5	30	44	15	122	10	147	56	6	10	72	550
08:15 AM	29	178	66	273	7	5	24	36	8	99	17	124	69	7	6	82	515
08:30 AM	44	133	69	246	9	14	26	49	21	110	13	144	73	11	10	94	533
08:45 AM	37	119	72	228	16	16	25	57	18	84	17	119	51	8	14	73	477
Total	149	612	273	1034	41	40	105	186	62	415	57	534	249	32	40	321	2075
Grand Total	292	1148	436	1876	72	67	199	338	99	919	97	1115	457	48	66	571	3900
Apprch %	15.6	61.2	23.2		21.3	19.8	58.9		8.9	82.4	8.7		80	8.4	11.6		
Total %	7.5	29.4	11.2	48.1	1.8	1.7	5.1	8.7	2.5	23.6	2.5	28.6	11.7	1.2	1.7	14.6	

	Day Street Southbound				Canyon Springs Parkway Westbound				Day Street Northbound				Canyon Springs Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**47**	155	55	257	5	6	22	33	17	**138**	11	**166**	63	4	5	72	528
08:00 AM	39	**182**	66	**287**	**9**	5	**30**	44	15	122	10	147	56	6	**10**	72	**550**
08:15 AM	29	178	66	273	7	5	24	36	8	99	**17**	124	69	7	6	82	515
08:30 AM	44	133	**69**	246	9	**14**	26	**49**	**21**	110	13	144	**73**	**11**	10	**94**	533
Total Volume	159	648	256	1063	30	30	102	162	61	469	51	581	261	28	31	320	2126
% App. Total	15	61	24.1		18.5	18.5	63		10.5	80.7	8.8		81.6	8.8	9.7		
PHF	.846	.890	.928	.926	.833	.536	.850	.827	.726	.850	.750	.875	.894	.636	.775	.851	.966

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City of Moreno Valley
N/S: Day Street
E/W: Canyon Springs Parkway
Weather: Clear

File Name : MRVDACSPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Day Street Southbound				Canyon Springs Parkway Westbound				Day Street Northbound				Canyon Springs Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	60	146	110	316	11	19	43	73	51	191	6	248	112	25	47	184	821
04:15 PM	68	142	118	328	13	29	63	105	35	155	14	204	135	18	35	188	825
04:30 PM	48	182	109	339	5	12	50	67	37	181	14	232	128	26	29	183	821
04:45 PM	57	140	125	322	10	16	57	83	46	170	20	236	135	30	41	206	847
Total	233	610	462	1305	39	76	213	328	169	697	54	920	510	99	152	761	3314
05:00 PM	59	190	109	358	8	18	67	93	46	215	5	266	125	30	43	198	915
05:15 PM	55	171	115	341	15	14	53	82	58	202	18	278	180	25	35	240	941
05:30 PM	38	172	125	335	11	12	40	63	52	194	19	265	170	40	42	252	915
05:45 PM	51	193	132	376	11	25	42	78	50	203	16	269	124	23	38	185	908
Total	203	726	481	1410	45	69	202	316	206	814	58	1078	599	118	158	875	3679
Grand Total	436	1336	943	2715	84	145	415	644	375	1511	112	1998	1109	217	310	1636	6993
Apprch %	16.1	49.2	34.7		13	22.5	64.4		18.8	75.6	5.6		67.8	13.3	18.9		
Total %	6.2	19.1	13.5	38.8	1.2	2.1	5.9	9.2	5.4	21.6	1.6	28.6	15.9	3.1	4.4	23.4	

	Day Street Southbound				Canyon Springs Parkway Westbound				Day Street Northbound				Canyon Springs Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**59**	190	109	358	8	18	**67**	**93**	46	**215**	5	266	125	30	**43**	198	915
05:15 PM	55	171	115	341	**15**	14	53	82	**58**	202	18	**278**	**180**	25	35	240	**941**
05:30 PM	38	172	125	335	11	12	40	63	52	194	**19**	265	170	**40**	42	**252**	915
05:45 PM	51	**193**	**132**	**376**	11	**25**	42	78	50	203	16	269	124	23	38	185	908
Total Volume	203	726	481	1410	45	69	202	316	206	814	58	1078	599	118	158	875	3679
% App. Total	14.4	51.5	34.1		14.2	21.8	63.9		19.1	75.5	5.4		68.5	13.5	18.1		
PHF	.860	.940	.911	.938	.750	.690	.754	.849	.888	.947	.763	.969	.832	.738	.919	.868	.977

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City of Moreno Valley
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File Name : MRVDACSPM
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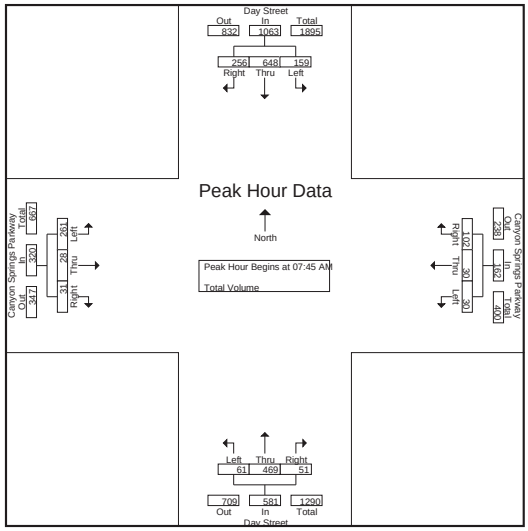

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				08:00 AM				07:15 AM				08:00 AM			
+0 mins.	**47**	155	55	257	9	5	**30**	44	8	139	**11**	158	56	6	10	72
+15 mins.	39	**182**	66	**287**	7	5	24	36	7	**146**	6	159	69	7	6	82
+30 mins.	29	178	66	273	9	14	26	49	**17**	138	11	**166**	**73**	**11**	10	**94**
+45 mins.	44	133	**69**	246	**16**	**16**	25	**57**	15	122	10	147	51	8	**14**	73
Total Volume	159	648	256	1063	41	40	105	186	47	545	38	630	249	32	40	321
% App. Total	15	61	24.1		22	21.5	56.5		7.5	86.5	6		77.6	10	12.5	
PHF	.846	.890	.928	.926	.641	.625	.875	.816	.691	.933	.864	.949	.853	.727	.714	.854

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City of Moreno Valley
N/S: Day Street
E/W: Canyon Springs Parkway
Weather: Clear

File Name : MRVDACSPM
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Start Date : 11/5/2014
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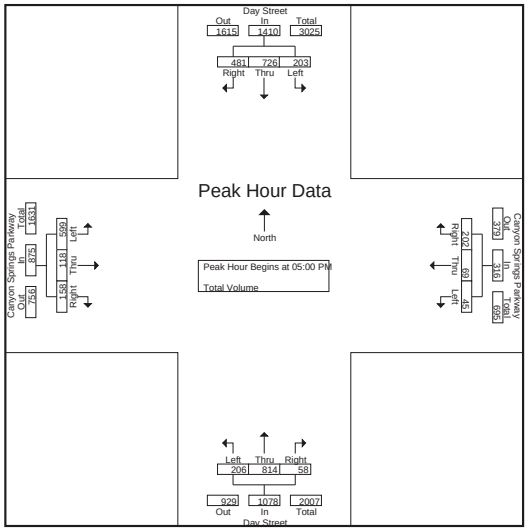

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				05:00 PM				04:45 PM			
+0 mins.	**59**	190	109	358	**13**	**29**	63	**105**	46	**215**	5	266	135	30	41	206
+15 mins.	55	171	115	341	5	12	50	67	**58**	202	18	**278**	125	30	**43**	198
+30 mins.	38	172	125	335	10	16	57	83	52	194	**19**	265	**180**	25	35	240
+45 mins.	51	**193**	**132**	**376**	8	18	**67**	93	50	203	16	269	170	**40**	42	**252**
Total Volume	203	726	481	1410	36	75	237	348	206	814	58	1078	610	125	161	896
% App. Total	14.4	51.5	34.1		10.3	21.6	68.1		19.1	75.5	5.4		68.1	14	18	
PHF	.860	.940	.911	.938	.692	.647	.884	.829	.888	.947	.763	.969	.847	.781	.936	.889

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City of Moreno Valley
N/S: Day Street
E/W: Campus Parkway
Weather: Clear

File Name : MRVDACAAM
Site Code : 05114445
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Groups Printed- Total Volume

	Day Street Southbound				Campus Parkway Westbound				Day Street Northbound				Campus Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	80	34	119	3	7	4	14	18	88	2	108	7	1	6	14	255
07:15 AM	8	104	17	129	3	5	14	22	20	124	2	146	17	3	6	26	323
07:30 AM	12	109	27	148	8	7	13	28	26	139	3	168	12	6	6	24	368
07:45 AM	10	92	39	141	6	13	12	31	30	146	9	185	7	4	12	23	380
Total	35	385	117	537	20	32	43	95	94	497	16	607	43	14	30	87	1326
08:00 AM	11	154	28	193	3	10	4	17	19	125	8	152	8	5	9	22	384
08:15 AM	20	138	23	181	6	15	17	38	27	95	8	130	13	4	12	29	378
08:30 AM	12	120	21	153	4	18	14	36	32	114	12	158	11	9	12	32	379
08:45 AM	29	109	20	158	3	18	14	35	30	88	9	127	11	2	18	31	351
Total	72	521	92	685	16	61	49	126	108	422	37	567	43	20	51	114	1492
Grand Total	107	906	209	1222	36	93	92	221	202	919	53	1174	86	34	81	201	2818
Apprch %	8.8	74.1	17.1		16.3	42.1	41.6		17.2	78.3	4.5		42.8	16.9	40.3		
Total %	3.8	32.2	7.4	43.4	1.3	3.3	3.3	7.8	7.2	32.6	1.9	41.7	3.1	1.2	2.9	7.1	

	Day Street Southbound				Campus Parkway Westbound				Day Street Northbound				Campus Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	10	92	**39**	141	**6**	13	12	31	30	**146**	9	**185**	7	4	**12**	23	380
08:00 AM	11	**154**	28	**193**	3	10	4	17	19	125	8	152	8	5	9	22	**384**
08:15 AM	**20**	138	23	181	6	15	**17**	**38**	27	95	8	130	**13**	4	12	29	378
08:30 AM	12	120	21	153	4	**18**	14	36	**32**	114	**12**	158	11	**9**	12	**32**	379
Total Volume	53	504	111	668	19	56	47	122	108	490	37	625	39	22	45	106	1521
% App. Total	7.9	75.4	16.6		15.6	45.9	38.5		17.3	76.8	5.9		36.8	20.8	42.5		
PHF	.663	.818	.712	.865	.792	.778	.691	.803	.844	.822	.771	.845	.750	.611	.938	.828	.990

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City of Moreno Valley
N/S: Day Street
E/W: Campus Parkway
Weather: Clear

File Name : MRVDACAPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Day Street Southbound				Campus Parkway Westbound				Day Street Northbound				Campus Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	58	159	10	227	13	29	40	82	33	143	26	202	41	22	29	92	603
04:15 PM	41	133	11	185	17	40	29	86	37	149	19	205	23	21	27	71	547
04:30 PM	67	129	16	212	30	39	42	111	49	147	27	223	30	18	40	88	634
04:45 PM	47	131	20	198	18	61	52	131	36	164	26	226	28	14	37	79	634
Total	213	552	57	822	78	169	163	410	155	603	98	856	122	75	133	330	2418
05:00 PM	61	154	17	232	24	39	40	103	42	172	22	236	46	17	39	102	673
05:15 PM	64	158	9	231	16	46	55	117	39	153	22	214	47	25	44	116	678
05:30 PM	67	161	11	239	22	48	42	112	58	188	28	274	40	22	34	96	721
05:45 PM	55	170	11	236	21	50	62	133	42	153	19	214	43	20	49	112	695
Total	247	643	48	938	83	183	199	465	181	666	91	938	176	84	166	426	2767
Grand Total	460	1195	105	1760	161	352	362	875	336	1269	189	1794	298	159	299	756	5185
Apprch %	26.1	67.9	6		18.4	40.2	41.4		18.7	70.7	10.5		39.4	21	39.6		
Total %	8.9	23	2	33.9	3.1	6.8	7	16.9	6.5	24.5	3.6	34.6	5.7	3.1	5.8	14.6	

	Day Street Southbound				Campus Parkway Westbound				Day Street Northbound				Campus Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	61	154	**17**	232	**24**	39	40	103	42	172	22	236	46	17	39	102	673
05:15 PM	64	158	9	231	16	46	55	117	39	153	22	214	**47**	**25**	44	**116**	678
05:30 PM	**67**	161	11	**239**	22	48	42	112	**58**	**188**	**28**	**274**	40	22	34	96	**721**
05:45 PM	55	**170**	11	236	21	**50**	**62**	**133**	42	153	19	214	43	20	**49**	112	695
Total Volume	247	643	48	938	83	183	199	465	181	666	91	938	176	84	166	426	2767
% App. Total	26.3	68.6	5.1		17.8	39.4	42.8		19.3	71	9.7		41.3	19.7	39		
PHF	.922	.946	.706	.981	.865	.915	.802	.874	.780	.886	.813	.856	.936	.840	.847	.918	.959

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City of Moreno Valley
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File Name : MRVDACAPM
Site Code : 05114445
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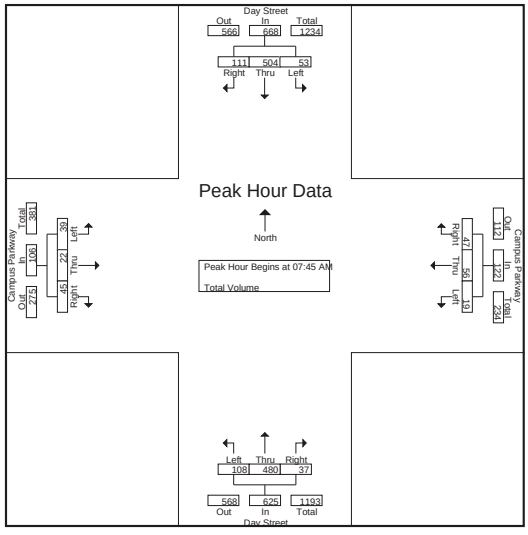
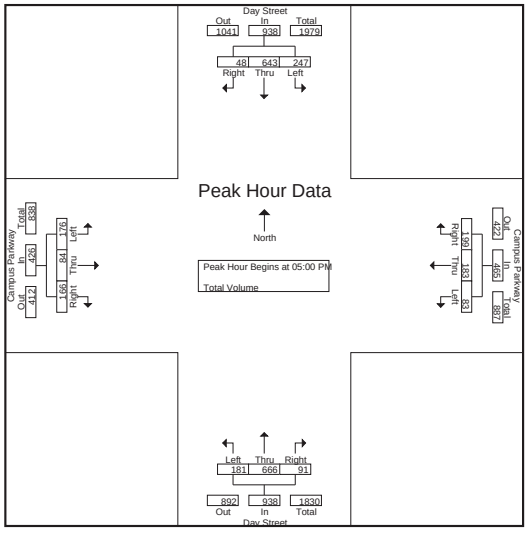


Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				07:15 AM				08:00 AM			
+0 mins.	11	**154**	**28**	**193**	3	10	4	17	20	124	2	146	8	5	9	22
+15 mins.	20	138	23	181	**6**	15	**17**	**38**	26	139	3	168	**13**	4	12	29
+30 mins.	12	120	21	153	4	**18**	14	36	**30**	**146**	**9**	**185**	11	**9**	12	**32**
+45 mins.	**29**	109	20	158	3	18	14	35	19	125	8	152	11	2	**18**	31
Total Volume	72	521	92	685	16	61	49	126	95	534	22	651	43	20	51	114
% App. Total	10.5	76.1	13.4		12.7	48.4	38.9		14.6	82	3.4		37.7	17.5	44.7	
PHF	.621	.846	.821	.887	.667	.847	.721	.829	.792	.914	.611	.880	.827	.556	.708	.891



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				04:45 PM				05:00 PM			
+0 mins.	61	154	**17**	232	**24**	39	40	103	36	164	26	226	46	17	39	102
+15 mins.	64	158	9	231	16	46	55	117	42	172	22	236	**47**	**25**	44	**116**
+30 mins.	**67**	161	11	**239**	22	48	42	112	39	153	22	214	40	22	34	96
+45 mins.	55	**170**	11	236	21	**50**	**62**	**133**	**58**	**188**	**28**	**274**	43	20	**49**	112
Total Volume	247	643	48	938	83	183	199	465	175	677	98	950	176	84	166	426
% App. Total	26.3	68.6	5.1		17.8	39.4	42.8		18.4	71.3	10.3		41.3	19.7	39	
PHF	.922	.946	.706	.981	.865	.915	.802	.874	.754	.900	.875	.867	.936	.840	.847	.918

INT ID: #9

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City of Moreno Valley
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Weather: Clear

File Name : MRVDAGAAM
Site Code : 05114445
Start Date : 11/5/2014
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Groups Printed- Total Volume

	Day Street Southbound				Gateway Drive Westbound				Day Street Northbound				Gateway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	12	49	8	69	5	19	16	40	3	84	8	95	6	5	2	13	217
07:15 AM	13	72	13	98	18	11	26	55	3	92	10	105	16	3	3	22	280
07:30 AM	13	83	19	115	11	15	26	52	5	107	10	122	17	6	5	28	317
07:45 AM	14	65	15	94	11	21	27	59	11	146	12	169	8	7	1	16	338
Total	52	269	55	376	45	66	95	206	22	429	40	491	47	21	11	79	1152
08:00 AM	19	90	19	128	8	18	18	44	13	111	14	138	15	9	6	30	340
08:15 AM	24	98	18	140	7	20	22	49	25	93	9	127	9	7	5	21	337
08:30 AM	20	68	21	109	6	24	31	61	14	96	11	121	18	12	6	36	327
08:45 AM	16	81	20	117	9	21	19	49	20	88	14	122	10	16	7	33	321
Total	79	337	78	494	30	83	90	203	72	388	48	508	52	44	24	120	1325
Grand Total	131	606	133	870	75	149	185	409	94	817	88	999	99	65	35	199	2477
Apprch %	15.1	69.7	15.3		18.3	36.4	45.2		9.4	81.8	8.8		49.7	32.7	17.6		
Total %	5.3	24.5	5.4	35.1	3	6	7.5	16.5	3.8	33	3.6	40.3	4	2.6	1.4	8	

	Day Street Southbound				Gateway Drive Westbound				Day Street Northbound				Gateway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	14	65	15	94	**11**	21	27	59	11	**146**	12	**169**	8	7	1	16	338
08:00 AM	19	90	19	128	8	18	18	44	13	111	**14**	138	15	9	**6**	30	**340**
08:15 AM	**24**	**98**	18	**140**	7	20	22	49	**25**	93	9	127	9	7	5	21	337
08:30 AM	20	68	**21**	109	6	**24**	**31**	**61**	14	96	11	121	**18**	**12**	6	**36**	327
Total Volume	77	321	73	471	32	83	98	213	63	446	46	555	50	35	18	103	1342
% App. Total	16.3	68.2	15.5		15	39	46		11.4	80.4	8.3		48.5	34	17.5		
PHF	.802	.819	.869	.841	.727	.865	.790	.873	.630	.764	.821	.821	.694	.729	.750	.715	.987

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City of Moreno Valley
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Weather: Clear

File Name : MRVDAGAPM
Site Code : 05114445
Start Date : 11/5/2014
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Groups Printed- Total Volume

	Day Street Southbound				Gateway Drive Westbound				Day Street Northbound				Gateway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	34	108	11	153	26	36	42	104	9	110	30	149	14	21	4	39	445
04:15 PM	47	93	12	152	37	35	49	121	9	120	38	167	18	24	8	50	490
04:30 PM	53	105	10	168	28	26	43	97	17	109	28	154	25	25	8	58	477
04:45 PM	54	111	10	175	30	26	42	98	14	105	34	153	20	29	13	62	488
Total	188	417	43	648	121	123	176	420	49	444	130	623	77	99	33	209	1900
05:00 PM	46	122	13	181	32	22	51	105	12	119	34	165	29	29	13	71	522
05:15 PM	54	145	5	204	27	27	48	102	11	129	27	167	19	31	11	61	534
05:30 PM	40	129	6	175	27	22	43	92	19	121	29	169	30	22	15	67	503
05:45 PM	61	144	11	216	29	28	38	95	15	129	25	169	11	23	13	47	527
Total	201	540	35	776	115	99	180	394	57	498	115	670	89	105	52	246	2086
Grand Total	389	957	78	1424	236	222	356	814	106	942	245	1293	166	204	85	455	3986
Apprch %	27.3	67.2	5.5		29	27.3	43.7		8.2	72.9	18.9		36.5	44.8	18.7		
Total %	9.8	24	2	35.7	5.9	5.6	8.9	20.4	2.7	23.6	6.1	32.4	4.2	5.1	2.1	11.4	

	Day Street Southbound				Gateway Drive Westbound				Day Street Northbound				Gateway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	46	122	**13**	181	**32**	22	**51**	**105**	12	119	**34**	165	29	29	13	**71**	522
05:15 PM	54	**145**	5	204	27	27	48	102	11	**129**	27	167	19	**31**	11	61	**534**
05:30 PM	40	129	6	175	27	22	43	92	**19**	121	29	**169**	**30**	22	**15**	67	503
05:45 PM	**61**	144	11	**216**	29	**28**	38	95	15	129	25	169	11	23	13	47	527
Total Volume	201	540	35	776	115	99	180	394	57	498	115	670	89	105	52	246	2086
% App. Total	25.9	69.6	4.5		29.2	25.1	45.7		8.5	74.3	17.2		36.2	42.7	21.1		
PHF	.824	.931	.673	.898	.898	.884	.882	.938	.750	.965	.846	.991	.742	.847	.867	.866	.977

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City of Moreno Valley
N/S: Day Street
E/W: Gateway Drive
Weather: Clear

File Name : MRVDAGAPM
Site Code : 05114445
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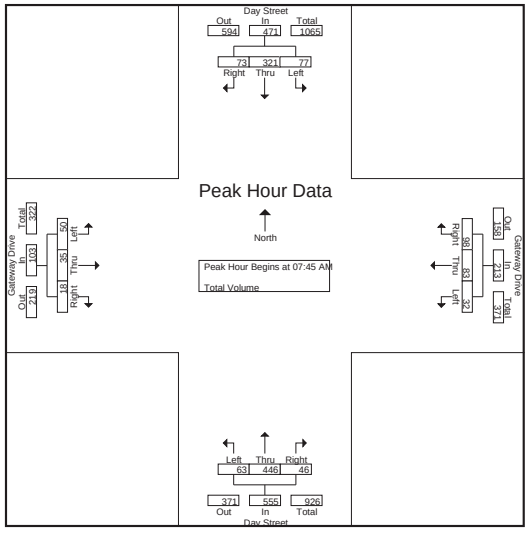
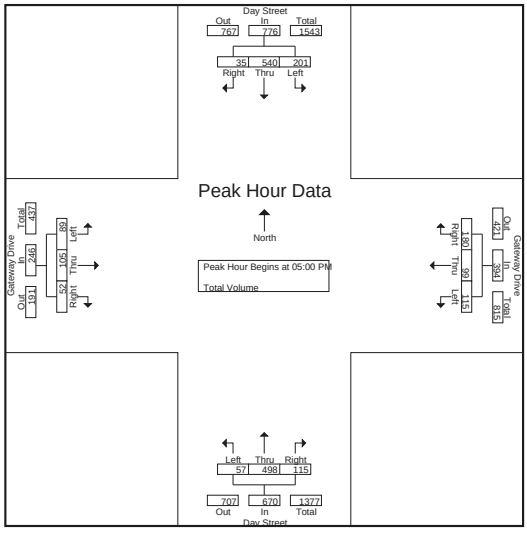


Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:45 AM				07:30 AM				08:00 AM			
+0 mins.	19	90	19	128	**11**	21	27	59	5	107	10	122	15	9	6	30
+15 mins.	**24**	**98**	18	**140**	8	18	18	44	11	**146**	12	**169**	9	7	5	21
+30 mins.	20	68	**21**	109	7	20	22	49	13	111	**14**	138	**18**	12	6	**36**
+45 mins.	16	81	20	117	6	**24**	**31**	**61**	**25**	93	9	127	10	**16**	**7**	33
Total Volume	79	337	78	494	32	83	98	213	54	457	45	556	52	44	24	120
% App. Total	16	68.2	15.8		15	39	46		9.7	82.2	8.1		43.3	36.7	20	
PHF	.823	.860	.929	.882	.727	.865	.790	.873	.540	.783	.804	.822	.722	.688	.857	.833



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				05:00 PM				04:45 PM			
+0 mins.	46	122	**13**	181	**37**	**35**	49	**121**	12	119	**34**	165	20	29	13	62
+15 mins.	54	**145**	5	204	28	26	43	97	11	**129**	27	167	29	29	13	**71**
+30 mins.	40	129	6	175	30	26	42	98	**19**	121	29	**169**	19	**31**	11	61
+45 mins.	**61**	144	11	**216**	32	22	**51**	105	15	129	25	169	**30**	22	**15**	67
Total Volume	201	540	35	776	127	109	185	421	57	498	115	670	98	111	52	261
% App. Total	25.9	69.6	4.5		30.2	25.9	43.9		8.5	74.3	17.2		37.5	42.5	19.9	
PHF	.824	.931	.673	.898	.858	.779	.907	.870	.750	.965	.846	.991	.817	.895	.867	.919

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City of Moreno Valley
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Weather: Clear

File Name : MRVDAEUAM
Site Code : 05114445
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Groups Printed- Total Volume

	Day Street Southbound				Eucalyptus Avenue Westbound				Day Street Northbound				Eucalyptus Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	33	23	61	1	89	18	108	30	53	2	85	26	18	8	52	306
07:15 AM	8	30	38	76	6	122	12	140	27	63	10	100	36	19	6	61	377
07:30 AM	11	30	53	94	2	124	23	149	39	66	8	113	44	33	14	91	447
07:45 AM	12	29	37	78	5	127	26	158	45	114	8	167	43	43	19	105	508
Total	36	122	151	309	14	462	79	555	141	296	28	465	149	113	47	309	1638
08:00 AM	21	38	38	97	6	110	31	147	67	81	8	156	32	52	21	105	505
08:15 AM	26	36	29	91	6	81	20	107	55	75	15	145	39	73	16	128	471
08:30 AM	12	38	25	75	11	82	31	124	32	78	3	113	30	54	12	96	408
08:45 AM	16	40	25	81	4	67	24	95	26	60	2	88	39	36	10	85	349
Total	75	152	117	344	27	340	106	473	180	294	28	502	140	215	59	414	1733
Grand Total	111	274	268	653	41	802	185	1028	321	590	56	967	289	328	106	723	3371
Apprch %	17	42	41		4	78	18		33.2	61	5.8		40	45.4	14.7		
Total %	3.3	8.1	8	19.4	1.2	23.8	5.5	30.5	9.5	17.5	1.7	28.7	8.6	9.7	3.1	21.4	

	Day Street Southbound				Eucalyptus Avenue Westbound				Day Street Northbound				Eucalyptus Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	11	30	**53**	94	2	124	23	149	39	66	8	113	**44**	33	14	91	447
07:45 AM	12	29	37	78	5	**127**	26	**158**	45	**114**	8	**167**	43	43	19	105	**508**
08:00 AM	21	**38**	38	**97**	**6**	110	**31**	147	**67**	81	8	156	32	52	**21**	105	505
08:15 AM	**26**	36	29	91	6	81	20	107	55	75	**15**	145	39	**73**	16	**128**	471
Total Volume	70	133	157	360	19	442	100	561	206	336	39	581	158	201	70	429	1931
% App. Total	19.4	36.9	43.6		3.4	78.8	17.8		35.5	57.8	6.7		36.8	46.9	16.3		
PHF	.673	.875	.741	.928	.792	.870	.806	.888	.769	.737	.650	.870	.898	.688	.833	.838	.950

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City of Moreno Valley
N/S: Day Street
E/W: Eucalyptus Avenue
Weather: Clear

File Name : MRVDAEUPM
Site Code : 05114445
Start Date : 11/5/2014
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Groups Printed- Total Volume

	Day Street Southbound				Eucalyptus Avenue Westbound				Day Street Northbound				Eucalyptus Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	27	63	50	140	6	66	33	105	9	68	7	84	50	109	23	182	511
04:15 PM	22	54	54	130	10	75	18	103	18	76	10	104	62	112	22	196	533
04:30 PM	25	70	45	140	7	101	32	140	15	78	9	102	58	120	22	200	582
04:45 PM	22	76	45	143	14	93	23	130	16	72	9	97	71	117	19	207	577
Total	96	263	194	553	37	335	106	478	58	294	35	387	241	458	86	785	2203
05:00 PM	31	93	68	192	6	98	31	135	17	71	13	101	50	121	32	203	631
05:15 PM	27	93	46	166	8	81	24	113	10	92	9	111	67	150	38	255	645
05:30 PM	44	90	46	180	10	73	49	132	28	80	4	112	56	147	51	254	678
05:45 PM	32	100	59	191	7	78	29	114	21	80	7	108	56	110	43	209	622
Total	134	376	219	729	31	330	133	494	76	323	33	432	229	528	164	921	2576
Grand Total	230	639	413	1282	68	665	239	972	134	617	68	819	470	986	250	1706	4779
Apprch %	17.9	49.8	32.2		7	68.4	24.6		16.4	75.3	8.3		27.5	57.8	14.7		
Total %	4.8	13.4	8.6	26.8	1.4	13.9	5	20.3	2.8	12.9	1.4	17.1	9.8	20.6	5.2	35.7	

	Day Street Southbound				Eucalyptus Avenue Westbound				Day Street Northbound				Eucalyptus Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	31	93	**68**	**192**	6	**98**	31	**135**	17	71	**13**	101	50	121	32	203	631
05:15 PM	27	93	46	166	8	81	24	113	10	**92**	9	111	**67**	**150**	38	**255**	645
05:30 PM	**44**	90	46	180	**10**	73	**49**	132	**28**	80	4	**112**	56	147	**51**	254	**678**
05:45 PM	32	**100**	59	191	7	78	29	114	21	80	7	108	56	110	43	209	622
Total Volume	134	376	219	729	31	330	133	494	76	323	33	432	229	528	164	921	2576
% App. Total	18.4	51.6	30		6.3	66.8	26.9		17.6	74.8	7.6		24.9	57.3	17.8		
PHF	.761	.940	.805	.949	.775	.842	.679	.915	.679	.878	.635	.964	.854	.880	.804	.903	.950

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City of Moreno Valley
N/S: Day Street
E/W: Eucalyptus Avenue
Weather: Clear

File Name : MRVDAEUAM
Site Code : 05114445
Start Date : 11/5/2014
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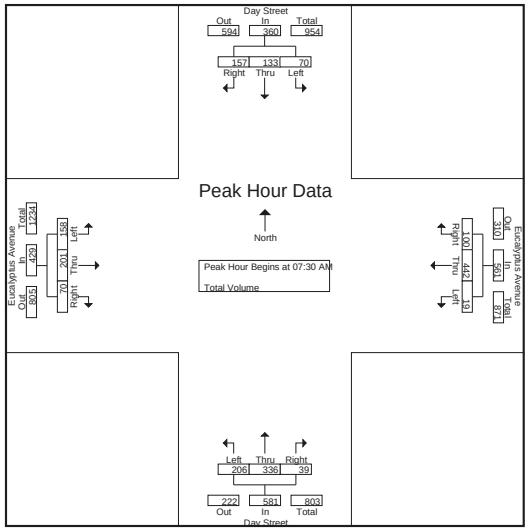

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:15 AM				07:30 AM				07:45 AM			
+0 mins.	11	30	**53**	94	**6**	122	12	140	39	66	8	113	**43**	43	19	105
+15 mins.	12	29	37	78	2	124	23	149	45	**114**	8	**167**	32	52	**21**	105
+30 mins.	21	**38**	38	**97**	5	**127**	26	**158**	**67**	81	8	156	39	**73**	16	**128**
+45 mins.	**26**	36	29	91	6	110	**31**	147	55	75	**15**	145	30	54	12	96
Total Volume	70	133	157	360	19	483	92	594	206	336	39	581	144	222	68	434
% App. Total	19.4	36.9	43.6		3.2	81.3	15.5		35.5	57.8	6.7		33.2	51.2	15.7	
PHF	.673	.875	.741	.928	.792	.951	.742	.940	.769	.737	.650	.870	.837	.760	.810	.848

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File Name : MRVDAEUPM
Site Code : 05114445
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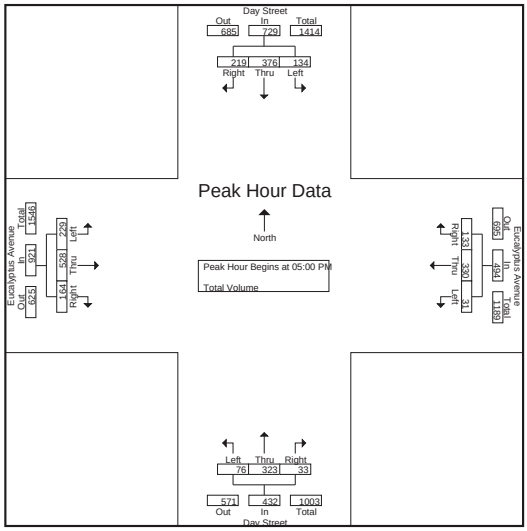

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:30 PM				05:00 PM				05:00 PM			
+0 mins.	31	93	**68**	**192**	7	**101**	**32**	**140**	17	71	**13**	101	50	121	32	203
+15 mins.	27	93	46	166	**14**	93	23	130	10	**92**	9	111	**67**	**150**	38	**255**
+30 mins.	**44**	90	46	180	6	98	31	135	**28**	80	4	**112**	56	147	**51**	254
+45 mins.	32	**100**	59	191	8	81	24	113	21	80	7	108	56	110	43	209
Total Volume	134	376	219	729	35	373	110	518	76	323	33	432	229	528	164	921
% App. Total	18.4	51.6	30		6.8	72	21.2		17.6	74.8	7.6		24.9	57.3	17.8	
PHF	.761	.940	.805	.949	.625	.923	.859	.925	.679	.878	.635	.964	.854	.880	.804	.903

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City of Moreno Valley
N/S: Day Street
E/W: Cottonwood Avenue
Weather: Clear

File Name : MRVDACOAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Day Street Southbound				Cottonwood Avenue Westbound				Day Street Northbound				Cottonwood Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	10	26	5	41	3	29	15	47	0	44	1	45	6	12	0	18	151
07:15 AM	13	28	7	48	5	32	13	50	1	46	2	49	5	11	1	17	164
07:30 AM	20	30	6	56	4	19	33	56	0	50	1	51	7	17	1	25	188
07:45 AM	17	36	4	57	6	30	27	63	1	107	3	111	2	21	2	25	256
Total	60	120	22	202	18	110	88	216	2	247	7	256	20	61	4	85	759
08:00 AM	22	43	8	73	4	28	34	66	2	93	5	100	12	16	0	28	267
08:15 AM	23	30	6	59	5	22	37	64	0	71	1	72	12	20	1	33	228
08:30 AM	17	35	5	57	1	17	23	41	0	56	2	58	3	17	0	20	176
08:45 AM	21	27	5	53	3	33	24	60	1	51	0	52	2	12	0	14	179
Total	83	135	24	242	13	100	118	231	3	271	8	282	29	65	1	95	850
Grand Total	143	255	46	444	31	210	206	447	5	518	15	538	49	126	5	180	1609
Apprch %	32.2	57.4	10.4		6.9	47	46.1		0.9	96.3	2.8		27.2	70	2.8		
Total %	8.9	15.8	2.9	27.6	1.9	13.1	12.8	27.8	0.3	32.2	0.9	33.4	3	7.8	0.3	11.2	

	Day Street Southbound				Cottonwood Avenue Westbound				Day Street Northbound				Cottonwood Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	20	30	6	56	4	19	33	56	0	50	1	51	7	17	1	25	188
07:45 AM	17	36	4	57	**6**	**30**	27	63	1	**107**	3	**111**	2	**21**	**2**	25	256
08:00 AM	22	**43**	**8**	**73**	4	28	34	**66**	**2**	93	**5**	100	**12**	16	0	28	**267**
08:15 AM	**23**	30	6	59	5	22	**37**	64	0	71	1	72	12	20	1	**33**	228
Total Volume	82	139	24	245	19	99	131	249	3	321	10	334	33	74	4	111	939
% App. Total	33.5	56.7	9.8		7.6	39.8	52.6		0.9	96.1	3		29.7	66.7	3.6		
PHF	.891	.808	.750	.839	.792	.825	.885	.943	.375	.750	.500	.752	.688	.881	.500	.841	.879

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City of Moreno Valley
N/S: Day Street
E/W: Cottonwood Avenue
Weather: Clear

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Site Code : 05114445
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Groups Printed- Total Volume

	Day Street Southbound				Cottonwood Avenue Westbound				Day Street Northbound				Cottonwood Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	27	44	4	75	3	12	19	34	1	49	3	53	4	22	3	29	191
04:15 PM	24	40	1	65	5	7	22	34	3	61	3	67	7	21	0	28	194
04:30 PM	29	53	10	92	0	23	26	49	3	67	3	73	3	7	0	10	224
04:45 PM	35	63	7	105	3	20	30	53	3	64	2	69	7	19	1	27	254
Total	115	200	22	337	11	62	97	170	10	241	11	262	21	69	4	94	863
05:00 PM	35	56	6	97	3	18	25	46	2	64	6	72	3	22	1	26	241
05:15 PM	36	68	4	108	0	16	29	45	4	56	2	62	8	22	3	33	248
05:30 PM	39	86	4	129	5	26	26	57	2	69	6	77	5	23	4	32	295
05:45 PM	34	73	6	113	1	17	23	41	3	60	3	66	4	22	2	28	248
Total	144	283	20	447	9	77	103	189	11	249	17	277	20	89	10	119	1032
Grand Total	259	483	42	784	20	139	200	359	21	490	28	539	41	158	14	213	1895
Apprch %	33	61.6	5.4		5.6	38.7	55.7		3.9	90.9	5.2		19.2	74.2	6.6		
Total %	13.7	25.5	2.2	41.4	1.1	7.3	10.6	18.9	1.1	25.9	1.5	28.4	2.2	8.3	0.7	11.2	

	Day Street Southbound				Cottonwood Avenue Westbound				Day Street Northbound				Cottonwood Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	35	63	**7**	105	3	20	**30**	53	3	64	2	69	7	19	1	27	254
05:00 PM	35	56	6	97	3	18	25	46	2	64	**6**	72	3	22	1	26	241
05:15 PM	36	68	4	108	0	16	29	45	**4**	56	2	62	**8**	22	3	**33**	248
05:30 PM	**39**	**86**	4	**129**	**5**	**26**	26	**57**	2	**69**	6	**77**	5	**23**	**4**	32	**295**
Total Volume	145	273	21	439	11	80	110	201	11	253	16	280	23	86	9	118	1038
% App. Total	33	62.2	4.8		5.5	39.8	54.7		3.9	90.4	5.7		19.5	72.9	7.6		
PHF	.929	.794	.750	.851	.550	.769	.917	.882	.688	.917	.667	.909	.719	.935	.563	.894	.880

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City of Moreno Valley
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Weather: Clear

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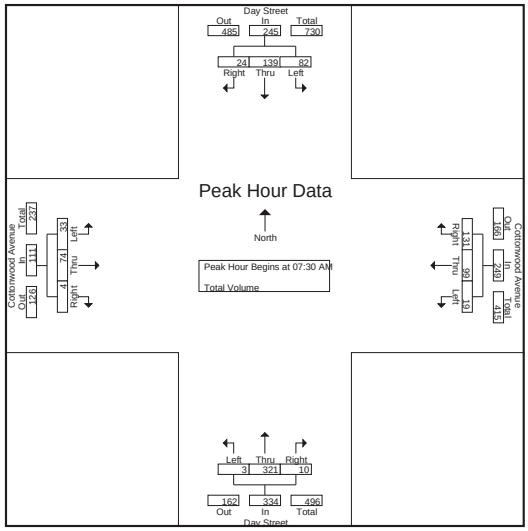

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:30 AM				07:45 AM				07:30 AM			
+0 mins.	17	36	4	57	4	19	33	56	1	**107**	3	**111**	7	17	1	25
+15 mins.	22	**43**	**8**	**73**	**6**	**30**	27	63	**2**	93	**5**	100	2	**21**	**2**	25
+30 mins.	**23**	30	6	59	4	28	34	**66**	0	71	1	72	**12**	16	0	28
+45 mins.	17	35	5	57	5	22	**37**	64	0	56	2	58	12	20	1	**33**
Total Volume	79	144	23	246	19	99	131	249	3	327	11	341	33	74	4	111
% App. Total	32.1	58.5	9.3		7.6	39.8	52.6		0.9	95.9	3.2		29.7	66.7	3.6	
PHF	.859	.837	.719	.842	.792	.825	.885	.943	.375	.764	.550	.768	.688	.881	.500	.841

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City of Moreno Valley
N/S: Day Street
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Weather: Clear

File Name : MRVDACOPM
Site Code : 05114445
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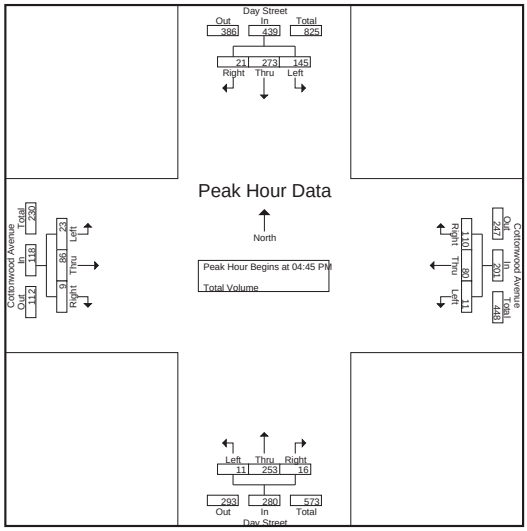

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:45 PM				04:15 PM				05:00 PM			
+0 mins.	35	56	**6**	97	3	20	**30**	53	**3**	61	3	67	3	22	1	26
+15 mins.	36	68	4	108	3	18	25	46	3	**67**	3	**73**	**8**	22	3	**33**
+30 mins.	**39**	**86**	4	**129**	0	16	29	45	3	64	2	69	5	**23**	**4**	32
+45 mins.	34	73	6	113	**5**	**26**	26	**57**	2	64	**6**	72	4	22	2	28
Total Volume	144	283	20	447	11	80	110	201	11	256	14	281	20	89	10	119
% App. Total	32.2	63.3	4.5		5.5	39.8	54.7		3.9	91.1	5		16.8	74.8	8.4	
PHF	.923	.823	.833	.866	.550	.769	.917	.882	.917	.955	.583	.962	.625	.967	.625	.902

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City of Moreno Valley
N/S: Day Street
E/W: Bay Avenue
Weather: Clear

File Name : MRVDABAAM
Site Code : 05114445
Start Date : 11/5/2014
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Groups Printed- Total Volume

	Day Street Southbound				Bay Avenue Westbound				Day Street Northbound				Bay Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	4	22	1	27	3	7	4	14	1	36	1	38	1	5	2	8	87
07:15 AM	6	31	1	38	2	9	3	14	1	44	0	45	1	4	1	6	103
07:30 AM	2	29	1	32	4	8	6	18	0	47	0	47	0	1	2	3	100
07:45 AM	2	43	1	46	3	5	16	24	1	96	1	98	2	6	3	11	179
Total	14	125	4	143	12	29	29	70	3	223	2	228	4	16	8	28	469
08:00 AM	9	33	2	44	0	6	16	22	4	77	0	81	5	8	6	19	166
08:15 AM	1	30	0	31	1	5	11	17	1	58	0	59	2	6	5	13	120
08:30 AM	4	31	2	37	3	6	4	13	0	52	0	52	0	7	2	9	111
08:45 AM	3	28	0	31	0	12	2	14	1	49	0	50	0	0	0	0	95
Total	17	122	4	143	4	29	33	66	6	236	0	242	7	21	13	41	492
Grand Total	31	247	8	286	16	58	62	136	9	459	2	470	11	37	21	69	961
Apprch %	10.8	86.4	2.8		11.8	42.6	45.6		1.9	97.7	0.4		15.9	53.6	30.4		
Total %	3.2	25.7	0.8	29.8	1.7	6	6.5	14.2	0.9	47.8	0.2	48.9	1.1	3.9	2.2	7.2	

	Day Street Southbound				Bay Avenue Westbound				Day Street Northbound				Bay Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	2	**43**	1	**46**	**3**	5	**16**	**24**	1	**96**	**1**	**98**	2	6	3	11	**179**
08:00 AM	**9**	33	**2**	44	0	**6**	16	22	**4**	77	0	81	**5**	**8**	**6**	**19**	166
08:15 AM	1	30	0	31	1	5	11	17	1	58	0	59	2	6	5	13	120
08:30 AM	4	31	2	37	3	6	4	13	0	52	0	52	0	7	2	9	111
Total Volume	16	137	5	158	7	22	47	76	6	283	1	290	9	27	16	52	576
% App. Total	10.1	86.7	3.2		9.2	28.9	61.8		2.1	97.6	0.3		17.3	51.9	30.8		
PHF	.444	.797	.625	.859	.583	.917	.734	.792	.375	.737	.250	.740	.450	.844	.667	.684	.804

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Weather: Clear

File Name : MRVDABAPM
Site Code : 05114445
Start Date : 11/5/2014
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Groups Printed- Total Volume

	Day Street Southbound				Bay Avenue Westbound				Day Street Northbound				Bay Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	45	0	46	1	3	6	10	3	47	4	54	1	6	1	8	118
04:15 PM	4	40	2	46	4	2	5	11	0	60	0	60	4	4	1	9	126
04:30 PM	7	42	1	50	1	2	2	5	1	65	4	70	1	5	1	7	132
04:45 PM	7	55	3	65	4	6	6	16	1	58	2	61	3	7	2	12	154
Total	19	182	6	207	10	13	19	42	5	230	10	245	9	22	5	36	530
05:00 PM	5	55	2	62	2	7	7	16	3	58	1	62	1	12	7	20	160
05:15 PM	4	71	1	76	4	7	3	14	2	54	1	57	5	9	3	17	164
05:30 PM	1	79	1	81	2	2	4	8	4	73	2	79	2	15	1	18	186
05:45 PM	9	74	2	85	1	6	4	11	3	58	1	62	0	5	2	7	165
Total	19	279	6	304	9	22	18	49	12	243	5	260	8	41	13	62	675
Grand Total	38	461	12	511	19	35	37	91	17	473	15	505	17	63	18	98	1205
Apprch %	7.4	90.2	2.3		20.9	38.5	40.7		3.4	93.7	3		17.3	64.3	18.4		
Total %	3.2	38.3	1	42.4	1.6	2.9	3.1	7.6	1.4	39.3	1.2	41.9	1.4	5.2	1.5	8.1	

	Day Street Southbound				Bay Avenue Westbound				Day Street Northbound				Bay Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	5	55	**2**	62	2	**7**	**7**	**16**	3	58	1	62	1	12	**7**	**20**	160
05:15 PM	4	71	1	76	**4**	7	3	14	2	54	1	57	**5**	9	3	17	164
05:30 PM	1	**79**	1	81	2	2	4	8	**4**	**73**	**2**	**79**	2	**15**	1	18	**186**
05:45 PM	**9**	74	2	**85**	1	6	4	11	3	58	1	62	0	5	2	7	165
Total Volume	19	279	6	304	9	22	18	49	12	243	5	260	8	41	13	62	675
% App. Total	6.2	91.8	2		18.4	44.9	36.7		4.6	93.5	1.9		12.9	66.1	21		
PHF	.528	.883	.750	.894	.563	.786	.643	.766	.750	.832	.625	.823	.400	.683	.464	.775	.907

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City of Moreno Valley
N/S: Day Street
E/W: Bay Avenue
Weather: Clear

File Name : MRVDABAPM
Site Code : 05114445
Start Date : 11/5/2014
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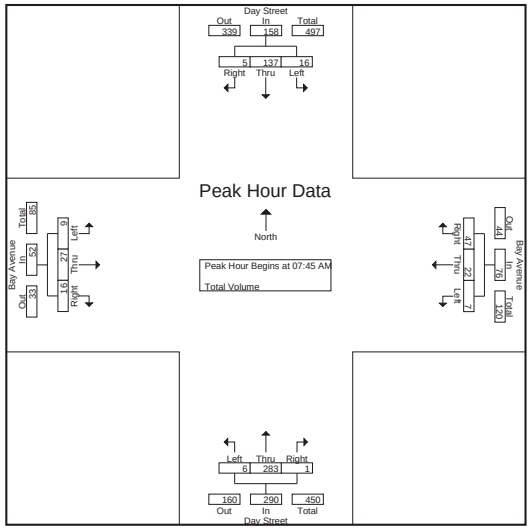

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				07:45 AM				07:45 AM			
+0 mins.	6	31	1	38	**4**	**8**	6	18	1	**96**	**1**	**98**	2	6	3	11
+15 mins.	2	29	1	32	3	5	**16**	**24**	**4**	77	0	81	**5**	**8**	**6**	**19**
+30 mins.	2	**43**	1	**46**	0	6	16	22	1	58	0	59	2	6	5	13
+45 mins.	**9**	33	**2**	44	1	5	11	17	0	52	0	52	0	7	2	9
Total Volume	19	136	5	160	8	24	49	81	6	283	1	290	9	27	16	52
% App. Total	11.9	85	3.1		9.9	29.6	60.5		2.1	97.6	0.3		17.3	51.9	30.8	
PHF	.528	.791	.625	.870	.500	.750	.766	.844	.375	.737	.250	.740	.450	.844	.667	.684

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City of Moreno Valley
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File Name : MRVDABAPM
Site Code : 05114445
Start Date : 11/5/2014
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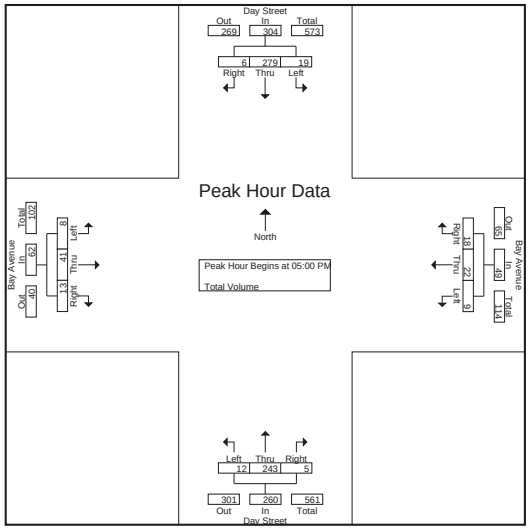

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:45 PM				05:00 PM				04:45 PM			
+0 mins.	5	55	**2**	62	**4**	6	6	**16**	3	58	1	62	3	7	2	12
+15 mins.	4	71	1	76	2	**7**	**7**	16	2	54	1	57	1	12	**7**	**20**
+30 mins.	1	**79**	1	81	4	7	3	14	**4**	**73**	**2**	**79**	**5**	9	3	17
+45 mins.	**9**	74	2	**85**	2	2	4	8	3	58	1	62	2	**15**	1	18
Total Volume	19	279	6	304	12	22	20	54	12	243	5	260	11	43	13	67
% App. Total	6.2	91.8	2		22.2	40.7	37		4.6	93.5	1.9		16.4	64.2	19.4	
PHF	.528	.883	.750	.894	.750	.786	.714	.844	.750	.832	.625	.823	.550	.717	.464	.838

INT ID: #15

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City of Moreno Valley
N/S: Day Street
E/W: Alessandro Boulevard
Weather: Clear

File Name : MRVDAALAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Day Street Southbound				Alessandro Boulevard Westbound				Day Street Northbound				Alessandro Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	11	2	21	34	2	246	12	260	3	4	4	11	25	104	1	130	435
07:15 AM	17	1	21	39	1	313	10	324	4	11	6	21	27	166	1	194	578
07:30 AM	14	2	15	31	0	280	12	292	4	5	3	12	32	162	3	197	532
07:45 AM	21	4	20	45	0	250	36	286	3	11	2	16	49	192	4	245	592
Total	63	9	77	149	3	1089	70	1162	14	31	15	60	133	624	9	766	2137
08:00 AM	20	4	10	34	3	214	35	252	3	8	7	18	36	175	7	218	522
08:15 AM	14	2	14	30	0	204	15	219	1	10	1	12	26	179	2	207	468
08:30 AM	11	1	22	34	1	192	14	207	2	3	1	6	36	173	0	209	456
08:45 AM	15	2	11	28	0	160	22	182	2	5	3	10	20	152	3	175	395
Total	60	9	57	126	4	770	86	860	8	26	12	46	118	679	12	809	1841
Grand Total	123	18	134	275	7	1859	156	2022	22	57	27	106	251	1303	21	1575	3978
Apprch %	44.7	6.5	48.7		0.3	91.9	7.7		20.8	53.8	25.5		15.9	82.7	1.3		
Total %	3.1	0.5	3.4	6.9	0.2	46.7	3.9	50.8	0.6	1.4	0.7	2.7	6.3	32.8	0.5	39.6	

	Day Street Southbound				Alessandro Boulevard Westbound				Day Street Northbound				Alessandro Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	17	1	**21**	39	1	**313**	10	**324**	**4**	**11**	6	**21**	27	166	1	194	578
07:30 AM	14	2	15	31	0	280	12	292	4	5	3	12	32	162	3	197	532
07:45 AM	**21**	**4**	20	**45**	0	250	**36**	286	3	11	2	16	**49**	**192**	4	**245**	**592**
08:00 AM	20	4	10	34	**3**	214	35	252	3	8	**7**	18	36	175	**7**	218	522
Total Volume	72	11	66	149	4	1057	93	1154	14	35	18	67	144	695	15	854	2224
% App. Total	48.3	7.4	44.3		0.3	91.6	8.1		20.9	52.2	26.9		16.9	81.4	1.8		
PHF	.857	.688	.786	.828	.333	.844	.646	.890	.875	.795	.643	.798	.735	.905	.536	.871	.939

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City of Moreno Valley
N/S: Day Street
E/W: Alessandro Boulevard
Weather: Clear

File Name : MRVDAALPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Day Street Southbound				Alessandro Boulevard Westbound				Day Street Northbound				Alessandro Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	27	7	8	42	2	208	31	241	4	1	7	12	20	244	4	268	563
04:15 PM	21	9	19	49	1	178	31	210	5	6	3	14	22	260	2	284	557
04:30 PM	25	5	18	48	3	171	33	207	3	6	3	12	30	255	3	288	555
04:45 PM	45	2	10	57	0	188	36	224	4	3	3	10	33	273	2	308	599
Total	118	23	55	196	6	745	131	882	16	16	16	48	105	1032	11	1148	2274
05:00 PM	38	8	23	69	1	247	30	278	3	4	1	8	23	299	3	325	680
05:15 PM	48	5	26	79	1	178	24	203	4	4	2	10	38	277	0	315	607
05:30 PM	46	5	22	73	2	192	30	224	0	3	1	4	33	344	0	377	678
05:45 PM	58	11	12	81	1	156	32	189	0	2	1	3	33	291	0	324	597
Total	190	29	83	302	5	773	116	894	7	13	5	25	127	1211	3	1341	2562
Grand Total	308	52	138	498	11	1518	247	1776	23	29	21	73	232	2243	14	2489	4836
Apprch %	61.8	10.4	27.7		0.6	85.5	13.9		31.5	39.7	28.8		9.3	90.1	0.6		
Total %	6.4	1.1	2.9	10.3	0.2	31.4	5.1	36.7	0.5	0.6	0.4	1.5	4.8	46.4	0.3	51.5	

	Day Street Southbound				Alessandro Boulevard Westbound				Day Street Northbound				Alessandro Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	45	2	10	57	0	188	**36**	224	**4**	3	**3**	**10**	33	273	2	308	599
05:00 PM	38	**8**	23	69	1	**247**	30	**278**	3	**4**	1	8	23	299	**3**	325	**680**
05:15 PM	**48**	5	**26**	**79**	1	178	24	203	4	4	2	10	**38**	277	0	315	607
05:30 PM	46	5	22	73	**2**	192	30	224	0	3	1	4	33	**344**	0	**377**	678
Total Volume	177	20	81	278	4	805	120	929	11	14	7	32	127	1193	5	1325	2564
% App. Total	63.7	7.2	29.1		0.4	86.7	12.9		34.4	43.8	21.9		9.6	90	0.4		
PHF	.922	.625	.779	.880	.500	.815	.833	.835	.688	.875	.583	.800	.836	.867	.417	.879	.943

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City of Moreno Valley
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File Name : MRVDAALAM
Site Code : 05114445
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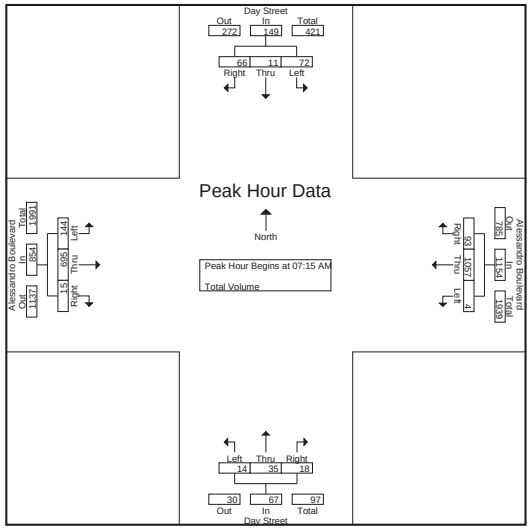

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:15 AM				07:45 AM			
+0 mins.	11	2	**21**	34	**2**	246	12	260	**4**	**11**	6	**21**	**49**	**192**	4	**245**
+15 mins.	17	1	21	39	1	**313**	10	**324**	4	5	3	12	36	175	**7**	218
+30 mins.	14	2	15	31	0	280	12	292	3	11	2	16	26	179	2	207
+45 mins.	**21**	**4**	20	**45**	0	250	**36**	286	3	8	**7**	18	36	173	0	209
Total Volume	63	9	77	149	3	1089	70	1162	14	35	18	67	147	719	13	879
% App. Total	42.3	6	51.7		0.3	93.7	6		20.9	52.2	26.9		16.7	81.8	1.5	
PHF	.750	.563	.917	.828	.375	.870	.486	.897	.875	.795	.643	.798	.750	.936	.464	.897

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City of Moreno Valley
N/S: Day Street
E/W: Alessandro Boulevard
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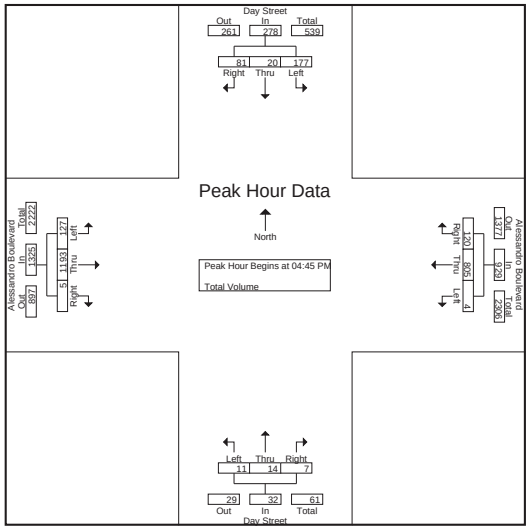
File Name : MRVDAALPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:45 PM				04:00 PM				05:00 PM			
+0 mins.	38	8	23	69	0	188	**36**	224	4	1	**7**	12	23	299	**3**	325
+15 mins.	48	5	**26**	79	1	**247**	30	**278**	**5**	**6**	3	**14**	**38**	277	0	315
+30 mins.	46	5	22	73	1	178	24	203	3	6	3	12	33	**344**	0	**377**
+45 mins.	**58**	**11**	12	**81**	**2**	192	30	224	4	3	3	10	33	291	0	324
Total Volume	190	29	83	302	4	805	120	929	16	16	16	48	127	1211	3	1341
% App. Total	62.9	9.6	27.5		0.4	86.7	12.9		33.3	33.3	33.3		9.5	90.3	0.2	
PHF	.819	.659	.798	.932	.500	.815	.833	.835	.800	.667	.571	.857	.836	.880	.250	.889

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City of Moreno Valley
N/S: Memorial Way / Eucalyptus Avenue
E/W: Eucalyptus Avenue / Towngate Drive
Weather: Clear

File Name : MRVEUTOAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Memorial Way Southbound				Towngate Drive Westbound				Eucalyptus Avenue Northbound				Eucalyptus Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	10	7	19	3	32	4	39	52	15	0	67	7	19	5	31	156
07:15 AM	1	17	9	27	2	50	6	58	58	28	2	88	3	17	14	34	207
07:30 AM	2	16	15	33	2	50	5	57	56	50	7	113	5	36	18	59	262
07:45 AM	0	24	18	42	2	52	4	58	67	52	4	123	8	37	20	65	288
Total	5	67	49	121	9	184	19	212	233	145	13	391	23	109	57	189	913
08:00 AM	4	24	4	32	1	44	9	54	50	28	5	83	6	48	18	72	241
08:15 AM	5	16	10	31	4	43	8	55	52	41	4	97	16	52	45	113	296
08:30 AM	5	18	10	33	2	36	9	47	52	39	2	93	9	43	40	92	265
08:45 AM	4	26	7	37	5	36	8	49	47	36	5	88	8	32	13	53	227
Total	18	84	31	133	12	159	34	205	201	144	16	361	39	175	116	330	1029
Grand Total	23	151	80	254	21	343	53	417	434	289	29	752	62	284	173	519	1942
Apprch %	9.1	59.4	31.5		5	82.3	12.7		57.7	38.4	3.9		11.9	54.7	33.3		
Total %	1.2	7.8	4.1	13.1	1.1	17.7	2.7	21.5	22.3	14.9	1.5	38.7	3.2	14.6	8.9	26.7	

	Memorial Way Southbound				Towngate Drive Westbound				Eucalyptus Avenue Northbound				Eucalyptus Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	**24**	**18**	**42**	2	**52**	4	**58**	**67**	**52**	4	**123**	8	37	20	65	288
08:00 AM	4	24	4	32	1	44	**9**	54	50	28	**5**	83	6	48	18	72	241
08:15 AM	**5**	16	10	31	**4**	43	8	55	52	41	4	97	**16**	**52**	**45**	**113**	**296**
08:30 AM	5	18	10	33	2	36	9	47	52	39	2	93	9	43	40	92	265
Total Volume	14	82	42	138	9	175	30	214	221	160	15	396	39	180	123	342	1090
% App. Total	10.1	59.4	30.4		4.2	81.8	14		55.8	40.4	3.8		11.4	52.6	36		
PHF	.700	.854	.583	.821	.563	.841	.833	.922	.825	.769	.750	.805	.609	.865	.683	.757	.921

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City of Moreno Valley
N/S: Memorial Way / Eucalyptus Avenue
E/W: Eucalyptus Avenue / Towngate Drive
Weather: Clear

File Name : MRVEUTOPM
Site Code : 05114445
Start Date : 11/5/2014
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Groups Printed- Total Volume

	Memorial Way Southbound				Towngate Drive Westbound				Eucalyptus Avenue Northbound				Eucalyptus Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	6	47	10	63	1	43	14	58	34	68	6	108	27	53	41	121	350
04:15 PM	17	59	21	97	4	43	16	63	31	55	5	91	18	62	43	123	374
04:30 PM	5	80	20	105	4	78	18	100	32	75	7	114	31	68	49	148	467
04:45 PM	11	72	24	107	6	52	15	73	46	63	7	116	32	41	47	120	416
Total	39	258	75	372	15	216	63	294	143	261	25	429	108	224	180	512	1607
05:00 PM	15	63	16	94	10	66	17	93	27	67	3	97	19	67	63	149	433
05:15 PM	22	56	21	99	6	44	11	61	48	60	3	111	33	84	54	171	442
05:30 PM	12	68	14	94	9	51	13	73	41	61	7	109	19	86	59	164	440
05:45 PM	15	59	12	86	4	53	9	66	34	58	10	102	19	57	62	138	392
Total	64	246	63	373	29	214	50	293	150	246	23	419	90	294	238	622	1707
Grand Total	103	504	138	745	44	430	113	587	293	507	48	848	198	518	418	1134	3314
Apprch %	13.8	67.7	18.5		7.5	73.3	19.3		34.6	59.8	5.7		17.5	45.7	36.9		
Total %	3.1	15.2	4.2	22.5	1.3	13	3.4	17.7	8.8	15.3	1.4	25.6	6	15.6	12.6	34.2	

	Memorial Way Southbound				Towngate Drive Westbound				Eucalyptus Avenue Northbound				Eucalyptus Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	5	**80**	20	105	4	**78**	**18**	**100**	32	**75**	**7**	114	31	68	49	148	**467**
04:45 PM	11	72	**24**	**107**	6	52	15	73	46	63	7	**116**	32	41	47	120	416
05:00 PM	15	63	16	94	**10**	66	17	93	27	67	3	97	19	67	**63**	149	433
05:15 PM	**22**	56	21	99	6	44	11	61	**48**	60	3	111	**33**	**84**	54	**171**	442
Total Volume	53	271	81	405	26	240	61	327	153	265	20	438	115	260	213	588	1758
% App. Total	13.1	66.9	20		8	73.4	18.7		34.9	60.5	4.6		19.6	44.2	36.2		
PHF	.602	.847	.844	.946	.650	.769	.847	.818	.797	.883	.714	.944	.871	.774	.845	.860	.941

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City of Moreno Valley
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Weather: Clear

File Name : MRVEUTOAM
Site Code : 05114445
Start Date : 11/5/2014
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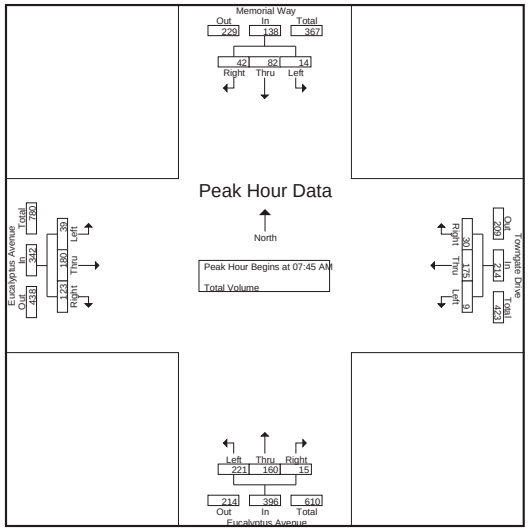

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:15 AM				07:30 AM				07:45 AM			
+0 mins.	2	16	15	33	**2**	50	6	**58**	56	50	**7**	113	8	37	20	65
+15 mins.	0	**24**	**18**	**42**	2	50	5	57	**67**	**52**	4	**123**	6	48	18	72
+30 mins.	4	24	4	32	2	**52**	4	58	50	28	5	83	**16**	**52**	**45**	**113**
+45 mins.	**5**	16	10	31	1	44	**9**	54	52	41	4	97	9	43	40	92
Total Volume	11	80	47	138	7	196	24	227	225	171	20	416	39	180	123	342
% App. Total	8	58	34.1		3.1	86.3	10.6		54.1	41.1	4.8		11.4	52.6	36	
PHF	.550	.833	.653	.821	.875	.942	.667	.978	.840	.822	.714	.846	.609	.865	.683	.757

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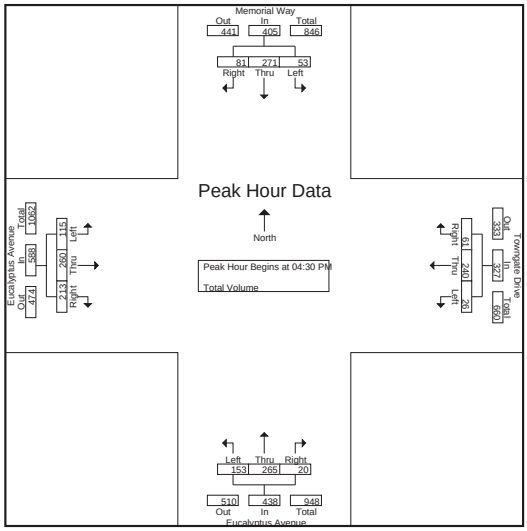
City of Moreno Valley
N/S: Memorial Way / Eucalyptus Avenue
E/W: Eucalyptus Avenue / Towngate Drive
Weather: Clear

File Name : MRVEUTOPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:15 PM				04:30 PM				05:00 PM			
+0 mins.	5	**80**	20	105	4	43	16	63	32	**75**	**7**	114	19	67	**63**	149
+15 mins.	11	72	**24**	**107**	4	**78**	**18**	**100**	46	63	7	**116**	**33**	84	54	**171**
+30 mins.	15	63	16	94	6	52	15	73	27	67	3	97	19	**86**	59	164
+45 mins.	**22**	56	21	99	**10**	66	17	93	**48**	60	3	111	19	57	62	138
Total Volume	53	271	81	405	24	239	66	329	153	265	20	438	90	294	238	622
% App. Total	13.1	66.9	20		7.3	72.6	20.1		34.9	60.5	4.6		14.5	47.3	38.3	
PHF	.602	.847	.844	.946	.600	.766	.917	.823	.797	.883	.714	.944	.682	.855	.944	.909

INT ID: #17

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City of Riverside
N/S: Corporate Centre Place
E/W: Canyon Springs Parkway
Weather: Clear

File Name : RIVCCCSAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Corporate Centre Place Southbound				Canyon Springs Parkway Westbound				Corporate Centre Place Northbound				Canyon Springs Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	2	2	6	4	29	2	35	0	0	3	3	0	29	0	29	73
07:15 AM	6	1	1	8	3	29	2	34	0	3	2	5	1	31	0	32	79
07:30 AM	1	1	1	3	3	43	3	49	0	1	4	5	1	37	0	38	95
07:45 AM	3	1	0	4	3	49	3	55	2	3	8	13	0	36	0	36	108
Total	12	5	4	21	13	150	10	173	2	7	17	26	2	133	0	135	355
08:00 AM	6	4	1	11	3	60	1	64	0	2	8	10	1	47	3	51	136
08:15 AM	4	2	2	8	8	55	0	63	2	0	8	10	2	35	1	38	119
08:30 AM	6	3	2	11	5	56	9	70	4	3	6	13	1	47	1	49	143
08:45 AM	9	3	2	14	6	71	13	90	5	6	5	16	2	41	0	43	163
Total	25	12	7	44	22	242	23	287	11	11	27	49	6	170	5	181	561
Grand Total	37	17	11	65	35	392	33	460	13	18	44	75	8	303	5	316	916
Apprch %	56.9	26.2	16.9		7.6	85.2	7.2		17.3	24	58.7		2.5	95.9	1.6		
Total %	4	1.9	1.2	7.1	3.8	42.8	3.6	50.2	1.4	2	4.8	8.2	0.9	33.1	0.5	34.5	

	Corporate Centre Place Southbound				Canyon Springs Parkway Westbound				Corporate Centre Place Northbound				Canyon Springs Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	6	**4**	1	11	3	60	1	64	0	2	**8**	10	1	**47**	**3**	**51**	136
08:15 AM	4	2	**2**	8	**8**	55	0	63	2	0	8	10	**2**	35	1	38	119
08:30 AM	6	3	2	11	5	56	9	70	4	3	6	13	1	47	1	49	143
08:45 AM	**9**	3	2	**14**	6	**71**	**13**	**90**	**5**	**6**	5	**16**	2	41	0	43	**163**
Total Volume	25	12	7	44	22	242	23	287	11	11	27	49	6	170	5	181	561
% App. Total	56.8	27.3	15.9		7.7	84.3	8		22.4	22.4	55.1		3.3	93.9	2.8		
PHF	.694	.750	.875	.786	.688	.852	.442	.797	.550	.458	.844	.766	.750	.904	.417	.887	.860

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City of Riverside
N/S: Corporate Centre Place
E/W: Canyon Springs Parkway
Weather: Clear

File Name : RIVCCCSPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Corporate Centre Place Southbound				Canyon Springs Parkway Westbound				Corporate Centre Place Northbound				Canyon Springs Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	28	14	4	46	5	92	23	120	6	11	8	25	10	71	9	90	281
04:15 PM	47	18	9	74	8	103	32	143	5	14	12	31	6	73	10	89	337
04:30 PM	31	11	5	47	10	86	17	113	6	14	9	29	3	86	3	92	281
04:45 PM	27	7	9	43	8	87	23	118	8	11	10	29	6	74	6	86	276
Total	133	50	27	210	31	368	95	494	25	50	39	114	25	304	28	357	1175
05:00 PM	35	9	7	51	9	107	25	141	6	9	12	27	12	103	2	117	336
05:15 PM	34	17	14	65	9	92	28	129	8	15	19	42	9	81	17	107	343
05:30 PM	50	19	2	71	9	115	26	150	6	11	13	30	8	96	6	110	361
05:45 PM	44	11	9	64	14	103	18	135	6	10	8	24	11	85	6	102	325
Total	163	56	32	251	41	417	97	555	26	45	52	123	40	365	31	436	1365
Grand Total	296	106	59	461	72	785	192	1049	51	95	91	237	65	669	59	793	2540
Apprch %	64.2	23	12.8		6.9	74.8	18.3		21.5	40.1	38.4		8.2	84.4	7.4		
Total %	11.7	4.2	2.3	18.1	2.8	30.9	7.6	41.3	2	3.7	3.6	9.3	2.6	26.3	2.3	31.2	

	Corporate Centre Place Southbound				Canyon Springs Parkway Westbound				Corporate Centre Place Northbound				Canyon Springs Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	35	9	7	51	9	107	25	141	6	9	12	27	**12**	**103**	2	**117**	336
05:15 PM	34	17	**14**	65	9	92	**28**	129	**8**	**15**	**19**	**42**	9	81	**17**	107	343
05:30 PM	**50**	**19**	2	**71**	9	**115**	26	**150**	6	11	13	30	8	96	6	110	**361**
05:45 PM	44	11	9	64	**14**	103	18	135	6	10	8	24	11	85	6	102	325
Total Volume	163	56	32	251	41	417	97	555	26	45	52	123	40	365	31	436	1365
% App. Total	64.9	22.3	12.7		7.4	75.1	17.5		21.1	36.6	42.3		9.2	83.7	7.1		
PHF	.815	.737	.571	.884	.732	.907	.866	.925	.813	.750	.684	.732	.833	.886	.456	.932	.945

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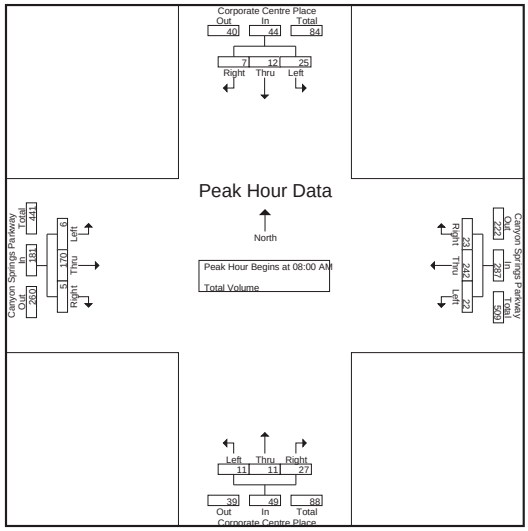
City of Riverside
N/S: Corporate Centre Place
E/W: Canyon Springs Parkway
Weather: Clear

File Name : RIVCCCSAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	6	**4**	1	11	3	60	1	64	0	2	**8**	10	1	**47**	**3**	**51**
+15 mins.	4	2	**2**	8	**8**	55	0	63	2	0	8	10	**2**	35	1	38
+30 mins.	6	3	2	11	5	56	9	70	4	3	6	13	1	47	1	49
+45 mins.	**9**	3	2	**14**	6	**71**	**13**	**90**	**5**	**6**	5	**16**	2	41	0	43
Total Volume	25	12	7	44	22	242	23	287	11	11	27	49	6	170	5	181
% App. Total	56.8	27.3	15.9		7.7	84.3	8		22.4	22.4	55.1		3.3	93.9	2.8	
PHF	.694	.750	.875	.786	.688	.852	.442	.797	.550	.458	.844	.766	.750	.904	.417	.887

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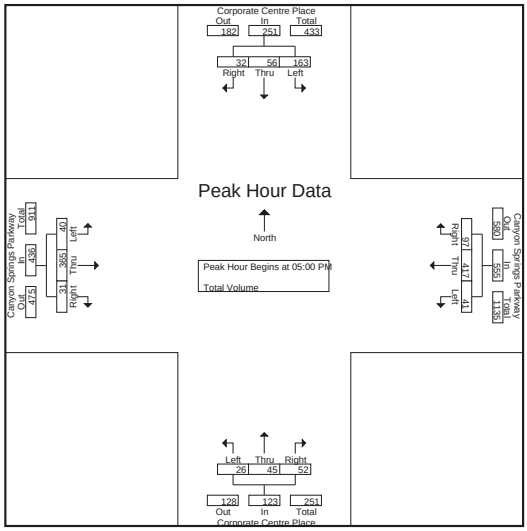
City of Riverside
N/S: Corporate Centre Place
E/W: Canyon Springs Parkway
Weather: Clear

File Name : RIVCCCSPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				04:45 PM				05:00 PM			
+0 mins.	35	9	7	51	9	107	25	141	**8**	11	10	29	**12**	**103**	2	**117**
+15 mins.	34	17	**14**	65	9	92	**28**	129	6	9	12	27	9	81	**17**	107
+30 mins.	**50**	**19**	2	**71**	9	**115**	26	**150**	8	**15**	**19**	**42**	8	96	6	110
+45 mins.	44	11	9	64	**14**	103	18	135	6	11	13	30	11	85	6	102
Total Volume	163	56	32	251	41	417	97	555	28	46	54	128	40	365	31	436
% App. Total	64.9	22.3	12.7		7.4	75.1	17.5		21.9	35.9	42.2		9.2	83.7	7.1	
PHF	.815	.737	.571	.884	.732	.907	.866	.925	.875	.767	.711	.762	.833	.886	.456	.932

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City of Riverside
N/S: Corporate Centre Place
E/W: Campus Parkway
Weather: Clear

File Name : RIVCCCAAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Corporate Centre Place Southbound				Campus Parkway Westbound				Corporate Centre Place Northbound				Campus Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	6	2	8	0	8	0	8	0	6	2	8	1	8	1	10	34
07:15 AM	1	3	3	7	4	8	0	12	0	5	3	8	0	12	2	14	41
07:30 AM	0	4	1	5	5	9	2	16	1	5	3	9	2	14	0	16	46
07:45 AM	1	7	2	10	4	17	1	22	2	15	2	19	5	9	1	15	66
Total	2	20	8	30	13	42	3	58	3	31	10	44	8	43	4	55	187
08:00 AM	2	5	4	11	2	9	0	11	2	9	0	11	5	6	0	11	44
08:15 AM	1	8	5	14	5	18	3	26	1	13	4	18	0	18	2	20	78
08:30 AM	0	5	3	8	5	18	3	26	2	9	6	17	2	14	1	17	68
08:45 AM	2	4	5	11	4	18	3	25	2	13	3	18	4	16	1	21	75
Total	5	22	17	44	16	63	9	88	7	44	13	64	11	54	4	69	265
Grand Total	7	42	25	74	29	105	12	146	10	75	23	108	19	97	8	124	452
Apprch %	9.5	56.8	33.8		19.9	71.9	8.2		9.3	69.4	21.3		15.3	78.2	6.5		
Total %	1.5	9.3	5.5	16.4	6.4	23.2	2.7	32.3	2.2	16.6	5.1	23.9	4.2	21.5	1.8	27.4	

	Corporate Centre Place Southbound				Campus Parkway Westbound				Corporate Centre Place Northbound				Campus Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	**2**	5	4	11	2	9	0	11	**2**	9	0	11	**5**	6	0	11	44
08:15 AM	1	**8**	**5**	**14**	**5**	**18**	**3**	**26**	1	**13**	4	**18**	0	**18**	**2**	20	**78**
08:30 AM	0	5	3	8	5	18	3	26	2	9	**6**	17	2	14	1	17	68
08:45 AM	2	4	5	11	4	18	3	25	2	13	3	18	4	16	1	**21**	75
Total Volume	5	22	17	44	16	63	9	88	7	44	13	64	11	54	4	69	265
% App. Total	11.4	50	38.6		18.2	71.6	10.2		10.9	68.8	20.3		15.9	78.3	5.8		
PHF	.625	.688	.850	.786	.800	.875	.750	.846	.875	.846	.542	.889	.550	.750	.500	.821	.849

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City of Riverside
N/S: Corporate Centre Place
E/W: Campus Parkway
Weather: Clear

File Name : RIVCCCAPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Corporate Centre Place Southbound				Campus Parkway Westbound				Corporate Centre Place Northbound				Campus Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	6	17	7	30	6	29	14	49	3	21	11	35	2	26	5	33	147
04:15 PM	10	19	6	35	10	24	12	46	1	17	16	34	8	30	2	40	155
04:30 PM	8	17	8	33	18	35	6	59	2	18	8	28	5	47	2	54	174
04:45 PM	5	13	9	27	24	38	12	74	0	23	8	31	4	29	2	35	167
Total	29	66	30	125	58	126	44	228	6	79	43	128	19	132	11	162	643
05:00 PM	5	21	7	33	16	27	10	53	1	25	14	40	4	29	3	36	162
05:15 PM	9	17	8	34	13	32	15	60	1	10	16	27	5	52	4	61	182
05:30 PM	15	21	5	41	18	38	7	63	2	21	13	36	4	36	9	49	189
05:45 PM	9	24	8	41	13	24	14	51	1	11	12	24	9	44	3	56	172
Total	38	83	28	149	60	121	46	227	5	67	55	127	22	161	19	202	705
Grand Total	67	149	58	274	118	247	90	455	11	146	98	255	41	293	30	364	1348
Apprch %	24.5	54.4	21.2		25.9	54.3	19.8		4.3	57.3	38.4		11.3	80.5	8.2		
Total %	5	11.1	4.3	20.3	8.8	18.3	6.7	33.8	0.8	10.8	7.3	18.9	3	21.7	2.2	27	

	Corporate Centre Place Southbound				Campus Parkway Westbound				Corporate Centre Place Northbound				Campus Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	5	21	7	33	16	27	10	53	1	**25**	14	**40**	4	29	3	36	162
05:15 PM	9	17	**8**	34	13	32	**15**	60	1	10	**16**	27	5	**52**	4	**61**	182
05:30 PM	**15**	21	5	**41**	**18**	**38**	7	**63**	**2**	21	13	36	4	36	**9**	49	**189**
05:45 PM	9	**24**	8	41	13	24	14	51	1	11	12	24	**9**	44	3	56	172
Total Volume	38	83	28	149	60	121	46	227	5	67	55	127	22	161	19	202	705
% App. Total	25.5	55.7	18.8		26.4	53.3	20.3		3.9	52.8	43.3		10.9	79.7	9.4		
PHF	.633	.865	.875	.909	.833	.796	.767	.901	.625	.670	.859	.794	.611	.774	.528	.828	.933

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City of Riverside
N/S: Corporate Centre Place
E/W: Campus Parkway
Weather: Clear

File Name : RIVCCCAPM
Site Code : 05114445
Start Date : 11/5/2014
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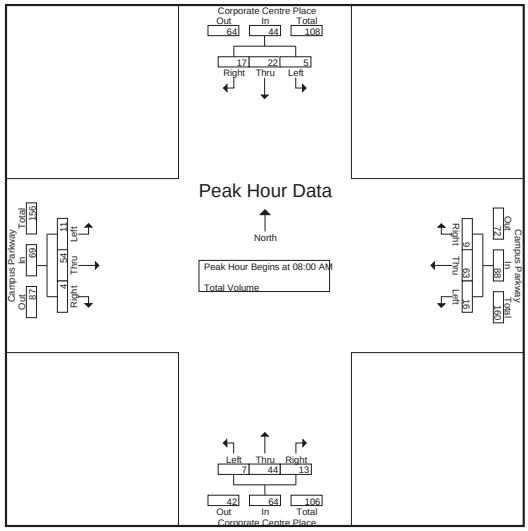

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				07:45 AM				08:00 AM			
+0 mins.	**2**	5	4	11	2	9	0	11	**2**	**15**	2	**19**	**5**	6	0	11
+15 mins.	1	**8**	**5**	**14**	**5**	**18**	**3**	**26**	2	9	0	11	0	**18**	**2**	20
+30 mins.	0	5	3	8	5	18	3	26	1	13	4	18	2	14	1	17
+45 mins.	2	4	5	11	4	18	3	25	2	9	**6**	17	4	16	1	**21**
Total Volume	5	22	17	44	16	63	9	88	7	46	12	65	11	54	4	69
% App. Total	11.4	50	38.6		18.2	71.6	10.2		10.8	70.8	18.5		15.9	78.3	5.8	
PHF	.625	.688	.850	.786	.800	.875	.750	.846	.875	.767	.500	.855	.550	.750	.500	.821

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City of Riverside
N/S: Corporate Centre Place
E/W: Campus Parkway
Weather: Clear

File Name : RIVCCCAPM
Site Code : 05114445
Start Date : 11/5/2014
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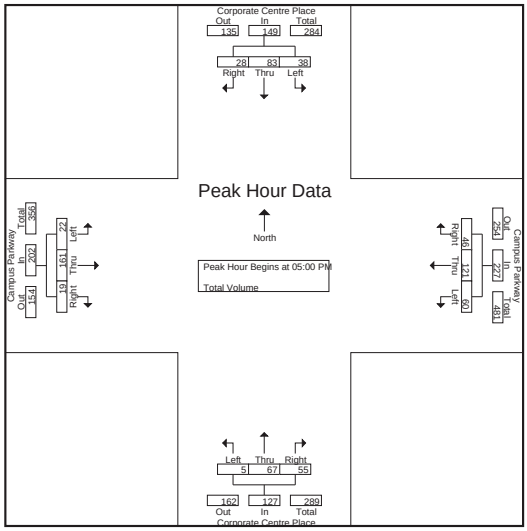

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:45 PM				04:45 PM				05:00 PM			
+0 mins.	5	21	7	33	**24**	**38**	12	**74**	0	23	8	31	4	29	3	36
+15 mins.	9	17	**8**	34	16	27	10	53	1	**25**	14	**40**	5	**52**	4	**61**
+30 mins.	**15**	21	5	**41**	13	32	**15**	60	1	10	**16**	27	4	36	**9**	49
+45 mins.	9	**24**	8	41	18	38	7	63	**2**	21	13	36	**9**	44	3	56
Total Volume	38	83	28	149	71	135	44	250	4	79	51	134	22	161	19	202
% App. Total	25.5	55.7	18.8		28.4	54	17.6		3	59	38.1		10.9	79.7	9.4	
PHF	.633	.865	.875	.909	.740	.888	.733	.845	.500	.790	.797	.838	.611	.774	.528	.828

INT ID: #20

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City of Riverside
N/S: Valley Springs Parkway
E/W: Corporate Centre Place
Weather: Clear

File Name : RIVVSCCAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Valley Springs Parkway Southbound				Corporate Centre Place Westbound				Valley Springs Parkway Northbound				Corporate Centre Place Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	26	1	29	5	2	0	7	9	28	5	42	2	2	3	7	85
07:15 AM	2	25	1	28	5	3	1	9	3	35	6	44	1	1	4	6	87
07:30 AM	2	43	0	45	4	4	1	9	10	47	7	64	1	1	7	9	127
07:45 AM	4	24	2	30	6	4	2	12	20	44	14	78	0	3	5	8	128
Total	10	118	4	132	20	13	4	37	42	154	32	228	4	7	19	30	427
08:00 AM	3	28	1	32	4	2	2	8	17	55	8	80	3	1	5	9	129
08:15 AM	8	26	0	34	9	6	0	15	25	63	12	100	1	2	11	14	163
08:30 AM	6	36	6	48	8	5	0	13	19	56	7	82	3	3	2	8	151
08:45 AM	7	34	4	45	6	2	0	8	25	61	12	98	2	2	7	11	162
Total	24	124	11	159	27	15	2	44	86	235	39	360	9	8	25	42	605
Grand Total	34	242	15	291	47	28	6	81	128	389	71	588	13	15	44	72	1032
Apprch %	11.7	83.2	5.2		58	34.6	7.4		21.8	66.2	12.1		18.1	20.8	61.1		
Total %	3.3	23.4	1.5	28.2	4.6	2.7	0.6	7.8	12.4	37.7	6.9	57	1.3	1.5	4.3	7	

	Valley Springs Parkway Southbound				Corporate Centre Place Westbound				Valley Springs Parkway Northbound				Corporate Centre Place Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	3	28	1	32	4	2	**2**	8	17	55	8	80	**3**	1	5	9	129
08:15 AM	**8**	26	0	34	**9**	**6**	0	**15**	**25**	**63**	**12**	**100**	1	2	**11**	**14**	**163**
08:30 AM	6	**36**	**6**	**48**	8	5	0	13	19	56	7	82	3	**3**	2	8	151
08:45 AM	7	34	4	45	6	2	0	8	25	61	12	98	2	2	7	11	162
Total Volume	24	124	11	159	27	15	2	44	86	235	39	360	9	8	25	42	605
% App. Total	15.1	78	6.9		61.4	34.1	4.5		23.9	65.3	10.8		21.4	19	59.5		
PHF	.750	.861	.458	.828	.750	.625	.250	.733	.860	.933	.813	.900	.750	.667	.568	.750	.928

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City of Riverside
N/S: Valley Springs Parkway
E/W: Corporate Centre Place
Weather: Clear

File Name : RIVVSCCPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Valley Springs Parkway Southbound				Corporate Centre Place Westbound				Valley Springs Parkway Northbound				Corporate Centre Place Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	10	100	8	118	18	10	0	28	37	99	16	152	3	9	22	34	332
04:15 PM	12	105	6	123	30	6	0	36	51	86	11	148	4	12	32	48	355
04:30 PM	11	91	6	108	26	15	0	41	47	80	15	142	5	4	26	35	326
04:45 PM	8	82	11	101	29	9	1	39	41	104	18	163	4	4	21	29	332
Total	41	378	31	450	103	40	1	144	176	369	60	605	16	29	101	146	1345
05:00 PM	8	104	7	119	23	16	1	40	42	86	23	151	9	15	33	57	367
05:15 PM	9	115	7	131	22	12	1	35	41	102	11	154	2	9	19	30	350
05:30 PM	9	86	6	101	36	12	0	48	44	88	21	153	10	10	26	46	348
05:45 PM	12	108	10	130	21	17	1	39	45	84	8	137	11	7	27	45	351
Total	38	413	30	481	102	57	3	162	172	360	63	595	32	41	105	178	1416
Grand Total	79	791	61	931	205	97	4	306	348	729	123	1200	48	70	206	324	2761
Apprch %	8.5	85	6.6		67	31.7	1.3		29	60.8	10.2		14.8	21.6	63.6		
Total %	2.9	28.6	2.2	33.7	7.4	3.5	0.1	11.1	12.6	26.4	4.5	43.5	1.7	2.5	7.5	11.7	

	Valley Springs Parkway Southbound				Corporate Centre Place Westbound				Valley Springs Parkway Northbound				Corporate Centre Place Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	8	104	7	119	23	16	**1**	40	42	86	**23**	151	9	**15**	**33**	**57**	**367**
05:15 PM	9	**115**	7	**131**	22	12	1	35	41	**102**	11	**154**	2	9	19	30	350
05:30 PM	9	86	6	101	**36**	12	0	**48**	44	88	21	153	10	10	26	46	348
05:45 PM	**12**	108	**10**	130	21	**17**	1	39	**45**	84	8	137	**11**	7	27	45	351
Total Volume	38	413	30	481	102	57	3	162	172	360	63	595	32	41	105	178	1416
% App. Total	7.9	85.9	6.2		63	35.2	1.9		28.9	60.5	10.6		18	23	59		
PHF	.792	.898	.750	.918	.708	.838	.750	.844	.956	.882	.685	.966	.727	.683	.795	.781	.965

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City of Riverside
N/S: Valley Springs Parkway
E/W: Corporate Centre Place
Weather: Clear

File Name : RIVVSCCAM
Site Code : 05114445
Start Date : 11/5/2014
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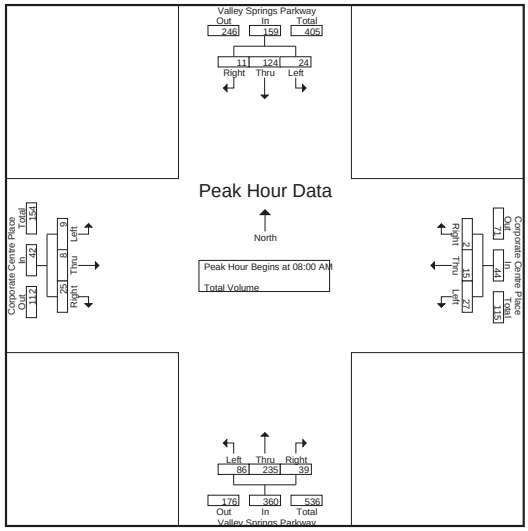

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:45 AM				08:00 AM				08:00 AM			
+0 mins.	3	28	1	32	6	4	**2**	12	17	55	8	80	**3**	1	5	9
+15 mins.	**8**	26	0	34	4	2	2	8	**25**	**63**	**12**	**100**	1	2	**11**	**14**
+30 mins.	6	**36**	**6**	**48**	**9**	**6**	0	**15**	19	56	7	82	3	**3**	2	8
+45 mins.	7	34	4	45	8	5	0	13	25	61	12	98	2	2	7	11
Total Volume	24	124	11	159	27	17	4	48	86	235	39	360	9	8	25	42
% App. Total	15.1	78	6.9		56.2	35.4	8.3		23.9	65.3	10.8		21.4	19	59.5	
PHF	.750	.861	.458	.828	.750	.708	.500	.800	.860	.933	.813	.900	.750	.667	.568	.750

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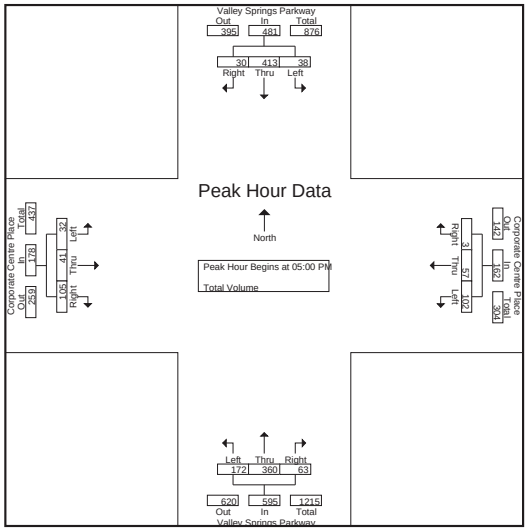
City of Riverside
N/S: Valley Springs Parkway
E/W: Corporate Centre Place
Weather: Clear

File Name : RIVVSCCPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:45 PM				04:45 PM				05:00 PM			
+0 mins.	8	104	7	119	29	9	**1**	39	41	**104**	18	**163**	9	**15**	**33**	**57**
+15 mins.	9	**115**	7	**131**	23	**16**	1	40	42	86	**23**	151	2	9	19	30
+30 mins.	9	86	6	101	22	12	1	35	41	102	11	154	10	10	26	46
+45 mins.	**12**	108	**10**	130	**36**	12	0	**48**	**44**	88	21	153	**11**	7	27	45
Total Volume	38	413	30	481	110	49	3	162	168	380	73	621	32	41	105	178
% App. Total	7.9	85.9	6.2		67.9	30.2	1.9		27.1	61.2	11.8		18	23	59	
PHF	.792	.898	.750	.918	.764	.766	.750	.844	.955	.913	.793	.952	.727	.683	.795	.781

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City of Riverside
N/S: Valley Springs Parkway
E/W: Driveway / Driveway 4
Weather: Clear

File Name : RIVVSD4AM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Valley Springs Parkway Southbound				Driveway 4 Westbound				Valley Springs Parkway Northbound				Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	35	0	35	0	0	0	0	1	43	0	44	0	0	1	1	80
07:15 AM	0	32	1	33	0	0	0	0	3	46	0	49	0	0	2	2	84
07:30 AM	0	55	1	56	0	0	0	0	0	65	0	65	0	0	1	1	122
07:45 AM	0	35	0	35	0	0	0	0	0	76	0	76	0	0	0	0	111
Total	0	157	2	159	0	0	0	0	4	230	0	234	0	0	4	4	397
08:00 AM	0	41	0	41	0	0	0	0	2	80	0	82	1	0	1	2	125
08:15 AM	0	43	3	46	0	0	0	0	2	100	0	102	0	0	4	4	152
08:30 AM	0	40	4	44	0	0	0	0	6	82	0	88	2	0	3	5	137
08:45 AM	0	91	4	95	0	0	0	0	1	110	0	111	0	0	2	2	208
Total	0	215	11	226	0	0	0	0	11	372	0	383	3	0	10	13	622
Grand Total	0	372	13	385	0	0	0	0	15	602	0	617	3	0	14	17	1019
Apprch %	0	96.6	3.4		0	0	0		2.4	97.6	0		17.6	0	82.4		
Total %	0	36.5	1.3	37.8	0	0	0	0	1.5	59.1	0	60.5	0.3	0	1.4	1.7	

	Valley Springs Parkway Southbound				Driveway 4 Westbound				Valley Springs Parkway Northbound				Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	41	0	41	0	0	0	0	2	80	0	82	1	0	1	2	125
08:15 AM	0	43	3	46	0	0	0	0	2	100	0	102	0	0	**4**	4	152
08:30 AM	0	40	**4**	44	0	0	0	0	**6**	82	0	88	**2**	0	3	**5**	137
08:45 AM	0	**91**	4	**95**	0	0	0	0	1	**110**	0	**111**	0	0	2	2	**208**
Total Volume	0	215	11	226	0	0	0	0	11	372	0	383	3	0	10	13	622
% App. Total	0	95.1	4.9		0	0	0		2.9	97.1	0		23.1	0	76.9		
PHF	.000	.591	.688	.595	.000	.000	.000	.000	.458	.845	.000	.863	.375	.000	.625	.650	.748

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City of Riverside
N/S: Valley Springs Parkway
E/W: Driveway / Driveway 4
Weather: Clear

File Name : RIVVSD4PM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Valley Springs Parkway Southbound				Driveway 4 Westbound				Valley Springs Parkway Northbound				Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	132	5	137	0	0	0	0	3	142	0	145	1	0	5	6	288
04:15 PM	1	155	6	162	0	0	0	0	3	136	0	139	4	0	8	12	313
04:30 PM	0	135	3	138	0	0	0	0	4	140	0	144	1	0	5	6	288
04:45 PM	0	142	4	146	0	0	0	0	8	166	0	174	3	0	4	7	327
Total	1	564	18	583	0	0	0	0	18	584	0	602	9	0	22	31	1216
05:00 PM	1	164	2	167	0	0	0	0	4	146	0	150	3	0	3	6	323
05:15 PM	1	151	5	157	0	0	0	0	4	158	0	162	2	0	7	9	328
05:30 PM	0	146	1	147	0	0	0	0	2	147	0	149	3	0	5	8	304
05:45 PM	0	157	1	158	0	0	0	0	2	148	0	150	2	0	2	4	312
Total	2	618	9	629	0	0	0	0	12	599	0	611	10	0	17	27	1267
Grand Total	3	1182	27	1212	0	0	0	0	30	1183	0	1213	19	0	39	58	2483
Apprch %	0.2	97.5	2.2		0	0	0		2.5	97.5	0		32.8	0	67.2		
Total %	0.1	47.6	1.1	48.8	0	0	0	0	1.2	47.6	0	48.9	0.8	0	1.6	2.3	

	Valley Springs Parkway Southbound				Driveway 4 Westbound				Valley Springs Parkway Northbound				Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	142	4	146	0	0	0	0	**8**	**166**	0	**174**	**3**	0	4	7	327
05:00 PM	**1**	**164**	2	**167**	0	0	0	0	4	146	0	150	3	0	3	6	323
05:15 PM	1	151	**5**	157	0	0	0	0	4	158	0	162	2	0	**7**	**9**	**328**
05:30 PM	0	146	1	147	0	0	0	0	2	147	0	149	3	0	5	8	304
Total Volume	2	603	12	617	0	0	0	0	18	617	0	635	11	0	19	30	1282
% App. Total	0.3	97.7	1.9		0	0	0		2.8	97.2	0		36.7	0	63.3		
PHF	.500	.919	.600	.924	.000	.000	.000	.000	.563	.929	.000	.912	.917	.000	.679	.833	.977

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City of Riverside
N/S: Valley Springs Parkway
E/W: Driveway / Driveway 4
Weather: Clear

File Name : RIVVSD4AM
Site Code : 05114445
Start Date : 11/5/2014
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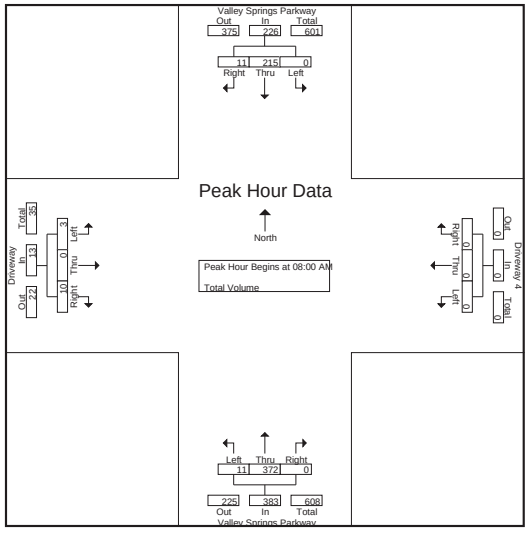

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	41	0	41	0	0	0	0	2	80	0	82	1	0	1	2
+15 mins.	0	43	3	46	0	0	0	0	2	100	0	102	0	0	**4**	4
+30 mins.	0	40	**4**	44	0	0	0	0	**6**	82	0	88	**2**	0	3	**5**
+45 mins.	0	**91**	4	**95**	0	0	0	0	1	**110**	0	**111**	0	0	2	2
Total Volume	0	215	11	226	0	0	0	0	11	372	0	383	3	0	10	13
% App. Total	0	95.1	4.9		0	0	0		2.9	97.1	0		23.1	0	76.9	
PHF	.000	.591	.688	.595	.000	.000	.000	.000	.458	.845	.000	.863	.375	.000	.625	.650

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City of Riverside
N/S: Valley Springs Parkway
E/W: Driveway / Driveway 4
Weather: Clear

File Name : RIVVSD4PM
Site Code : 05114445
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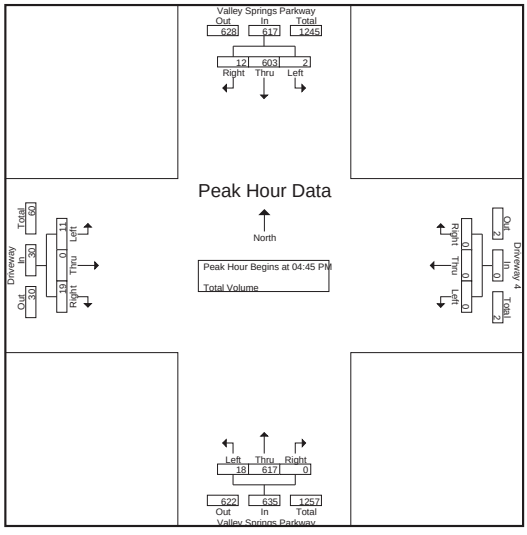

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:45 PM				04:00 PM			
+0 mins.	**1**	**164**	2	**167**	0	0	0	0	**8**	**166**	0	**174**	1	0	5	6
+15 mins.	1	151	**5**	157	0	0	0	0	4	146	0	150	**4**	0	**8**	**12**
+30 mins.	0	146	1	147	0	0	0	0	4	158	0	162	1	0	5	6
+45 mins.	0	157	1	158	0	0	0	0	2	147	0	149	3	0	4	7
Total Volume	2	618	9	629	0	0	0	0	18	617	0	635	9	0	22	31
% App. Total	0.3	98.3	1.4		0	0	0		2.8	97.2	0		29	0	71	
PHF	.500	.942	.450	.942	.000	.000	.000	.000	.563	.929	.000	.912	.563	.000	.688	.646

INT ID: #22

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City of Riverside
N/S: Valley Springs Parkway
E/W: Gateway Drive
Weather: Clear

File Name : RIVVSGAAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Valley Springs Parkway Southbound				Gateway Drive Westbound				Valley Springs Parkway Northbound				Gateway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	36	0	36	23	0	7	30	0	40	39	79	0	0	0	0	145
07:15 AM	3	29	0	32	24	0	3	27	0	45	38	83	0	0	0	0	142
07:30 AM	4	47	0	51	23	0	4	27	0	59	64	123	0	0	0	0	201
07:45 AM	2	34	0	36	27	0	3	30	0	72	71	143	0	0	0	0	209
Total	9	146	0	155	97	0	17	114	0	216	212	428	0	0	0	0	697
08:00 AM	2	41	0	43	23	0	6	29	0	72	41	113	0	0	0	0	185
08:15 AM	3	41	0	44	21	0	11	32	0	83	53	136	0	0	0	0	212
08:30 AM	1	43	0	44	21	0	10	31	0	79	34	113	0	0	0	0	188
08:45 AM	6	44	0	50	29	0	9	38	0	93	30	123	0	0	0	0	211
Total	12	169	0	181	94	0	36	130	0	327	158	485	0	0	0	0	796
Grand Total	21	315	0	336	191	0	53	244	0	543	370	913	0	0	0	0	1493
Apprch %	6.2	93.8	0		78.3	0	21.7		0	59.5	40.5		0	0	0		
Total %	1.4	21.1	0	22.5	12.8	0	3.5	16.3	0	36.4	24.8	61.2	0	0	0	0	

	Valley Springs Parkway Southbound				Gateway Drive Westbound				Valley Springs Parkway Northbound				Gateway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**4**	**47**	0	**51**	23	0	4	27	0	59	64	123	0	0	0	0	201
07:45 AM	2	34	0	36	**27**	0	3	30	0	72	**71**	**143**	0	0	0	0	209
08:00 AM	2	41	0	43	23	0	6	29	0	72	41	113	0	0	0	0	185
08:15 AM	3	41	0	44	21	0	**11**	**32**	0	**83**	53	136	0	0	0	0	**212**
Total Volume	11	163	0	174	94	0	24	118	0	286	229	515	0	0	0	0	807
% App. Total	6.3	93.7	0		79.7	0	20.3		0	55.5	44.5		0	0	0		
PHF	.688	.867	.000	.853	.870	.000	.545	.922	.000	.861	.806	.900	.000	.000	.000	.000	.952

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PO Box 1178
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City of Riverside
N/S: Valley Springs Parkway
E/W: Gateway Drive
Weather: Clear

File Name : RIVVSGAPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Valley Springs Parkway Southbound				Gateway Drive Westbound				Valley Springs Parkway Northbound				Gateway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	5	132	0	137	47	0	11	58	0	154	22	176	0	0	0	0	371
04:15 PM	14	135	0	149	46	0	17	63	0	76	9	85	0	0	0	0	297
04:30 PM	4	139	0	143	51	0	24	75	1	131	18	150	0	0	0	0	368
04:45 PM	10	143	0	153	53	0	14	67	0	150	25	175	0	0	0	0	395
Total	33	549	0	582	197	0	66	263	1	511	74	586	0	0	0	0	1431
05:00 PM	7	161	0	168	144	0	22	166	0	130	22	152	0	0	0	0	486
05:15 PM	11	154	0	165	67	1	12	80	0	133	24	157	0	0	0	0	402
05:30 PM	10	140	0	150	71	0	16	87	0	150	35	185	0	0	0	0	422
05:45 PM	13	143	0	156	62	0	16	78	0	131	17	148	0	0	0	0	382
Total	41	598	0	639	344	1	66	411	0	544	98	642	0	0	0	0	1692
Grand Total	74	1147	0	1221	541	1	132	674	1	1055	172	1228	0	0	0	0	3123
Apprch %	6.1	93.9	0		80.3	0.1	19.6		0.1	85.9	14		0	0	0		
Total %	2.4	36.7	0	39.1	17.3	0	4.2	21.6	0	33.8	5.5	39.3	0	0	0	0	

	Valley Springs Parkway Southbound				Gateway Drive Westbound				Valley Springs Parkway Northbound				Gateway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	10	143	0	153	53	0	14	67	0	**150**	25	175	0	0	0	0	395
05:00 PM	7	**161**	0	**168**	**144**	0	**22**	**166**	0	130	22	152	0	0	0	0	**486**
05:15 PM	**11**	154	0	165	67	**1**	12	80	0	133	24	157	0	0	0	0	402
05:30 PM	10	140	0	150	71	0	16	87	0	150	**35**	**185**	0	0	0	0	422
Total Volume	38	598	0	636	335	1	64	400	0	563	106	669	0	0	0	0	1705
% App. Total	6	94	0		83.8	0.2	16		0	84.2	15.8		0	0	0		
PHF	.864	.929	.000	.946	.582	.250	.727	.602	.000	.938	.757	.904	.000	.000	.000	.000	.877

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City of Riverside
N/S: Valley Springs Parkway
E/W: Gateway Drive
Weather: Clear

File Name : RIVVSGAAM
Site Code : 05114445
Start Date : 11/5/2014
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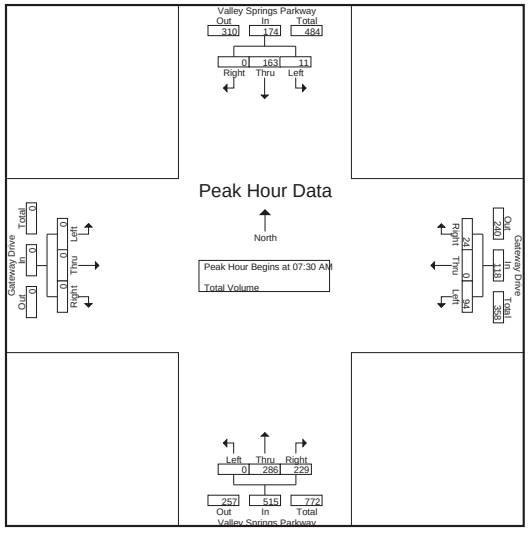

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				07:30 AM				07:00 AM			
+0 mins.	2	41	0	43	23	0	6	29	0	59	64	123	0	0	0	0
+15 mins.	3	41	0	44	21	0	**11**	32	0	72	**71**	**143**	0	0	0	0
+30 mins.	1	43	0	44	21	0	10	31	0	72	41	113	0	0	0	0
+45 mins.	**6**	**44**	0	**50**	**29**	0	9	**38**	0	**83**	53	136	0	0	0	0
Total Volume	12	169	0	181	94	0	36	130	0	286	229	515	0	0	0	0
% App. Total	6.6	93.4	0		72.3	0	27.7		0	55.5	44.5		0	0	0	
PHF	.500	.960	.000	.905	.810	.000	.818	.855	.000	.861	.806	.900	.000	.000	.000	.000

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City of Riverside
N/S: Valley Springs Parkway
E/W: Gateway Drive
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File Name : RIVVSGAPM
Site Code : 05114445
Start Date : 11/5/2014
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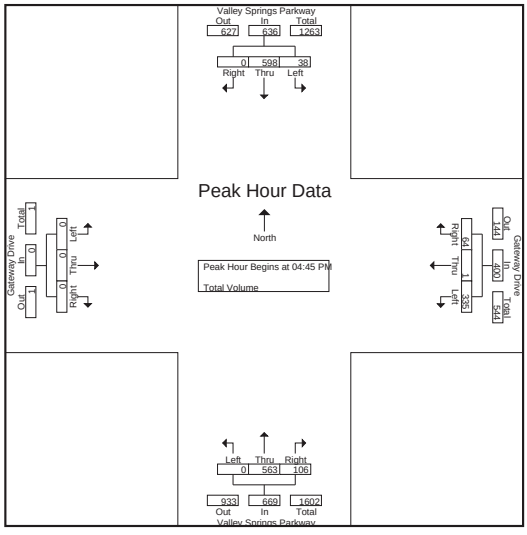

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				04:45 PM				04:00 PM			
+0 mins.	7	**161**	0	**168**	**144**	0	**22**	**166**	0	**150**	25	175	0	0	0	0
+15 mins.	11	154	0	165	67	**1**	12	80	0	130	22	152	0	0	0	0
+30 mins.	10	140	0	150	71	0	16	87	0	133	24	157	0	0	0	0
+45 mins.	**13**	143	0	156	62	0	16	78	0	150	**35**	**185**	0	0	0	0
Total Volume	41	598	0	639	344	1	66	411	0	563	106	669	0	0	0	0
% App. Total	6.4	93.6	0		83.7	0.2	16.1		0	84.2	15.8		0	0	0	
PHF	.788	.929	.000	.951	.597	.250	.750	.619	.000	.938	.757	.904	.000	.000	.000	.000

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City of Riverside
N/S: Existing Office Driveway/Driveway 6
E/W: Gateway Drive
Weather: Clear

File Name : RIVD6GAAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Existing Office Driveway Southbound				Gateway Drive Westbound				Driveway 6 Northbound				Gateway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	0	1	2	0	34	3	37	0	0	0	0	2	24	0	26	65
07:15 AM	0	0	1	1	0	29	3	32	0	0	0	0	4	30	0	34	67
07:30 AM	0	0	0	0	0	34	6	40	0	0	0	0	4	39	0	43	83
07:45 AM	1	0	0	1	0	33	2	35	0	0	0	0	5	49	0	54	90
Total	2	0	2	4	0	130	14	144	0	0	0	0	15	142	0	157	305
08:00 AM	0	0	0	0	0	28	1	29	0	0	0	0	1	43	0	44	73
08:15 AM	1	0	0	1	0	30	1	31	0	0	0	0	2	51	0	53	85
08:30 AM	0	0	0	0	0	32	0	32	0	0	0	0	2	28	0	30	62
08:45 AM	0	0	2	2	0	35	2	37	0	0	0	0	1	28	0	29	68
Total	1	0	2	3	0	125	4	129	0	0	0	0	6	150	0	156	288
Grand Total	3	0	4	7	0	255	18	273	0	0	0	0	21	292	0	313	593
Apprch %	42.9	0	57.1		0	93.4	6.6		0	0	0		6.7	93.3	0		
Total %	0.5	0	0.7	1.2	0	43	3	46	0	0	0	0	3.5	49.2	0	52.8	

	Existing Office Driveway Southbound				Gateway Drive Westbound				Driveway 6 Northbound				Gateway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	**34**	**6**	**40**	0	0	0	0	4	39	0	43	83
07:45 AM	**1**	0	0	**1**	0	33	2	35	0	0	0	0	**5**	49	0	**54**	**90**
08:00 AM	0	0	0	0	0	28	1	29	0	0	0	0	1	43	0	44	73
08:15 AM	1	0	0	1	0	30	1	31	0	0	0	0	2	**51**	0	53	85
Total Volume	2	0	0	2	0	125	10	135	0	0	0	0	12	182	0	194	331
% App. Total	100	0	0		0	92.6	7.4		0	0	0		6.2	93.8	0		
PHF	.500	.000	.000	.500	.000	.919	.417	.844	.000	.000	.000	.000	.600	.892	.000	.898	.919

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City of Riverside
N/S: Existing Office Driveway/Driveway 6
E/W: Gateway Drive
Weather: Clear

File Name : RIVD6GAPM
Site Code : 05114445
Start Date : 11/5/2014
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Groups Printed- Total Volume

	Existing Office Driveway Southbound				Gateway Drive Westbound				Driveway 6 Northbound				Gateway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	0	1	2	0	55	2	57	0	0	0	0	0	18	0	18	77
04:15 PM	4	0	5	9	0	59	0	59	0	0	0	0	0	25	0	25	93
04:30 PM	2	0	4	6	0	55	3	58	0	0	0	0	0	29	0	29	93
04:45 PM	3	0	3	6	0	56	2	58	0	0	0	0	1	42	0	43	107
Total	10	0	13	23	0	225	7	232	0	0	0	0	1	114	0	115	370
05:00 PM	8	0	10	18	0	113	1	114	0	0	0	0	3	36	0	39	171
05:15 PM	2	0	3	5	0	54	3	57	0	0	0	0	1	34	0	35	97
05:30 PM	3	0	5	8	0	63	6	69	0	0	0	0	6	44	0	50	127
05:45 PM	1	0	3	4	0	76	5	81	0	0	0	0	0	25	0	25	110
Total	14	0	21	35	0	306	15	321	0	0	0	0	10	139	0	149	505
Grand Total	24	0	34	58	0	531	22	553	0	0	0	0	11	253	0	264	875
Apprch %	41.4	0	58.6		0	96	4		0	0	0		4.2	95.8	0		
Total %	2.7	0	3.9	6.6	0	60.7	2.5	63.2	0	0	0	0	1.3	28.9	0	30.2	

	Existing Office Driveway Southbound				Gateway Drive Westbound				Driveway 6 Northbound				Gateway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**8**	0	**10**	**18**	0	**113**	1	**114**	0	0	0	0	3	36	0	39	**171**
05:15 PM	2	0	3	5	0	54	3	57	0	0	0	0	1	34	0	35	97
05:30 PM	3	0	5	8	0	63	**6**	69	0	0	0	0	**6**	**44**	0	**50**	127
05:45 PM	1	0	3	4	0	76	5	81	0	0	0	0	0	25	0	25	110
Total Volume	14	0	21	35	0	306	15	321	0	0	0	0	10	139	0	149	505
% App. Total	40	0	60		0	95.3	4.7		0	0	0		6.7	93.3	0		
PHF	.438	.000	.525	.486	.000	.677	.625	.704	.000	.000	.000	.000	.417	.790	.000	.745	.738

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City of Riverside
N/S: Existing Office Driveway/Driveway 6
E/W: Gateway Drive
Weather: Clear

File Name : RIVD6GAAM
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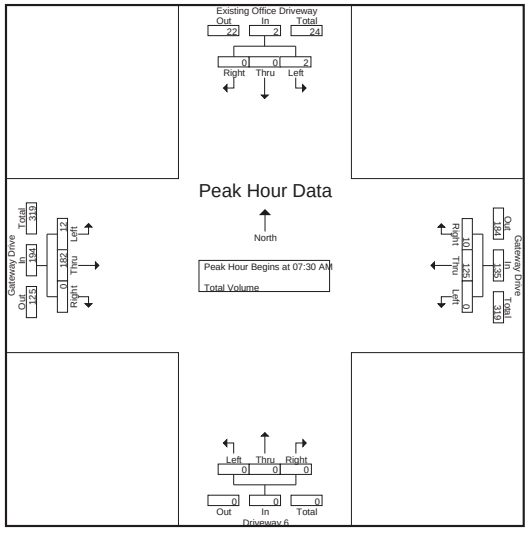

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:30 AM			
+0 mins.	**1**	0	**1**	**2**	0	**34**	3	37	0	0	0	0	4	39	0	43
+15 mins.	0	0	1	1	0	29	3	32	0	0	0	0	**5**	49	0	**54**
+30 mins.	0	0	0	0	0	34	**6**	**40**	0	0	0	0	1	43	0	44
+45 mins.	1	0	0	1	0	33	2	35	0	0	0	0	2	**51**	0	53
Total Volume	2	0	2	4	0	130	14	144	0	0	0	0	12	182	0	194
% App. Total	50	0	50		0	90.3	9.7		0	0	0		6.2	93.8	0	
PHF	.500	.000	.500	.500	.000	.956	.583	.900	.000	.000	.000	.000	.600	.892	.000	.898

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City of Riverside
N/S: Existing Office Driveway/Driveway 6
E/W: Gateway Drive
Weather: Clear

File Name : RIVD6GAPM
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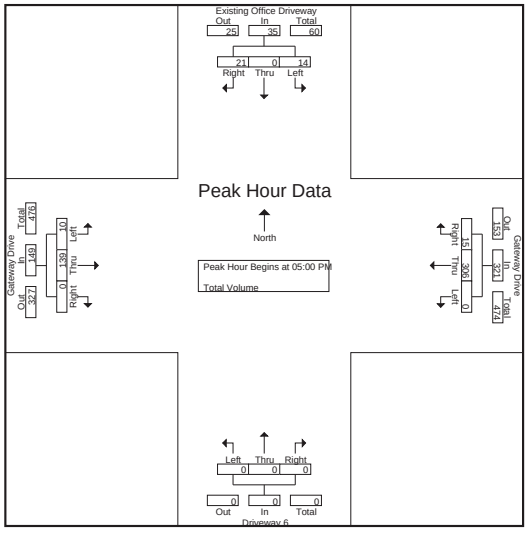

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				05:00 PM				04:00 PM				04:45 PM			
+0 mins.	4	0	5	9	0	**113**	1	**114**	0	0	0	0	1	42	0	43
+15 mins.	2	0	4	6	0	54	3	57	0	0	0	0	3	36	0	39
+30 mins.	3	0	3	6	0	63	**6**	69	0	0	0	0	1	34	0	35
+45 mins.	**8**	0	**10**	**18**	0	76	5	81	0	0	0	0	**6**	**44**	0	**50**
Total Volume	17	0	22	39	0	306	15	321	0	0	0	0	11	156	0	167
% App. Total	43.6	0	56.4		0	95.3	4.7		0	0	0		6.6	93.4	0	
PHF	.531	.000	.550	.542	.000	.677	.625	.704	.000	.000	.000	.000	.458	.886	.000	.835

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City of Riverside
N/S: Canyon Park Drive / Driveway 7
E/W: Gateway Drive
Weather: Clear

File Name : RIVD7GAAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Canyon Park Drive Southbound				Gateway Drive Westbound				Driveway 7 Northbound				Gateway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	3	0	13	16	0	25	1	26	0	0	0	0	13	10	0	23	65
07:15 AM	2	0	14	16	0	18	3	21	0	0	0	0	8	20	0	28	65
07:30 AM	6	0	13	19	0	31	3	34	0	0	0	0	15	20	0	35	88
07:45 AM	1	0	9	10	0	32	4	36	0	0	0	0	18	30	0	48	94
Total	12	0	49	61	0	106	11	117	0	0	0	0	54	80	0	134	312
08:00 AM	5	0	11	16	0	19	7	26	0	0	0	0	11	32	0	43	85
08:15 AM	8	0	7	15	0	23	4	27	0	0	0	0	15	37	0	52	94
08:30 AM	9	0	9	18	0	27	5	32	0	0	0	0	5	21	0	26	76
08:45 AM	8	0	11	19	0	26	8	34	0	0	0	0	10	19	0	29	82
Total	30	0	38	68	0	95	24	119	0	0	0	0	41	109	0	150	337
Grand Total	42	0	87	129	0	201	35	236	0	0	0	0	95	189	0	284	649
Apprch %	32.6	0	67.4		0	85.2	14.8		0	0	0		33.5	66.5	0		
Total %	6.5	0	13.4	19.9	0	31	5.4	36.4	0	0	0	0	14.6	29.1	0	43.8	

	Canyon Park Drive Southbound				Gateway Drive Westbound				Driveway 7 Northbound				Gateway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	6	0	**13**	**19**	0	31	3	34	0	0	0	0	15	20	0	35	88
07:45 AM	1	0	9	10	0	**32**	4	**36**	0	0	0	0	**18**	30	0	48	**94**
08:00 AM	5	0	11	16	0	19	**7**	26	0	0	0	0	11	32	0	43	85
08:15 AM	**8**	0	7	15	0	23	4	27	0	0	0	0	15	**37**	0	**52**	94
Total Volume	20	0	40	60	0	105	18	123	0	0	0	0	59	119	0	178	361
% App. Total	33.3	0	66.7		0	85.4	14.6		0	0	0		33.1	66.9	0		
PHF	.625	.000	.769	.789	.000	.820	.643	.854	.000	.000	.000	.000	.819	.804	.000	.856	.960

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City of Riverside
N/S: Canyon Park Drive / Driveway 7
E/W: Gateway Drive
Weather: Clear

File Name : RIVD7GAPM
Site Code : 05114445
Start Date : 11/5/2014
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Groups Printed- Total Volume

	Canyon Park Drive Southbound				Gateway Drive Westbound				Driveway 7 Northbound				Gateway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	5	0	12	17	0	48	6	54	0	0	0	0	2	17	0	19	90
04:15 PM	9	0	17	26	0	42	6	48	0	0	0	0	4	26	0	30	104
04:30 PM	12	0	17	29	0	44	15	59	0	0	0	0	5	27	0	32	120
04:45 PM	6	0	19	25	0	37	8	45	0	0	0	0	10	33	0	43	113
Total	32	0	65	97	0	171	35	206	0	0	0	0	21	103	0	124	427
05:00 PM	10	0	46	56	0	48	7	55	0	0	0	0	9	47	0	56	167
05:15 PM	12	0	19	31	0	36	9	45	0	0	0	0	8	33	0	41	117
05:30 PM	9	0	29	38	0	42	9	51	0	0	0	0	9	38	0	47	136
05:45 PM	13	0	33	46	0	48	8	56	0	0	0	0	5	24	0	29	131
Total	44	0	127	171	0	174	33	207	0	0	0	0	31	142	0	173	551
Grand Total	76	0	192	268	0	345	68	413	0	0	0	0	52	245	0	297	978
Apprch %	28.4	0	71.6		0	83.5	16.5		0	0	0		17.5	82.5	0		
Total %	7.8	0	19.6	27.4	0	35.3	7	42.2	0	0	0	0	5.3	25.1	0	30.4	

	Canyon Park Drive Southbound				Gateway Drive Westbound				Driveway 7 Northbound				Gateway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	10	0	**46**	**56**	0	**48**	7	55	0	0	0	0	**9**	**47**	0	**56**	**167**
05:15 PM	12	0	19	31	0	36	**9**	45	0	0	0	0	8	33	0	41	117
05:30 PM	9	0	29	38	0	42	9	51	0	0	0	0	9	38	0	47	136
05:45 PM	**13**	0	33	46	0	48	8	**56**	0	0	0	0	5	24	0	29	131
Total Volume	44	0	127	171	0	174	33	207	0	0	0	0	31	142	0	173	551
% App. Total	25.7	0	74.3		0	84.1	15.9		0	0	0		17.9	82.1	0		
PHF	.846	.000	.690	.763	.000	.906	.917	.924	.000	.000	.000	.000	.861	.755	.000	.772	.825

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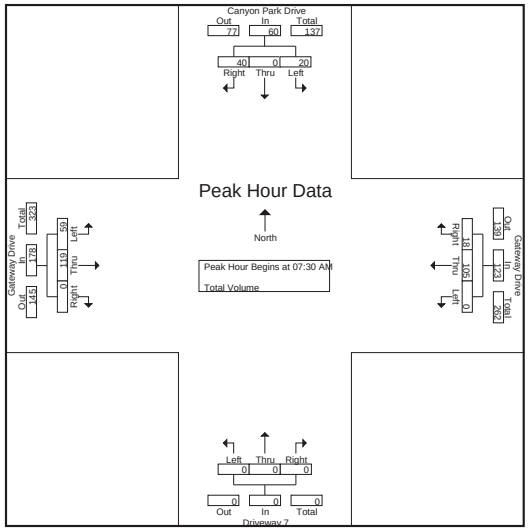
City of Riverside
N/S: Canyon Park Drive / Driveway 7
E/W: Gateway Drive
Weather: Clear

File Name : RIVD7GAAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:30 AM				07:00 AM				07:30 AM			
+0 mins.	5	0	**11**	16	0	31	3	34	0	0	0	0	15	20	0	35
+15 mins.	8	0	7	15	0	**32**	4	**36**	0	0	0	0	**18**	30	0	48
+30 mins.	**9**	0	9	18	0	19	**7**	26	0	0	0	0	11	32	0	43
+45 mins.	8	0	11	**19**	0	23	4	27	0	0	0	0	15	**37**	0	**52**
Total Volume	30	0	38	68	0	105	18	123	0	0	0	0	59	119	0	178
% App. Total	44.1	0	55.9		0	85.4	14.6		0	0	0		33.1	66.9	0	
PHF	.833	.000	.864	.895	.000	.820	.643	.854	.000	.000	.000	.000	.819	.804	.000	.856

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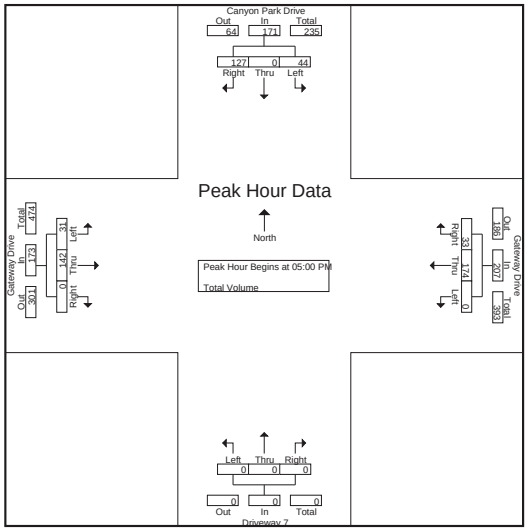
City of Riverside
N/S: Canyon Park Drive / Driveway 7
E/W: Gateway Drive
Weather: Clear

File Name : RIVD7GAPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				04:00 PM				04:45 PM			
+0 mins.	10	0	**46**	**56**	0	42	6	48	0	0	0	0	**10**	33	0	43
+15 mins.	12	0	19	31	0	44	**15**	**59**	0	0	0	0	9	**47**	0	**56**
+30 mins.	9	0	29	38	0	37	8	45	0	0	0	0	8	33	0	41
+45 mins.	**13**	0	33	46	0	**48**	7	55	0	0	0	0	9	38	0	47
Total Volume	44	0	127	171	0	171	36	207	0	0	0	0	36	151	0	187
% App. Total	25.7	0	74.3		0	82.6	17.4		0	0	0		19.3	80.7	0	
PHF	.846	.000	.690	.763	.000	.891	.600	.877	.000	.000	.000	.000	.900	.803	.000	.835

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City of Riverside
N/S: CVS Driveway / Driveway 9
E/W: Gateway Drive
Weather: Clear

File Name : RIVD9GAAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	CVS Driveway Southbound				Gateway Drive Westbound				Driveway 9 Northbound				Gateway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	5	27	0	32	0	0	2	2	0	13	1	14	48
07:15 AM	0	0	0	0	2	25	0	27	2	0	3	5	0	17	0	17	49
07:30 AM	0	0	0	0	2	35	0	37	2	0	5	7	0	23	3	26	70
07:45 AM	0	0	0	0	7	38	0	45	0	0	2	2	0	19	4	23	70
Total	0	0	0	0	16	125	0	141	4	0	12	16	0	72	8	80	237
08:00 AM	0	0	0	0	16	34	0	50	0	0	4	4	0	23	4	27	81
08:15 AM	0	0	0	0	21	37	0	58	0	0	4	4	0	18	6	24	86
08:30 AM	0	0	0	0	30	34	0	64	0	0	6	6	0	29	4	33	103
08:45 AM	0	0	0	0	26	33	0	59	1	0	11	12	0	21	3	24	95
Total	0	0	0	0	93	138	0	231	1	0	25	26	0	91	17	108	365
Grand Total	0	0	0	0	109	263	0	372	5	0	37	42	0	163	25	188	602
Apprch %	0	0	0		29.3	70.7	0		11.9	0	88.1		0	86.7	13.3		
Total %	0	0	0	0	18.1	43.7	0	61.8	0.8	0	6.1	7	0	27.1	4.2	31.2	

	CVS Driveway Southbound				Gateway Drive Westbound				Driveway 9 Northbound				Gateway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	16	34	0	50	0	0	4	4	0	23	4	27	81
08:15 AM	0	0	0	0	21	**37**	0	58	0	0	4	4	0	18	**6**	24	86
08:30 AM	0	0	0	0	**30**	34	0	**64**	0	0	6	6	0	**29**	4	**33**	**103**
08:45 AM	0	0	0	0	26	33	0	59	**1**	0	**11**	**12**	0	21	3	24	95
Total Volume	0	0	0	0	93	138	0	231	1	0	25	26	0	91	17	108	365
% App. Total	0	0	0		40.3	59.7	0		3.8	0	96.2		0	84.3	15.7		
PHF	.000	.000	.000	.000	.775	.932	.000	.902	.250	.000	.568	.542	.000	.784	.708	.818	.886

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City of Riverside
N/S: CVS Driveway / Driveway 9
E/W: Gateway Drive
Weather: Clear

File Name : RIVD9GAPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	CVS Driveway Southbound				Gateway Drive Westbound				Driveway 9 Northbound				Gateway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	9	45	0	54	5	0	14	19	0	21	2	23	96
04:15 PM	0	0	0	0	11	45	0	56	2	0	15	17	0	35	1	36	109
04:30 PM	0	0	0	0	5	43	0	48	5	0	18	23	0	39	0	39	110
04:45 PM	0	0	0	0	4	42	0	46	1	0	23	24	0	43	1	44	114
Total	0	0	0	0	29	175	0	204	13	0	70	83	0	138	4	142	429
05:00 PM	0	0	0	0	4	42	0	46	3	0	9	12	0	56	0	56	114
05:15 PM	0	0	0	0	3	40	0	43	1	0	9	10	0	54	2	56	109
05:30 PM	0	0	0	0	5	44	0	49	0	0	7	7	0	60	2	62	118
05:45 PM	0	0	0	0	5	44	0	49	3	0	4	7	0	44	0	44	100
Total	0	0	0	0	17	170	0	187	7	0	29	36	0	214	4	218	441
Grand Total	0	0	0	0	46	345	0	391	20	0	99	119	0	352	8	360	870
Apprch %	0	0	0		11.8	88.2	0		16.8	0	83.2		0	97.8	2.2		
Total %	0	0	0	0	5.3	39.7	0	44.9	2.3	0	11.4	13.7	0	40.5	0.9	41.4	

	CVS Driveway Southbound				Gateway Drive Westbound				Driveway 9 Northbound				Gateway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	4	42	0	46	1	0	**23**	**24**	0	43	1	44	114
05:00 PM	0	0	0	0	4	42	0	46	**3**	0	9	12	0	56	0	56	114
05:15 PM	0	0	0	0	3	40	0	43	1	0	9	10	0	54	**2**	56	109
05:30 PM	0	0	0	0	**5**	**44**	0	**49**	0	0	7	7	0	**60**	2	**62**	**118**
Total Volume	0	0	0	0	16	168	0	184	5	0	48	53	0	213	5	218	455
% App. Total	0	0	0		8.7	91.3	0		9.4	0	90.6		0	97.7	2.3		
PHF	.000	.000	.000	.000	.800	.955	.000	.939	.417	.000	.522	.552	.000	.888	.625	.879	.964

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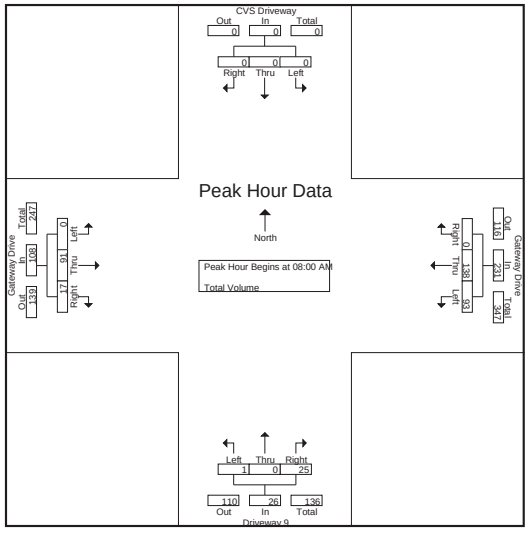
City of Riverside
N/S: CVS Driveway / Driveway 9
E/W: Gateway Drive
Weather: Clear

File Name : RIVD9GAAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	16	34	0	50	0	0	4	4	0	23	4	27
+15 mins.	0	0	0	0	21	**37**	0	58	0	0	4	4	0	18	**6**	24
+30 mins.	0	0	0	0	**30**	34	0	**64**	0	0	6	6	0	**29**	4	**33**
+45 mins.	0	0	0	0	26	33	0	59	**1**	0	**11**	**12**	0	21	3	24
Total Volume	0	0	0	0	93	138	0	231	1	0	25	26	0	91	17	108
% App. Total	0	0	0		40.3	59.7	0		3.8	0	96.2		0	84.3	15.7	
PHF	.000	.000	.000	.000	.775	.932	.000	.902	.250	.000	.568	.542	.000	.784	.708	.818

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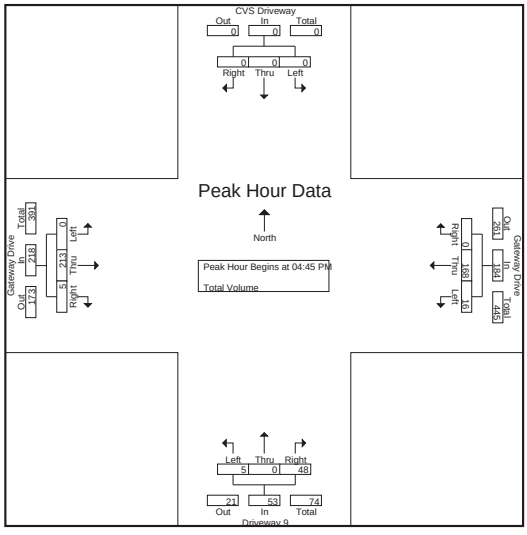
City of Riverside
N/S: CVS Driveway / Driveway 9
E/W: Gateway Drive
Weather: Clear

File Name : RIVD9GAPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:45 PM			
+0 mins.	0	0	0	0	9	**45**	0	54	**5**	0	14	19	0	43	1	44
+15 mins.	0	0	0	0	**11**	45	0	**56**	2	0	15	17	0	56	0	56
+30 mins.	0	0	0	0	5	43	0	48	5	0	18	23	0	54	**2**	56
+45 mins.	0	0	0	0	4	42	0	46	1	0	**23**	**24**	0	**60**	2	**62**
Total Volume	0	0	0	0	29	175	0	204	13	0	70	83	0	213	5	218
% App. Total	0	0	0		14.2	85.8	0		15.7	0	84.3		0	97.7	2.3	
PHF	.000	.000	.000	.000	.659	.972	.000	.911	.650	.000	.761	.865	.000	.888	.625	.879

INT ID: #28

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City of Riverside
N/S: Canyon Park Drive
E/W: Campus Parkway
Weather: Clear

File Name : RIVCPCAAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Canyon Park Drive Southbound				Campus Parkway Westbound				Canyon Park Drive Northbound				Campus Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	5	0	7	9	7	0	16	0	4	10	14	0	7	2	9	46
07:15 AM	2	3	1	6	11	10	0	21	0	2	7	9	0	15	1	16	52
07:30 AM	1	3	0	4	14	15	0	29	2	1	12	15	0	12	4	16	64
07:45 AM	1	1	0	2	18	21	4	43	2	3	10	15	1	10	1	12	72
Total	6	12	1	19	52	53	4	109	4	10	39	53	1	44	8	53	234
08:00 AM	1	9	0	10	9	10	4	23	1	5	7	13	1	7	1	9	55
08:15 AM	1	3	2	6	10	22	3	35	4	3	5	12	0	16	7	23	76
08:30 AM	3	6	1	10	10	23	7	40	1	3	8	12	0	17	3	20	82
08:45 AM	8	5	0	13	10	23	9	42	5	3	7	15	2	12	6	20	90
Total	13	23	3	39	39	78	23	140	11	14	27	52	3	52	17	72	303
Grand Total	19	35	4	58	91	131	27	249	15	24	66	105	4	96	25	125	537
Apprch %	32.8	60.3	6.9		36.5	52.6	10.8		14.3	22.9	62.9		3.2	76.8	20		
Total %	3.5	6.5	0.7	10.8	16.9	24.4	5	46.4	2.8	4.5	12.3	19.6	0.7	17.9	4.7	23.3	

	Canyon Park Drive Southbound				Campus Parkway Westbound				Canyon Park Drive Northbound				Campus Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	1	**9**	0	10	9	10	4	23	1	**5**	7	13	1	7	1	9	55
08:15 AM	1	3	**2**	6	**10**	22	3	35	4	3	5	12	0	16	**7**	**23**	76
08:30 AM	3	6	1	10	10	**23**	7	40	1	3	**8**	12	0	**17**	3	20	82
08:45 AM	**8**	5	0	**13**	10	23	**9**	**42**	**5**	3	7	**15**	**2**	12	6	20	**90**
Total Volume	13	23	3	39	39	78	23	140	11	14	27	52	3	52	17	72	303
% App. Total	33.3	59	7.7		27.9	55.7	16.4		21.2	26.9	51.9		4.2	72.2	23.6		
PHF	.406	.639	.375	.750	.975	.848	.639	.833	.550	.700	.844	.867	.375	.765	.607	.783	.842

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City of Riverside
N/S: Canyon Park Drive
E/W: Campus Parkway
Weather: Clear

File Name : RIVCPCAPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 1

Groups Printed- Total Volume

	Canyon Park Drive Southbound				Campus Parkway Westbound				Canyon Park Drive Northbound				Campus Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	7	3	2	12	9	40	12	61	6	1	0	7	4	37	3	44	124
04:15 PM	6	7	4	17	14	37	16	67	5	6	4	15	3	46	6	55	154
04:30 PM	7	3	3	13	13	53	15	81	5	12	3	20	2	47	11	60	174
04:45 PM	8	8	4	20	13	61	11	85	6	12	3	21	5	39	2	46	172
Total	28	21	13	62	49	191	54	294	22	31	10	63	14	169	22	205	624
05:00 PM	7	6	3	16	32	50	6	88	3	7	11	21	5	39	6	50	175
05:15 PM	11	9	2	22	9	53	9	71	7	7	3	17	3	70	6	79	189
05:30 PM	10	6	4	20	20	52	15	87	6	9	6	21	3	51	7	61	189
05:45 PM	6	10	4	20	21	44	14	79	7	3	8	18	2	57	11	70	187
Total	34	31	13	78	82	199	44	325	23	26	28	77	13	217	30	260	740
Grand Total	62	52	26	140	131	390	98	619	45	57	38	140	27	386	52	465	1364
Apprch %	44.3	37.1	18.6		21.2	63	15.8		32.1	40.7	27.1		5.8	83	11.2		
Total %	4.5	3.8	1.9	10.3	9.6	28.6	7.2	45.4	3.3	4.2	2.8	10.3	2	28.3	3.8	34.1	

	Canyon Park Drive Southbound				Campus Parkway Westbound				Canyon Park Drive Northbound				Campus Parkway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	7	6	3	16	**32**	50	6	**88**	3	7	**11**	**21**	**5**	39	6	50	175
05:15 PM	**11**	9	2	**22**	9	**53**	9	71	**7**	7	3	17	3	**70**	6	**79**	**189**
05:30 PM	10	6	**4**	20	20	52	**15**	87	6	**9**	6	21	3	51	7	61	189
05:45 PM	6	**10**	4	20	21	44	14	79	7	3	8	18	2	57	**11**	70	187
Total Volume	34	31	13	78	82	199	44	325	23	26	28	77	13	217	30	260	740
% App. Total	43.6	39.7	16.7		25.2	61.2	13.5		29.9	33.8	36.4		5	83.5	11.5		
PHF	.773	.775	.813	.886	.641	.939	.733	.923	.821	.722	.636	.917	.650	.775	.682	.823	.979

Counts Unlimited, Inc.
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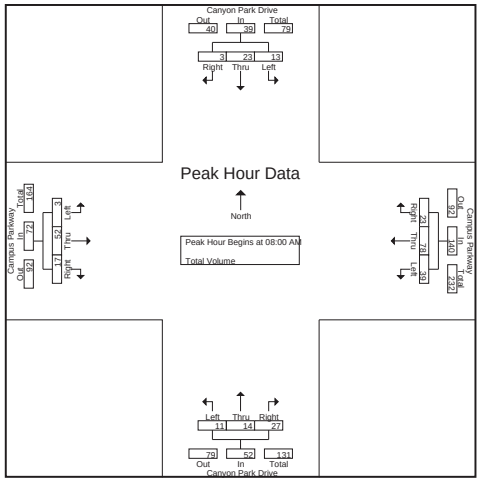
Corona, CA 92878
951-268-6268

City of Riverside
N/S: Canyon Park Drive
E/W: Campus Parkway
Weather: Clear

File Name : RIVCPCAAM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:45 AM				07:30 AM				08:00 AM			
+0 mins.	1	**9**	0	10	**18**	21	4	**43**	2	1	**12**	**15**	1	7	1	9
+15 mins.	1	3	**2**	6	9	10	4	23	2	3	10	15	0	16	**7**	**23**
+30 mins.	3	6	1	10	10	22	3	35	1	**5**	7	13	0	**17**	3	20
+45 mins.	**8**	5	0	**13**	10	**23**	**7**	40	**4**	3	5	12	**2**	12	6	20
Total Volume	13	23	3	39	47	76	18	141	9	12	34	55	3	52	17	72
% App. Total	33.3	59	7.7		33.3	53.9	12.8		16.4	21.8	61.8		4.2	72.2	23.6	
PHF	.406	.639	.375	.750	.653	.826	.643	.820	.563	.600	.708	.917	.375	.765	.607	.783

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City of Riverside
N/S: Canyon Park Drive
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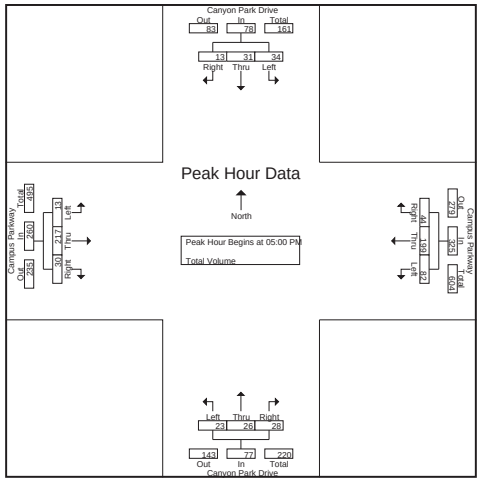
File Name : RIVCPCAPM
Site Code : 05114445
Start Date : 11/5/2014
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				05:00 PM			
+0 mins.	8	8	**4**	20	13	**61**	11	85	6	**12**	3	**21**	**5**	39	6	50
+15 mins.	7	6	3	16	**32**	50	6	**88**	3	7	**11**	21	3	**70**	6	**79**
+30 mins.	**11**	**9**	2	**22**	9	53	9	71	**7**	7	3	17	3	51	7	61
+45 mins.	10	6	4	20	20	52	**15**	87	6	9	6	21	2	57	**11**	70
Total Volume	36	29	13	78	74	216	41	331	22	35	23	80	13	217	30	260
% App. Total	46.2	37.2	16.7		22.4	65.3	12.4		27.5	43.8	28.8		5	83.5	11.5	
PHF	.818	.806	.813	.886	.578	.885	.683	.940	.786	.729	.523	.952	.650	.775	.682	.823

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Canyon Springs Healthcare Campus Senior Living Volume Development

2015/01/07

1. Sycamore Cyn. Bl. / Eastridge Av.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	137	1,035	150	90	119	28	25	53	10	94	150	391	2,282	34	202	114	276	310	20	69	149	61	450	78	224	1,987
Project Only	0	0	10	30	0	0	0	10	0	3	3	10	66	0	0	6	17	0	0	0	6	0	13	13	38	93
Cumulative Development Projects Only	270	55	8	18	67	276	181	364	180	14	544	57	2,034	220	64	15	63	67	223	336	663	330	8	443	22	2,454
Existing + Project	137	1,035	160	120	119	28	25	63	10	97	153	401	2,348	34	202	120	293	310	20	69	155	61	463	91	262	2,080
2016 Without Project (EAC)	413	1,132	164	112	191	305	207	419	190	112	700	464	4,409	255	274	134	350	390	244	408	818	393	476	524	255	4,521
2016 With Project (EACP)	413	1,132	174	142	191	305	207	429	190	115	703	474	4,475	255	274	140	367	390	244	408	824	393	489	537	293	4,614
General Plan Buildout (GPBO) Without Project	434	1,189	173	119	201	320	224	453	205	118	785	488	4,709	268	288	141	368	410	256	441	884	424	500	551	270	4,801
General Plan Buildout (GPBO) With Project	434	1,189	183	149	201	320	224	463	205	121	788	498	4,775	268	288	147	385	410	256	441	890	424	513	564	308	4,894
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	1,322	223	1,545	237	1,451	1,688	88	315	403	635	293	928		350	821	1,171	606	495	1,101	279	132	411	752	539	1,291	
Project Only	10	3	13	30	10	40	10	3	13	16	50	66		6	13	19	17	38	55	6	13	19	64	29	93	
Cumulative Development Projects Only	333	261	594	361	293	654	725	1,090	1,815	615	390	1,005		299	405	704	353	422	775	1,329	886	2,215	473	741	1,214	
Existing + Project	1,332	226	1,558	267	1,461	1,728	98	318	416	651	343	994		356	834	1,190	623	533	1,156	285	145	430	816	568	1,384	
2016 Without Project (EAC)	1,709	493	2,202	608	1,803	2,411	816	1,418	2,234	1,276	695	1,971		663	1,259	1,922	984	937	1,921	1,619	1,023	2,642	1,255	1,302	2,557	
2016 With Project (EACP)	1,719	496	2,215	638	1,813	2,451	826	1,421	2,247	1,292	745	2,037		669	1,272	1,941	1,001	975	1,976	1,625	1,036	2,661	1,319	1,331	2,650	
General Plan Buildout (GPBO) Without Project	1,796	524	2,320	640	1,901	2,541	882	1,539	2,421	1,391	745	2,136		697	1,334	2,031	1,034	999	2,033	1,749	1,075	2,824	1,321	1,393	2,714	
General Plan Buildout (GPBO) With Project	1,806	527	2,333	670	1,911	2,581	892	1,542	2,434	1,407	795	2,202		703	1,347	2,050	1,051	1,037	2,088	1,755	1,088	2,843	1,385	1,422	2,807	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	14,100			13,200			8,600			16,000				14,100			13,200			8,600			16,000			
Existing Pk-to-daily	*11%*			*13%*			*5%*			*6%*				*8%*			*8%*			*5%*			*8%*			
Project Only	200			600			200			900				200			600			200			900			
Cumulative Development Projects Only	6,400			6,900			20,200			11,100				6,400			6,900			20,200			11,100			
Existing + Project	14,200			13,800			8,800			16,900				14,200			13,800			8,800			16,900			
2016 Without Project (EAC)	21,000			20,600			29,100			27,700				21,000			20,600			29,100			27,700			
EAC Peak-to-Daily	*10%*			*12%*			*8%*			*7%*				*9%*			*9%*			*9%*			*9%*			
2016 With Project (EACP)	21,200			21,200			29,300			28,600				21,200			21,200			29,300			28,600			
EACP Peak-to-Daily	*10%*			*12%*			*8%*			*7%*				*9%*			*9%*			*9%*			*9%*			
General Plan Buildout (GPBO) Without Project	22,100			21,700			31,600			29,200				22,100			21,700			31,600			29,200			
GPBO without Project Peak-to-Daily	*11%*			*12%*			*8%*			*7%*				*9%*			*9%*			*9%*			*9%*			
2025 GP City of Riverside Model ADT	10,900			21,500			31,800							10,900			21,500			31,800						
2035 RivTAM ADT	15,000			6,000			35,000			27,000				15,000			6,000			35,000			27,000			
2035 Moreno Valley Model ADT	21,000			13,000			34,000			28,000				21,000			13,000			34,000			28,000			
General Plan Buildout (GPBO) With Project	22,300			22,200			31,800			30,100				22,300			22,200			31,800			30,100			
GPBO with Project Peak-to-Daily	*10%*			*12%*			*8%*			*7%*				*9%*			*9%*			*9%*			*9%*			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.050*			*1.050*			*1.080*			*1.050*				*1.050*			*1.050*			*1.080*			*1.050*			

Canyon Springs Healthcare Campus Senior Living Volume Development

2. Box Springs Bl. / Eastridge Av.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	10	11	46	33	2	4	61	192	15	54	685	347	1,460	18	3	29	99	2	37	12	545	3	28	716	58	1,550
Project Only	0	0	10	10	0	0	0	51	0	3	17	3	94	0	0	5	5	0	0	0	29	0	12	64	12	127
Cumulative Development Projects Only	0	108	3	111	72	0	0	390	0	3	614	165	1,466	0	88	2	200	132	0	0	741	0	2	473	134	1,772
Existing + Project	10	11	56	43	2	4	61	243	15	57	702	350	1,554	18	3	34	104	2	37	12	574	3	40	780	70	1,677
2016 Without Project (EAC)	10	119	51	145	74	4	63	590	16	59	1,327	526	2,984	19	91	32	303	134	38	12	1,308	3	31	1,218	194	3,383
2016 With Project (EACP)	10	119	61	155	74	4	63	641	16	62	1,344	529	3,078	19	91	37	308	134	38	12	1,337	3	43	1,282	206	3,510
General Plan Buildout (GPBO) Without Project	11	125	54	153	78	4	66	622	17	62	1,444	552	3,188	20	96	35	318	141	40	13	1,375	3	33	1,282	207	3,563
General Plan Buildout (GPBO) With Project	11	125	64	163	78	4	66	673	17	65	1,461	555	3,282	20	96	40	323	141	40	13	1,404	3	45	1,346	219	3,690
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	67	71	138	39	419	458	268	699	967	1,086	271	1,357		50	33	83	138	73	211	560	771	1,331	802	673	1,475	
Project Only	10	3	13	10	3	13	51	17	68	23	71	94		5	12	17	5	12	17	29	64	93	88	39	127	
Cumulative Development Projects Only	111	75	186	183	273	456	390	614	1,004	782	504	1,286		90	134	224	332	222	554	741	473	1,214	609	943	1,552	
Existing + Project	77	74	151	49	422	471	319	716	1,035	1,109	342	1,451		55	45	100	143	85	228	589	835	1,424	890	712	1,602	
2016 Without Project (EAC)	180	149	329	223	708	931	669	1,341	2,010	1,912	786	2,698		142	168	310	475	297	772	1,323	1,275	2,598	1,443	1,643	3,086	
2016 With Project (EACP)	190	152	342	233	711	944	720	1,358	2,078	1,935	857	2,792		147	180	327	480	309	789	1,352	1,339	2,691	1,531	1,682	3,213	
General Plan Buildout (GPBO) Without Project	190	157	347	235	743	978	705	1,459	2,164	2,058	829	2,887		151	177	328	499	316	815	1,391	1,342	2,733	1,522	1,728	3,250	
General Plan Buildout (GPBO) With Project	200	160	360	245	746	991	756	1,476	2,232	2,081	900	2,981		156	189	345	504	328	832	1,420	1,406	2,826	1,610	1,767	3,377	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	1,000			2,500			16,000			19,400				1,000			2,500			16,000			19,400			
Existing Pk-to-daily	*14%*			*18%*			*6%*			*7%*				*8%*			*8%*			*8%*			*8%*			
Project Only	200			200			900			1,300				200			200			900			1,300			
Cumulative Development Projects Only	2,100			5,100			11,100			14,200				2,100			5,100			11,100			14,200			
Existing + Project	1,200			2,700			16,900			20,700				1,200			2,700			16,900			20,700			
2016 Without Project (EAC)	3,100			7,700			27,700			34,400				3,100			7,700			27,700			34,400			
EAC Peak-to-Daily	*11%*			*12%*			*7%*			*8%*				*10%*			*10%*			*9%*			*9%*			
2016 With Project (EACP)	3,300			7,900			28,600			35,700				3,300			7,900			28,600			35,700			
EACP Peak-to-Daily	*10%*			*12%*			*7%*			*8%*				*10%*			*10%*			*9%*			*9%*			
General Plan Buildout (GPBO) Without Project	3,300			8,100			29,200			36,200				3,300			8,100			29,200			36,200			
GPBO without Project Peak-to-Daily	*11%*			*12%*			*7%*			*8%*				*10%*			*10%*			*9%*			*9%*			
2025 GP City of Riverside Model ADT																										
2035 RivTAM ADT				6,000			27,000			33,000							6,000			27,000			33,000			
2035 Moreno Valley Model ADT				9,000			28,000			37,000							9,000			28,000			37,000			
General Plan Buildout (GPBO) With Project	3,400			8,300			30,100			37,500				3,400			8,300			30,100			37,500			
GPBO with Project Peak-to-Daily	*10%*			*12%*			*7%*			*8%*				*10%*			*10%*			*9%*			*9%*			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.050*			*1.050*			*1.050*			*1.050*				*1.050*			*1.050*			*1.050*			*1.050*			

Canyon Springs Healthcare Campus Senior Living Volume Development

2015/01/07

3. I-215 Ramps / Eastridge Av. - Eucalyptus Av.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	286	0	179	145	0	209	76	126	69	361	591	298	2,340	137	0	533	629	0	304	161	379	133	600	361	328	3,565
Project Only	0	0	212	166	0	0	0	70	0	70	23	54	595	0	0	119	92	0	0	0	39	0	269	89	210	818
Cumulative Development Projects Only	30	0	11	2	0	9	5	489	10	17	743	9	1,325	11	0	18	9	0	7	11	899	33	14	591	5	1,598
Existing + Project	286	0	391	311	0	209	76	196	69	431	614	352	2,935	137	0	652	721	0	304	161	418	133	869	450	538	4,383
2016 Without Project (EAC)	328	0	197	153	0	226	84	620	82	393	1,358	319	3,760	154	0	573	663	0	323	179	1,293	171	638	967	346	5,307
2016 With Project (EACP)	328	0	409	319	0	226	84	690	82	463	1,381	373	4,355	154	0	692	755	0	323	179	1,332	171	907	1,056	556	6,125
General Plan Buildout (GPBO) Without Project	344	0	217	171	0	287	88	655	87	416	1,427	369	4,061	162	0	608	701	0	339	188	1,360	180	683	1,020	382	5,623
General Plan Buildout (GPBO) With Project	344	0	429	337	0	287	88	725	87	486	1,450	423	4,656	162	0	727	793	0	339	188	1,399	180	952	1,109	592	6,441
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	465	430	895	354	374	728	271	1,086	1,357	1,250	450	1,700		670	733	1,403	933	489	1,422	673	802	1,475	1,289	1,541	2,830	
Project Only	212	70	282	166	54	220	70	23	93	147	448	595		119	269	388	92	210	302	39	89	128	568	250	818	
Cumulative Development Projects Only	41	27	68	11	14	25	504	782	1,286	769	502	1,271		29	47	76	16	16	32	943	609	1,552	610	926	1,536	
Existing + Project	677	500	1,177	520	428	948	341	1,109	1,450	1,397	898	2,295		789	1,002	1,791	1,025	699	1,724	712	891	1,603	1,857	1,791	3,648	
2016 Without Project (EAC)	525	475	1,000	379	403	782	786	1,912	2,698	2,070	970	3,040		727	809	1,536	986	525	1,511	1,643	1,444	3,087	1,951	2,529	4,480	
2016 With Project (EACP)	737	545	1,282	545	457	1,002	856	1,935	2,791	2,217	1,418	3,635		846	1,078	1,924	1,078	735	1,813	1,682	1,533	3,215	2,519	2,779	5,298	
General Plan Buildout (GPBO) Without Project	561	503	1,064	458	457	915	830	2,058	2,888	2,212	1,043	3,255		770	863	1,633	1,040	570	1,610	1,728	1,521	3,249	2,085	2,669	4,754	
General Plan Buildout (GPBO) With Project	773	573	1,346	624	511	1,135	900	2,081	2,981	2,359	1,491	3,850		889	1,132	2,021	1,132	780	1,912	1,767	1,610	3,377	2,653	2,919	5,572	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	16,800			17,100			19,400			30,500				16,800			17,100			19,400			30,500			
Existing Pk-to-daily	*5%*			*4%*			*7%*			*6%*				*8%*			*8%*			*8%*			*9%*			
Project Only	3,900			3,000			1,300			8,200				3,900			3,000			1,300			8,200			
Cumulative Development Projects Only	700			400			14,200			14,100				700			400			14,200			14,100			
Existing + Project	20,700			20,100			20,700			38,700				20,700			20,100			20,700			38,700			
2016 Without Project (EAC)	18,200			18,100			34,400			45,800				18,200			18,100			34,400			45,800			
EAC Peak-to-Daily	*5%*			*4%*			*8%*			*7%*				*8%*			*8%*			*9%*			*10%*			
2016 With Project (EACP)	22,100			21,200			35,700			54,000				22,100			21,200			35,700			54,000			
EACP Peak-to-Daily	*6%*			*5%*			*8%*			*7%*				*9%*			*9%*			*9%*			*10%*			
General Plan Buildout (GPBO) Without Project	19,300			19,200			36,200			48,500				19,300			19,200			36,200			48,500			
GPBO without Project Peak-to-Daily	*6%*			*5%*			*8%*			*7%*				*8%*			*8%*			*9%*			*10%*			
2025 GP City of Riverside Model ADT										45,900													45,900			
2035 RivTAM ADT	23,000			11,000			33,000			47,000				23,000			11,000			33,000			47,000			
2035 Moreno Valley Model ADT	28,000			18,000			37,000			65,000				28,000			18,000			37,000			65,000			
General Plan Buildout (GPBO) With Project	23,200			22,200			37,500			56,700				23,200			22,200			37,500			56,700			
GPBO with Project Peak-to-Daily	*6%*			*5%*			*8%*			*7%*				*9%*			*9%*			*9%*			*10%*			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.050*			*1.050*			*1.050*			*1.050*				*1.050*			*1.050*			*1.050*			*1.050*			

Canyon Springs Healthcare Campus Senior Living Volume Development

4. Valley Springs Pkwy. / Eucalyptus Av.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	323	362	122	14	30	229	195	235	20	22	698	35	2,285	55	139	47	59	180	695	484	854	203	37	539	46	3,338
Project Only	0	45	1	18	15	130	393	56	0	0	17	54	729	0	24	0	69	57	495	216	35	0	1	73	30	1,000
Cumulative Development Projects Only	61	4	0	5	4	129	95	370	37	0	579	8	1,292	45	4	0	9	4	107	152	700	73	0	458	8	1,560
Existing + Project	323	407	123	32	45	359	588	291	20	22	715	89	3,014	55	163	47	128	237	1,190	700	889	203	38	612	76	4,338
2016 Without Project (EAC)	397	381	127	20	35	367	298	614	58	23	1,305	44	3,669	102	149	49	70	191	830	656	1,589	284	38	1,019	56	5,033
2016 With Project (EACP)	397	426	128	38	50	497	691	670	58	23	1,322	98	4,398	102	173	49	139	248	1,325	872	1,624	284	39	1,092	86	6,033
General Plan Buildout (GPBO) Without Project	449	436	144	22	38	392	333	648	61	24	1,371	49	3,967	115	171	55	77	203	896	700	1,670	298	40	1,074	60	5,359
General Plan Buildout (GPBO) With Project	449	481	145	40	53	522	726	704	61	24	1,388	103	4,696	115	195	55	146	260	1,391	916	1,705	298	41	1,147	90	6,359
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	807	72	879	273	592	865	450	1,250	1,700	755	371	1,126		241	420	661	934	669	1,603	1,541	1,289	2,830	622	960	1,582	
Project Only	46	15	61	163	492	655	449	147	596	71	75	146		24	58	82	621	270	891	251	568	819	104	104	208	
Cumulative Development Projects Only	65	41	106	138	107	245	502	769	1,271	587	375	962		49	77	126	120	164	284	925	610	1,535	466	709	1,175	
Existing + Project	853	87	940	436	1,084	1,520	899	1,397	2,296	826	446	1,272		265	478	743	1,555	939	2,494	1,792	1,857	3,649	726	1,064	1,790	
2016 Without Project (EAC)	905	116	1,021	422	723	1,145	970	2,069	3,039	1,372	761	2,133		300	513	813	1,091	861	1,952	2,529	1,951	4,480	1,113	1,708	2,821	
2016 With Project (EACP)	951	131	1,082	585	1,215	1,800	1,419	2,216	3,635	1,443	836	2,279		324	571	895	1,712	1,131	2,843	2,780	2,519	5,299	1,217	1,812	3,029	
General Plan Buildout (GPBO) Without Project	1,029	123	1,152	452	818	1,270	1,042	2,212	3,254	1,444	814	2,258		341	541	882	1,176	931	2,107	2,668	2,085	4,753	1,174	1,802	2,976	
General Plan Buildout (GPBO) With Project	1,075	138	1,213	615	1,310	1,925	1,491	2,359	3,850	1,515	889	2,404		365	599	964	1,797	1,201	2,998	2,919	2,653	5,572	1,278	1,906	3,184	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	7,900			17,400			30,500			17,100				7,900			17,400			30,500			17,100			
Existing Pk-to-daily	*11%*			*5%*			*6%*			*7%*				*8%*			*9%*			*9%*			*9%*			
Project Only	800			8,900			8,200			2,100				800			8,900			8,200			2,100			
Cumulative Development Projects Only	1,200			2,700			14,100			10,700				1,200			2,700			14,100			10,700			
Existing + Project	8,800			26,300			38,700			19,200				8,800			26,300			38,700			19,200			
2016 Without Project (EAC)	9,400			20,800			45,800			28,600				9,400			20,800			45,800			28,600			
EAC Peak-to-Daily	*11%*			*5%*			*7%*			*7%*				*9%*			*9%*			*10%*			*10%*			
2016 With Project (EACP)	10,200			29,700			54,000			30,600				10,200			29,700			54,000			30,600			
EACP Peak-to-Daily	*11%*			*6%*			*7%*			*7%*				*9%*			*10%*			*10%*			*10%*			
General Plan Buildout (GPBO) Without Project	10,800			22,300			48,500			30,100				10,800			22,300			48,500			30,100			
GPBO without Project Peak-to-Daily	*11%*			*6%*			*7%*			*8%*				*8%*			*9%*			*10%*			*10%*			
2025 GP City of Riverside Model ADT	11,600						45,900							11,600						45,900						
2035 RivTAM ADT	16,000						47,000			30,000				16,000						47,000			30,000			
2035 Moreno Valley Model ADT	24,000			16,000			65,000			37,000				24,000			16,000			65,000			37,000			
General Plan Buildout (GPBO) With Project	11,600			31,200			56,700			32,100				11,600			31,200			56,700			32,100			
GPBO with Project Peak-to-Daily	*10%*			*6%*			*7%*			*7%*				*8%*			*10%*			*10%*			*10%*			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.130*			*1.050*			*1.050*			*1.050*				*1.130*			*1.050*			*1.050*			*1.050*			

Canyon Springs Healthcare Campus Senior Living Volume Development

5. Day St. / SR-60 WB Ramps

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	0	355	187	124	502	0	0	0	0	363	0	230	1,761	0	813	431	75	635	0	0	0	0	470	0	142	2,566
Project Only	0	6	33	0	20	0	0	0	0	162	0	0	221	0	25	123	0	11	0	0	0	0	92	0	0	251
Cumulative Development Projects Only	0	23	44	0	42	0	0	0	0	67	0	0	176	0	42	75	0	32	0	0	0	0	61	0	0	210
Existing + Project	0	361	220	124	522	0	0	0	0	525	0	230	1,982	0	838	554	75	646	0	0	0	0	562	0	142	2,817
2016 Without Project (EAC)	0	392	239	129	564	0	0	0	0	445	0	239	2,008	0	888	523	78	693	0	0	0	0	550	0	148	2,880
2016 With Project (EACP)	0	398	272	129	584	0	0	0	0	607	0	239	2,229	0	913	646	78	704	0	0	0	0	642	0	148	3,131
General Plan Buildout (GPBO) Without Project	0	412	253	135	593	0	0	0	0	475	0	251	2,119	0	934	555	82	728	0	0	0	0	582	0	155	3,036
General Plan Buildout (GPBO) With Project	0	418	286	135	613	0	0	0	0	637	0	251	2,340	0	959	678	82	739	0	0	0	0	674	0	155	3,287
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	542	865	1,407	626	585	1,211	0	0	0	593	311	904		1,244	1,105	2,349	710	955	1,665	0	0	0	612	506	1,118	
Project Only	39	182	221	20	6	26	0	0	0	162	33	195		148	103	251	11	25	36	0	0	0	92	123	215	
Cumulative Development Projects Only	67	109	176	42	23	65	0	0	0	67	44	111		117	93	210	32	42	74	0	0	0	61	75	136	
Existing + Project	581	1,047	1,628	646	591	1,237	0	0	0	755	344	1,099		1,392	1,208	2,600	721	980	1,701	0	0	0	704	629	1,333	
2016 Without Project (EAC)	631	1,009	1,640	693	631	1,324	0	0	0	684	368	1,052		1,411	1,243	2,654	771	1,036	1,807	0	0	0	698	601	1,299	
2016 With Project (EACP)	670	1,191	1,861	713	637	1,350	0	0	0	846	401	1,247		1,559	1,346	2,905	782	1,061	1,843	0	0	0	790	724	1,514	
General Plan Buildout (GPBO) Without Project	665	1,068	1,733	728	663	1,391	0	0	0	726	388	1,114		1,489	1,310	2,799	810	1,089	1,899	0	0	0	737	637	1,374	
General Plan Buildout (GPBO) With Project	704	1,250	1,954	748	669	1,417	0	0	0	888	421	1,309		1,637	1,413	3,050	821	1,114	1,935	0	0	0	829	760	1,589	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	28,200			20,000			0			13,400				28,200			20,000			0			13,400			
Existing Pk-to-daily	*5%*			*6%*			*-*			*7%*				*8%*			*8%*			*-*			*8%*			
Project Only	2,700			400			0			2,400				2,700			400			0			2,400			
Cumulative Development Projects Only	2,000			800			0			1,300				2,000			800			0			1,300			
Existing + Project	30,900			20,300			0			15,800				30,900			20,300			0			15,800			
2016 Without Project (EAC)	31,400			21,600			0			15,200				31,400			21,600			0			15,200			
EAC Peak-to-Daily	*5%*			*6%*			*-*			*7%*				*8%*			*8%*			*-*			*9%*			
2016 With Project (EACP)	34,100			21,900			0			17,600				34,100			21,900			0			17,600			
EACP Peak-to-Daily	*5%*			*6%*			*-*			*7%*				*9%*			*8%*			*-*			*9%*			
General Plan Buildout (GPBO) Without Project	33,100			22,700			0			16,100				33,100			22,700			0			16,100			
GPBO without Project Peak-to-Daily	*5%*			*6%*			*-*			*7%*				*8%*			*8%*			*-*			*9%*			
2025 GP City of Riverside Model ADT				17,500													17,500									
2035 RivTAM ADT	30,000			19,000						14,000				30,000			19,000						14,000			
2035 Moreno Valley Model ADT	50,000			34,000						22,000				50,000			34,000						22,000			
General Plan Buildout (GPBO) With Project	35,800			23,000			0			18,500				35,800			23,000			0			18,500			
GPBO with Project Peak-to-Daily	*5%*			*6%*			*-*			*7%*				*9%*			*8%*			*-*			*9%*			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.050*			*1.050*			*-*			*1.050*				*1.050*			*1.050*			*-*			*1.050*			

3.1-22

Canyon Springs Healthcare Campus Senior Living Volume Development

6. Day St. / SR-60 EB Ramps

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	0	461	371	107	758	0	0	0	0	382	0	81	2,160	0	956	706	155	950	0	0	0	0	615	0	288	3,670
Project Only	0	39	54	0	182	0	0	0	0	97	0	0	372	0	148	205	0	102	0	0	0	0	56	0	0	511
Cumulative Development Projects Only	0	67	52	0	108	0	0	0	0	63	0	0	290	0	116	81	0	93	0	0	0	0	53	0	0	343
Existing + Project	0	500	425	107	940	0	0	0	0	479	0	81	2,532	0	1,104	911	155	1,052	0	0	0	0	671	0	288	4,181
2016 Without Project (EAC)	0	547	438	111	897	0	0	0	0	460	0	84	2,537	0	1,111	816	161	1,081	0	0	0	0	693	0	300	4,162
2016 With Project (EACP)	0	586	492	111	1,079	0	0	0	0	557	0	84	2,909	0	1,259	1,021	161	1,183	0	0	0	0	749	0	300	4,673
General Plan Buildout (GPBO) Without Project	0	577	463	117	951	0	0	0	0	488	0	88	2,684	0	1,174	867	169	1,142	0	0	0	0	730	0	315	4,397
General Plan Buildout (GPBO) With Project	0	616	517	117	1,133	0	0	0	0	585	0	88	3,056	0	1,322	1,072	169	1,244	0	0	0	0	786	0	315	4,908
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	832	1,140	1,972	865	542	1,407	0	0	0	463	478	941		1,662	1,565	3,227	1,105	1,244	2,349	0	0	0	903	861	1,764	
Project Only	93	279	372	182	39	221	0	0	0	97	54	151		353	158	511	102	148	250	0	0	0	56	205	261	
Cumulative Development Projects Only	119	171	290	108	67	175	0	0	0	63	52	115		197	146	343	93	116	209	0	0	0	53	81	134	
Existing + Project	925	1,419	2,344	1,047	581	1,628	0	0	0	560	532	1,092		2,015	1,723	3,738	1,207	1,392	2,599	0	0	0	959	1,066	2,025	
2016 Without Project (EAC)	985	1,357	2,342	1,008	631	1,639	0	0	0	544	549	1,093		1,927	1,774	3,701	1,242	1,411	2,653	0	0	0	993	977	1,970	
2016 With Project (EACP)	1,078	1,636	2,714	1,190	670	1,860	0	0	0	641	603	1,244		2,280	1,932	4,212	1,344	1,559	2,903	0	0	0	1,049	1,182	2,231	
General Plan Buildout (GPBO) Without Project	1,040	1,439	2,479	1,068	665	1,733	0	0	0	576	580	1,156		2,041	1,872	3,913	1,311	1,489	2,800	0	0	0	1,045	1,036	2,081	
General Plan Buildout (GPBO) With Project	1,133	1,718	2,851	1,250	704	1,954	0	0	0	673	634	1,307		2,394	2,030	4,424	1,413	1,637	3,050	0	0	0	1,101	1,241	2,342	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	39,200			28,200			0			21,200				39,200			28,200			0			21,200			
Existing Pk-to-daily	*5%*			*5%*			*-*			*4%*				*8%*			*8%*			*-*			*8%*			
Project Only	5,100			2,700			0			2,400				5,100			2,700			0			2,400			
Cumulative Development Projects Only	3,300			2,000			0			1,300				3,300			2,000			0			1,300			
Existing + Project	44,300			30,900			0			23,500				44,300			30,900			0			23,500			
2016 Without Project (EAC)	44,100			31,400			0			23,300				44,100			31,400			0			23,300			
EAC Peak-to-Daily	*5%*			*5%*			*-*			*5%*				*8%*			*8%*			*-*			*8%*			
2016 With Project (EACP)	49,200			34,100			0			25,700				49,200			34,100			0			25,700			
EACP Peak-to-Daily	*6%*			*5%*			*-*			*5%*				*9%*			*9%*			*-*			*9%*			
General Plan Buildout (GPBO) Without Project	46,600			33,100			0			24,600				46,600			33,100			0			24,600			
GPBO without Project Peak-to-Daily	*5%*			*5%*			*-*			*5%*				*8%*			*8%*			*-*			*8%*			
2025 GP City of Riverside Model ADT	30,900													30,900												
2035 RivTAM ADT	39,000			30,000						13,000				39,000			30,000						13,000			
2035 Moreno Valley Model ADT	62,000			50,000						18,000				62,000			50,000						18,000			
General Plan Buildout (GPBO) With Project	51,700			35,800			0			27,000				51,700			35,800			0			27,000			
GPBO with Project Peak-to-Daily	*6%*			*5%*			*-*			*5%*				*9%*			*9%*			*-*			*9%*			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.050*			*1.050*			*-*			*1.050*				*1.050*			*1.050*			*-*			*1.050*			

Canyon Springs Healthcare Campus Senior Living Volume Development

2015/01/07

7. Day St. / Cyn. Springs Pkwy.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	61	469	51	159	648	256	261	28	31	30	30	102	2,126	206	814	58	203	726	481	626	118	158	45	69	222	3,726
Project Only	0	90	0	0	277	2	3	0	1	0	0	0	373	1	350	0	0	155	3	3	0	0	0	0	0	512
Cumulative Development Projects Only	4	93	2	2	134	35	25	3	3	1	3	1	306	3	159	1	1	113	32	36	3	3	2	3	2	358
Existing + Project	61	559	51	159	925	258	264	28	32	30	30	102	2,499	207	1,164	58	203	881	484	629	118	158	45	69	222	4,238
2016 Without Project (EAC)	67	581	55	167	808	301	297	32	35	32	34	107	2,516	217	1,006	61	212	868	532	687	126	167	49	75	233	4,233
2016 With Project (EACP)	67	671	55	167	1,085	303	300	32	36	32	34	107	2,889	218	1,356	61	212	1,023	535	690	126	167	49	75	233	4,745
General Plan Buildout (GPBO) Without Project	70	615	58	175	862	316	313	34	37	34	46	112	2,672	228	1,074	64	223	919	561	722	132	175	51	89	245	4,483
General Plan Buildout (GPBO) With Project	70	705	58	175	1,139	318	316	34	38	34	46	112	3,045	229	1,424	64	223	1,074	564	725	132	175	51	89	245	4,995
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	581	709	1,290	1,063	832	1,895	320	347	667	162	238	400		1,078	929	2,007	1,410	1,662	3,072	902	756	1,658	336	379	715	
Project Only	90	278	368	279	93	372	4	2	6	0	0	0		351	155	506	158	353	511	3	4	7	0	0	0	
Cumulative Development Projects Only	99	138	237	171	119	290	31	42	73	5	7	12		163	118	281	146	197	343	42	38	80	7	5	12	
Existing + Project	671	987	1,658	1,342	925	2,267	324	349	673	162	238	400		1,429	1,084	2,513	1,568	2,015	3,583	905	760	1,665	336	379	715	
2016 Without Project (EAC)	703	875	1,578	1,276	985	2,261	364	402	766	173	254	427		1,284	1,084	2,368	1,612	1,926	3,538	980	824	1,804	357	399	756	
2016 With Project (EACP)	793	1,153	1,946	1,555	1,078	2,633	368	404	772	173	254	427		1,635	1,239	2,874	1,770	2,279	4,049	983	828	1,811	357	399	756	
General Plan Buildout (GPBO) Without Project	743	933	1,676	1,353	1,040	2,393	384	432	816	192	267	459		1,366	1,145	2,511	1,703	2,041	3,744	1,029	878	1,907	385	419	804	
General Plan Buildout (GPBO) With Project	833	1,211	2,044	1,632	1,133	2,765	388	434	822	192	267	459		1,717	1,300	3,017	1,861	2,394	4,255	1,032	882	1,914	385	419	804	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	24,200			39,200			19,900			8,600				24,200			39,200			19,900			8,600			
Existing Pk-to-daily	*5%*			*5%*			*3%*			*5%*				*8%*			*8%*			*8%*			*8%*			
Project Only	5,000			5,100			100			0				5,000			5,100			100			0			
Cumulative Development Projects Only	2,700			3,300			800			100				2,700			3,300			800			100			
Existing + Project	29,200			44,300			20,000			8,600				29,200			44,300			20,000			8,600			
2016 Without Project (EAC)	27,800			44,100			21,500			9,100				27,800			44,100			21,500			9,100			
EAC Peak-to-Daily	*6%*			*5%*			*4%*			*5%*				*9%*			*8%*			*8%*			*8%*			
2016 With Project (EACP)	32,900			49,200			21,600			9,100				32,900			49,200			21,600			9,100			
EACP Peak-to-Daily	*6%*			*5%*			*4%*			*5%*				*9%*			*8%*			*8%*			*8%*			
General Plan Buildout (GPBO) Without Project	29,500			46,600			22,600			9,500				29,500			46,600			22,600			9,500			
GPBO without Project Peak-to-Daily	*6%*			*5%*			*4%*			*5%*				*9%*			*8%*			*8%*			*8%*			
2025 GP City of Riverside Model ADT	30,900			30,900										30,900			30,900									
2035 RivTAM ADT	33,000			39,000										33,000			39,000									
2035 Moreno Valley Model ADT	51,000			62,000										51,000			62,000									
General Plan Buildout (GPBO) With Project	34,500			51,700			22,700			9,500				34,500			51,700			22,700			9,500			
GPBO with Project Peak-to-Daily	*6%*			*5%*			*4%*			*5%*				*9%*			*8%*			*8%*			*8%*			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.050*			*1.050*			*1.050*			*1.050*				*1.050*			*1.050*			*1.050*			*1.050*			

Canyon Springs Healthcare Campus Senior Living Volume Development

2015/01/07

8. Day St. / Campus Pkwy.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR												PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	108	480	37	53	504	111	39	22	45	19	56	62	1,536	181	666	91	247	643	48	176	84	166	83	183	236	2,804
Project Only	1	84	0	0	274	4	6	4	3	1	10	0	387	3	345	1	0	149	7	6	13	2	0	7	0	533
Cumulative Development Projects Only	4	89	1	8	125	1	7	1	2	0	1	2	241	5	146	1	5	107	1	8	2	2	1	2	8	288
Existing + Project	109	564	37	53	778	115	45	26	48	20	66	62	1,923	184	1,011	92	247	792	55	182	97	168	83	190	236	3,337
2016 Without Project (EAC)	116	588	39	63	649	116	48	24	49	20	59	67	1,838	193	839	96	262	776	51	191	89	175	87	192	254	3,205
2016 With Project (EACP)	117	672	39	63	923	120	54	28	52	21	69	67	2,225	196	1,184	97	262	925	58	197	102	177	87	199	254	3,738
General Plan Buildout (GPBO) Without Project	142	622	41	66	695	142	51	55	52	21	93	70	2,050	203	898	101	275	822	54	201	94	184	91	202	267	3,392
General Plan Buildout (GPBO) With Project	143	706	41	66	969	146	57	59	55	22	103	70	2,437	206	1,243	102	275	971	61	207	107	186	91	209	267	3,925
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	625	568	1,193	668	581	1,249	106	275	381	137	112	249		938	892	1,830	938	1,078	2,016	426	412	838	502	422	924	
Project Only	85	278	363	278	90	368	13	15	28	11	4	15		349	151	500	156	351	507	21	17	38	7	14	21	
Cumulative Development Projects Only	94	127	221	134	98	232	10	6	16	3	10	13		152	110	262	113	162	275	12	8	20	11	8	19	
Existing + Project	710	846	1,556	946	671	1,617	119	290	409	148	116	264		1,287	1,043	2,330	1,094	1,429	2,523	447	429	876	509	436	945	
2016 Without Project (EAC)	743	718	1,461	828	703	1,531	121	291	412	146	126	272		1,128	1,038	2,166	1,089	1,284	2,373	455	436	891	533	447	980	
2016 With Project (EACP)	828	996	1,824	1,106	793	1,899	134	306	440	157	130	287		1,477	1,189	2,666	1,245	1,635	2,880	476	453	929	540	461	1,001	
General Plan Buildout (GPBO) Without Project	805	768	1,573	903	743	1,646	158	377	535	184	162	346		1,202	1,097	2,299	1,151	1,366	2,517	479	459	938	560	470	1,030	
General Plan Buildout (GPBO) With Project	890	1,046	1,936	1,181	833	2,014	171	392	563	195	166	361		1,551	1,248	2,799	1,307	1,717	3,024	500	476	976	567	484	1,051	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	22,000			24,200			10,100			11,100				22,000			24,200			10,100			11,100			
Existing Pk-to-daily	*5%*			*5%*			*4%*			*2%*				*8%*			*8%*			*8%*			*8%*			
Project Only	5,000			5,000			400			200				5,000			5,000			400			200			
Cumulative Development Projects Only	2,500			2,600			200			200				2,500			2,600			200			200			
Existing + Project	26,900			29,200			10,500			11,300				26,900			29,200			10,500			11,300			
2016 Without Project (EAC)	25,300			27,800			10,700			11,700				25,300			27,800			10,700			11,700			
EAC Peak-to-Daily	*6%*			*6%*			*4%*			*2%*				*9%*			*9%*			*8%*			*8%*			
2016 With Project (EACP)	30,300			32,800			11,100			11,900				30,300			32,800			11,100			11,900			
EACP Peak-to-Daily	*6%*			*6%*			*4%*			*2%*				*9%*			*9%*			*8%*			*8%*			
General Plan Buildout (GPBO) Without Project	26,900			29,500			11,200			12,300				26,900			29,500			11,200			12,300			
GPBO without Project Peak-to-Daily	*6%*			*6%*			*5%*			*3%*				*9%*			*9%*			*8%*			*8%*			
2025 GP City of Riverside Model ADT	30,900			30,900										30,900			30,900									
2035 RivTAM ADT	33,000			33,000										33,000			33,000									
2035 Moreno Valley Model ADT	51,000			51,000										51,000			51,000									
General Plan Buildout (GPBO) With Project	31,800			34,500			11,700			12,500				31,800			34,500			11,700			12,500			
GPBO with Project Peak-to-Daily	*6%*			*6%*			*5%*			*3%*				*9%*			*9%*			*8%*			*8%*			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.050*			*1.050*			*1.050*			*1.050*				*1.050*			*1.050*			*1.050*			*1.050*			

Canyon Springs Healthcare Campus Senior Living Volume Development

2015/01/07

9. Day St. / Gateway Dr.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR												PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	75	446	46	77	321	73	50	35	31	32	83	98	1,367	57	498	115	201	540	35	89	105	67	115	99	180	2,101
Project Only	94	8	0	0	28	249	77	6	33	2	19	0	516	61	38	2	0	16	136	311	24	117	1	11	0	717
Cumulative Development Projects Only	0	94	1	1	126	0	0	0	0	0	0	1	223	0	150	1	1	110	0	0	1	0	1	1	1	266
Existing + Project	169	454	46	77	349	322	127	41	64	34	102	98	1,883	118	536	117	201	556	171	400	129	184	116	110	180	2,818
2016 Without Project (EAC)	78	558	49	81	460	76	52	36	32	33	86	103	1,644	59	668	121	210	672	36	93	110	70	121	104	188	2,452
2016 With Project (EACP)	172	566	49	81	488	325	129	42	65	35	105	103	2,160	120	706	123	210	688	172	404	134	187	122	115	188	3,169
General Plan Buildout (GPBO) Without Project	87	586	51	85	484	92	58	40	35	35	91	108	1,752	65	703	127	221	706	45	113	118	79	127	110	197	2,611
General Plan Buildout (GPBO) With Project	181	594	51	85	512	341	135	46	68	37	110	108	2,268	126	741	129	221	722	181	424	142	196	128	121	197	3,328
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	567	384	951	471	594	1,065	116	231	347	213	158	371		670	722	1,392	776	767	1,543	261	191	452	394	421	815	
Project Only	102	63	165	277	85	362	116	362	478	21	6	27		101	134	235	152	349	501	452	208	660	12	26	38	
Cumulative Development Projects Only	95	126	221	127	95	222	0	0	0	1	2	3		151	111	262	111	151	262	1	1	2	3	3	6	
Existing + Project	669	447	1,116	748	679	1,427	232	593	825	234	164	398		771	856	1,627	928	1,116	2,044	713	399	1,112	406	447	853	
2016 Without Project (EAC)	685	525	1,210	617	713	1,330	120	240	360	222	166	388		848	863	1,711	918	949	1,867	273	199	472	413	441	854	
2016 With Project (EACP)	787	588	1,375	894	798	1,692	236	602	838	243	172	415		949	997	1,946	1,070	1,298	2,368	725	407	1,132	425	467	892	
General Plan Buildout (GPBO) Without Project	724	554	1,278	661	752	1,413	133	270	403	234	176	410		895	912	1,807	972	1,013	1,985	310	220	530	434	466	900	
General Plan Buildout (GPBO) With Project	826	617	1,443	938	837	1,775	249	632	881	255	182	437		996	1,046	2,042	1,124	1,362	2,486	762	428	1,190	446	492	938	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	16,800			22,000			5,000			9,800				16,800			22,000			5,000			9,800			
Existing Pk-to-daily	*6%*			*5%*			*7%*			*4%*				*8%*			*7%*			*9%*			*8%*			
Project Only	2,300			5,000			6,500			400				2,300			5,000			6,500			400			
Cumulative Development Projects Only	2,500			2,500			8			48				2,500			2,500			8			48			
Existing + Project	19,100			26,900			11,500			10,200				19,100			26,900			11,500			10,200			
2016 Without Project (EAC)	19,900			25,300			5,200			10,200				19,900			25,300			5,200			10,200			
EAC Peak-to-Daily	*6%*			*5%*			*7%*			*4%*				*9%*			*7%*			*9%*			*8%*			
2016 With Project (EACP)	22,200			30,300			11,700			10,600				22,200			30,300			11,700			10,600			
EACP Peak-to-Daily	*6%*			*6%*			*7%*			*4%*				*9%*			*8%*			*10%*			*8%*			
General Plan Buildout (GPBO) Without Project	21,000			26,900			5,800			10,800				21,000			26,900			5,800			10,800			
GPBO without Project Peak-to-Daily	*6%*			*5%*			*7%*			*4%*				*9%*			*7%*			*9%*			*8%*			
2025 GP City of Riverside Model ADT	7,700			30,900										7,700			30,900									
2035 RivTAM ADT	23,000			33,000						30,000				23,000			33,000						30,000			
2035 Moreno Valley Model ADT	30,000			51,000						46,000				30,000			51,000						46,000			
General Plan Buildout (GPBO) With Project	23,400			31,800			12,300			11,100				23,400			31,800			12,300			11,100			
GPBO with Project Peak-to-Daily	*6%*			*6%*			*7%*			*4%*				*9%*			*8%*			*10%*			*8%*			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.050*			*1.050*			*1.050*			*1.050*				*1.050*			*1.050*			*1.050*			*1.050*			

Canyon Springs Healthcare Campus Senior Living Volume Development

2015/01/07

10. Day St. / Dwy. 1

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	0	594	0	0	360	0	0	0	0	0	0	0	954	0	685	0	0	729	0	0	0	0	0	0	0	1,414
Project Only	46	94	0	0	40	23	8	0	7	0	0	0	218	24	60	0	0	121	12	41	0	36	0	0	0	294
Cumulative Development Projects Only	0	95	0	0	126	0	0	0	0	0	0	0	221	0	151	0	0	111	0	0	0	0	0	0	0	262
Existing + Project	46	688	0	0	400	23	8	0	7	0	0	0	1,172	24	745	0	0	850	12	41	0	36	0	0	0	1,708
2016 Without Project (EAC)	0	713	0	0	501	0	0	0	0	0	0	0	1,214	0	864	0	0	869	0	0	0	0	0	0	0	1,733
2016 With Project (EACP)	46	807	0	0	541	23	8	0	7	0	0	0	1,432	24	924	0	0	990	12	41	0	36	0	0	0	2,027
General Plan Buildout (GPBO) Without Project	0	766	0	0	529	0	0	0	0	0	0	0	1,295	0	920	0	0	922	0	0	0	0	0	0	0	1,842
General Plan Buildout (GPBO) With Project	46	860	0	0	569	23	8	0	7	0	0	0	1,513	24	980	0	0	1,043	12	41	0	36	0	0	0	2,136
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	594	360	954	360	594	954	0	0	0	0	0	0		685	729	1,414	729	685	1,414	0	0	0	0	0	0	
Project Only	140	47	187	63	102	165	15	69	84	0	0	0		84	157	241	133	101	234	77	36	113	0	0	0	
Cumulative Development Projects Only	95	126	221	126	95	221	0	0	0	0	0	0		151	111	262	111	151	262	0	0	0	0	0	0	
Existing + Project	734	407	1,141	423	696	1,119	15	69	84	0	0	0		769	886	1,655	862	786	1,648	77	36	113	0	0	0	
2016 Without Project (EAC)	713	501	1,214	501	713	1,214	0	0	0	0	0	0		864	869	1,733	869	864	1,733	0	0	0	0	0	0	
2016 With Project (EACP)	853	548	1,401	564	815	1,379	15	69	84	0	0	0		948	1,026	1,974	1,002	965	1,967	77	36	113	0	0	0	
General Plan Buildout (GPBO) Without Project	766	529	1,295	529	766	1,295	0	0	0	0	0	0		920	922	1,842	922	920	1,842	0	0	0	0	0	0	
General Plan Buildout (GPBO) With Project	906	576	1,482	592	868	1,460	15	69	84	0	0	0		1,004	1,079	2,083	1,055	1,021	2,076	77	36	113	0	0	0	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	16,800			16,800			0			0				16,800			16,800			0			0			
Existing Pk-to-daily	*6%*			*6%*			-			-				*8%*			*8%*			-			-			
Project Only	2,500			2,300			1,200			0				2,500			2,300			1,200			0			
Cumulative Development Projects Only	2,500			2,500			0			0				2,500			2,500			0			0			
Existing + Project	19,300			19,100			1,200			0				19,300			19,100			1,200			0			
2016 Without Project (EAC)	19,900			19,900			0			0				19,900			19,900			0			0			
EAC Peak-to-Daily	*6%*			*6%*			-			-				*9%*			*9%*			-			-			
2016 With Project (EACP)	22,400			22,200			1,200			0				22,400			22,200			1,200			0			
EACP Peak-to-Daily	*6%*			*6%*			*7%*			-				*9%*			*9%*			*9%*			-			
General Plan Buildout (GPBO) Without Project	21,000			21,000			0			0				21,000			21,000			0			0			
GPBO without Project Peak-to-Daily	*6%*			*6%*			-			-				*9%*			*9%*			-			-			
2025 GP City of Riverside Model ADT	7,700			7,700										7,700			7,700									
2035 RivTAM ADT	23,000			23,000										23,000			23,000									
2035 Moreno Valley Model ADT	30,000			30,000										30,000			30,000									
General Plan Buildout (GPBO) With Project	23,500			23,400			1,200			0				23,500			23,400			1,200			0			
GPBO with Project Peak-to-Daily	*6%*			*6%*			*7%*			-				*9%*			*9%*			*9%*			-			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.050*			*1.050*			*1.000*			-				*1.050*			*1.050*			*1.000*			-			

3.1-35

Canyon Springs Healthcare Campus Senior Living Volume Development

2015/01/07

11. Day St. / Dwy. 2

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	0	594	0	0	360	0	0	0	0	0	0	0	954	0	685	0	0	729	0	0	0	0	0	0	0	1,414
Project Only	0	140	0	0	40	8	0	0	5	0	0	0	193	0	84	0	0	153	4	0	0	26	0	0	0	267
Cumulative Development Projects Only	0	95	0	0	126	0	0	0	0	0	0	0	221	0	151	0	0	111	0	0	0	0	0	0	0	262
Existing + Project	0	734	0	0	400	8	0	0	5	0	0	0	1,147	0	769	0	0	882	4	0	0	26	0	0	0	1,681
2016 Without Project (EAC)	0	713	0	0	501	0	0	0	0	0	0	0	1,214	0	864	0	0	869	0	0	0	0	0	0	0	1,733
2016 With Project (EACP)	0	853	0	0	541	8	0	0	5	0	0	0	1,407	0	948	0	0	1,022	4	0	0	26	0	0	0	2,000
General Plan Buildout (GPBO) Without Project	0	766	0	0	528	0	0	0	0	0	0	0	1,294	0	920	0	0	922	0	0	0	0	0	0	0	1,842
General Plan Buildout (GPBO) With Project	0	906	0	0	568	8	0	0	5	0	0	0	1,487	0	1,004	0	0	1,075	4	0	0	26	0	0	0	2,109

	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	594	360	954	360	594	954	0	0	0	0	0	0		685	729	1,414	729	685	1,414	0	0	0	0	0	0	
Project Only	140	45	185	48	140	188	5	8	13	0	0	0		84	179	263	157	84	241	26	4	30	0	0	0	
Cumulative Development Projects Only	95	126	221	126	95	221	0	0	0	0	0	0		151	111	262	111	151	262	0	0	0	0	0	0	
Existing + Project	734	405	1,139	408	734	1,142	5	8	13	0	0	0		769	908	1,677	886	769	1,655	26	4	30	0	0	0	
2016 Without Project (EAC)	713	501	1,214	501	713	1,214	0	0	0	0	0	0		864	869	1,733	869	864	1,733	0	0	0	0	0	0	
2016 With Project (EACP)	853	546	1,399	549	853	1,402	5	8	13	0	0	0		948	1,048	1,996	1,026	948	1,974	26	4	30	0	0	0	
General Plan Buildout (GPBO) Without Project	766	528	1,294	528	766	1,294	0	0	0	0	0	0		920	922	1,842	922	920	1,842	0	0	0	0	0	0	
General Plan Buildout (GPBO) With Project	906	573	1,479	576	906	1,482	5	8	13	0	0	0		1,004	1,101	2,105	1,079	1,004	2,083	26	4	30	0	0	0	

ADT	South Leg	North Leg	West Leg	East Leg		South Leg	North Leg	West Leg	East Leg	
Existing (2014)	16,800	16,800	0	0		16,800	16,800	0	0	
Existing Pk-to-daily	*6%*	*6%*	*-*	*-*		*8%*	*8%*	*-*	*-*	
Project Only	2,600	2,500	300	0		2,600	2,500	300	0	
Cumulative Development Projects Only	2,500	2,500	0	0		2,500	2,500	0	0	
Existing + Project	19,400	19,300	300	0		19,400	19,300	300	0	
2016 Without Project (EAC)	19,900	19,900	0	0		19,900	19,900	0	0	
EAC Peak-to-Daily	*6%*	*6%*	*-*	*-*		*9%*	*9%*	*-*	*-*	
2016 With Project (EACP)	22,500	22,400	300	0		22,500	22,400	300	0	
EACP Peak-to-Daily	*6%*	*6%*	*5%*	*-*		*9%*	*9%*	*12%*	*-*	
General Plan Buildout (GPBO) Without Project	21,000	21,000	0	0		21,000	21,000	0	0	
GPBO without Project Peak-to-Daily	*6%*	*6%*	*-*	*-*		*9%*	*9%*	*-*	*-*	
2025 GP City of Riverside Model ADT	7,700	7,700				7,700	7,700			
2035 RivTAM ADT	23,000	23,000				23,000	23,000			
2035 Moreno Valley Model ADT	30,000	30,000				30,000	30,000			
General Plan Buildout (GPBO) With Project	23,700	23,500	300	0		23,700	23,500	300	0	
GPBO with Project Peak-to-Daily	*6%*	*6%*	*5%*	*-*		*9%*	*9%*	*12%*	*-*	
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.050*	*1.050*	*1.000*	*-*		*1.050*	*1.050*	*1.000*	*-*	

Canyon Springs Healthcare Campus Senior Living Volume Development

2015/01/07

12. Day St. / Eucalyptus Av.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR												PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	206	336	39	70	133	157	158	201	70	19	442	100	1,931	76	323	33	134	376	219	229	528	164	31	330	133	2,576
Project Only	18	57	0	8	19	18	57	13	5	0	37	26	258	9	33	0	33	72	74	36	46	22	0	21	15	361
Cumulative Development Projects Only	12	75	181	4	116	6	16	366	9	272	551	4	1,612	10	137	332	3	91	17	11	674	14	221	448	3	1,961
Existing + Project	224	393	39	78	152	175	215	214	75	19	479	126	2,189	85	356	33	167	448	293	265	574	186	31	351	148	2,937
2016 Without Project (EAC)	226	425	222	77	254	169	180	575	82	292	1,011	108	3,621	89	473	366	142	482	245	249	1,223	185	253	791	141	4,639
2016 With Project (EACP)	244	482	222	85	273	187	237	588	87	292	1,048	134	3,879	98	506	366	175	554	319	285	1,269	207	253	812	156	5,000
General Plan Buildout (GPBO) Without Project	243	459	238	82	268	178	192	604	86	307	1,063	115	3,835	96	508	392	151	510	261	263	1,286	195	266	832	149	4,909
General Plan Buildout (GPBO) With Project	261	516	238	90	287	196	249	617	91	307	1,100	141	4,093	105	541	392	184	582	335	299	1,332	217	266	853	164	5,270
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	581	222	803	360	594	954	429	805	1,234	561	310	871		432	571	1,003	729	685	1,414	921	625	1,546	494	695	1,189	
Project Only	75	24	99	45	140	185	75	73	148	63	21	84		42	94	136	179	84	263	104	104	208	36	79	115	
Cumulative Development Projects Only	268	397	665	126	95	221	391	569	960	827	551	1,378		479	326	805	111	151	262	699	475	1,174	672	1,009	1,681	
Existing + Project	656	246	902	405	734	1,139	504	878	1,382	624	331	955		474	665	1,139	908	769	1,677	1,025	729	1,754	530	774	1,304	
2016 Without Project (EAC)	873	628	1,501	500	713	1,213	837	1,406	2,243	1,411	874	2,285		928	920	1,848	869	863	1,732	1,657	1,125	2,782	1,185	1,731	2,916	
2016 With Project (EACP)	948	652	1,600	545	853	1,398	912	1,479	2,391	1,474	895	2,369		970	1,014	1,984	1,048	947	1,995	1,761	1,229	2,990	1,221	1,810	3,031	
General Plan Buildout (GPBO) Without Project	940	661	1,601	528	766	1,294	882	1,484	2,366	1,485	924	2,409		996	971	1,967	922	920	1,842	1,744	1,189	2,933	1,247	1,829	3,076	
General Plan Buildout (GPBO) With Project	1,015	685	1,700	573	906	1,479	957	1,557	2,514	1,548	945	2,493		1,038	1,065	2,103	1,101	1,004	2,105	1,848	1,293	3,141	1,283	1,908	3,191	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	11,800			16,800			17,100			13,900				11,800			16,800			17,100			13,900			
Existing Pk-to-daily	*7%*			*6%*			*7%*			*6%*				*9%*			*8%*			*9%*			*9%*			
Project Only	1,400			2,600			2,100			1,200				1,400			2,600			2,100			1,200			
Cumulative Development Projects Only	7,400			2,500			10,700			15,300				7,400			2,500			10,700			15,300			
Existing + Project	13,200			19,400			19,200			15,000				13,200			19,400			19,200			15,000			
2016 Without Project (EAC)	19,600			19,900			28,500			29,700				19,600			19,900			28,500			29,700			
EAC Peak-to-Daily	*8%*			*6%*			*8%*			*8%*				*9%*			*9%*			*10%*			*10%*			
2016 With Project (EACP)	21,000			22,500			30,600			30,900				21,000			22,500			30,600			30,900			
EACP Peak-to-Daily	*8%*			*6%*			*8%*			*8%*				*9%*			*9%*			*10%*			*10%*			
General Plan Buildout (GPBO) Without Project	21,000			21,000			30,100			31,300				21,000			21,000			30,100			31,300			
GPBO without Project Peak-to-Daily	*8%*			*6%*			*8%*			*8%*				*9%*			*9%*			*10%*			*10%*			
2025 GP City of Riverside Model ADT	22,400			7,700						27,100				22,400			7,700						27,100			
2035 RivTAM ADT	30,000			23,000			30,000			29,000				30,000			23,000			30,000			29,000			
2035 Moreno Valley Model ADT	40,000			30,000			37,000			38,000				40,000			30,000			37,000			38,000			
General Plan Buildout (GPBO) With Project	22,400			23,700			32,100			32,400				22,400			23,700			32,100			32,400			
GPBO with Project Peak-to-Daily	*8%*			*6%*			*8%*			*8%*				*9%*			*9%*			*10%*			*10%*			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.070*			*1.050*			*1.050*			*1.050*				*1.070*			*1.050*			*1.050*			*1.050*			

Canyon Springs Healthcare Campus Senior Living Volume Development

13. Day St. / Cottonwood Av.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	3	321	10	82	139	24	33	74	4	19	99	131	939	11	253	16	145	273	21	23	86	9	11	80	110	1,038
Project Only	0	62	0	4	20	0	1	0	0	0	0	11	98	0	35	0	14	79	1	1	0	0	0	0	7	137
Cumulative Development Projects Only	37	187	110	113	287	0	0	54	57	77	36	81	1,039	67	342	91	98	227	0	0	44	45	134	66	137	1,251
Existing + Project	3	383	10	86	159	24	34	74	4	19	99	142	1,037	11	288	16	159	352	22	24	86	9	11	80	117	1,175
2016 Without Project (EAC)	40	521	120	198	432	25	34	131	61	97	139	217	2,015	78	605	108	249	511	22	24	133	54	145	149	251	2,329
2016 With Project (EACP)	40	583	120	202	452	25	35	131	61	97	139	228	2,113	78	640	108	263	590	23	25	133	54	145	149	258	2,466
General Plan Buildout (GPBO) Without Project	44	579	132	212	464	27	36	138	64	151	217	345	2,409	86	669	119	267	552	24	25	140	57	226	232	395	2,792
General Plan Buildout (GPBO) With Project	44	641	132	216	484	27	37	138	64	151	217	356	2,507	86	704	119	281	631	25	26	140	57	226	232	402	2,929
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	334	162	496	245	485	730	111	126	237	249	166	415		280	293	573	439	386	825	118	112	230	201	247	448	
Project Only	62	20	82	24	74	98	1	0	1	11	4	15		35	79	114	94	43	137	1	1	2	7	14	21	
Cumulative Development Projects Only	334	421	755	400	268	668	111	73	184	194	277	471		500	406	906	325	479	804	89	133	222	337	233	570	
Existing + Project	396	182	578	269	559	828	112	126	238	260	170	430		315	372	687	533	429	962	119	113	232	208	261	469	
2016 Without Project (EAC)	681	590	1,271	655	772	1,427	226	204	430	453	449	902		791	710	1,501	782	880	1,662	211	249	460	545	490	1,035	
2016 With Project (EACP)	743	610	1,353	679	846	1,525	227	204	431	464	453	917		826	789	1,615	876	923	1,799	212	250	462	552	504	1,056	
General Plan Buildout (GPBO) Without Project	755	679	1,434	703	960	1,663	238	288	526	713	482	1,195		874	835	1,709	843	1,089	1,932	222	342	564	853	526	1,379	
General Plan Buildout (GPBO) With Project	817	699	1,516	727	1,034	1,761	239	288	527	724	486	1,210		909	914	1,823	937	1,132	2,069	223	343	566	860	540	1,400	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	7,100			11,800			2,800			5,400				7,100			11,800			2,800			5,400			
Existing Pk-to-daily	*7%*			*6%*			*9%*			*8%*				*8%*			*7%*			*8%*			*8%*			
Project Only	1,100			1,400			22			200				1,100			1,400			22			200			
Cumulative Development Projects Only	8,300			7,400			2,000			5,200				8,300			7,400			2,000			5,200			
Existing + Project	8,200			13,200			2,800			5,600				8,200			13,200			2,800			5,600			
2016 Without Project (EAC)	15,700			19,600			4,900			10,800				15,700			19,600			4,900			10,800			
EAC Peak-to-Daily	*8%*			*7%*			*9%*			*8%*				*10%*			*8%*			*9%*			*10%*			
2016 With Project (EACP)	16,800			21,000			4,900			11,000				16,800			21,000			4,900			11,000			
EACP Peak-to-Daily	*8%*			*7%*			*9%*			*8%*				*10%*			*9%*			*9%*			*10%*			
General Plan Buildout (GPBO) Without Project	17,500			21,000			5,100			17,000				17,500			21,000			5,100			17,000			
GPBO without Project Peak-to-Daily	*8%*			*8%*			*10%*			*7%*				*10%*			*9%*			*11%*			*8%*			
2025 GP City of Riverside Model ADT	18,600			22,400						17,200				18,600			22,400						17,200			
2035 RivTAM ADT	30,000			30,000			1,000			10,000				30,000			30,000			1,000			10,000			
2035 Moreno Valley Model ADT	41,000			40,000			2,000			12,000				41,000			40,000			2,000			12,000			
General Plan Buildout (GPBO) With Project	18,600			22,400			5,200			17,200				18,600			22,400			5,200			17,200			
GPBO with Project Peak-to-Daily	*8%*			*8%*			*10%*			*7%*				*10%*			*9%*			*11%*			*8%*			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.100*			*1.070*			*1.050*			*1.560*				*1.100*			*1.070*			*1.050*			*1.560*			

Canyon Springs Healthcare Campus Senior Living Volume Development

2015/01/07

14. Day St. / Bay Av.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR												PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	6	283	1	16	137	5	9	27	16	7	22	47	576	12	243	5	19	279	6	8	41	13	9	22	18	675
Project Only	0	42	0	4	14	3	10	0	0	0	0	11	84	0	24	0	14	53	12	5	0	0	0	0	6	114
Cumulative Development Projects Only	0	334	0	0	422	0	0	0	0	2	0	0	758	0	500	1	0	405	0	0	0	0	0	0	0	906
Existing + Project	6	325	1	20	151	8	19	27	16	7	22	58	660	12	267	5	33	332	18	13	41	13	9	22	24	789
2016 Without Project (EAC)	6	628	1	17	565	5	9	28	17	9	23	49	1,357	12	753	6	20	695	6	8	43	14	9	23	19	1,608
2016 With Project (EACP)	6	670	1	21	579	8	19	28	17	9	23	60	1,441	12	777	6	34	748	18	13	43	14	9	23	25	1,722
General Plan Buildout (GPBO) Without Project	7	735	1	19	623	6	10	29	18	9	24	52	1,533	14	877	7	23	770	8	9	45	15	9	24	20	1,821
General Plan Buildout (GPBO) With Project	7	777	1	23	637	9	20	29	18	9	24	63	1,617	14	901	7	37	823	20	14	45	15	9	24	26	1,935

	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	290	160	450	158	339	497	52	33	85	76	44	120		260	301	561	304	269	573	62	40	102	49	65	114	
Project Only	42	14	56	21	63	84	10	3	13	11	4	15		24	53	77	79	35	114	5	12	17	6	14	20	
Cumulative Development Projects Only	334	424	758	422	334	756	0	0	0	2	0	2		501	405	906	405	500	905	0	0	0	0	1	1	
Existing + Project	332	174	506	179	402	581	62	36	98	87	48	135		284	354	638	383	304	687	67	52	119	55	79	134	
2016 Without Project (EAC)	635	591	1,226	587	686	1,273	54	34	88	81	46	127		771	718	1,489	721	780	1,501	65	41	106	51	69	120	
2016 With Project (EACP)	677	605	1,282	608	749	1,357	64	37	101	92	50	142		795	771	1,566	800	815	1,615	70	53	123	57	83	140	
General Plan Buildout (GPBO) Without Project	743	650	1,393	648	797	1,445	57	37	94	85	49	134		898	794	1,692	801	906	1,707	69	46	115	53	75	128	
General Plan Buildout (GPBO) With Project	785	664	1,449	669	860	1,529	67	40	107	96	53	149		922	847	1,769	880	941	1,821	74	58	132	59	89	148	

ADT	South Leg	North Leg	West Leg	East Leg		South Leg	North Leg	West Leg	East Leg	
Existing (2014)	6,700	7,100	1,200	1,400		6,700	7,100	1,200	1,400	
Existing Pk-to-daily	*7%*	*7%*	*7%*	*9%*		*8%*	*8%*	*8%*	*8%*	
Project Only	800	1,100	200	200		800	1,100	200	200	
Cumulative Development Projects Only	8,300	8,300	0	16		8,300	8,300	0	16	
Existing + Project	7,500	8,200	1,400	1,600		7,500	8,200	1,400	1,600	
2016 Without Project (EAC)	15,300	15,700	1,300	1,400		15,300	15,700	1,300	1,400	
EAC Peak-to-Daily	*8%*	*8%*	*7%*	*9%*		*10%*	*10%*	*8%*	*8%*	
2016 With Project (EACP)	16,100	16,800	1,400	1,600		16,100	16,800	1,400	1,600	
EACP Peak-to-Daily	*8%*	*8%*	*7%*	*9%*		*10%*	*10%*	*9%*	*9%*	
General Plan Buildout (GPBO) Without Project	17,800	17,500	1,300	1,500		17,800	17,500	1,300	1,500	
GPBO without Project Peak-to-Daily	*8%*	*8%*	*7%*	*9%*		*9%*	*10%*	*9%*	*8%*	
2025 GP City of Riverside Model ADT	18,600	18,600				18,600	18,600			
2035 RivTAM ADT	32,000	30,000				32,000	30,000			
2035 Moreno Valley Model ADT	44,000	41,000				44,000	41,000			
General Plan Buildout (GPBO) With Project	18,600	18,600	1,500	1,700		18,600	18,600	1,500	1,700	
GPBO with Project Peak-to-Daily	*8%*	*8%*	*7%*	*9%*		*10%*	*10%*	*9%*	*9%*	
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.160*	*1.100*	*1.050*	*1.050*		*1.160*	*1.100*	*1.050*	*1.050*	

Canyon Springs Healthcare Campus Senior Living Volume Development

2015/01/07

15. Day St. / Alessandro Bl.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	14	35	18	72	11	66	144	695	15	4	1,057	93	2,224	11	14	7	177	20	81	127	1,193	5	4	805	120	2,564
Project Only	0	10	0	7	3	4	11	0	0	0	0	20	55	0	6	0	26	13	14	7	0	0	0	0	11	77
Cumulative Development Projects Only	80	248	85	3	360	60	84	290	142	159	491	2	2,004	144	426	151	2	302	102	72	573	95	98	423	3	2,391
Existing + Project	14	45	18	79	14	70	155	695	15	4	1,057	113	2,279	11	20	7	203	33	95	134	1,193	5	4	805	131	2,641
2016 Without Project (EAC)	95	284	104	78	371	129	234	1,013	158	163	1,591	99	4,319	155	441	158	186	323	186	204	1,814	100	102	1,261	128	5,058
2016 With Project (EACP)	95	294	104	85	374	133	245	1,013	158	163	1,591	119	4,374	155	447	158	212	336	200	211	1,814	100	102	1,261	139	5,135
General Plan Buildout (GPBO) Without Project	100	299	109	92	431	150	285	1,226	191	171	1,671	105	4,830	163	463	166	220	377	218	248	2,195	121	107	1,324	135	5,737
General Plan Buildout (GPBO) With Project	100	309	109	99	434	154	296	1,226	191	171	1,671	125	4,885	163	469	166	246	390	232	255	2,195	121	107	1,324	146	5,814
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	67	30	97	149	272	421	854	1,137	1,991	1,154	785	1,939		32	29	61	278	261	539	1,325	897	2,222	929	1,377	2,306	
Project Only	10	3	13	14	41	55	11	4	15	20	7	27		6	13	19	53	24	77	7	14	21	11	26	37	
Cumulative Development Projects Only	413	661	1,074	423	334	757	516	631	1,147	652	378	1,030		721	495	1,216	406	501	907	740	669	1,409	524	726	1,250	
Existing + Project	77	33	110	163	313	476	865	1,141	2,006	1,174	792	1,966		38	42	80	331	285	616	1,332	911	2,243	940	1,403	2,343	
2016 Without Project (EAC)	483	692	1,175	578	617	1,195	1,405	1,815	3,220	1,853	1,195	3,048		754	525	1,279	695	773	1,468	2,118	1,602	3,720	1,491	2,158	3,649	
2016 With Project (EACP)	493	695	1,188	592	658	1,250	1,416	1,819	3,235	1,873	1,202	3,075		760	538	1,298	748	797	1,545	2,125	1,616	3,741	1,502	2,184	3,686	
General Plan Buildout (GPBO) Without Project	508	793	1,301	673	689	1,362	1,702	1,921	3,623	1,947	1,427	3,374		792	605	1,397	815	846	1,661	2,564	1,705	4,269	1,566	2,581	4,147	
General Plan Buildout (GPBO) With Project	518	796	1,314	687	730	1,417	1,713	1,925	3,638	1,967	1,434	3,401		798	618	1,416	868	870	1,738	2,571	1,719	4,290	1,577	2,607	4,184	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	700			6,700			26,700			27,700				700			6,700			26,700			27,700			
Existing Pk-to-daily	*13%*			*6%*			*7%*			*7%*				*8%*			*8%*			*8%*			*8%*			
Project Only	200			800			200			400				200			800			200			400			
Cumulative Development Projects Only	11,200			8,300			13,400			11,900				11,200			8,300			13,400			11,900			
Existing + Project	900			7,500			26,900			28,000				900			7,500			26,900			28,000			
2016 Without Project (EAC)	12,000			15,300			41,100			40,700				12,000			15,300			41,100			40,700			
EAC Peak-to-Daily	*10%*			*8%*			*8%*			*7%*				*11%*			*10%*			*9%*			*9%*			
2016 With Project (EACP)	12,200			16,100			41,300			41,100				12,200			16,100			41,300			41,100			
EACP Peak-to-Daily	*10%*			*8%*			*8%*			*7%*				*11%*			*10%*			*9%*			*9%*			
General Plan Buildout (GPBO) Without Project	12,600			17,800			49,700			42,800				12,600			17,800			49,700			42,800			
GPBO without Project Peak-to-Daily	*10%*			*8%*			*7%*			*8%*				*11%*			*9%*			*9%*			*10%*			
2025 GP City of Riverside Model ADT				18,600			49,900			39,800							18,600			49,900			39,800			
2035 RivTAM ADT	10,000			32,000			53,000			41,000				10,000			32,000			53,000			41,000			
2035 Moreno Valley Model ADT	15,000			44,000			62,000			49,000				15,000			44,000			62,000			49,000			
General Plan Buildout (GPBO) With Project	12,800			18,600			49,900			43,100				12,800			18,600			49,900			43,100			
GPBO with Project Peak-to-Daily	*10%*			*8%*			*7%*			*8%*				*11%*			*9%*			*9%*			*10%*			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.050*			*1.160*			*1.210*			*1.050*				*1.050*			*1.160*			*1.210*			*1.050*			

3.1-33

Canyon Springs Healthcare Campus Senior Living Volume Development

16. Memorial Wy. - Eucalyptus Av. / Eucalyptus Av. - Towngate Dr.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	221	160	15	14	82	42	39	180	123	9	175	30	1,090	153	265	20	53	271	81	115	260	213	26	240	61	1,758
Project Only	32	0	0	0	0	0	0	10	11	0	31	0	84	18	0	0	0	0	0	0	39	40	0	18	0	115
Cumulative Development Projects Only	276	0	0	0	0	270	180	185	182	0	277	0	1,370	223	0	0	0	0	220	330	338	337	0	226	0	1,674
Existing + Project	253	160	15	14	82	42	39	190	134	9	206	30	1,174	171	265	20	53	271	81	115	299	253	26	258	61	1,873
2016 Without Project (EAC)	506	166	16	15	85	314	221	372	310	9	459	31	2,504	382	276	21	55	282	304	450	609	559	27	476	63	3,504
2016 With Project (EACP)	538	166	16	15	85	314	221	382	321	9	490	31	2,588	400	276	21	55	282	304	450	648	599	27	494	63	3,619
General Plan Buildout (GPBO) Without Project	533	174	17	16	89	330	232	392	326	10	508	34	2,661	402	290	22	58	296	319	473	641	589	30	525	69	3,714
General Plan Buildout (GPBO) With Project	565	174	17	16	89	330	232	402	337	10	539	34	2,745	420	290	22	58	296	319	473	680	629	30	543	69	3,829
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	396	214	610	138	229	367	342	438	780	214	209	423		438	510	948	405	441	846	588	474	1,062	327	333	660	
Project Only	32	11	43	0	0	0	21	63	84	31	10	41		18	40	58	0	0	0	79	36	115	18	39	57	
Cumulative Development Projects Only	276	182	458	270	180	450	547	823	1,370	277	185	462		223	337	560	220	330	550	1,005	669	1,674	226	338	564	
Existing + Project	428	225	653	138	229	367	363	501	864	245	219	464		456	550	1,006	405	441	846	667	510	1,177	345	372	717	
2016 Without Project (EAC)	688	404	1,092	414	418	832	903	1,279	2,182	499	403	902		679	868	1,547	641	789	1,430	1,618	1,162	2,780	566	685	1,251	
2016 With Project (EACP)	720	415	1,135	414	418	832	924	1,342	2,266	530	413	943		697	908	1,605	641	789	1,430	1,697	1,198	2,895	584	724	1,308	
General Plan Buildout (GPBO) Without Project	724	425	1,149	435	440	875	950	1,371	2,321	552	425	977		714	915	1,629	673	832	1,505	1,703	1,246	2,949	624	721	1,345	
General Plan Buildout (GPBO) With Project	756	436	1,192	435	440	875	971	1,434	2,405	583	435	1,018		732	955	1,687	673	832	1,505	1,782	1,282	3,064	642	760	1,402	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	11,400			10,200			13,900			7,900				11,400			10,200			13,900			7,900			
Existing Pk-to-daily	*5%*			*4%*			*6%*			*5%*				*8%*			*8%*			*8%*			*8%*			
Project Only	600			0			1,200			600				600			0			1,200			600			
Cumulative Development Projects Only	5,100			5,000			15,200			5,100				5,100			5,000			15,200			5,100			
Existing + Project	12,000			10,200			15,000			8,500				12,000			10,200			15,000			8,500			
2016 Without Project (EAC)	16,900			15,600			29,700			13,400				16,900			15,600			29,700			13,400			
EAC Peak-to-Daily	*6%*			*5%*			*7%*			*7%*				*9%*			*9%*			*9%*			*9%*			
2016 With Project (EACP)	17,500			15,600			30,800			14,000				17,500			15,600			30,800			14,000			
EACP Peak-to-Daily	*6%*			*5%*			*7%*			*7%*				*9%*			*9%*			*9%*			*9%*			
General Plan Buildout (GPBO) Without Project	17,800			16,300			31,300			14,800				17,800			16,300			31,300			14,800			
GPBO without Project Peak-to-Daily	*6%*			*5%*			*7%*			*7%*				*9%*			*9%*			*9%*			*9%*			
2025 GP City of Riverside Model ADT	8,500						27,100			15,400				8,500						27,100			15,400			
2035 RivTAM ADT	23,000			17,000			29,000			20,000				23,000			17,000			29,000			20,000			
2035 Moreno Valley Model ADT	25,000			28,000			38,000			25,000				25,000			28,000			38,000			25,000			
General Plan Buildout (GPBO) With Project	18,400			16,300			32,400			15,400				18,400			16,300			32,400			15,400			
GPBO with Project Peak-to-Daily	*6%*			*5%*			*7%*			*7%*				*9%*			*9%*			*9%*			*9%*			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.050*			*1.050*			*1.050*			*1.100*				*1.050*			*1.050*			*1.050*			*1.100*			

Canyon Springs Healthcare Campus Senior Living Volume Development

17. Corporate Centre Pl. / Cyn. Springs Pkwy.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	11	11	27	25	12	7	6	170	5	22	242	23	561	26	45	52	163	56	32	40	365	31	41	417	97	1,365
Project Only	0	0	3	0	0	0	0	0	0	2	0	0	5	0	0	3	0	0	0	0	0	0	3	0	0	6
Cumulative Development Projects Only	0	0	0	1	0	4	3	30	0	0	39	2	79	0	0	0	2	0	4	4	38	0	0	36	1	85
Existing + Project	11	11	30	25	12	7	6	170	5	24	242	23	566	26	45	55	163	56	32	40	365	31	44	417	97	1,371
2016 Without Project (EAC)	11	11	28	27	12	11	9	207	5	23	291	26	661	27	47	54	172	58	37	46	418	32	43	470	102	1,506
2016 With Project (EACP)	11	11	31	27	12	11	9	207	5	25	291	26	666	27	47	57	172	58	37	46	418	32	46	470	102	1,512
General Plan Buildout (GPBO) Without Project	27	27	31	28	13	12	9	218	25	34	308	27	759	40	67	60	181	61	39	48	439	54	55	494	107	1,645
General Plan Buildout (GPBO) With Project	27	27	34	28	13	12	9	218	25	36	308	27	764	40	67	63	181	61	39	48	439	54	58	494	107	1,651
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	49	39	88	44	40	84	181	260	441	287	222	509		123	128	251	251	182	433	436	475	911	555	580	1,135	
Project Only	3	2	5	0	0	0	0	0	0	2	3	5		3	3	6	0	0	0	0	0	0	3	3	6	
Cumulative Development Projects Only	0	0	0	5	5	10	33	43	76	41	31	72		0	0	0	6	5	11	42	40	82	37	40	77	
Existing + Project	52	41	93	44	40	84	181	260	441	289	225	514		126	131	257	251	182	433	436	475	911	558	583	1,141	
2016 Without Project (EAC)	50	40	90	50	46	96	221	313	534	340	262	602		128	133	261	267	195	462	496	534	1,030	615	644	1,259	
2016 With Project (EACP)	53	42	95	50	46	96	221	313	534	342	265	607		131	136	267	267	195	462	496	534	1,030	618	647	1,265	
General Plan Buildout (GPBO) Without Project	85	72	157	53	63	116	252	347	599	369	277	646		167	170	337	281	222	503	541	573	1,114	656	680	1,336	
General Plan Buildout (GPBO) With Project	88	74	162	53	63	116	252	347	599	371	280	651		170	173	343	281	222	503	541	573	1,114	659	683	1,342	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	3,500			5,200			10,900			13,600				3,500			5,200			10,900			13,600			
Existing Pk-to-daily	*3%*			*2%*			*4%*			*4%*				*7%*			*8%*			*8%*			*8%*			
Project Only	100			0			8			100				100			0			8			100			
Cumulative Development Projects Only	0			100			900			800				0			100			900			800			
Existing + Project	3,600			5,200			10,900			13,700				3,600			5,200			10,900			13,700			
2016 Without Project (EAC)	3,600			5,500			12,200			15,000				3,600			5,500			12,200			15,000			
EAC Peak-to-Daily	*2%*			*2%*			*4%*			*4%*				*7%*			*8%*			*8%*			*8%*			
2016 With Project (EACP)	3,700			5,500			12,300			15,100				3,700			5,500			12,300			15,100			
EACP Peak-to-Daily	*3%*			*2%*			*4%*			*4%*				*7%*			*8%*			*8%*			*8%*			
General Plan Buildout (GPBO) Without Project	4,000			5,800			12,900			15,800				4,000			5,800			12,900			15,800			
GPBO without Project Peak-to-Daily	*4%*			*2%*			*5%*			*4%*				*9%*			*9%*			*9%*			*8%*			
2025 GP City of Riverside Model ADT																										
2035 RivTAM ADT																										
2035 Moreno Valley Model ADT																										
General Plan Buildout (GPBO) With Project	4,100			5,800			12,900			15,800				4,100			5,800			12,900			15,800			
GPBO with Project Peak-to-Daily	*4%*			*2%*			*5%*			*4%*				*8%*			*9%*			*9%*			*8%*			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.100*			*1.050*			*1.050*			*1.050*				*1.100*			*1.050*			*1.050*			*1.050*			

Canyon Springs Healthcare Campus Senior Living Volume Development

18. Corporate Centre Pl. / Campus Pkwy.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	14	44	13	5	22	17	11	54	4	18	65	9	276	9	72	61	38	83	28	22	161	19	60	129	46	728
Project Only	0	3	9	9	2	0	0	10	0	5	3	3	44	0	3	9	5	3	0	0	6	0	9	13	12	60
Cumulative Development Projects Only	0	0	3	0	0	0	0	1	0	4	2	0	10	0	0	3	0	0	0	0	3	0	3	3	0	12
Existing + Project	14	47	22	14	24	17	11	64	4	23	68	12	320	9	75	70	43	86	28	22	167	19	69	142	58	788
2016 Without Project (EAC)	15	46	17	5	23	18	11	57	4	23	70	9	298	9	75	66	40	86	29	23	171	20	65	137	48	769
2016 With Project (EACP)	15	49	26	14	25	18	11	67	4	28	73	12	342	9	78	75	45	89	29	23	177	20	74	150	60	829
General Plan Buildout (GPBO) Without Project	16	48	20	6	25	39	12	60	4	74	101	40	445	9	79	70	42	92	50	24	180	21	115	161	76	919
General Plan Buildout (GPBO) With Project	16	51	29	15	27	39	12	70	4	79	104	43	489	9	82	79	47	95	50	24	186	21	124	174	88	979
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	71	44	115	44	64	108	69	96	165	92	72	164		142	162	304	149	140	289	202	166	368	235	260	495	
Project Only	12	7	19	11	6	17	10	3	13	11	28	39		12	12	24	8	15	23	6	13	19	34	20	54	
Cumulative Development Projects Only	3	4	7	0	0	0	1	2	3	6	4	10		3	3	6	0	0	0	3	3	6	6	6	12	
Existing + Project	83	51	134	55	70	125	79	99	178	103	100	203		154	174	328	157	155	312	208	179	387	269	280	549	
2016 Without Project (EAC)	78	50	128	46	66	112	72	103	175	102	79	181		150	171	321	155	146	301	214	175	389	250	277	527	
2016 With Project (EACP)	90	57	147	57	72	129	82	106	188	113	107	220		162	183	345	163	161	324	220	188	408	284	297	581	
General Plan Buildout (GPBO) Without Project	84	103	187	70	100	170	76	156	232	215	86	301		158	228	386	184	179	363	225	220	445	352	292	644	
General Plan Buildout (GPBO) With Project	96	110	206	81	106	187	86	159	245	226	114	340		170	240	410	192	194	386	231	233	464	386	312	698	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	3,600			3,500			4,400			5,900				3,600			3,500			4,400			5,900			
Existing Pk-to-daily	*3%*			*3%*			*4%*			*3%*				*8%*			*8%*			*8%*			*8%*			
Project Only	300			300			200			600				300			300			200			600			
Cumulative Development Projects Only	100			0			40			100				100			0			40			100			
Existing + Project	4,000			3,700			4,600			6,500				4,000			3,700			4,600			6,500			
2016 Without Project (EAC)	3,900			3,600			4,600			6,300				3,900			3,600			4,600			6,300			
EAC Peak-to-Daily	*3%*			*3%*			*4%*			*3%*				*8%*			*8%*			*8%*			*8%*			
2016 With Project (EACP)	4,200			3,900			4,800			6,900				4,200			3,900			4,800			6,900			
EACP Peak-to-Daily	*3%*			*3%*			*4%*			*3%*				*8%*			*8%*			*8%*			*8%*			
General Plan Buildout (GPBO) Without Project	4,100			3,800			4,900			6,700				4,100			3,800			4,900			6,700			
GPBO without Project Peak-to-Daily	*5%*			*4%*			*5%*			*5%*				*9%*			*10%*			*9%*			*10%*			
2025 GP City of Riverside Model ADT																										
2035 RivTAM ADT																										
2035 Moreno Valley Model ADT																										
General Plan Buildout (GPBO) With Project	4,400			4,100			5,100			7,200				4,400			4,100			5,100			7,200			
GPBO with Project Peak-to-Daily	*5%*			*5%*			*5%*			*5%*				*9%*			*10%*			*9%*			*10%*			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.050*			*1.050*			*1.050*			*1.050*				*1.050*			*1.050*			*1.050*			*1.050*			

Canyon Springs Healthcare Campus Senior Living Volume Development

2015/01/07

19. Dwy. 3 / Corporate Centre Pl.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	0	0	0	0	0	0	0	71	0	0	44	0	115	0	0	0	0	0	0	0	142	0	0	162	0	304
Project Only	3	0	9	0	0	0	0	4	2	5	2	0	25	3	0	8	0	0	0	0	4	3	9	4	0	31
Cumulative Development Projects Only	0	0	0	0	0	0	0	3	0	0	4	0	7	0	0	0	0	0	0	0	3	0	0	3	0	6
Existing + Project	3	0	9	0	0	0	0	75	2	5	46	0	140	3	0	8	0	0	0	0	146	3	9	166	0	335
2016 Without Project (EAC)	0	0	0	0	0	0	0	77	0	0	50	0	127	0	0	0	0	0	0	0	151	0	0	172	0	323
2016 With Project (EACP)	3	0	9	0	0	0	0	81	2	5	52	0	152	3	0	8	0	0	0	0	155	3	9	176	0	354
General Plan Buildout (GPBO) Without Project	0	0	0	0	0	0	0	83	0	0	103	0	186	0	0	0	0	0	0	0	159	0	0	227	0	386
General Plan Buildout (GPBO) With Project	3	0	9	0	0	0	0	87	2	5	105	0	211	3	0	8	0	0	0	0	163	3	9	231	0	417

	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	0	0	0	0	0	0	71	44	115	44	71	115		0	0	0	0	0	0	142	162	304	162	142	304	
Project Only	12	7	19	0	0	0	6	5	11	7	13	20		11	12	23	0	0	0	7	7	14	13	12	25	
Cumulative Development Projects Only	0	0	0	0	0	0	3	4	7	4	3	7		0	0	0	0	0	0	3	3	6	3	3	6	
Existing + Project	12	7	19	0	0	0	77	49	126	51	84	135		11	12	23	0	0	0	149	169	318	175	154	329	
2016 Without Project (EAC)	0	0	0	0	0	0	77	50	127	50	77	127		0	0	0	0	0	0	151	172	323	172	151	323	
2016 With Project (EACP)	12	7	19	0	0	0	83	55	138	57	90	147		11	12	23	0	0	0	158	179	337	185	163	348	
General Plan Buildout (GPBO) Without Project	0	0	0	0	0	0	83	103	186	103	83	186		0	0	0	0	0	0	159	227	386	227	159	386	
General Plan Buildout (GPBO) With Project	12	7	19	0	0	0	89	108	197	110	96	206		11	12	23	0	0	0	166	234	400	240	171	411	

ADT	South Leg	North Leg	West Leg	East Leg		South Leg	North Leg	West Leg	East Leg	
Existing (2014)	0	0	3,600	3,600		0	0	3,600	3,600	
Existing Pk-to-daily	-	-	*3%*	*3%*		-	-	*8%*	*8%*	
Project Only	300	0	200	300		300	0	200	300	
Cumulative Development Projects Only	0	0	100	100		0	0	100	100	
Existing + Project	300	0	3,800	4,000		300	0	3,800	4,000	
2016 Without Project (EAC)	0	0	3,900	3,900		0	0	3,900	3,900	
EAC Peak-to-Daily	-	-	*3%*	*3%*		-	-	*8%*	*8%*	
2016 With Project (EACP)	300	0	4,100	4,200		300	0	4,100	4,200	
EACP Peak-to-Daily	*6%*	-	*3%*	*3%*		*7%*	-	*8%*	*8%*	
General Plan Buildout (GPBO) Without Project	0	0	4,100	4,100		0	0	4,100	4,100	
GPBO without Project Peak-to-Daily	-	-	*5%*	*5%*		-	-	*9%*	*9%*	
2025 GP City of Riverside Model ADT										
2035 RivTAM ADT										
2035 Moreno Valley Model ADT										
General Plan Buildout (GPBO) With Project	300	0	4,300	4,400		300	0	4,300	4,400	
GPBO with Project Peak-to-Daily	*6%*	-	*5%*	*5%*		*7%*	-	*9%*	*9%*	
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.000*	-	*1.050*	*1.050*		*1.000*	-	*1.050*	*1.050*	

Canyon Springs Healthcare Campus Senior Living Volume Development

2015/01/07

20. Valley Springs Pkwy. / Corporate Centre Pl.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	86	250	39	24	174	11	9	8	25	27	15	2	670	172	393	63	38	413	30	32	41	105	102	57	3	1,449
Project Only	3	6	5	0	20	0	0	0	9	4	0	0	47	12	25	6	0	11	0	0	0	5	6	0	0	65
Cumulative Development Projects Only	0	106	0	3	138	0	0	1	0	0	1	3	252	0	164	0	2	119	1	1	1	0	0	1	2	291
Existing + Project	89	256	44	24	194	11	9	8	34	31	15	2	717	184	418	69	38	424	30	32	41	110	108	57	3	1,514
2016 Without Project (EAC)	89	366	41	28	319	11	9	9	26	28	17	5	948	179	573	66	42	549	32	34	44	109	106	60	5	1,799
2016 With Project (EACP)	92	372	46	28	339	11	9	9	35	32	17	5	995	191	598	72	42	560	32	34	44	114	112	60	5	1,864
General Plan Buildout (GPBO) Without Project	128	393	43	29	336	22	9	12	28	30	69	5	1,104	189	624	70	44	599	34	36	46	115	112	91	25	1,985
General Plan Buildout (GPBO) With Project	131	399	48	29	356	22	9	12	37	34	69	5	1,151	201	649	76	44	610	34	36	46	120	118	91	25	2,050
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	375	226	601	209	261	470	42	112	154	44	71	115		628	620	1,248	481	428	909	178	259	437	162	142	304	
Project Only	14	33	47	20	6	26	9	3	12	4	5	9		43	22	65	11	25	36	5	12	17	6	6	12	
Cumulative Development Projects Only	106	138	244	141	109	250	1	1	2	4	4	8		164	119	283	122	167	289	2	2	4	3	3	6	
Existing + Project	389	259	648	229	267	496	51	115	166	48	76	124		671	642	1,313	492	453	945	183	271	454	168	148	316	
2016 Without Project (EAC)	496	373	869	358	380	738	44	117	161	50	78	128		818	764	1,582	623	612	1,235	187	271	458	171	152	323	
2016 With Project (EACP)	510	406	916	378	386	764	53	120	173	54	83	137		861	786	1,647	634	637	1,271	192	283	475	177	158	335	
General Plan Buildout (GPBO) Without Project	564	394	958	387	407	794	49	219	268	104	84	188		883	826	1,709	677	685	1,362	197	314	511	228	160	388	
General Plan Buildout (GPBO) With Project	578	427	1,005	407	413	820	58	222	280	108	89	197		926	848	1,774	688	710	1,398	202	326	528	234	166	400	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	15,000			10,900			5,200			3,600				15,000			10,900			5,200			3,600			
Existing Pk-to-daily	*4%*			*4%*			*3%*			*3%*				*8%*			*8%*			*8%*			*8%*			
Project Only	700			400			200			200				700			400			200			200			
Cumulative Development Projects Only	2,700			2,800			34			100				2,700			2,800			34			100			
Existing + Project	15,700			11,300			5,400			3,800				15,700			11,300			5,400			3,800			
2016 Without Project (EAC)	18,300			14,100			5,500			3,900				18,300			14,100			5,500			3,900			
EAC Peak-to-Daily	*5%*			*5%*			*3%*			*3%*				*9%*			*9%*			*8%*			*8%*			
2016 With Project (EACP)	19,000			14,500			5,700			4,100				19,000			14,500			5,700			4,100			
EACP Peak-to-Daily	*5%*			*5%*			*3%*			*3%*				*9%*			*9%*			*8%*			*8%*			
General Plan Buildout (GPBO) Without Project	19,200			14,900			5,800			4,100				19,200			14,900			5,800			4,100			
GPBO without Project Peak-to-Daily	*5%*			*5%*			*5%*			*5%*				*9%*			*9%*			*9%*			*10%*			
2025 GP City of Riverside Model ADT																										
2035 RivTAM ADT																										
2035 Moreno Valley Model ADT	16,000			16,000										16,000			16,000									
General Plan Buildout (GPBO) With Project	19,900			15,200			5,900			4,300				19,900			15,200			5,900			4,300			
GPBO with Project Peak-to-Daily	*5%*			*5%*			*5%*			*5%*				*9%*			*9%*			*9%*			*9%*			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.050*			*1.050*			*1.050*			*1.050*				*1.050*			*1.050*			*1.050*			*1.050*			

3.1-44

Canyon Springs Healthcare Campus Senior Living Volume Development

2015/01/07

21. Valley Springs Pkwy. / Dwy. 4

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	11	372	0	0	215	11	3	0	10	0	0	0	622	18	617	0	0	605	15	11	0	31	0	0	0	1,297
Project Only	0	10	7	2	31	0	0	0	0	14	0	4	68	0	39	14	4	18	0	0	0	0	13	0	4	92
Cumulative Development Projects Only	0	106	0	0	138	0	0	0	0	0	0	0	244	0	164	0	0	119	0	0	0	0	0	0	0	283
Existing + Project	11	382	7	2	246	11	3	0	10	14	0	4	690	18	656	14	4	623	15	11	0	31	13	0	4	1,389
2016 Without Project (EAC)	11	493	0	0	362	11	3	0	10	0	0	0	890	19	806	0	0	748	16	11	0	32	0	0	0	1,632
2016 With Project (EACP)	11	503	7	2	393	11	3	0	10	14	0	4	958	19	845	14	4	766	16	11	0	32	13	0	4	1,724
General Plan Buildout (GPBO) Without Project	22	561	0	0	382	12	3	0	15	0	0	0	995	20	871	0	0	809	17	12	0	34	0	0	0	1,763
General Plan Buildout (GPBO) With Project	22	571	7	2	413	12	3	0	15	14	0	4	1,063	20	910	14	4	827	17	12	0	34	13	0	4	1,855

	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	383	225	608	226	375	601	13	22	35	0	0	0		635	636	1,271	620	628	1,248	42	33	75	0	0	0	
Project Only	17	45	62	33	14	47	0	0	0	18	9	27		53	31	84	22	43	65	0	0	0	17	18	35	
Cumulative Development Projects Only	106	138	244	138	106	244	0	0	0	0	0	0		164	119	283	119	164	283	0	0	0	0	0	0	
Existing + Project	400	270	670	259	389	648	13	22	35	18	9	27		688	667	1,355	642	671	1,313	42	33	75	17	18	35	
2016 Without Project (EAC)	504	372	876	373	496	869	13	22	35	0	0	0		825	780	1,605	764	817	1,581	43	35	78	0	0	0	
2016 With Project (EACP)	521	417	938	406	510	916	13	22	35	18	9	27		878	811	1,689	786	860	1,646	43	35	78	17	18	35	
General Plan Buildout (GPBO) Without Project	583	397	980	394	564	958	18	34	52	0	0	0		891	843	1,734	826	883	1,709	46	37	83	0	0	0	
General Plan Buildout (GPBO) With Project	600	442	1,042	427	578	1,005	18	34	52	18	9	27		944	874	1,818	848	926	1,774	46	37	83	17	18	35	

ADT	South Leg	North Leg	West Leg	East Leg		South Leg	North Leg	West Leg	East Leg	
Existing (2014)	15,300	15,000	900	0		15,300	15,000	900	0	
Existing Pk-to-daily	*4%*	*4%*	*4%*	*-*		*8%*	*8%*	*8%*	*-*	
Project Only	900	700	0	500		900	700	0	500	
Cumulative Development Projects Only	2,700	2,700	0	0		2,700	2,700	0	0	
Existing + Project	16,200	15,700	900	500		16,200	15,700	900	500	
2016 Without Project (EAC)	18,600	18,300	900	0		18,600	18,300	900	0	
EAC Peak-to-Daily	*5%*	*5%*	*4%*	*-*		*9%*	*9%*	*8%*	*-*	
2016 With Project (EACP)	19,500	19,000	900	500		19,500	19,000	900	500	
EACP Peak-to-Daily	*5%*	*5%*	*4%*	*6%*		*9%*	*9%*	*8%*	*7%*	
General Plan Buildout (GPBO) Without Project	19,600	19,200	1,000	0		19,600	19,200	1,000	0	
GPBO without Project Peak-to-Daily	*5%*	*5%*	*5%*	*-*		*9%*	*9%*	*8%*	*-*	
2025 GP City of Riverside Model ADT										
2035 RivTAM ADT										
2035 Moreno Valley Model ADT	16,000	16,000				16,000	16,000			
General Plan Buildout (GPBO) With Project	20,500	19,900	1,000	500		20,500	19,900	1,000	500	
GPBO with Project Peak-to-Daily	*5%*	*5%*	*5%*	*6%*		*9%*	*9%*	*8%*	*7%*	
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.050*	*1.050*	*1.050*	*1.000*		*1.050*	*1.050*	*1.050*	*1.000*	

Canyon Springs Healthcare Campus Senior Living Volume Development

22. Valley Springs Pkwy. / Gateway Dr.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	0	343	249	46	179	0	0	0	0	94	0	40	951	0	563	106	38	598	0	0	0	0	336	0	72	1,713
Project Only	0	14	93	12	33	0	0	0	0	53	0	4	209	0	38	81	7	24	0	0	0	0	120	0	15	285
Cumulative Development Projects Only	0	105	2	0	138	0	0	0	0	1	0	0	246	0	163	1	1	118	0	0	0	0	2	0	1	286
Existing + Project	0	357	342	58	212	0	0	0	0	147	0	44	1,160	0	601	187	45	622	0	0	0	0	456	0	87	1,998
2016 Without Project (EAC)	0	462	261	48	324	0	0	0	0	99	0	42	1,236	0	749	111	41	740	0	0	0	0	352	0	76	2,069
2016 With Project (EACP)	0	476	354	60	357	0	0	0	0	152	0	46	1,445	0	787	192	48	764	0	0	0	0	472	0	91	2,354
General Plan Buildout (GPBO) Without Project	0	538	279	51	346	0	0	0	0	107	0	44	1,365	0	810	121	43	800	0	0	0	0	376	0	81	2,231
General Plan Buildout (GPBO) With Project	0	552	372	63	379	0	0	0	0	160	0	48	1,574	0	848	202	50	824	0	0	0	0	496	0	96	2,516
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	592	273	865	225	383	608	0	0	0	134	295	429		669	934	1,603	636	635	1,271	0	0	0	408	144	552	
Project Only	107	86	193	45	18	63	0	0	0	57	105	162		119	144	263	31	53	84	0	0	0	135	88	223	
Cumulative Development Projects Only	107	139	246	138	105	243	0	0	0	1	2	3		164	120	284	119	164	283	0	0	0	3	2	5	
Existing + Project	699	359	1,058	270	401	671	0	0	0	191	400	591		788	1,078	1,866	667	688	1,355	0	0	0	543	232	775	
2016 Without Project (EAC)	723	423	1,146	372	504	876	0	0	0	141	309	450		860	1,092	1,952	781	825	1,606	0	0	0	428	152	580	
2016 With Project (EACP)	830	509	1,339	417	522	939	0	0	0	198	414	612		979	1,236	2,215	812	878	1,690	0	0	0	563	240	803	
General Plan Buildout (GPBO) Without Project	817	453	1,270	397	582	979	0	0	0	151	330	481		931	1,176	2,107	843	891	1,734	0	0	0	457	164	621	
General Plan Buildout (GPBO) With Project	924	539	1,463	442	600	1,042	0	0	0	208	435	643		1,050	1,320	2,370	874	944	1,818	0	0	0	592	252	844	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	17,400			15,300			0			6,600				17,400			15,300			0			6,600			
Existing Pk-to-daily	*5%*			*4%*			*-*			*6%*				*9%*			*8%*			*-*			*8%*			
Project Only	2,700			900			0			2,200				2,700			900			0			2,200			
Cumulative Development Projects Only	2,700			2,700			0			40				2,700			2,700			0			40			
Existing + Project	20,100			16,200			0			8,800				20,100			16,200			0			8,800			
2016 Without Project (EAC)	20,800			18,600			0			6,900				20,800			18,600			0			6,900			
EAC Peak-to-Daily	*6%*			*5%*			*-*			*6%*				*9%*			*9%*			*-*			*8%*			
2016 With Project (EACP)	23,500			19,500			0			9,100				23,500			19,500			0			9,100			
EACP Peak-to-Daily	*6%*			*5%*			*-*			*7%*				*9%*			*9%*			*-*			*9%*			
General Plan Buildout (GPBO) Without Project	22,000			19,600			0			7,400				22,000			19,600			0			7,400			
GPBO without Project Peak-to-Daily	*6%*			*5%*			*-*			*7%*				*10%*			*9%*			*-*			*8%*			
2025 GP City of Riverside Model ADT																										
2035 RivTAM ADT																										
2035 Moreno Valley Model ADT	16,000			16,000										16,000			16,000									
General Plan Buildout (GPBO) With Project	24,700			20,500			0			9,600				24,700			20,500			0			9,600			
GPBO with Project Peak-to-Daily	*6%*			*5%*			*-*			*7%*				*10%*			*9%*			*-*			*9%*			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.050*			*1.050*			*-*			*1.050*				*1.050*			*1.050*			*-*			*1.050*			

Canyon Springs Healthcare Campus Senior Living Volume Development

2015/01/07

23. Valley Springs Pkwy. / Dwy. 5

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	0	592	0	0	273	0	0	0	0	0	0	0	865	0	669	0	0	934	0	0	0	0	0	0	0	1,603
Project Only	0	93	400	45	41	0	0	0	0	121	0	14	714	0	62	208	24	120	0	0	0	0	501	0	57	972
Cumulative Development Projects Only	0	107	0	0	138	0	0	0	0	0	0	0	245	0	164	0	0	120	0	0	0	0	0	0	0	284
Existing + Project	0	685	400	45	314	0	0	0	0	121	0	14	1,579	0	731	208	24	1,054	0	0	0	0	501	0	57	2,575
2016 Without Project (EAC)	0	723	0	0	422	0	0	0	0	0	0	0	1,145	0	860	0	0	1,092	0	0	0	0	0	0	0	1,952
2016 With Project (EACP)	0	816	400	45	463	0	0	0	0	121	0	14	1,859	0	922	208	24	1,212	0	0	0	0	501	0	57	2,924
General Plan Buildout (GPBO) Without Project	0	817	0	0	453	0	0	0	0	0	0	0	1,270	0	931	0	0	1,176	0	0	0	0	0	0	0	2,107
General Plan Buildout (GPBO) With Project	0	910	400	45	494	0	0	0	0	121	0	14	1,984	0	993	208	24	1,296	0	0	0	0	501	0	57	3,079

	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	592	273	865	273	592	865	0	0	0	0	0	0		669	934	1,603	934	669	1,603	0	0	0	0	0	0	
Project Only	493	162	655	86	107	193	0	0	0	135	445	580		270	621	891	144	119	263	0	0	0	558	232	790	
Cumulative Development Projects Only	107	138	245	138	107	245	0	0	0	0	0	0		164	120	284	120	164	284	0	0	0	0	0	0	
Existing + Project	1,085	435	1,520	359	699	1,058	0	0	0	135	445	580		939	1,555	2,494	1,078	788	1,866	0	0	0	558	232	790	
2016 Without Project (EAC)	723	422	1,145	422	723	1,145	0	0	0	0	0	0		860	1,092	1,952	1,092	860	1,952	0	0	0	0	0	0	
2016 With Project (EACP)	1,216	584	1,800	508	830	1,338	0	0	0	135	445	580		1,130	1,713	2,843	1,236	979	2,215	0	0	0	558	232	790	
General Plan Buildout (GPBO) Without Project	817	453	1,270	453	817	1,270	0	0	0	0	0	0		931	1,176	2,107	1,176	931	2,107	0	0	0	0	0	0	
General Plan Buildout (GPBO) With Project	1,310	615	1,925	539	924	1,463	0	0	0	135	445	580		1,201	1,797	2,998	1,320	1,050	2,370	0	0	0	558	232	790	

ADT	South Leg	North Leg	West Leg	East Leg		South Leg	North Leg	West Leg	East Leg	
Existing (2014)	17,400	17,400	0	0		17,400	17,400	0	0	
Existing Pk-to-daily	*5%*	*5%*	-	-		*9%*	*9%*	-	-	
Project Only	8,900	2,700	0	7,800		8,900	2,700	0	7,800	
Cumulative Development Projects Only	2,700	2,700	0	0		2,700	2,700	0	0	
Existing + Project	26,300	20,100	0	7,800		26,300	20,100	0	7,800	
2016 Without Project (EAC)	20,800	20,800	0	0		20,800	20,800	0	0	
EAC Peak-to-Daily	*5%*	*5%*	-	-		*9%*	*9%*	-	-	
2016 With Project (EACP)	29,700	23,500	0	7,800		29,700	23,500	0	7,800	
EACP Peak-to-Daily	*6%*	*6%*	-	*7%*		*10%*	*9%*	-	*10%*	
General Plan Buildout (GPBO) Without Project	22,300	22,000	0	0		22,300	22,000	0	0	
GPBO without Project Peak-to-Daily	*6%*	*6%*	-	-		*9%*	*10%*	-	-	
2025 GP City of Riverside Model ADT										
2035 RivTAM ADT										
2035 Moreno Valley Model ADT	16,000	16,000				16,000	16,000			
General Plan Buildout (GPBO) With Project	31,200	24,700	0	7,800		31,200	24,700	0	7,800	
GPBO with Project Peak-to-Daily	*6%*	*6%*	-	*7%*		*10%*	*10%*	-	*10%*	
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.050*	*1.050*	-	*1.000*		*1.050*	*1.050*	-	*1.000*	

Canyon Springs Healthcare Campus Senior Living Volume Development

2015/01/07

24. Dwy. 6 / Gateway Dr.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	0	0	0	2	0	0	12	182	0	0	135	10	341	0	0	0	14	0	21	10	159	0	0	306	15	525
Project Only	21	3	16	1	9	0	0	34	71	53	36	0	244	89	11	67	1	5	0	0	51	37	28	45	1	335
Cumulative Development Projects Only	0	0	0	0	0	0	0	2	0	0	1	0	3	0	0	0	0	0	0	0	2	0	0	2	0	4
Existing + Project	21	3	16	3	9	0	12	216	71	53	171	10	585	89	11	67	15	5	21	10	210	37	28	351	16	860
2016 Without Project (EAC)	0	0	0	2	0	0	12	191	0	0	141	10	356	0	0	0	15	0	22	10	167	0	0	320	16	550
2016 With Project (EACP)	21	3	16	3	9	0	12	225	71	53	177	10	600	89	11	67	16	5	22	10	218	37	28	365	17	885
General Plan Buildout (GPBO) Without Project	0	0	0	4	0	0	13	202	0	0	153	11	383	0	0	0	19	0	23	11	178	0	0	341	17	589
General Plan Buildout (GPBO) With Project	21	3	16	5	9	0	13	236	71	53	189	11	627	89	11	67	20	5	23	11	229	37	28	386	18	924
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	0	0	0	2	22	24	194	135	329	145	184	329		0	0	0	35	25	60	169	327	496	321	173	494	
Project Only	40	133	173	10	3	13	105	57	162	89	51	140		167	70	237	6	12	18	88	134	222	74	119	193	
Cumulative Development Projects Only	0	0	0	0	0	0	2	1	3	1	2	3		0	0	0	0	0	0	2	2	4	2	2	4	
Existing + Project	40	133	173	12	25	37	299	192	491	234	235	469		167	70	237	41	37	78	257	461	718	395	292	687	
2016 Without Project (EAC)	0	0	0	2	22	24	203	141	344	151	193	344		0	0	0	37	26	63	177	342	519	336	182	518	
2016 With Project (EACP)	40	133	173	12	25	37	308	198	506	240	244	484		167	70	237	43	38	81	265	476	741	410	301	711	
General Plan Buildout (GPBO) Without Project	0	0	0	4	24	28	215	153	368	164	206	370		0	0	0	42	28	70	189	364	553	358	197	555	
General Plan Buildout (GPBO) With Project	40	133	173	14	27	41	320	210	530	253	257	510		167	70	237	48	40	88	277	498	775	432	316	748	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	0			700			6,600			5,900				0			700			6,600			5,900			
Existing Pk-to-daily	-			*3%*			*5%*			*6%*				-			*8%*			*7%*			*8%*			
Project Only	2,300			200			2,200			1,900				2,300			200			2,200			1,900			
Cumulative Development Projects Only	0			0			40			40				0			0			40			40			
Existing + Project	2,300			900			8,800			7,800				2,300			900			8,800			7,800			
2016 Without Project (EAC)	0			700			6,900			6,200				0			700			6,900			6,200			
EAC Peak-to-Daily	-			*3%*			*5%*			*6%*				-			*8%*			*7%*			*8%*			
2016 With Project (EACP)	2,300			900			9,100			8,100				2,300			900			9,100			8,100			
EACP Peak-to-Daily	*7%*			*4%*			*6%*			*6%*				*10%*			*9%*			*8%*			*9%*			
General Plan Buildout (GPBO) Without Project	0			800			7,400			6,600				0			800			7,400			6,600			
GPBO without Project Peak-to-Daily	-			*4%*			*5%*			*6%*				-			*9%*			*7%*			*8%*			
2025 GP City of Riverside Model ADT																										
2035 RivTAM ADT																										
2035 Moreno Valley Model ADT																										
General Plan Buildout (GPBO) With Project	2,300			1,000			9,600			8,500				2,300			1,000			9,600			8,500			
GPBO with Project Peak-to-Daily	*7%*			*4%*			*6%*			*6%*				*10%*			*9%*			*8%*			*9%*			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.000*			*1.050*			*1.050*			*1.050*				*1.000*			*1.050*			*1.050*			*1.050*			

Canyon Springs Healthcare Campus Senior Living Volume Development

25. Canyon Park Dr. - Dwy. 7 / Gateway Dr.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	0	0	0	20	0	40	65	119	0	0	105	28	377	0	0	0	44	0	147	31	142	0	0	174	43	581
Project Only	5	12	78	0	36	0	1	32	18	258	84	0	524	23	46	323	0	20	1	1	109	9	134	51	0	717
Cumulative Development Projects Only	0	0	0	0	0	1	2	0	0	0	0	0	3	0	0	0	0	0	2	1	1	0	0	1	0	5
Existing + Project	5	12	78	20	36	40	66	151	18	258	189	28	901	23	46	323	44	20	148	32	251	9	134	225	43	1,298
2016 Without Project (EAC)	0	0	0	21	0	43	70	124	0	0	109	29	396	0	0	0	46	0	155	33	149	0	0	182	45	610
2016 With Project (EACP)	5	12	78	21	36	43	71	156	18	258	193	29	920	23	46	323	46	20	156	34	258	9	134	233	45	1,327
General Plan Buildout (GPBO) Without Project	0	0	0	24	0	45	74	132	0	0	119	30	424	0	0	0	49	0	163	35	162	0	0	194	47	650
General Plan Buildout (GPBO) With Project	5	12	78	24	36	45	75	164	18	258	203	30	948	23	46	323	49	20	164	36	271	9	134	245	47	1,367
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	0	0	0	60	93	153	184	145	329	133	139	272		0	0	0	191	74	265	173	321	494	217	186	403	
Project Only	95	312	407	36	13	49	51	89	140	342	110	452		392	163	555	21	47	68	119	75	194	185	432	617	
Cumulative Development Projects Only	0	0	0	1	2	3	2	1	3	0	0	0		0	0	0	2	1	3	2	3	5	1	1	2	
Existing + Project	95	312	407	96	106	202	235	234	469	475	249	724		392	163	555	212	121	333	292	396	688	402	618	1,020	
2016 Without Project (EAC)	0	0	0	64	99	163	194	152	346	138	145	283		0	0	0	201	78	279	182	337	519	227	195	422	
2016 With Project (EACP)	95	312	407	100	112	212	245	241	486	480	255	735		392	163	555	222	125	347	301	412	713	412	627	1,039	
General Plan Buildout (GPBO) Without Project	0	0	0	69	104	173	206	164	370	149	156	305		0	0	0	212	82	294	197	357	554	241	211	452	
General Plan Buildout (GPBO) With Project	95	312	407	105	117	222	257	253	510	491	266	757		392	163	555	233	129	362	316	432	748	426	643	1,069	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	0			3,200			5,900			5,000				0			3,200			5,900			5,000			
Existing Pk-to-daily	-			*5%*			*6%*			*5%*				-			*8%*			*8%*			*8%*			
Project Only	5,500			700			1,900			6,100				5,500			700			1,900			6,100			
Cumulative Development Projects Only	0			32			40			8				0			32			40			8			
Existing + Project	5,500			3,900			7,800			11,100				5,500			3,900			7,800			11,100			
2016 Without Project (EAC)	0			3,300			6,200			5,200				0			3,300			6,200			5,200			
EAC Peak-to-Daily	-			*5%*			*6%*			*5%*				-			*8%*			*8%*			*8%*			
2016 With Project (EACP)	5,500			4,000			8,100			11,300				5,500			4,000			8,100			11,300			
EACP Peak-to-Daily	*7%*			*5%*			*6%*			*6%*				*10%*			*9%*			*9%*			*9%*			
General Plan Buildout (GPBO) Without Project	0			3,500			6,600			5,800				0			3,500			6,600			5,800			
GPBO without Project Peak-to-Daily	-			*5%*			*6%*			*5%*				-			*8%*			*8%*			*8%*			
2025 GP City of Riverside Model ADT																										
2035 RivTAM ADT																										
2035 Moreno Valley Model ADT																										
General Plan Buildout (GPBO) With Project	5,500			4,200			8,500			11,900				5,500			4,200			8,500			11,900			
GPBO with Project Peak-to-Daily	*7%*			*5%*			*6%*			*6%*				*10%*			*9%*			*9%*			*9%*			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.000*			*1.050*			*1.050*			*1.050*				*1.000*			*1.050*			*1.050*			*1.050*			

Canyon Springs Healthcare Campus Senior Living Volume Development

2015/01/07

26. Dwy. 8 / Gateway Dr.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	0	0	0	0	0	0	0	108	0	0	139	0	247	0	0	0	0	0	0	0	218	0	0	180	0	398
Project Only	0	0	0	0	0	0	1	110	0	0	341	1	453	0	0	0	1	0	1	1	431	0	0	185	1	620
Cumulative Development Projects Only	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
Existing + Project	0	0	0	0	0	0	1	218	0	0	480	1	700	0	0	0	1	0	1	1	649	0	0	365	1	1,018
2016 Without Project (EAC)	0	0	0	0	0	0	0	112	0	0	145	0	257	0	0	0	0	0	0	0	228	0	0	188	0	416
2016 With Project (EACP)	0	0	0	0	0	0	1	222	0	0	486	1	710	0	0	0	1	0	1	1	659	0	0	373	1	1,036
General Plan Buildout (GPBO) Without Project	0	0	0	0	0	0	0	124	0	0	170	0	294	0	0	0	0	0	0	0	262	0	0	208	0	470
General Plan Buildout (GPBO) With Project	0	0	0	0	0	0	1	234	0	0	511	1	747	0	0	0	1	0	1	1	693	0	0	393	1	1,090

	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	0	0	0	0	0	0	108	139	247	139	108	247		0	0	0	0	0	0	218	180	398	180	218	398	
Project Only	0	0	0	0	2	2	111	341	452	342	110	452		0	0	0	2	2	4	432	186	618	186	432	618	
Cumulative Development Projects Only	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	1	1	2	1	1	2	
Existing + Project	0	0	0	0	2	2	219	480	699	481	218	699		0	0	0	2	2	4	650	366	1,016	366	650	1,016	
2016 Without Project (EAC)	0	0	0	0	0	0	112	145	257	145	112	257		0	0	0	0	0	0	228	188	416	188	228	416	
2016 With Project (EACP)	0	0	0	0	2	2	223	486	709	487	222	709		0	0	0	2	2	4	660	374	1,034	374	660	1,034	
General Plan Buildout (GPBO) Without Project	0	0	0	0	0	0	124	170	294	170	124	294		0	0	0	0	0	0	262	208	470	208	262	470	
General Plan Buildout (GPBO) With Project	0	0	0	0	2	2	235	511	746	512	234	746		0	0	0	2	2	4	694	394	1,088	394	694	1,088	

ADT	South Leg	North Leg	West Leg	East Leg		South Leg	North Leg	West Leg	East Leg	
Existing (2014)	0	0	5,000	5,000		0	0	5,000	5,000	
Existing Pk-to-daily	-	-	*5%*	*5%*		-	-	*8%*	*8%*	
Project Only	0	36	6,100	6,100		0	36	6,100	6,100	
Cumulative Development Projects Only	0	0	8	8		0	0	8	8	
Existing + Project	0	36	11,100	11,100		0	36	11,100	11,100	
2016 Without Project (EAC)	0	0	5,200	5,200		0	0	5,200	5,200	
EAC Peak-to-Daily	-	-	*5%*	*5%*		-	-	*8%*	*8%*	
2016 With Project (EACP)	0	36	11,300	11,300		0	36	11,300	11,300	
EACP Peak-to-Daily	-	*6%*	*6%*	*6%*		-	*11%*	*9%*	*9%*	
General Plan Buildout (GPBO) Without Project	0	0	5,800	5,800		0	0	5,800	5,800	
GPBO without Project Peak-to-Daily	-	-	*5%*	*5%*		-	-	*8%*	*8%*	
2025 GP City of Riverside Model ADT										
2035 RivTAM ADT										
2035 Moreno Valley Model ADT										
General Plan Buildout (GPBO) With Project	0	36	11,900	11,900		0	36	11,900	11,900	
GPBO with Project Peak-to-Daily	-	*6%*	*6%*	*6%*		-	*11%*	*9%*	*9%*	
GPBO + Project Growth Factor (applied to EACP peak hour)	-	*1.000*	*1.050*	*1.050*		-	*1.000*	*1.050*	*1.050*	

3-151

Canyon Springs Healthcare Campus Senior Living Volume Development

2015/01/07

27. Dwy. 9 / Gateway Dr.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	1	0	25	0	0	0	0	91	17	93	138	0	365	5	0	48	0	0	0	0	213	5	16	175	0	462
Project Only	0	0	0	11	0	2	4	106	0	0	340	21	484	0	0	0	24	0	5	6	427	0	0	181	26	669
Cumulative Development Projects Only	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
Existing + Project	1	0	25	11	0	2	4	197	17	93	478	21	849	5	0	48	24	0	5	6	640	5	16	356	26	1,131
2016 Without Project (EAC)	1	0	26	0	0	0	0	95	18	97	144	0	381	5	0	50	0	0	0	0	223	5	17	183	0	483
2016 With Project (EACP)	1	0	26	11	0	2	4	201	18	97	484	21	865	5	0	50	24	0	5	6	650	5	17	364	26	1,152
General Plan Buildout (GPBO) Without Project	1	0	27	0	0	0	0	105	19	102	169	0	423	5	0	55	0	0	0	0	256	5	18	203	0	542
General Plan Buildout (GPBO) With Project	1	0	27	11	0	2	4	211	19	102	509	21	907	5	0	55	24	0	5	6	683	5	18	384	26	1,211
	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	26	110	136	0	0	0	108	139	247	231	116	347		53	21	74	0	0	0	218	180	398	191	261	452	
Project Only	0	0	0	13	25	38	110	342	452	361	117	478		0	0	0	29	32	61	433	186	619	207	451	658	
Cumulative Development Projects Only	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	1	1	2	1	1	2	
Existing + Project	26	110	136	13	25	38	218	481	699	592	233	825		53	21	74	29	32	61	651	366	1,017	398	712	1,110	
2016 Without Project (EAC)	27	115	142	0	0	0	113	145	258	241	121	362		55	22	77	0	0	0	228	188	416	200	273	473	
2016 With Project (EACP)	27	115	142	13	25	38	223	487	710	602	238	840		55	22	77	29	32	61	661	374	1,035	407	724	1,131	
General Plan Buildout (GPBO) Without Project	28	121	149	0	0	0	124	170	294	271	132	403		60	23	83	0	0	0	261	208	469	221	311	532	
General Plan Buildout (GPBO) With Project	28	121	149	13	25	38	234	512	746	632	249	881		60	23	83	29	32	61	694	394	1,088	428	762	1,190	
ADT	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Existing (2014)	900			0			5,000			5,000				900			0			5,000			5,000			
Existing Pk-to-daily	*15%*			*-*			*5%*			*7%*				*8%*			*-*			*8%*			*9%*			
Project Only	0			600			6,100			6,500				0			600			6,100			6,500			
Cumulative Development Projects Only	0			0			8			8				0			0			8			8			
Existing + Project	900			600			11,100			11,500				900			600			11,100			11,500			
2016 Without Project (EAC)	900			0			5,200			5,200				900			0			5,200			5,200			
EAC Peak-to-Daily	*15%*			*-*			*5%*			*7%*				*8%*			*-*			*8%*			*9%*			
2016 With Project (EACP)	900			600			11,300			11,700				900			600			11,300			11,700			
EACP Peak-to-Daily	*15%*			*6%*			*6%*			*7%*				*8%*			*10%*			*9%*			*10%*			
General Plan Buildout (GPBO) Without Project	1,000			0			5,800			5,800				1,000			0			5,800			5,800			
GPBO without Project Peak-to-Daily	*15%*			*-*			*5%*			*7%*				*9%*			*-*			*8%*			*9%*			
2025 GP City of Riverside Model ADT																										
2035 RivTAM ADT																										
2035 Moreno Valley Model ADT																										
General Plan Buildout (GPBO) With Project	1,000			600			11,900			12,300				1,000			600			11,900			12,300			
GPBO with Project Peak-to-Daily	*15%*			*6%*			*6%*			*7%*				*9%*			*10%*			*9%*			*10%*			
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.050*			*1.000*			*1.050*			*1.050*				*1.050*			*1.000*			*1.050*			*1.050*			

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Canyon Springs Healthcare Campus Senior Living Volume Development

2015/09/15

28. Canyon Park Dr. / Campus Pkwy.

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	11	14	27	13	23	3	3	52	17	39	78	23	303	23	26	28	34	31	13	13	217	30	82	199	44	740
Project Only	6	3	4	0	9	0	0	9	19	11	5	0	66	24	12	13	0	5	0	0	8	11	7	9	0	89
Cumulative Development Projects Only	0	1	1	0	0	2	2	3	0	1	4	0	14	0	1	1	0	1	2	2	4	0	1	4	0	16
Existing + Project	17	17	31	13	32	3	3	61	36	50	83	23	369	47	38	41	34	36	13	13	225	41	89	208	44	829
2016 Without Project (EAC)	11	16	29	14	24	5	5	57	18	42	85	24	330	24	28	30	35	33	16	16	230	31	86	211	46	786
2016 With Project (EACP)	17	19	33	14	33	5	5	66	37	53	90	24	396	48	40	43	35	38	16	16	238	42	93	220	46	875
General Plan Buildout (GPBO) Without Project	12	17	31	15	26	5	5	60	20	66	197	35	489	26	30	32	37	35	17	17	243	33	128	310	67	975
General Plan Buildout (GPBO) With Project	18	20	35	15	35	5	5	69	39	77	202	35	555	50	42	45	37	40	17	17	251	44	135	319	67	1,064

	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
Link Volumes	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	52	79	131	39	40	79	72	92	164	140	92	232		77	143	220	78	83	161	260	235	495	325	279	604	
Project Only	13	39	52	9	3	12	28	11	39	16	13	29		49	23	72	5	12	17	19	33	52	16	21	37	
Cumulative Development Projects Only	2	1	3	2	3	5	5	6	11	5	4	9		2	2	4	3	3	6	6	6	12	5	5	10	
Existing + Project	65	118	183	48	43	91	100	103	203	156	105	261		126	166	292	83	95	178	279	268	547	341	300	641	
2016 Without Project (EAC)	56	84	140	43	45	88	80	101	181	151	100	251		82	150	232	84	90	174	277	251	528	343	295	638	
2016 With Project (EACP)	69	123	192	52	48	100	108	112	220	167	113	280		131	173	304	89	102	191	296	284	580	359	316	675	
General Plan Buildout (GPBO) Without Project	60	112	172	46	57	103	85	214	299	298	106	404		88	196	284	89	114	203	293	353	646	505	312	817	
General Plan Buildout (GPBO) With Project	73	151	224	55	60	115	113	225	338	314	119	433		137	219	356	94	126	220	312	386	698	521	333	854	

ADT	South Leg	North Leg	West Leg	East Leg		South Leg	North Leg	West Leg	East Leg	
Existing (2014)	2,600	1,900	5,900	7,200		2,600	1,900	5,900	7,200	
Existing Pk-to-daily	*5%*	*4%*	*3%*	*3%*		*8%*	*8%*	*8%*	*8%*	
Project Only	700	200	600	400		700	200	600	400	
Cumulative Development Projects Only	30	100	100	100		30	100	100	100	
Existing + Project	3,400	2,100	6,500	7,700		3,400	2,100	6,500	7,700	
2016 Without Project (EAC)	2,800	2,100	6,300	7,600		2,800	2,100	6,300	7,600	
EAC Peak-to-Daily	*5%*	*4%*	*3%*	*3%*		*8%*	*8%*	*8%*	*8%*	
2016 With Project (EACP)	3,500	2,200	6,900	8,100		3,500	2,200	6,900	8,100	
EACP Peak-to-Daily	*6%*	*4%*	*3%*	*3%*		*9%*	*9%*	*8%*	*8%*	
General Plan Buildout (GPBO) Without Project	3,000	2,200	6,700	11,200		3,000	2,200	6,700	11,200	
GPBO without Project Peak-to-Daily	*6%*	*5%*	*4%*	*4%*		*10%*	*9%*	*10%*	*7%*	
2025 GP City of Riverside Model ADT										
2035 RivTAM ADT										
2035 Moreno Valley Model ADT										
General Plan Buildout (GPBO) With Project	3,700	2,400	7,200	11,700		3,700	2,400	7,200	11,700	
GPBO with Project Peak-to-Daily	*6%*	*5%*	*5%*	*4%*		*10%*	*9%*	*10%*	*7%*	
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.050*	*1.050*	*1.050*	*1.450*		*1.050*	*1.050*	*1.050*	*1.450*	

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Canyon Springs Healthcare Campus Senior Living Volume Development

2015/01/07

29. Canyon Park Dr. / Dwy. 10

	AM PEAK HOUR												AM TOTAL	PM PEAK HOUR											PM TOTAL
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
Existing (2014)	0	93	0	0	60	0	0	0	0	0	0	0	153	0	74	0	0	191	0	0	0	0	0	0	0	265
Project Only	0	11	2	3	36	0	0	0	0	1	0	2	55	0	45	2	4	19	0	0	0	0	2	0	4	76
Cumulative Development Projects Only	0	2	0	0	1	0	0	0	0	0	0	0	3	0	1	0	0	2	0	0	0	0	0	0	0	3
Existing + Project	0	104	2	3	96	0	0	0	0	1	0	2	208	0	119	2	4	210	0	0	0	0	2	0	4	341
2016 Without Project (EAC)	0	99	0	0	63	0	0	0	0	0	0	0	162	0	78	0	0	201	0	0	0	0	0	0	0	279
2016 With Project (EACP)	0	110	2	3	99	0	0	0	0	1	0	2	217	0	123	2	4	220	0	0	0	0	2	0	4	355
General Plan Buildout (GPBO) Without Project	0	104	0	0	68	0	0	0	0	0	0	0	172	0	82	0	0	212	0	0	0	0	0	0	0	294
General Plan Buildout (GPBO) With Project	0	115	2	3	104	0	0	0	0	1	0	2	227	0	127	2	4	231	0	0	0	0	2	0	4	370

Link Volumes	South Leg			North Leg			West Leg			East Leg				South Leg			North Leg			West Leg			East Leg			
	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total		IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total	
Existing (2014)	93	60	153	60	93	153	0	0	0	0	0	0		74	191	265	191	74	265	0	0	0	0	0	0	
Project Only	13	37	50	39	13	52	0	0	0	3	5	8		47	21	68	23	49	72	0	0	0	6	6	12	
Cumulative Development Projects Only	2	1	3	1	2	3	0	0	0	0	0	0		1	2	3	2	1	3	0	0	0	0	0	0	
Existing + Project	106	97	203	99	106	205	0	0	0	3	5	8		121	212	333	214	123	337	0	0	0	6	6	12	
2016 Without Project (EAC)	99	63	162	63	99	162	0	0	0	0	0	0		78	201	279	201	78	279	0	0	0	0	0	0	
2016 With Project (EACP)	112	100	212	102	112	214	0	0	0	3	5	8		125	222	347	224	127	351	0	0	0	6	6	12	
General Plan Buildout (GPBO) Without Project	104	68	172	68	104	172	0	0	0	0	0	0		82	212	294	212	82	294	0	0	0	0	0	0	
General Plan Buildout (GPBO) With Project	117	105	222	107	117	224	0	0	0	3	5	8		129	233	362	235	131	366	0	0	0	6	6	12	

ADT	South Leg	North Leg	West Leg	East Leg		South Leg	North Leg	West Leg	East Leg	
Existing (2014)	3,200	3,200	0	0		3,200	3,200	0	0	
Existing Pk-to-daily	*5%*	*5%*	-	-		*8%*	*8%*	-	-	
Project Only	700	700	0	100		700	700	0	100	
Cumulative Development Projects Only	32	32	0	0		32	32	0	0	
Existing + Project	3,900	3,900	0	100		3,900	3,900	0	100	
2016 Without Project (EAC)	3,300	3,300	0	0		3,300	3,300	0	0	
EAC Peak-to-Daily	*5%*	*5%*	-	-		*8%*	*8%*	-	-	
2016 With Project (EACP)	4,000	4,100	0	100		4,000	4,100	0	100	
EACP Peak-to-Daily	*5%*	*5%*	-	*7%*		*9%*	*9%*	-	*11%*	
General Plan Buildout (GPBO) Without Project	3,500	3,500	0	0		3,500	3,500	0	0	
GPBO without Project Peak-to-Daily	*5%*	*5%*	-	-		*8%*	*8%*	-	-	
2025 GP City of Riverside Model ADT										
2035 RivTAM ADT										
2035 Moreno Valley Model ADT										
General Plan Buildout (GPBO) With Project	4,200	4,300	0	100		4,200	4,300	0	100	
GPBO with Project Peak-to-Daily	*5%*	*5%*	-	*7%*		*9%*	*9%*	-	*11%*	
GPBO + Project Growth Factor (applied to EACP peak hour)	*1.050*	*1.050*	-	*1.000*		*1.050*	*1.050*	-	*1.000*	

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Freeway Volumes - ADT Growth

	Existing (2014)	2016 NP (interpolate)	City of Riverside GP (2025)	2035 RivTAM	2035 Moreno Valley Traffic Model	Growth ?
I-215 Between Ramps	**139,638**	145,279	**96,700**	**132,000**	**147,000**	no growth; apply 5% increase to freeway 2016np freeway volumes
SR-60 Between	**112,764**	117,320	**75,800**	**80,000**	**86,000**	no growth; apply 5% increase to freeway 2016np freeway volumes

PeMS Data for Week of November 4-6, 2014 (consistent with Interchange count data).
City of Riverside General Plan Buildout (2025)

Freeway Volumes - AM Peak Hour

	Existing (2014)	Project	Cumulative	E+P	2016NP	2016WP	GPBO Growth Factor	GPBO NP	GPBO WP
I-215 Northbound									
S of Eastridge Av.	4,155	212	41	4,367	4,364	4,576		4,592	4,804
NB Off Ramp at Eastridge Av.	465	212	41	677	525	737		561	773
Between	**3,690**	0	0	3,690	3,839	3,839	1.05	4,031	4,031
NB On Ramp at Eastridge Av.	374	54	14	428	403	457		457	511
N of Eastridge Av.	4,064	54	14	4,118	4,242	4,296		4,488	4,542
I-215 Southbound									
N of Eastridge Av.	5,047	166	11	5,213	5,262	5,428		5,585	5,751
SB Off Ramp at Eastridge Av.	354	166	11	520	379	545		458	624
Between	**4,693**	0	0	4,693	4,883	4,883	1.05	5,127	5,127
SB On Ramp at Eastridge Av.	430	70	27	500	475	545		503	573
S of Eastridge Av.	5,123	70	27	5,193	5,358	5,428		5,630	5,700
SR-60 Westbound									
E of Day St.	3,428	162	67	3,590	3,634	3,796		3,824	3,986
WB Off Ramp at Day St.	593	162	67	755	684	846		726	888
Between	**2,835**	0	0	2,835	2,950	2,950	1.05	3,098	3,098
WB On Ramp at Day St.	311	33	44	344	368	401		388	421
W of Day St.	3,146	33	44	3,179	3,318	3,351		3,486	3,519
SR-60 Eastbound									
W of Day St.	3,358	97	63	3,455	3,556	3,653		3,739	3,836
EB Off Ramp at Day St.	463	97	63	560	544	641		576	673
Between	**2,895**	0	0	2,895	3,012	3,012	1.05	3,163	3,163
EB On Ramp at Day St.	478	54	52	532	549	603		580	634
E of Day St.	3,373	54	52	3,427	3,561	3,615		3,743	3,797

PeMS Data for Week of November 4-6, 2014 (consistent with Interchange count data).

Flow Conserved Volumes

Freeway Mainline Truck %: Based on 2012 Annual Average Daily Truck Traffic (Source: Caltrans)

I-215 = 10.9 % >>> HCS Input = 11% (rounded value)

SR-60 = 10.5 % >>> HCS Input = 11% (rounded value)

Freeway Volumes - PM Peak Hour

	Existing (2014)	Project	Cumulative	E+P	2016NP	2016WP	GPBO Growth Factor	GPBO NP	GPBO WP
I-215 Northbound									
S of Eastridge Av.	4,420	119	29	4,539	4,629	4,748		4,867	4,986
NB Off Ramp at Eastridge Av.	670	119	29	789	727	846		770	889
Between	**3,750**	0	0	3,750	3,902	3,902	1.05	4,097	4,097
NB On Ramp at Eastridge Av.	489	210	16	699	525	735		570	780
N of Eastridge Av.	4,239	210	16	4,449	4,427	4,637		4,667	4,877
I-215 Southbound									
N of Eastridge Av.	6,287	92	16	6,379	6,556	6,648		6,889	6,981
SB Off Ramp at Eastridge Av.	933	92	16	1,025	986	1,078		1,040	1,132
Between	**5,354**	0	0	5,354	5,570	5,570	1.05	5,849	5,849
SB On Ramp at Eastridge Av.	733	269	47	1,002	809	1,078		863	1,132
S of Eastridge Av.	6,087	269	47	6,356	6,379	6,648		6,712	6,981
SR-60 Westbound									
E of Day St.	3,623	92	61	3,715	3,831	3,923		4,027	4,119
WB Off Ramp at Day St.	612	92	61	704	698	790		737	829
Between	**3,011**	0	0	3,011	3,133	3,133	1.05	3,290	3,290
WB On Ramp at Day St.	506	123	75	629	601	724		637	760
W of Day St.	3,517	123	75	3,640	3,734	3,857		3,927	4,050
SR-60 Eastbound									
W of Day St.	5,382	56	53	5,438	5,653	5,709		5,938	5,994
EB Off Ramp at Day St.	903	56	53	959	993	1,049		1,045	1,101
Between	**4,479**	0	0	4,479	4,660	4,660	1.05	4,893	4,893
EB On Ramp at Day St.	861	205	81	1,066	977	1,182		1,036	1,241
E of Day St.	5,340	205	81	5,545	5,637	5,842		5,929	6,134

PeMS Data for Week of November 4-6, 2014 (consistent with Interchange count data).

Flow Conserved Volumes

Freeway Mainline Truck %: Based on 2012 Annual Average Daily Truck Traffic (Source: Caltrans)

I-215 = 10.9 % >>> HCS Input = 11% (rounded value)

SR-60 = 10.5 % >>> HCS Input = 11% (rounded value)

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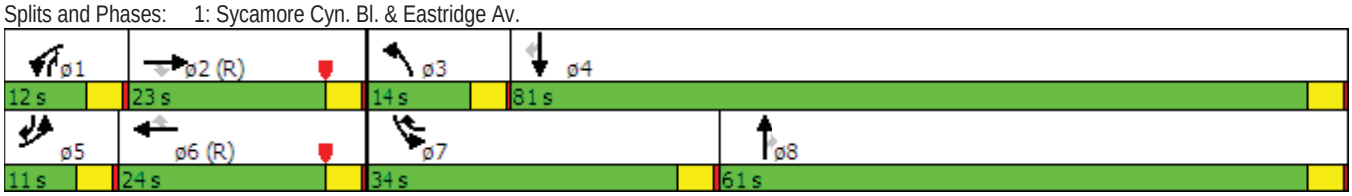
APPENDIX 3.2:

EXISTING (2014) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	53	10	94	150	391	137	1035	150	90	119	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		150	310		200	360		320	275		110
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	120			120			120			200		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		910			577			817			952	
Travel Time (s)		15.5			9.8			12.4			14.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	11.0	11.0	20.0	11.0
Total Split (s)	11.0	23.0	23.0	12.0	24.0	34.0	14.0	61.0	12.0	34.0	81.0	11.0
Total Split (%)	8.5%	17.7%	17.7%	9.2%	18.5%	26.2%	10.8%	46.9%	9.2%	26.2%	62.3%	8.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	Max	None	None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 54 (42%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Sycamore Cyn. Bl. & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	25	53	10	94	150	391	137	1035	150	90	119	28
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	27	58	0	103	165	430	151	1137	165	99	131	31
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	880	274	181	680	387	203	2120	1032	180	2096	991
Arrive On Green	0.03	0.17	0.00	0.05	0.19	0.19	0.06	0.60	0.60	0.05	0.59	0.59
Sat Flow, veh/h	3442	5085	1583	3442	3539	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	27	58	0	103	165	430	151	1137	165	99	131	31
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1770	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	1.0	1.2	0.0	3.8	5.1	25.0	5.6	24.7	5.3	3.6	2.0	1.0
Cycle Q Clear(g_c), s	1.0	1.2	0.0	3.8	5.1	25.0	5.6	24.7	5.3	3.6	2.0	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	115	880	274	181	680	387	203	2120	1032	180	2096	991
V/C Ratio(X)	0.23	0.07	0.00	0.57	0.24	1.11	0.74	0.54	0.16	0.55	0.06	0.03
Avail Cap(c_a), veh/h	185	880	274	212	680	387	265	2120	1032	794	2096	991
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.2	45.0	0.0	60.1	44.5	49.1	60.2	15.4	8.8	60.1	11.2	9.3
Incr Delay (d2), s/veh	1.0	0.1	0.0	2.8	0.8	79.4	7.8	1.0	0.3	2.6	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.6	0.0	1.9	2.6	22.4	2.9	12.3	2.4	1.8	1.0	0.4
LnGrp Delay(d),s/veh	62.2	45.1	0.0	63.0	45.4	128.5	68.0	16.4	9.1	62.7	11.3	9.3
LnGrp LOS	E	D		E	D	F	E	B	A	E	B	A
Approach Vol, veh/h		85			698			1453			261	
Approach Delay, s/veh		50.5			99.2			20.9			30.6	
Approach LOS		D			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	26.5	11.7	81.0	8.4	29.0	10.8	81.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	19.0	10.0	77.0	7.0	20.0	30.0	57.0
Max Q Clear Time (g_c+I1), s	5.8	3.2	7.6	4.0	3.0	27.0	5.6	26.7
Green Ext Time (p_c), s	0.0	2.6	0.1	12.8	0.0	0.0	0.3	10.9

Intersection Summary	
HCM 2010 Ctrl Delay	44.8
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	61	192	15	54	685	347	10	11	46	33	2	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		80	150		0	75		160	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		760			700			315			411	
Travel Time (s)		13.0			11.9			7.2			9.3	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0		11.0	20.0	20.0	11.0	20.0	
Total Split (s)	18.0	77.0	77.0	18.0	77.0		11.0	22.0	22.0	13.0	24.0	
Total Split (%)	13.8%	59.2%	59.2%	13.8%	59.2%		8.5%	16.9%	16.9%	10.0%	18.5%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Box Springs Bl. & Eastridge Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	61	192	15	54	685	347	10	11	46	33	2	4
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	67	211	16	59	753	381	11	12	51	36	2	4
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	2307	1032	84	1482	748	31	258	219	69	283	253
Arrive On Green	0.05	0.65	0.65	0.09	1.00	1.00	0.02	0.14	0.14	0.04	0.16	0.16
Sat Flow, veh/h	1774	3539	1583	1774	2279	1150	1774	1863	1583	1774	1770	1583
Grp Volume(v), veh/h	67	211	16	59	584	550	11	12	51	36	2	4
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1660	1774	1863	1583	1774	1770	1583
Q Serve(g_s), s	4.9	2.9	0.5	4.2	0.0	0.0	0.8	0.7	3.7	2.6	0.1	0.3
Cycle Q Clear(g_c), s	4.9	2.9	0.5	4.2	0.0	0.0	0.8	0.7	3.7	2.6	0.1	0.3
Prop In Lane	1.00		1.00	1.00		0.69	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	87	2307	1032	84	1151	1079	31	258	219	69	283	253
V/C Ratio(X)	0.77	0.09	0.02	0.70	0.51	0.51	0.35	0.05	0.23	0.52	0.01	0.02
Avail Cap(c_a), veh/h	191	2307	1032	191	1151	1079	96	258	219	123	283	253
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.1	8.4	8.0	57.9	0.0	0.0	63.1	48.6	49.9	61.3	45.9	46.0
Incr Delay (d2), s/veh	13.3	0.1	0.0	10.1	1.6	1.7	6.6	0.3	2.5	5.9	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	1.4	0.2	2.3	0.5	0.5	0.4	0.4	1.8	1.4	0.1	0.1
LnGrp Delay(d),s/veh	74.3	8.5	8.0	68.0	1.6	1.7	69.7	48.9	52.3	67.1	46.0	46.1
LnGrp LOS	E	A	A	E	A	A	E	D	D	E	D	D
Approach Vol, veh/h		294			1193			74			42	
Approach Delay, s/veh		23.4			4.9			54.4			64.1	
Approach LOS		C			A			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	88.7	6.3	24.8	10.4	88.5	9.1	22.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	73.0	7.0	20.0	14.0	73.0	9.0	18.0
Max Q Clear Time (g_c+I1), s	6.2	4.9	2.8	2.3	6.9	2.0	4.6	5.7
Green Ext Time (p_c), s	0.1	12.2	0.0	0.2	0.1	12.2	0.0	0.1

Intersection Summary	
HCM 2010 Ctrl Delay	12.2
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	126	0	361	591	0	286	0	0	145	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	275		0	0		0	0		0
Storage Lanes	0		0	0		0	2		0	2		0
Taper Length (ft)	90			190			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		241			359			784			672	
Travel Time (s)		4.1			6.1			15.3			13.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.25	0.90	0.90	0.25	0.90
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot			Prot		
Protected Phases	5	2		1	6		3			7		
Permitted Phases												
Detector Phase	5	2		1	6		3			7		
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0			7.0		
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0			11.0		
Total Split (s)	28.0	48.0		44.0	64.0		38.0			38.0		
Total Split (%)	21.5%	36.9%		33.8%	49.2%		29.2%			29.2%		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5			3.5		
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5			0.5		
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0			0.0		
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0			4.0		
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		None			None		

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 24 (18%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: I-215 SB/NB Ramps & Eastridge Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	76	126	0	361	591	0	286	0	0	145	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	0	0	1863	0	0
Adj Flow Rate, veh/h	84	140	0	401	657	0	318	0	0	161	0	0
Adj No. of Lanes	1	2	0	2	2	0	2	0	0	2	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.25	0.90	0.90	0.25	0.90
Percent Heavy Veh, %	2	2	0	2	2	0	2	0	0	2	0	0
Cap, veh/h	107	2321	0	476	2596	0	391	0	0	391	0	0
Arrive On Green	0.02	0.22	0.00	0.18	0.98	0.00	0.11	0.00	0.00	0.11	0.00	0.00
Sat Flow, veh/h	1774	3632	0	3442	3632	0	3442	318		3442	161	
Grp Volume(v), veh/h	84	140	0	401	657	0	318	60.4		161	54.3	
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1721	1770	0	1721	E		1721	D	
Q Serve(g_s), s	6.1	4.1	0.0	14.6	0.8	0.0	11.7			5.7		
Cycle Q Clear(g_c), s	6.1	4.1	0.0	14.6	0.8	0.0	11.7			5.7		
Prop In Lane	1.00		0.00	1.00		0.00	1.00			1.00		
Lane Grp Cap(c), veh/h	107	2321	0	476	2596	0	391			391		
V/C Ratio(X)	0.78	0.06	0.00	0.84	0.25	0.00	0.81			0.41		
Avail Cap(c_a), veh/h	328	2321	0	1059	2596	0	900			900		
HCM Platoon Ratio	0.33	0.33	1.00	1.33	1.33	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.99	0.99	0.00	1.00			1.00		
Uniform Delay (d), s/veh	62.8	19.1	0.0	51.7	0.4	0.0	56.3			53.6		
Incr Delay (d2), s/veh	11.6	0.0	0.0	4.1	0.2	0.0	4.1			0.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	3.4	2.0	0.0	7.2	0.4	0.0	5.8			2.7		
LnGrp Delay(d),s/veh	74.4	19.2	0.0	55.7	0.7	0.0	60.4			54.3		
LnGrp LOS	E	B		E	A		E			D		
Approach Vol, veh/h		224			1058							
Approach Delay, s/veh		39.9			21.5							
Approach LOS		D			C							

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3		5	6	7	
Phs Duration (G+Y+Rc), s	22.0	89.2	18.8		11.9	99.4	18.8	
Change Period (Y+Rc), s	4.0	4.0	4.0		4.0	4.0	4.0	
Max Green Setting (Gmax), s	40.0	44.0	34.0		24.0	60.0	34.0	
Max Q Clear Time (g_c+I1), s	16.6	6.1	13.7		8.1	2.8	7.7	
Green Ext Time (p_c), s	1.4	5.8	1.0		0.1	6.0	0.5	

Intersection Summary	
HCM 2010 Ctrl Delay	33.9
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	202	69	0	877	0	0	0	0	0	0	209
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		700			241			458			364	
Travel Time (s)		11.9			4.1			8.9			7.1	
Peak Hour Factor	0.25	0.90	0.90	0.25	0.90	0.25	0.25	0.25	0.25	0.25	0.25	0.90
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	202	69	0	877	0	0	0	0	0	0	209
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	1082515456		-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	25	90	90	25	90	25	25	25	25	25	25	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	224	77	0	974	0	0	0	0	0	0	232

Major/Minor	Major1			Major2						Minor2		
Conflicting Flow All	974	0	-	224	0	0				1064	1198	487
Stage 1	-	-	-	-	-	-				974	974	-
Stage 2	-	-	-	-	-	-				90	224	-
Critical Hdwy	4.14	-	-	5.34	-	-				6.29	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-				5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-				6.04	5.54	-
Follow-up Hdwy	2.22	-	-	3.12	-	-				3.67	4.02	3.32
Pot Cap-1 Maneuver	704	-	0	911	-	-				250	184	526
Stage 1	-	-	0	-	-	-				319	328	-
Stage 2	-	-	0	-	-	-				883	717	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	704	-	-	911	-	-				250	0	526
Mov Cap-2 Maneuver	-	-	-	-	-	-				285	0	-
Stage 1	-	-	-	-	-	-				319	0	-
Stage 2	-	-	-	-	-	-				883	0	-

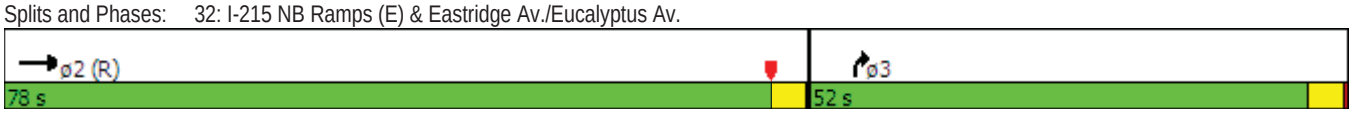
Approach	EB	WB	SB
HCM Control Delay, s	0	0	17.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	704	-	911	-	-	526
HCM Lane V/C Ratio	-	-	-	-	-	0.441
HCM Control Delay (s)	0	-	0	-	-	17.1
HCM Lane LOS	A	-	A	-	-	C
HCM 95th %tile Q(veh)	0	-	0	-	-	2.2

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	271	0	0	0	0	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Right Turn on Red		Yes				Yes
Link Speed (mph)	30			40	30	
Link Distance (ft)	100			131	592	
Travel Time (s)	2.3			2.2	13.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA					Prot
Protected Phases	2					3
Permitted Phases						
Detector Phase	2					3
Switch Phase						
Minimum Initial (s)	7.0					7.0
Minimum Split (s)	20.0					11.0
Total Split (s)	78.0					52.0
Total Split (%)	60.0%					40.0%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	0.5					0.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	4.0					4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max					None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	

Splits and Phases: 32: I-215 NB Ramps (E) & Eastridge Av./Eucalyptus Av.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	271	0	0	0	0	179
Number	2	12			3	18
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)		1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0			0	1863
Adj Flow Rate, veh/h	301	0			0	199
Adj No. of Lanes	2	0			0	2
Peak Hour Factor	0.90	0.90			0.90	0.90
Percent Heavy Veh, %	2	0			0	2
Cap, veh/h	3430	0			0	0
Arrive On Green	0.97	0.00			0.00	0.00
Sat Flow, veh/h	3725	0			0	
Grp Volume(v), veh/h	301	0			0.0	
Grp Sat Flow(s),veh/h/ln	1770	0				
Q Serve(g_s), s	0.4	0.0				
Cycle Q Clear(g_c), s	0.4	0.0				
Prop In Lane		0.00				
Lane Grp Cap(c), veh/h	3430	0				
V/C Ratio(X)	0.09	0.00				
Avail Cap(c_a), veh/h	3430	0				
HCM Platoon Ratio	1.00	1.00				
Upstream Filter(I)	1.00	0.00				
Uniform Delay (d), s/veh	0.1	0.0				
Incr Delay (d2), s/veh	0.1	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile BackOfQ(50%),veh/ln	0.2	0.0				
LnGrp Delay(d),s/veh	0.1	0.0				
LnGrp LOS	A					
Approach Vol, veh/h	301					
Approach Delay, s/veh	0.1					
Approach LOS	A					

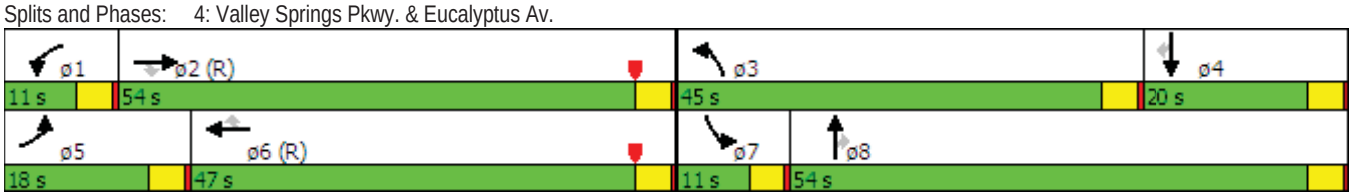
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		130.0						
Change Period (Y+Rc), s		4.0						
Max Green Setting (Gmax), s		74.0						
Max Q Clear Time (g_c+I1), s		2.4						
Green Ext Time (p_c), s		2.2						

Intersection Summary	
HCM 2010 Ctrl Delay	0.1
HCM 2010 LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	195	235	20	22	698	35	323	362	122	14	30	229
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	1		1	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0
Total Split (s)	18.0	54.0	54.0	11.0	47.0	47.0	45.0	54.0	54.0	11.0	20.0	20.0
Total Split (%)	13.8%	41.5%	41.5%	8.5%	36.2%	36.2%	34.6%	41.5%	41.5%	8.5%	15.4%	15.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	Max	None	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	195	235	20	22	698	35	323	362	122	14	30	229
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	219	264	22	25	784	39	363	407	137	16	34	257
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	271	1545	691	57	1380	617	395	1361	609	42	346	517
Arrive On Green	0.16	0.87	0.87	0.03	0.39	0.39	0.22	0.38	0.38	0.02	0.19	0.19
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	1774	3539	1583	1774	1863	2787
Grp Volume(v), veh/h	219	264	22	25	784	39	363	407	137	16	34	257
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1774	1770	1583	1774	1863	1393
Q Serve(g_s), s	8.0	1.4	0.2	1.8	22.6	2.0	26.0	10.4	7.6	1.2	2.0	10.8
Cycle Q Clear(g_c), s	8.0	1.4	0.2	1.8	22.6	2.0	26.0	10.4	7.6	1.2	2.0	10.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	271	1545	691	57	1380	617	395	1361	609	42	346	517
V/C Ratio(X)	0.81	0.17	0.03	0.44	0.57	0.06	0.92	0.30	0.22	0.38	0.10	0.50
Avail Cap(c_a), veh/h	371	1545	691	96	1380	617	560	1361	609	96	346	517
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.76	0.76	0.76	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.8	4.7	4.7	61.8	31.1	24.8	49.4	27.8	26.9	62.5	43.9	47.5
Incr Delay (d2), s/veh	9.1	0.2	0.1	4.0	1.3	0.1	16.1	0.6	0.9	5.6	0.6	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.7	0.1	0.9	11.2	0.9	14.5	5.2	3.5	0.6	1.1	4.4
LnGrp Delay(d),s/veh	62.9	5.0	4.7	65.8	32.4	25.0	65.5	28.4	27.8	68.1	44.5	50.9
LnGrp LOS	E	A	A	E	C	C	E	C	C	E	D	D
Approach Vol, veh/h		505			848			907			307	
Approach Delay, s/veh		30.1			33.0			43.2			51.1	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	60.8	32.9	28.1	14.2	54.7	7.1	54.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	50.0	41.0	16.0	14.0	43.0	7.0	50.0
Max Q Clear Time (g_c+I1), s	3.8	3.4	28.0	12.8	10.0	24.6	3.2	12.4
Green Ext Time (p_c), s	0.0	8.7	0.9	1.4	0.3	6.8	0.0	4.9

Intersection Summary	
HCM 2010 Ctrl Delay	38.2
HCM 2010 LOS	D

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	363	230	355	187	124	502
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		175	200	
Storage Lanes	2	1		1	1	
Taper Length (ft)	60				80	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		40			40
Link Distance (ft)	307		957			795
Travel Time (s)	6.0		16.3			13.6
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	33.0	28.0	35.0	33.0	28.0	63.0
Total Split (%)	34.4%	29.2%	36.5%	34.4%	29.2%	65.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 42 (44%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: Day St. & SR-60 WB Ramps

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	363	230	355	187	124	502
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	374	237	366	193	128	518
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	588	415	2170	1241	162	2640
Arrive On Green	0.17	0.17	1.00	1.00	0.09	0.75
Sat Flow, veh/h	3442	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	374	237	366	193	128	518
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1770
Q Serve(g_s), s	9.7	12.5	0.0	0.0	6.8	4.2
Cycle Q Clear(g_c), s	9.7	12.5	0.0	0.0	6.8	4.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	588	415	2170	1241	162	2640
V/C Ratio(X)	0.64	0.57	0.17	0.16	0.79	0.20
Avail Cap(c_a), veh/h	1040	622	2170	1241	444	2640
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.99	0.99	1.00	1.00
Uniform Delay (d), s/veh	37.0	30.8	0.0	0.0	42.7	3.6
Incr Delay (d2), s/veh	1.2	1.2	0.2	0.3	8.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	5.6	0.0	0.1	3.7	2.1
LnGrp Delay(d),s/veh	38.2	32.0	0.2	0.3	51.2	3.8
LnGrp LOS	D	C	A	A	D	A
Approach Vol, veh/h	611		559			646
Approach Delay, s/veh	35.8		0.2			13.2
Approach LOS	D		A			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	12.7	62.9				75.6		20.4
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	24.0	31.0				59.0		29.0
Max Q Clear Time (g_c+I1), s	8.8	2.0				6.2		14.5
Green Ext Time (p_c), s	0.3	6.9				7.5		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	16.8
HCM 2010 LOS	B

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	382	81	461	371	107	758
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	200		0	425	
Storage Lanes	2	0		1	1	
Taper Length (ft)	60				60	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		40			40
Link Distance (ft)	263		524			957
Travel Time (s)	5.1		8.9			16.3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	33.0	24.0	39.0	33.0	24.0	63.0
Total Split (%)	34.4%	25.0%	40.6%	34.4%	25.0%	65.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Day St. & SR-60 EB Ramps

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	382	81	461	371	107	758
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	390	83	470	379	109	773
Adj No. of Lanes	2	1	2	1	1	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	502	353	2307	1263	137	3920
Arrive On Green	0.15	0.15	1.00	1.00	0.15	1.00
Sat Flow, veh/h	3442	1583	3632	1583	1774	5253
Grp Volume(v), veh/h	390	83	470	379	109	773
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1695
Q Serve(g_s), s	10.5	4.1	0.0	0.0	5.7	0.0
Cycle Q Clear(g_c), s	10.5	4.1	0.0	0.0	5.7	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	502	353	2307	1263	137	3920
V/C Ratio(X)	0.78	0.23	0.20	0.30	0.79	0.20
Avail Cap(c_a), veh/h	1040	601	2307	1263	370	3920
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.95	0.95	0.93	0.93
Uniform Delay (d), s/veh	39.5	30.6	0.0	0.0	39.8	0.0
Incr Delay (d2), s/veh	2.6	0.3	0.2	0.6	9.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	1.8	0.1	0.2	3.1	0.0
LnGrp Delay(d),s/veh	42.1	30.9	0.2	0.6	49.0	0.1
LnGrp LOS	D	C	A	A	D	A
Approach Vol, veh/h	473		849			882
Approach Delay, s/veh	40.2		0.4			6.1
Approach LOS	D		A			A

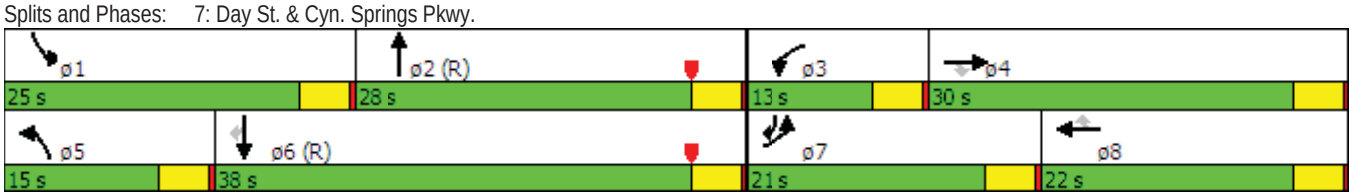
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	11.4	66.6				78.0		18.0
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	20.0	35.0				59.0		29.0
Max Q Clear Time (g_c+I1), s	7.7	2.0				2.0		12.5
Green Ext Time (p_c), s	0.2	11.9				13.4		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	11.2
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	261	28	31	30	30	102	61	469	51	159	648	256
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	145		0	165		0	170		200
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	95			100			120			80		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		1120			404			728			524	
Travel Time (s)		19.1			7.9			12.4			8.9	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												37%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	21.0	30.0	30.0	13.0	22.0	22.0	15.0	28.0		25.0	38.0	21.0
Total Split (%)	21.9%	31.3%	31.3%	13.5%	22.9%	22.9%	15.6%	29.2%		26.0%	39.6%	21.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 9 (9%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Day St. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	261	28	31	30	30	102	61	469	51	159	648	256
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	269	29	32	31	31	105	63	484	53	164	784	186
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	4	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	353	282	240	73	168	143	105	2471	267	196	4333	1083
Arrive On Green	0.10	0.15	0.15	0.04	0.09	0.09	0.12	1.00	1.00	0.22	1.00	1.00
Sat Flow, veh/h	3442	1863	1583	1774	1863	1583	1774	4661	503	1774	7451	1583
Grp Volume(v), veh/h	269	29	32	31	31	105	63	350	187	164	784	186
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1863	1583	1774	1695	1774	1774	1863	1583
Q Serve(g_s), s	7.3	1.3	1.7	1.6	1.5	6.2	3.2	0.0	0.0	8.5	0.0	0.0
Cycle Q Clear(g_c), s	7.3	1.3	1.7	1.6	1.5	6.2	3.2	0.0	0.0	8.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.28	1.00		1.00
Lane Grp Cap(c), veh/h	353	282	240	73	168	143	105	1797	940	196	4333	1083
V/C Ratio(X)	0.76	0.10	0.13	0.43	0.18	0.74	0.60	0.19	0.20	0.83	0.18	0.17
Avail Cap(c_a), veh/h	609	504	429	166	349	297	203	1797	940	388	4333	1083
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.94	0.94	0.94	1.00	1.00	1.00	0.99	0.99	0.99	0.94	0.94	0.94
Uniform Delay (d), s/veh	41.9	35.1	35.3	44.9	40.4	42.6	41.2	0.0	0.0	36.5	0.0	0.0
Incr Delay (d2), s/veh	3.2	0.1	0.2	3.9	0.5	7.2	5.3	0.2	0.5	8.5	0.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.7	0.7	0.9	0.8	3.0	1.7	0.1	0.1	4.6	0.0	0.1
LnGrp Delay(d),s/veh	45.2	35.3	35.5	48.8	40.9	49.8	46.5	0.2	0.5	45.0	0.1	0.3
LnGrp LOS	D	D	D	D	D	D	D	A	A	D	A	A
Approach Vol, veh/h		330			167			600			1134	
Approach Delay, s/veh		43.4			47.9			5.2			6.6	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	54.9	7.9	18.5	9.7	59.8	13.8	12.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	24.0	9.0	26.0	11.0	34.0	17.0	18.0
Max Q Clear Time (g_c+I1), s	10.5	2.0	3.6	3.7	5.2	2.0	9.3	8.2
Green Ext Time (p_c), s	0.3	9.6	0.0	0.7	0.0	11.2	0.5	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	14.8
HCM 2010 LOS	B

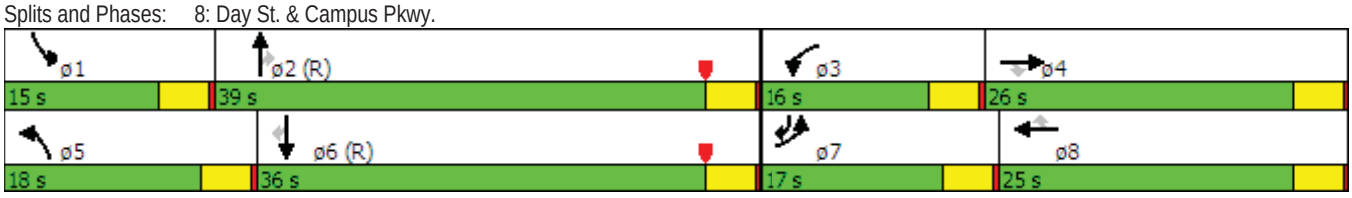
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	22	45	19	56	62	108	480	37	53	504	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		50	200		0	130		50	190		0
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	60			120			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		938			519			1025			728	
Travel Time (s)		16.0			10.1			17.5			12.4	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	17.0	26.0	26.0	16.0	25.0	25.0	18.0	39.0	39.0	15.0	36.0	17.0
Total Split (%)	17.7%	27.1%	27.1%	16.7%	26.0%	26.0%	18.8%	40.6%	40.6%	15.6%	37.5%	17.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 8 (8%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Day St. & Campus Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	39	22	45	19	56	62	108	480	37	53	504	111
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	39	22	45	19	57	63	109	485	37	54	509	112
Adj No. of Lanes	2	1	1	1	2	1	2	3	1	2	3	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	169	144	51	257	115	237	3346	1042	191	3278	1095
Arrive On Green	0.05	0.09	0.09	0.03	0.07	0.07	0.14	1.00	1.00	0.11	1.00	1.00
Sat Flow, veh/h	3442	1863	1583	1774	3539	1583	3442	5085	1583	3442	5085	1583
Grp Volume(v), veh/h	39	22	45	19	57	63	109	485	37	54	509	112
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1770	1583	1721	1695	1583	1721	1695	1583
Q Serve(g_s), s	1.0	1.0	2.6	1.0	1.5	3.7	2.8	0.0	0.0	1.4	0.0	0.0
Cycle Q Clear(g_c), s	1.0	1.0	2.6	1.0	1.5	3.7	2.8	0.0	0.0	1.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	162	169	144	51	257	115	237	3346	1042	191	3278	1095
V/C Ratio(X)	0.24	0.13	0.31	0.37	0.22	0.55	0.46	0.14	0.04	0.28	0.16	0.10
Avail Cap(c_a), veh/h	466	427	363	222	774	346	502	3346	1042	394	3278	1095
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.98	0.98	0.98
Uniform Delay (d), s/veh	44.1	40.2	40.8	45.7	42.0	43.0	39.7	0.0	0.0	40.9	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.3	1.2	4.4	0.4	4.0	1.4	0.1	0.1	0.8	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.6	1.2	0.6	0.7	1.7	1.4	0.0	0.0	0.7	0.0	0.1
LnGrp Delay(d),s/veh	44.8	40.5	42.1	50.1	42.4	47.0	41.1	0.1	0.1	41.7	0.1	0.2
LnGrp LOS	D	D	D	D	D	D	D	A	A	D	A	A
Approach Vol, veh/h		106			139			631			675	
Approach Delay, s/veh		42.8			45.5			7.2			3.4	
Approach LOS		D			D			A			A	

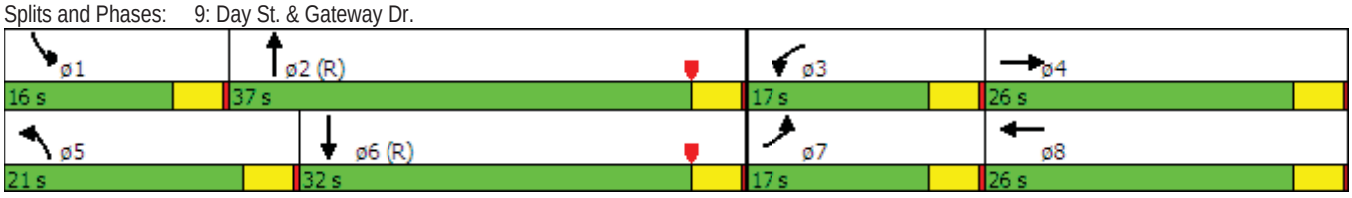
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	67.2	6.8	12.7	10.6	65.9	8.5	11.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	35.0	12.0	22.0	14.0	32.0	13.0	21.0
Max Q Clear Time (g_c+I1), s	3.4	2.0	3.0	4.6	4.8	2.0	3.0	5.7
Green Ext Time (p_c), s	0.1	8.1	0.0	0.6	0.2	7.9	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	11.4
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	35	31	32	83	98	75	446	46	77	321	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	100		0	190		400	260		0
Storage Lanes	1		0	1		0	1		1	2		0
Taper Length (ft)	0			120			60			165		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		318			585			592			1025	
Travel Time (s)		5.4			11.4			10.1			17.5	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	17.0	26.0		17.0	26.0		21.0	37.0		16.0	32.0	
Total Split (%)	17.7%	27.1%		17.7%	27.1%		21.9%	38.5%		16.7%	33.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

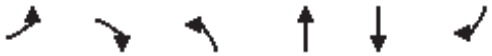
Splits and Phases: 9: Day St. & Gateway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	35	31	32	83	98	75	446	46	77	321	73
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	51	35	31	32	84	99	76	451	46	78	324	74
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	199	156	74	164	147	112	2924	294	220	2600	572
Arrive On Green	0.05	0.11	0.11	0.04	0.09	0.09	0.06	0.62	0.62	0.13	1.00	1.00
Sat Flow, veh/h	1774	1889	1482	1774	1770	1583	1774	4697	472	3442	4173	918
Grp Volume(v), veh/h	51	33	33	32	84	99	76	324	173	78	261	137
Grp Sat Flow(s),veh/h/ln	1774	1770	1601	1774	1770	1583	1774	1695	1779	1721	1695	1701
Q Serve(g_s), s	2.7	1.6	1.8	1.7	4.3	5.8	4.0	3.8	3.9	2.0	0.0	0.0
Cycle Q Clear(g_c), s	2.7	1.6	1.8	1.7	4.3	5.8	4.0	3.8	3.9	2.0	0.0	0.0
Prop In Lane	1.00		0.93	1.00		1.00	1.00		0.27	1.00		0.54
Lane Grp Cap(c), veh/h	96	186	168	74	164	147	112	2110	1108	220	2112	1060
V/C Ratio(X)	0.53	0.17	0.20	0.43	0.51	0.67	0.68	0.15	0.16	0.36	0.12	0.13
Avail Cap(c_a), veh/h	240	406	367	240	406	363	314	2110	1108	430	2112	1060
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Uniform Delay (d), s/veh	44.2	39.2	39.3	44.9	41.5	42.1	44.0	7.6	7.6	40.1	0.0	0.0
Incr Delay (d2), s/veh	4.5	0.4	0.6	3.9	2.5	5.3	6.9	0.2	0.3	1.0	0.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.8	0.8	0.9	2.2	2.7	2.2	1.8	2.0	1.0	0.0	0.1
LnGrp Delay(d),s/veh	48.7	39.6	39.8	48.8	43.9	47.4	50.9	7.7	7.9	41.0	0.1	0.3
LnGrp LOS	D	D	D	D	D	D	D	A	A	D	A	A
Approach Vol, veh/h		117			215			573			476	
Approach Delay, s/veh		43.6			46.3			13.5			6.9	
Approach LOS		D			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	63.8	8.0	14.1	10.1	63.8	9.2	12.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	33.0	13.0	22.0	17.0	28.0	13.0	22.0
Max Q Clear Time (g_c+I1), s	4.0	5.9	3.7	3.8	6.0	2.0	4.7	7.8
Green Ext Time (p_c), s	0.1	5.8	0.0	1.2	0.1	5.8	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	18.9
HCM 2010 LOS	B



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	7	9	21	660	386	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	25			0
Storage Lanes	1	0	1			0
Taper Length (ft)	60		25			
Link Speed (mph)	30			40	40	
Link Distance (ft)	264			453	180	
Travel Time (s)	6.0			7.7	3.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	7	9	21	660	386	27
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	-	25	-	-	-
Veh in Median Storage, #	1	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	10	23	710	415	29

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	830	222	444	0	-	0
Stage 1	430	-	-	-	-	-
Stage 2	400	-	-	-	-	-
Critical Hdwy	6.29	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	341	666	719	-	-	-
Stage 1	548	-	-	-	-	-
Stage 2	624	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	330	666	719	-	-	-
Mov Cap-2 Maneuver	412	-	-	-	-	-
Stage 1	548	-	-	-	-	-
Stage 2	604	-	-	-	-	-

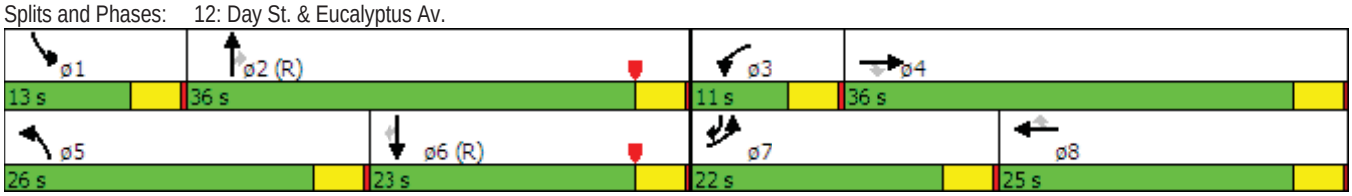
Approach	EB	NB	SB
HCM Control Delay, s	12.1	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	719	-	525	-	-
HCM Lane V/C Ratio	0.031	-	0.033	-	-
HCM Control Delay (s)	10.2	-	12.1	-	-
HCM Lane LOS	B	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	158	201	70	19	442	100	206	336	39	70	133	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		50	175		0	100		100	200		0
Storage Lanes	1		1	1		1	1		2	1		1
Taper Length (ft)	100			75			80			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			40	
Link Distance (ft)		2104			1174			390			453	
Travel Time (s)		35.9			20.0			7.6			7.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	22.0	36.0	36.0	11.0	25.0	25.0	26.0	36.0	36.0	13.0	23.0	22.0
Total Split (%)	22.9%	37.5%	37.5%	11.5%	26.0%	26.0%	27.1%	37.5%	37.5%	13.5%	24.0%	22.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Day St. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	158	201	70	19	442	100	206	336	39	70	133	157
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	166	212	74	20	465	105	217	354	41	74	140	165
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	201	911	407	53	616	276	255	1710	765	111	1423	816
Arrive On Green	0.11	0.26	0.26	0.03	0.17	0.17	0.14	0.48	0.48	0.06	0.40	0.40
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	166	212	74	20	465	105	217	354	41	74	140	165
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	8.8	4.5	3.5	1.1	12.0	5.6	11.5	5.5	1.3	3.9	2.4	5.4
Cycle Q Clear(g_c), s	8.8	4.5	3.5	1.1	12.0	5.6	11.5	5.5	1.3	3.9	2.4	5.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	201	911	407	53	616	276	255	1710	765	111	1423	816
V/C Ratio(X)	0.83	0.23	0.18	0.37	0.75	0.38	0.85	0.21	0.05	0.66	0.10	0.20
Avail Cap(c_a), veh/h	333	1180	528	129	774	346	407	1710	765	166	1423	816
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.6	28.2	27.8	45.7	37.7	35.1	40.1	14.3	13.2	44.0	17.9	12.6
Incr Delay (d2), s/veh	8.2	0.1	0.2	4.3	3.3	0.9	9.5	0.3	0.1	6.6	0.1	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	2.2	1.6	0.6	6.2	2.5	6.3	2.8	0.6	2.1	1.2	2.5
LnGrp Delay(d),s/veh	49.8	28.3	28.0	49.9	41.0	35.9	49.6	14.5	13.3	50.6	18.0	13.1
LnGrp LOS	D	C	C	D	D	D	D	B	B	D	B	B
Approach Vol, veh/h		452			590			612			379	
Approach Delay, s/veh		36.1			40.4			26.9			22.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	50.4	6.9	28.7	17.8	42.6	14.9	20.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	32.0	7.0	32.0	22.0	19.0	18.0	21.0
Max Q Clear Time (g_c+I1), s	5.9	7.5	3.1	6.5	13.5	7.4	10.8	14.0
Green Ext Time (p_c), s	0.0	3.9	0.0	5.0	0.4	2.9	0.2	2.7

Intersection Summary	
HCM 2010 Ctrl Delay	32.0
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	33	74	4	19	99	131	3	321	10	82	139	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	95		95	80		0	100		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	60			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			25			35	
Link Distance (ft)		861			839			1320			2260	
Travel Time (s)		16.8			16.3			36.0			44.0	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	13.0	22.0		13.0	22.0	22.0	11.0	45.0		16.0	50.0	
Total Split (%)	13.5%	22.9%		13.5%	22.9%	22.9%	11.5%	46.9%		16.7%	52.1%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Day St. & Cottonwood Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	33	74	4	19	99	131	3	321	10	82	139	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	38	84	5	22	112	149	3	365	11	93	158	27
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	236	14	57	226	192	10	1076	32	119	1023	175
Arrive On Green	0.05	0.14	0.14	0.03	0.12	0.12	0.01	0.60	0.60	0.07	0.66	0.66
Sat Flow, veh/h	1774	1741	104	1774	1863	1583	1774	1799	54	1774	1551	265
Grp Volume(v), veh/h	38	0	89	22	112	149	3	0	376	93	0	185
Grp Sat Flow(s),veh/h/ln	1774	0	1844	1774	1863	1583	1774	0	1853	1774	0	1816
Q Serve(g_s), s	2.0	0.0	4.2	1.2	5.4	8.8	0.2	0.0	9.8	5.0	0.0	3.7
Cycle Q Clear(g_c), s	2.0	0.0	4.2	1.2	5.4	8.8	0.2	0.0	9.8	5.0	0.0	3.7
Prop In Lane	1.00		0.06	1.00		1.00	1.00		0.03	1.00		0.15
Lane Grp Cap(c), veh/h	82	0	250	57	226	192	10	0	1109	119	0	1198
V/C Ratio(X)	0.46	0.00	0.36	0.38	0.49	0.77	0.30	0.00	0.34	0.78	0.00	0.15
Avail Cap(c_a), veh/h	166	0	346	166	349	297	129	0	1109	222	0	1198
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.6	0.0	37.7	45.5	39.4	40.9	47.5	0.0	9.7	44.1	0.0	6.2
Incr Delay (d2), s/veh	4.0	0.0	0.9	4.1	1.7	6.6	16.1	0.0	0.8	10.5	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	2.2	0.6	2.9	4.2	0.1	0.0	5.3	2.8	0.0	1.9
LnGrp Delay(d),s/veh	48.6	0.0	38.5	49.7	41.1	47.5	63.6	0.0	10.5	54.6	0.0	6.5
LnGrp LOS	D		D	D	D	D	E		B	D		A
Approach Vol, veh/h		127			283			379			278	
Approach Delay, s/veh		41.5			45.1			11.0			22.6	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	61.4	7.1	17.0	4.5	67.3	8.5	15.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	41.0	9.0	18.0	7.0	46.0	9.0	18.0
Max Q Clear Time (g_c+I1), s	7.0	11.8	3.2	6.2	2.2	5.7	4.0	10.8
Green Ext Time (p_c), s	0.1	3.8	0.0	1.2	0.0	4.0	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	26.7
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	27	16	7	22	47	6	283	1	16	137	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		861			839			634			1320	
Travel Time (s)		19.6			19.1			17.3			36.0	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.4
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	9	27	16	0	7	22	47	0	6	283	1
Peak Hour Factor	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	11	34	20	0	9	27	59	0	7	354	1
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	9	8.8	11.6
HCM LOS	A	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	2%	25%	0%	24%	0%	10%
Vol Thru, %	98%	75%	0%	76%	0%	87%
Vol Right, %	0%	0%	100%	0%	100%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	290	36	16	29	47	158
LT Vol	6	9	0	7	0	16
Through Vol	283	27	0	22	0	137
RT Vol	1	0	16	0	47	5
Lane Flow Rate	362	45	20	36	59	198
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.463	0.076	0.029	0.061	0.085	0.262
Departure Headway (Hd)	4.597	6.088	5.25	6.044	5.212	4.78
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	779	584	675	588	681	747
Service Time	2.644	3.873	3.034	3.825	2.992	2.837
HCM Lane V/C Ratio	0.465	0.077	0.03	0.061	0.087	0.265
HCM Control Delay	11.6	9.4	8.2	9.2	8.5	9.5
HCM Lane LOS	B	A	A	A	A	A
HCM 95th-tile Q	2.5	0.2	0.1	0.2	0.3	1

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	16	137	5
Peak Hour Factor	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	20	171	6
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	9.5
HCM LOS	A

Lane

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	144	695	15	4	1057	93	14	35	18	72	11	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	245		0	220		75	50		50	200		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	100			120			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		861			839			831			716	
Travel Time (s)		13.0			12.7			16.2			19.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		
Detector Phase	5	2		1	6	6	8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (s)	21.0	63.0		11.0	53.0	53.0	22.0	22.0	22.0	22.0	22.0	
Total Split (%)	21.9%	65.6%		11.5%	55.2%	55.2%	22.9%	22.9%	22.9%	22.9%	22.9%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max		None	C-Max	C-Max	Max	Max	Max	Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 15: Day St. & Alessandro Bl.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	144	695	15	4	1057	93	14	35	18	72	11	66
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	153	739	16	4	1124	99	15	37	19	77	12	70
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	3484	75	13	2060	922	264	349	297	305	44	259
Arrive On Green	0.11	0.68	0.68	0.01	0.58	0.58	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1774	5123	111	1774	3539	1583	1311	1863	1583	1342	237	1382
Grp Volume(v), veh/h	153	489	266	4	1124	99	15	37	19	77	0	82
Grp Sat Flow(s),veh/h/ln	1774	1695	1843	1774	1770	1583	1311	1863	1583	1342	0	1619
Q Serve(g_s), s	8.1	5.2	5.2	0.2	18.7	2.7	1.0	1.6	0.9	4.8	0.0	4.2
Cycle Q Clear(g_c), s	8.1	5.2	5.2	0.2	18.7	2.7	5.1	1.6	0.9	6.4	0.0	4.2
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.85
Lane Grp Cap(c), veh/h	187	2306	1254	13	2060	922	264	349	297	305	0	304
V/C Ratio(X)	0.82	0.21	0.21	0.31	0.55	0.11	0.06	0.11	0.06	0.25	0.00	0.27
Avail Cap(c_a), veh/h	314	2306	1254	129	2060	922	264	349	297	305	0	304
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.0	5.7	5.7	47.4	12.3	8.9	35.6	32.3	32.1	35.0	0.0	33.4
Incr Delay (d2), s/veh	8.5	0.2	0.4	12.6	1.0	0.2	0.4	0.6	0.4	2.0	0.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	2.4	2.7	0.2	9.4	1.2	0.4	0.9	0.4	2.0	0.0	2.1
LnGrp Delay(d),s/veh	50.5	5.9	6.1	60.0	13.3	9.2	36.0	32.9	32.5	37.0	0.0	35.6
LnGrp LOS	D	A	A	E	B	A	D	C	C	D		D
Approach Vol, veh/h		908			1227			71			159	
Approach Delay, s/veh		13.5			13.1			33.5			36.2	
Approach LOS		B			B			C			D	

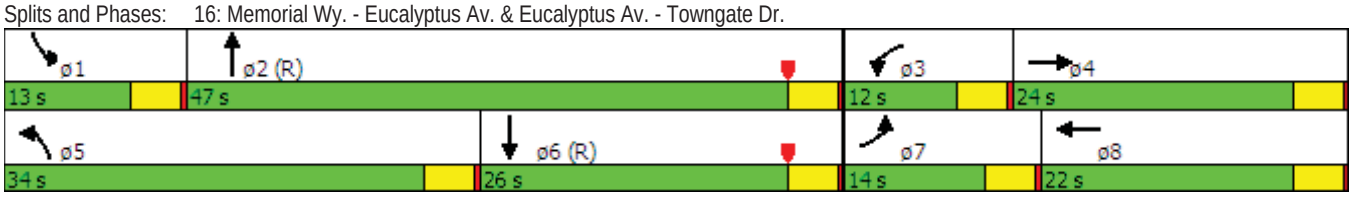
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	69.3		22.0	14.1	59.9		22.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	59.0		18.0	17.0	49.0		18.0
Max Q Clear Time (g_c+I1), s	2.2	7.2		8.4	10.1	20.7		7.1
Green Ext Time (p_c), s	0.0	19.7		0.7	0.2	15.3		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	15.4
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	180	123	9	175	30	221	160	15	14	82	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		0	150		0	200		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	14.0	24.0		12.0	22.0		34.0	47.0		13.0	26.0	
Total Split (%)	14.6%	25.0%		12.5%	22.9%		35.4%	49.0%		13.5%	27.1%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	39	180	123	9	175	30	221	160	15	14	82	42
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	42	196	134	10	190	33	240	174	16	15	89	46
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	428	200	30	413	69	281	2185	199	43	1229	597
Arrive On Green	0.05	0.13	0.13	0.02	0.09	0.09	0.16	0.67	0.67	0.02	0.53	0.53
Sat Flow, veh/h	1774	3390	1583	1774	4390	733	1774	3281	299	1774	2312	1123
Grp Volume(v), veh/h	42	196	134	10	145	78	240	93	97	15	67	68
Grp Sat Flow(s),veh/h/ln	1774	1695	1583	1774	1695	1733	1774	1770	1810	1774	1770	1665
Q Serve(g_s), s	2.2	5.1	7.8	0.5	3.9	4.1	12.6	1.8	1.8	0.8	1.8	1.9
Cycle Q Clear(g_c), s	2.2	5.1	7.8	0.5	3.9	4.1	12.6	1.8	1.8	0.8	1.8	1.9
Prop In Lane	1.00		1.00	1.00		0.42	1.00		0.17	1.00		0.67
Lane Grp Cap(c), veh/h	87	428	200	30	319	163	281	1179	1205	43	941	885
V/C Ratio(X)	0.48	0.46	0.67	0.33	0.45	0.48	0.86	0.08	0.08	0.35	0.07	0.08
Avail Cap(c_a), veh/h	185	706	330	148	636	325	554	1179	1205	166	941	885
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.5	38.9	40.0	46.6	41.1	41.2	39.3	5.7	5.7	46.1	10.9	11.0
Incr Delay (d2), s/veh	4.1	0.8	3.9	6.2	1.0	2.2	7.3	0.1	0.1	4.9	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	2.4	3.6	0.3	1.9	2.1	6.8	0.9	0.9	0.4	0.9	0.9
LnGrp Delay(d),s/veh	48.5	39.7	43.9	52.8	42.2	43.4	46.7	5.8	5.8	51.0	11.1	11.1
LnGrp LOS	D	D	D	D	D	D	D	A	A	D	B	B
Approach Vol, veh/h		372			233			430			150	
Approach Delay, s/veh		42.2			43.0			28.6			15.1	
Approach LOS		D			D			C			B	

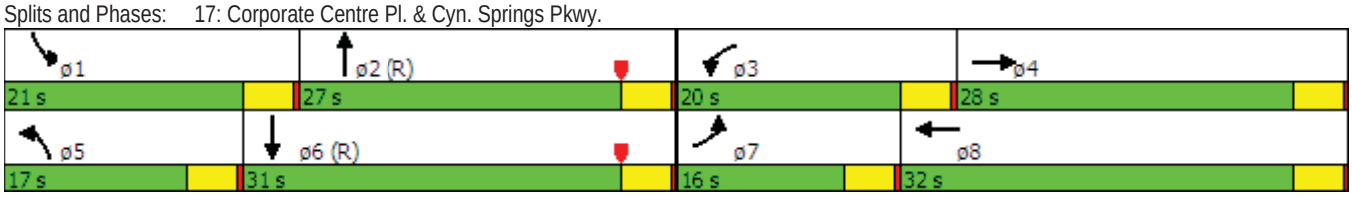
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	67.9	5.6	16.1	19.2	55.1	8.7	13.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	43.0	8.0	20.0	30.0	22.0	10.0	18.0
Max Q Clear Time (g_c+I1), s	2.8	3.8	2.5	9.8	14.6	3.9	4.2	6.1
Green Ext Time (p_c), s	0.0	1.8	0.0	2.4	0.6	1.6	0.0	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	34.0
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	6	170	5	22	242	23	11	11	27	25	12	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	175		0	130		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			90			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		476			1120			987			205	
Travel Time (s)		8.1			19.1			16.8			4.7	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	16.0	28.0		20.0	32.0		17.0	27.0		21.0	31.0	
Total Split (%)	16.7%	29.2%		20.8%	33.3%		17.7%	28.1%		21.9%	32.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 21 (22%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 17: Corporate Centre Pl. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	170	5	22	242	23	11	11	27	25	12	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	7	198	6	26	281	27	13	13	31	29	14	8
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	22	442	13	65	525	50	38	1187	1062	70	767	438
Arrive On Green	0.01	0.09	0.09	0.07	0.22	0.22	0.02	0.67	0.67	0.04	0.69	0.69
Sat Flow, veh/h	1774	5073	153	1774	4728	446	1774	1770	1583	1774	1114	637
Grp Volume(v), veh/h	7	132	72	26	200	108	13	13	31	29	0	22
Grp Sat Flow(s),veh/h/ln	1774	1695	1836	1774	1695	1784	1774	1770	1583	1774	0	1750
Q Serve(g_s), s	0.4	3.5	3.6	1.3	5.0	5.1	0.7	0.2	0.6	1.5	0.0	0.4
Cycle Q Clear(g_c), s	0.4	3.5	3.6	1.3	5.0	5.1	0.7	0.2	0.6	1.5	0.0	0.4
Prop In Lane	1.00		0.08	1.00		0.25	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	22	295	160	65	377	198	38	1187	1062	70	0	1205
V/C Ratio(X)	0.32	0.45	0.45	0.40	0.53	0.55	0.34	0.01	0.03	0.42	0.00	0.02
Avail Cap(c_a), veh/h	222	848	459	296	989	520	240	1187	1062	314	0	1205
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.0	41.6	41.6	43.5	35.1	35.2	46.3	5.2	5.3	45.0	0.0	4.7
Incr Delay (d2), s/veh	8.0	1.1	2.0	3.9	1.1	2.3	5.3	0.0	0.1	3.9	0.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.7	1.9	0.7	2.4	2.6	0.4	0.1	0.3	0.8	0.0	0.2
LnGrp Delay(d),s/veh	55.0	42.7	43.6	47.4	36.3	37.5	51.6	5.3	5.4	49.0	0.0	4.7
LnGrp LOS	E	D	D	D	D	D	D	A	A	D		A
Approach Vol, veh/h		211			334			57			51	
Approach Delay, s/veh		43.4			37.5			15.9			29.9	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	68.4	7.5	12.4	6.1	70.1	5.2	14.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	23.0	16.0	24.0	13.0	27.0	12.0	28.0
Max Q Clear Time (g_c+I1), s	3.5	2.6	3.3	5.6	2.7	2.4	2.4	7.1
Green Ext Time (p_c), s	0.0	0.2	0.0	2.8	0.0	0.3	0.0	2.9

Intersection Summary	
HCM 2010 Ctrl Delay	36.9
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	54	4	18	65	9	14	44	13	5	22	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	170		0	100		0	130		0	135		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			45			60			60		
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		474			710			623			987	
Travel Time (s)		8.1			12.1			10.6			16.8	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	11	54	4	0	18	65	9	0	14	44	13
Peak Hour Factor	0.92	0.85	0.85	0.85	0.92	0.85	0.85	0.85	0.92	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	13	64	5	0	21	76	11	0	16	52	15
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	3
HCM Control Delay	8.1	8.1	8
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	53%	0%	100%	82%	0%	100%	71%	0%	100%
Vol Right, %	0%	0%	47%	0%	0%	18%	0%	0%	29%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	14	29	28	11	36	22	18	43	31	5	15
LT Vol	14	0	0	11	0	0	18	0	0	5	0
Through Vol	0	29	15	0	36	18	0	43	22	0	15
RT Vol	0	0	13	0	0	4	0	0	9	0	0
Lane Flow Rate	16	35	33	13	42	26	21	51	36	6	17
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.026	0.049	0.043	0.02	0.06	0.036	0.033	0.072	0.049	0.009	0.025
Departure Headway (Hd)	5.637	5.137	4.808	5.606	5.106	4.979	5.554	5.054	4.849	5.7	5.2
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	636	698	746	640	703	721	646	710	740	629	689
Service Time	3.36	2.86	2.531	3.326	2.826	2.698	3.273	2.773	2.567	3.426	2.926
HCM Lane V/C Ratio	0.025	0.05	0.044	0.02	0.06	0.036	0.033	0.072	0.049	0.01	0.025
HCM Control Delay	8.5	8.1	7.7	8.4	8.2	7.9	8.5	8.2	7.8	8.5	8.1
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0	0.1

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	5	22	17
Peak Hour Factor	0.92	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	6	26	20
Number of Lanes	0	1	2	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	7.9
HCM LOS	A

Lane	SBLn3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	8	25	27	15	2	86	250	39	24	174	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		70	140		50	150		0	120		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			40			40			40	
Link Distance (ft)		327			603			402			804	
Travel Time (s)		7.4			10.3			6.9			13.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	15.0	24.0		17.0	26.0	26.0	25.0	38.0		17.0	30.0	
Total Split (%)	15.6%	25.0%		17.7%	27.1%	27.1%	26.0%	39.6%		17.7%	31.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 47 (49%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Valley Springs Pkwy. & Corporate Centre Pl.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	9	8	25	27	15	2	86	250	39	24	174	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	10	9	27	29	16	2	92	269	42	26	187	12
Adj No. of Lanes	1	1	0	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.93	0.93	0.93	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	2	2	2	2	2	2	2
Cap, veh/h	30	25	74	70	290	130	118	3112	471	65	3265	206
Arrive On Green	0.02	0.06	0.06	0.04	0.08	0.08	0.13	1.00	1.00	0.04	0.67	0.67
Sat Flow, veh/h	1774	411	1234	1774	3539	1583	1774	4459	675	1774	4889	309
Grp Volume(v), veh/h	10	0	36	29	16	2	92	203	108	26	129	70
Grp Sat Flow(s),veh/h/ln	1774	0	1645	1774	1770	1583	1774	1695	1744	1774	1695	1808
Q Serve(g_s), s	0.5	0.0	2.0	1.5	0.4	0.1	4.8	0.0	0.0	1.4	1.3	1.3
Cycle Q Clear(g_c), s	0.5	0.0	2.0	1.5	0.4	0.1	4.8	0.0	0.0	1.4	1.3	1.3
Prop In Lane	1.00		0.75	1.00		1.00	1.00		0.39	1.00		0.17
Lane Grp Cap(c), veh/h	30	0	98	70	290	130	118	2366	1217	65	2264	1207
V/C Ratio(X)	0.33	0.00	0.37	0.42	0.06	0.02	0.78	0.09	0.09	0.40	0.06	0.06
Avail Cap(c_a), veh/h	203	0	343	240	811	363	388	2366	1217	240	2264	1207
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	0.0	43.4	45.0	40.6	40.5	40.9	0.0	0.0	45.2	5.5	5.5
Incr Delay (d2), s/veh	6.2	0.0	2.3	3.9	0.1	0.0	10.4	0.1	0.1	4.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	1.0	0.8	0.2	0.1	2.7	0.0	0.0	0.7	0.6	0.7
LnGrp Delay(d),s/veh	52.8	0.0	45.7	49.0	40.7	40.6	51.4	0.1	0.1	49.2	5.6	5.6
LnGrp LOS	D		D	D	D	D	D	A	A	D	A	A
Approach Vol, veh/h		46			47			403			225	
Approach Delay, s/veh		47.2			45.8			11.8			10.6	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	71.0	7.8	9.7	10.4	68.1	5.6	11.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	34.0	13.0	20.0	21.0	26.0	11.0	22.0
Max Q Clear Time (g_c+I1), s	3.4	2.0	3.5	4.0	6.8	3.3	2.5	2.4
Green Ext Time (p_c), s	0.0	3.2	0.0	0.2	0.2	3.0	0.0	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	15.9
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	0	10	0	0	0	11	372	0	0	215	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	25		0	75		50
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	60			60			10			80		
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		252			253			418			402	
Travel Time (s)		5.7			5.8			7.1			6.9	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	0	10	0	0	0	11	372	0	0	215	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	0	13	0	0	0	15	496	0	0	287	15

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	522	819	151				301	0	0	496	0	0
Stage 1	294	294	-				-	-	-	-	-	-
Stage 2	228	525	-				-	-	-	-	-	-
Critical Hdwy	5.74	6.54	7.14				5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	6.64	5.54	-				-	-	-	-	-	-
Critical Hdwy Stg 2	6.04	5.54	-				-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92				3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	534	309	738				839	-	-	680	-	-
Stage 1	638	668	-				-	-	-	-	-	-
Stage 2	724	528	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	521	0	738				839	-	-	680	-	-
Mov Cap-2 Maneuver	521	0	-				-	-	-	-	-	-
Stage 1	638	0	-				-	-	-	-	-	-
Stage 2	706	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.5	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	839	-	-	673	680	-	-
HCM Lane V/C Ratio	0.017	-	-	0.026	-	-	-
HCM Control Delay (s)	9.4	0.1	-	10.5	0	-	-
HCM Lane LOS	A	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0	-	-

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (vph)	94	40	0	343	249	46	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	180		0	115	
Storage Lanes	1	1	1		0	1	
Taper Length (ft)	60		100			120	
Right Turn on Red		Yes			Yes		
Link Speed (mph)	40			40			40
Link Distance (ft)	609			576			418
Travel Time (s)	10.4			9.8			7.1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)							
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	3		5	2		1	6
Permitted Phases		8					
Detector Phase	3	8	5	2		1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	11.0	20.0	11.0	20.0		11.0	20.0
Total Split (s)	31.0	31.0	12.0	43.0		22.0	53.0
Total Split (%)	32.3%	32.3%	12.5%	44.8%		22.9%	55.2%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead	Lag		Lead	Lag
Lead-Lag Optimize?			Yes	Yes		Yes	Yes
Recall Mode	None	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 22 (23%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 22: Valley Springs Pkwy. & Gateway Dr.

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	94	40	0	343	249	46	179
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1900	1863	1863
Adj Flow Rate, veh/h	99	42		361	262	48	188
Adj No. of Lanes	1	1		3	0	1	3
Peak Hour Factor	0.95	0.95		0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	137	122		2527	1180	93	4270
Arrive On Green	0.08	0.08		0.75	0.75	0.11	1.00
Sat Flow, veh/h	1774	1583		3558	1583	1774	5253
Grp Volume(v), veh/h	99	42		361	262	48	188
Grp Sat Flow(s),veh/h/ln	1774	1583		1695	1583	1774	1695
Q Serve(g_s), s	5.2	2.4		2.9	4.8	2.5	0.0
Cycle Q Clear(g_c), s	5.2	2.4		2.9	4.8	2.5	0.0
Prop In Lane	1.00	1.00			1.00	1.00	
Lane Grp Cap(c), veh/h	137	122		2527	1180	93	4270
V/C Ratio(X)	0.72	0.34		0.14	0.22	0.51	0.04
Avail Cap(c_a), veh/h	499	445		2527	1180	333	4270
HCM Platoon Ratio	1.00	1.00		1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	42.0		3.5	3.7	41.8	0.0
Incr Delay (d2), s/veh	7.1	1.7		0.1	0.4	4.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	1.1		1.4	2.3	1.3	0.0
LnGrp Delay(d),s/veh	50.4	43.7		3.6	4.2	46.1	0.0
LnGrp LOS	D	D		A	A	D	A
Approach Vol, veh/h	141			623			236
Approach Delay, s/veh	48.4			3.8			9.4
Approach LOS	D			A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.1	75.6				84.6		11.4
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	18.0	39.0				49.0		27.0
Max Q Clear Time (g_c+I1), s	4.5	6.8				2.0		7.2
Green Ext Time (p_c), s	0.1	5.7				5.9		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	11.4
HCM 2010 LOS	B

Notes

User approved ignoring U-Turning movement.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	12	182	135	10	2	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	60				60	
Link Speed (mph)		40	40		30	
Link Distance (ft)		609	672		287	
Travel Time (s)		10.4	11.5		6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	12	182	135	10	2	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	100	-	-	-	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	13	198	147	11	2	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	158	0	-	0	277	79
Stage 1	-	-	-	-	152	-
Stage 2	-	-	-	-	125	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1419	-	-	-	690	965
Stage 1	-	-	-	-	860	-
Stage 2	-	-	-	-	887	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1419	-	-	-	684	965
Mov Cap-2 Maneuver	-	-	-	-	709	-
Stage 1	-	-	-	-	860	-
Stage 2	-	-	-	-	879	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1419	-	-	-	709
HCM Lane V/C Ratio	0.009	-	-	-	0.003
HCM Control Delay (s)	7.6	-	-	-	10.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	65	119	105	28	20	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125			0	150	0
Storage Lanes	1			0	0	1
Taper Length (ft)	60				60	
Link Speed (mph)		40	40		40	
Link Distance (ft)		672	394		405	
Travel Time (s)		11.5	6.7		6.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	65	119	105	28	20	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	68	124	109	29	21	42

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	139	0	-	0	321	69
Stage 1	-	-	-	-	124	-
Stage 2	-	-	-	-	197	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1442	-	-	-	648	980
Stage 1	-	-	-	-	888	-
Stage 2	-	-	-	-	817	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1442	-	-	-	617	980
Mov Cap-2 Maneuver	-	-	-	-	655	-
Stage 1	-	-	-	-	888	-
Stage 2	-	-	-	-	778	-

Approach	EB	WB	SB
HCM Control Delay, s	2.7	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1442	-	-	-	655	980
HCM Lane V/C Ratio	0.047	-	-	-	0.032	0.043
HCM Control Delay (s)	7.6	-	-	-	10.7	8.8
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1	0.1

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	91	17	93	138	1	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	25		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			0		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	226			318	265	
Travel Time (s)	3.9			5.4	6.0	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	91	17	93	138	1	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	25	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	102	19	104	155	1	28

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	121	0	399	61
Stage 1	-	-	-	-	112	-
Stage 2	-	-	-	-	287	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1464	-	579	991
Stage 1	-	-	-	-	900	-
Stage 2	-	-	-	-	736	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1464	-	538	991
Mov Cap-2 Maneuver	-	-	-	-	586	-
Stage 1	-	-	-	-	900	-
Stage 2	-	-	-	-	684	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.1	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	965	-	-	1464	-
HCM Lane V/C Ratio	0.03	-	-	0.071	-
HCM Control Delay (s)	8.8	-	-	7.6	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	52	17	39	78	23	11	14	27	13	23	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		50	110		100	100		50	0		50
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		710			938			620			207	
Travel Time (s)		12.1			16.0			10.6			4.7	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	3	52	17	0	39	78	23	0	11	14	27
Peak Hour Factor	0.92	0.84	0.84	0.84	0.92	0.84	0.84	0.84	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	4	62	20	0	46	93	27	0	13	17	32
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	2	3
HCM Control Delay	8	8.2	8
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	36%	0%
Vol Thru, %	0%	100%	15%	0%	100%	50%	0%	100%	53%	64%	0%
Vol Right, %	0%	0%	85%	0%	0%	50%	0%	0%	47%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	9	32	3	35	34	39	52	49	36	3
LT Vol	11	0	0	3	0	0	39	0	0	13	0
Through Vol	0	9	5	0	35	17	0	52	26	23	0
RT Vol	0	0	27	0	0	17	0	0	23	0	3
Lane Flow Rate	13	11	38	4	41	41	46	62	58	43	4
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.021	0.016	0.049	0.006	0.059	0.055	0.071	0.086	0.076	0.065	0.005
Departure Headway (Hd)	5.776	5.277	4.68	5.662	5.161	4.814	5.506	5.006	4.676	5.481	4.6
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	620	678	765	633	695	744	651	717	767	654	777
Service Time	3.507	3.008	2.411	3.389	2.888	2.541	3.231	2.73	2.401	3.211	2.331
HCM Lane V/C Ratio	0.021	0.016	0.05	0.006	0.059	0.055	0.071	0.086	0.076	0.066	0.005
HCM Control Delay	8.6	8.1	7.7	8.4	8.2	7.8	8.7	8.2	7.8	8.6	7.4
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0	0.2	0	0.2	0.2	0.2	0.3	0.2	0.2	0

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	13	23	3
Peak Hour Factor	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	15	27	4
Number of Lanes	0	0	1	1

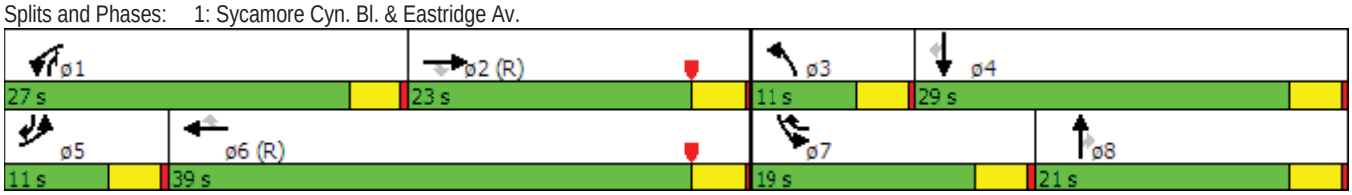
Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	8.5
HCM LOS	A

Lane

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	69	149	61	450	78	224	34	202	114	276	310	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		150	310		200	360		320	275		110
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	120			120			120			200		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		910			577			817			952	
Travel Time (s)		15.5			9.8			12.4			14.4	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	11.0	11.0	20.0	11.0
Total Split (s)	11.0	23.0	23.0	27.0	39.0	19.0	11.0	21.0	27.0	19.0	29.0	11.0
Total Split (%)	12.2%	25.6%	25.6%	30.0%	43.3%	21.1%	12.2%	23.3%	30.0%	21.1%	32.2%	12.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	Max	None	None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Sycamore Cyn. Bl. & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	69	149	61	450	78	224	34	202	114	276	310	20
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	78	167	0	506	88	252	38	227	128	310	348	22
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	2	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	230	1623	505	611	1522	863	164	745	614	396	983	545
Arrive On Green	0.07	0.32	0.00	0.18	0.43	0.43	0.05	0.21	0.21	0.12	0.28	0.28
Sat Flow, veh/h	3442	5085	1583	3442	3539	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	78	167	0	506	88	252	38	227	128	310	348	22
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1770	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	1.9	2.1	0.0	12.8	1.3	7.7	1.0	4.9	4.8	7.9	7.1	0.8
Cycle Q Clear(g_c), s	1.9	2.1	0.0	12.8	1.3	7.7	1.0	4.9	4.8	7.9	7.1	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	230	1623	505	611	1522	863	164	745	614	396	983	545
V/C Ratio(X)	0.34	0.10	0.00	0.83	0.06	0.29	0.23	0.30	0.21	0.78	0.35	0.04
Avail Cap(c_a), veh/h	268	1623	505	880	1522	863	268	745	614	574	983	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	21.6	0.0	35.7	15.0	11.1	41.3	30.0	18.3	38.7	26.0	19.6
Incr Delay (d2), s/veh	0.9	0.1	0.0	4.5	0.1	0.9	0.7	1.1	0.8	4.4	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.0	0.0	6.4	0.7	3.6	0.5	2.5	2.2	4.0	3.6	0.4
LnGrp Delay(d),s/veh	41.0	21.7	0.0	40.2	15.1	11.9	42.0	31.0	19.1	43.1	27.0	19.7
LnGrp LOS	D	C		D	B	B	D	C	B	D	C	B
Approach Vol, veh/h		245			846			393			680	
Approach Delay, s/veh		27.8			29.1			28.2			34.1	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	32.7	8.3	29.0	10.0	42.7	14.4	22.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	19.0	7.0	25.0	7.0	35.0	15.0	17.0
Max Q Clear Time (g_c+I1), s	14.8	4.1	3.0	9.1	3.9	9.7	9.9	6.9
Green Ext Time (p_c), s	1.2	2.1	0.0	3.5	0.0	2.4	0.5	2.8

Intersection Summary	
HCM 2010 Ctrl Delay	30.4
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	545	3	28	716	58	18	3	29	99	2	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		80	150		0	75		160	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		760			700			315			411	
Travel Time (s)		13.0			11.9			7.2			9.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0		11.0	20.0	20.0	11.0	20.0	
Total Split (s)	11.0	42.0	42.0	11.0	42.0		11.0	20.0	20.0	17.0	26.0	
Total Split (%)	12.2%	46.7%	46.7%	12.2%	46.7%		12.2%	22.2%	22.2%	18.9%	28.9%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Box Springs Bl. & Eastridge Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	545	3	28	716	58	18	3	29	99	2	37
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	12	562	3	29	738	60	19	3	30	102	2	38
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	36	1799	805	71	1751	142	52	373	317	131	433	387
Arrive On Green	0.02	0.51	0.51	0.05	0.70	0.70	0.03	0.20	0.20	0.07	0.24	0.24
Sat Flow, veh/h	1774	3539	1583	1774	3315	269	1774	1863	1583	1774	1770	1583
Grp Volume(v), veh/h	12	562	3	29	394	404	19	3	30	102	2	38
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1815	1774	1863	1583	1774	1770	1583
Q Serve(g_s), s	0.6	8.4	0.1	1.4	8.5	8.5	0.9	0.1	1.4	5.1	0.1	1.7
Cycle Q Clear(g_c), s	0.6	8.4	0.1	1.4	8.5	8.5	0.9	0.1	1.4	5.1	0.1	1.7
Prop In Lane	1.00		1.00	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	36	1799	805	71	935	959	52	373	317	131	433	387
V/C Ratio(X)	0.34	0.31	0.00	0.41	0.42	0.42	0.36	0.01	0.09	0.78	0.00	0.10
Avail Cap(c_a), veh/h	138	1799	805	138	935	959	138	373	317	256	433	387
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.5	12.9	10.9	41.6	7.6	7.6	42.9	28.8	29.3	41.0	25.7	26.3
Incr Delay (d2), s/veh	5.4	0.5	0.0	3.7	1.4	1.4	4.2	0.0	0.6	9.7	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	4.2	0.0	0.8	4.4	4.5	0.5	0.1	0.7	2.8	0.0	0.8
LnGrp Delay(d),s/veh	48.9	13.4	10.9	45.3	9.0	8.9	47.1	28.9	29.9	50.6	25.7	26.8
LnGrp LOS	D	B	B	D	A	A	D	C	C	D	C	C
Approach Vol, veh/h		577			827			52			142	
Approach Delay, s/veh		14.1			10.2			36.1			43.9	
Approach LOS		B			B			D			D	

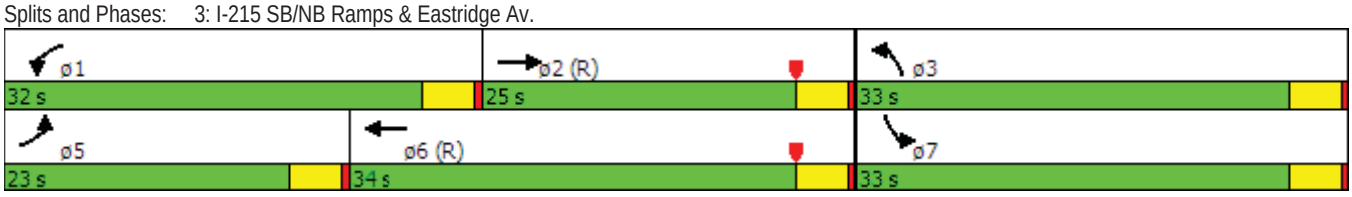
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	49.7	6.6	26.0	5.8	51.5	10.6	22.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	38.0	7.0	22.0	7.0	38.0	13.0	16.0
Max Q Clear Time (g_c+I1), s	3.4	10.4	2.9	3.7	2.6	10.5	7.1	3.4
Green Ext Time (p_c), s	0.0	9.7	0.0	0.2	0.0	9.7	0.1	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	15.5
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	161	379	0	600	361	0	137	0	0	629	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	275		0	0		0	0		0
Storage Lanes	0		0	0		0	2		0	2		0
Taper Length (ft)	90			190			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		241			359			784			672	
Travel Time (s)		4.1			6.1			15.3			13.1	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			36			120			120	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Prot			Prot		
Protected Phases	5	2		1	6		3			7		
Permitted Phases												
Detector Phase	5	2		1	6		3			7		
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0			7.0		
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0			11.0		
Total Split (s)	23.0	25.0		32.0	34.0		33.0			33.0		
Total Split (%)	25.6%	27.8%		35.6%	37.8%		36.7%			36.7%		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5			3.5		
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5			0.5		
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0			0.0		
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0			4.0		
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		None			None		

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 45 (50%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: I-215 SB/NB Ramps & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	161	379	0	600	361	0	137	0	0	629	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	0	0	1863	0	0
Adj Flow Rate, veh/h	166	391	0	619	372	0	141	0	0	648	0	0
Adj No. of Lanes	1	2	0	2	2	0	2	0	0	2	0	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0	2	2	0	2	0	0	2	0	0
Cap, veh/h	206	1535	0	721	1865	0	769	0	0	769	0	0
Arrive On Green	0.04	0.14	0.00	0.35	0.88	0.00	0.22	0.00	0.00	0.22	0.00	0.00
Sat Flow, veh/h	1774	3632	0	3442	3632	0	3442	141		3442	648	
Grp Volume(v), veh/h	166	391	0	619	372	0	141	28.4		648	37.5	
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1721	1770	0	1721	C		1721	D	
Q Serve(g_s), s	8.4	8.8	0.0	15.0	1.4	0.0	3.0			16.2		
Cycle Q Clear(g_c), s	8.4	8.8	0.0	15.0	1.4	0.0	3.0			16.2		
Prop In Lane	1.00		0.00	1.00		0.00	1.00			1.00		
Lane Grp Cap(c), veh/h	206	1535	0	721	1865	0	769			769		
V/C Ratio(X)	0.81	0.25	0.00	0.86	0.20	0.00	0.18			0.84		
Avail Cap(c_a), veh/h	375	1535	0	1071	1865	0	1109			1109		
HCM Platoon Ratio	0.33	0.33	1.00	1.67	1.67	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.99	0.99	0.00	1.00			1.00		
Uniform Delay (d), s/veh	42.3	25.6	0.0	28.0	2.6	0.0	28.3			33.4		
Incr Delay (d2), s/veh	7.2	0.4	0.0	4.8	0.2	0.0	0.1			4.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	4.5	4.4	0.0	7.5	0.7	0.0	1.4			8.1		
LnGrp Delay(d),s/veh	49.5	26.0	0.0	32.8	2.9	0.0	28.4			37.5		
LnGrp LOS	D	C		C	A		C			D		
Approach Vol, veh/h		557			991							
Approach Delay, s/veh		33.0			21.6							
Approach LOS		C			C							

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3		5	6	7	
Phs Duration (G+Y+Rc), s	22.8	43.0	24.1		14.4	51.4	24.1	
Change Period (Y+Rc), s	4.0	4.0	4.0		4.0	4.0	4.0	
Max Green Setting (Gmax), s	28.0	21.0	29.0		19.0	30.0	29.0	
Max Q Clear Time (g_c+I1), s	17.0	10.8	5.0		10.4	3.4	18.2	
Green Ext Time (p_c), s	1.8	3.4	0.4		0.3	5.1	1.9	

Intersection Summary	
HCM 2010 Ctrl Delay	29.1
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	540	133	0	498	0	0	0	0	0	0	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		700			241			458			364	
Travel Time (s)		11.9			4.1			8.9			7.1	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	Yes	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Left
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	540	133	0	498	0	0	0	0	0	0	304
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	108	25	156	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	557	137	0	513	0	0	0	0	0	0	313

Major/Minor	Major1			Major2						Minor2		
Conflicting Flow All	513	0	-	557	0	0				736	1070	257
Stage 1	-	-	-	-	-	-				513	513	-
Stage 2	-	-	-	-	-	-				223	557	-
Critical Hdwy	4.14	-	-	5.34	-	-				6.29	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-				5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-				6.04	5.54	-
Follow-up Hdwy	2.22	-	-	3.12	-	-				3.67	4.02	3.32
Pot Cap-1 Maneuver	1049	-	0	637	-	-				385	220	742
Stage 1	-	-	0	-	-	-				548	534	-
Stage 2	-	-	0	-	-	-				754	510	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	1049	-	-	637	-	-				385	0	742
Mov Cap-2 Maneuver	-	-	-	-	-	-				455	0	-
Stage 1	-	-	-	-	-	-				548	0	-
Stage 2	-	-	-	-	-	-				754	0	-

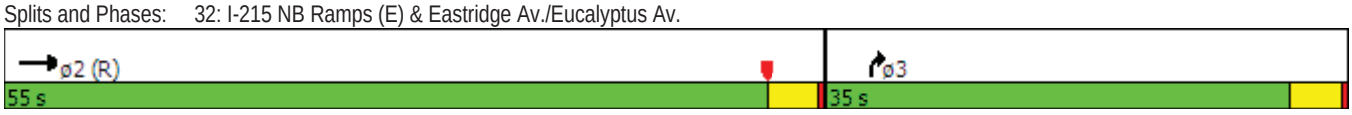
Approach	EB	WB	SB
HCM Control Delay, s	0	0	13.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1049	-	637	-	-	742
HCM Lane V/C Ratio	-	-	-	-	-	0.422
HCM Control Delay (s)	0	-	0	-	-	13.4
HCM Lane LOS	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0	-	0	-	-	2.1

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1008	0	0	0	0	533
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Right Turn on Red		Yes				Yes
Link Speed (mph)	30			40	30	
Link Distance (ft)	100			131	592	
Travel Time (s)	2.3			2.2	13.5	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA					Prot
Protected Phases	2					3
Permitted Phases						
Detector Phase	2					3
Switch Phase						
Minimum Initial (s)	7.0					7.0
Minimum Split (s)	20.0					11.0
Total Split (s)	55.0					35.0
Total Split (%)	61.1%					38.9%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	0.5					0.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	4.0					4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max					None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	

Splits and Phases: 32: I-215 NB Ramps (E) & Eastridge Av./Eucalyptus Av.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	1008	0	0	0	0	533
Number	2	12			3	18
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)		1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0			0	1863
Adj Flow Rate, veh/h	1039	0			0	549
Adj No. of Lanes	2	0			0	2
Peak Hour Factor	0.97	0.97			0.97	0.97
Percent Heavy Veh, %	2	0			0	2
Cap, veh/h	3382	0			0	0
Arrive On Green	0.96	0.00			0.00	0.00
Sat Flow, veh/h	3725	0			0	
Grp Volume(v), veh/h	1039	0			0.0	
Grp Sat Flow(s),veh/h/ln	1770	0				
Q Serve(g_s), s	1.7	0.0				
Cycle Q Clear(g_c), s	1.7	0.0				
Prop In Lane		0.00				
Lane Grp Cap(c), veh/h	3382	0				
V/C Ratio(X)	0.31	0.00				
Avail Cap(c_a), veh/h	3382	0				
HCM Platoon Ratio	1.00	1.00				
Upstream Filter(I)	1.00	0.00				
Uniform Delay (d), s/veh	0.1	0.0				
Incr Delay (d2), s/veh	0.2	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile BackOfQ(50%),veh/ln	0.8	0.0				
LnGrp Delay(d),s/veh	0.4	0.0				
LnGrp LOS	A					
Approach Vol, veh/h	1039					
Approach Delay, s/veh	0.4					
Approach LOS	A					

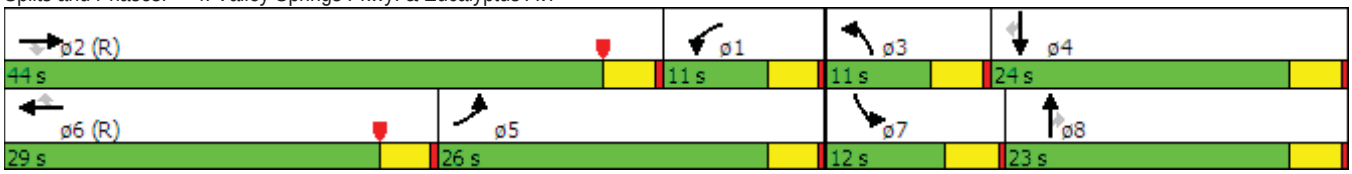
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		90.0						
Change Period (Y+Rc), s		4.0						
Max Green Setting (Gmax), s		51.0						
Max Q Clear Time (g_c+I1), s		3.7						
Green Ext Time (p_c), s		9.9						

Intersection Summary	
HCM 2010 Ctrl Delay	0.4
HCM 2010 LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	484	854	203	37	539	46	55	139	47	59	180	695
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	1		1	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0
Total Split (s)	26.0	44.0	44.0	11.0	29.0	29.0	11.0	23.0	23.0	12.0	24.0	24.0
Total Split (%)	28.9%	48.9%	48.9%	12.2%	32.2%	32.2%	12.2%	25.6%	25.6%	13.3%	26.7%	26.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	Max	None	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	484	854	203	37	539	46	55	139	47	59	180	695
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	504	890	211	39	561	48	57	145	49	61	188	724
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	906	1573	704	171	983	440	105	780	349	108	414	619
Arrive On Green	0.53	0.89	0.89	0.06	0.19	0.19	0.06	0.22	0.22	0.02	0.07	0.07
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	1774	3539	1583	1774	1863	2787
Grp Volume(v), veh/h	504	890	211	39	561	48	57	145	49	61	188	724
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1774	1770	1583	1774	1863	1393
Q Serve(g_s), s	8.8	5.1	1.3	1.9	13.0	1.8	2.8	3.0	1.7	3.1	8.7	10.9
Cycle Q Clear(g_c), s	8.8	5.1	1.3	1.9	13.0	1.8	2.8	3.0	1.7	3.1	8.7	10.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	906	1573	704	171	983	440	105	780	349	108	414	619
V/C Ratio(X)	0.56	0.57	0.30	0.23	0.57	0.11	0.54	0.19	0.14	0.57	0.45	1.17
Avail Cap(c_a), veh/h	906	1573	704	171	983	440	138	780	349	158	414	619
HCM Platoon Ratio	2.00	2.00	2.00	0.67	0.67	0.67	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.85	0.85	0.85	0.88	0.88	0.88	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	3.1	1.5	38.9	31.7	17.2	41.2	28.5	16.4	42.9	36.5	12.5
Incr Delay (d2), s/veh	0.6	1.3	0.9	0.6	2.1	0.4	4.3	0.5	0.8	4.6	3.6	92.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	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	2.5	0.6	1.0	6.6	0.8	1.5	1.5	0.8	1.6	4.9	12.2
LnGrp Delay(d),s/veh	18.4	4.3	2.5	39.5	33.9	17.6	45.5	29.0	17.2	47.5	40.0	105.1
LnGrp LOS	B	A	A	D	C	B	D	C	B	D	D	F
Approach Vol, veh/h		1605			648			251			973	
Approach Delay, s/veh		8.5			33.0			30.5			88.9	
Approach LOS		A			C			C			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	44.0	9.3	24.0	27.7	29.0	9.5	23.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	40.0	7.0	20.0	22.0	25.0	8.0	19.0
Max Q Clear Time (g_c+I1), s	3.9	7.1	4.8	12.9	10.8	15.0	5.1	5.0
Green Ext Time (p_c), s	0.7	7.7	0.0	3.1	1.5	2.6	0.0	4.6

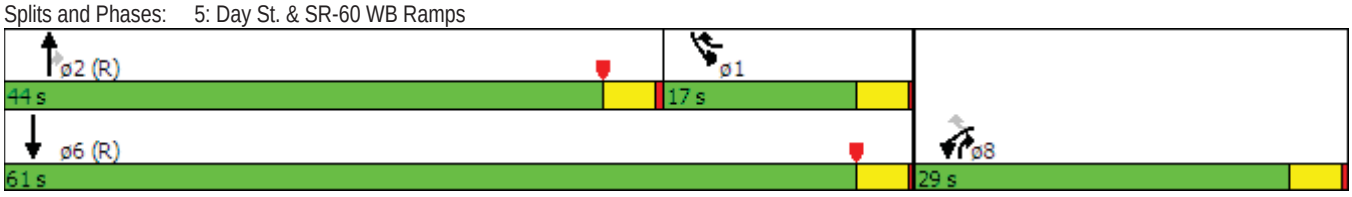
Intersection Summary	
HCM 2010 Ctrl Delay	37.2
HCM 2010 LOS	D

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	470	142	813	431	75	635
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		175	200	
Storage Lanes	2	1		1	1	
Taper Length (ft)	60				80	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	30		40			40
Link Distance (ft)	307		957			795
Travel Time (s)	7.0		16.3			13.6
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	24		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	29.0	17.0	44.0	29.0	17.0	61.0
Total Split (%)	32.2%	18.9%	48.9%	32.2%	18.9%	67.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 14 (16%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 5: Day St. & SR-60 WB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	470	142	813	431	75	635
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	485	146	838	444	77	655
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	611	669	1573	985	434	2597
Arrive On Green	0.18	0.18	0.89	0.89	0.24	0.73
Sat Flow, veh/h	3442	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	485	146	838	444	77	655
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1770
Q Serve(g_s), s	12.1	0.0	4.5	4.3	3.1	5.4
Cycle Q Clear(g_c), s	12.1	0.0	4.5	4.3	3.1	5.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	611	669	1573	985	434	2597
V/C Ratio(X)	0.79	0.22	0.53	0.45	0.18	0.25
Avail Cap(c_a), veh/h	956	827	1573	985	434	2597
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.80	0.80	1.00	1.00
Uniform Delay (d), s/veh	35.4	16.5	3.0	1.5	26.8	3.9
Incr Delay (d2), s/veh	2.5	0.2	1.0	1.2	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	2.3	2.1	2.8	1.5	2.7
LnGrp Delay(d),s/veh	38.0	16.7	4.1	2.6	27.0	4.2
LnGrp LOS	D	B	A	A	C	A
Approach Vol, veh/h	631		1282			732
Approach Delay, s/veh	33.0		3.6			6.6
Approach LOS	C		A			A

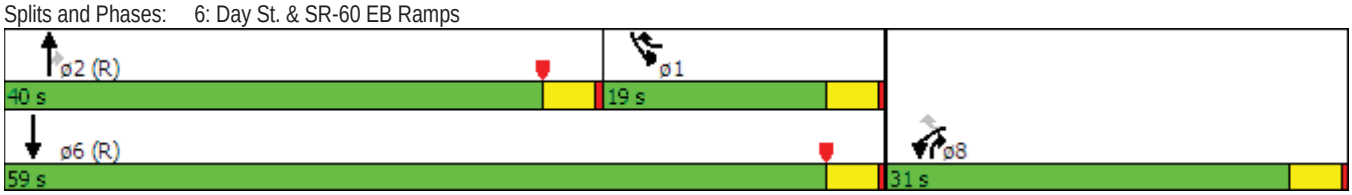
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	26.0	44.0				70.0		20.0
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	13.0	40.0				57.0		25.0
Max Q Clear Time (g_c+I1), s	5.1	6.5				7.4		14.1
Green Ext Time (p_c), s	2.7	8.5				5.0		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	11.4
HCM 2010 LOS	B

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	615	288	956	706	155	950
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	200		0	425	
Storage Lanes	2	0		1	1	
Taper Length (ft)	60				60	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		40			40
Link Distance (ft)	263		524			957
Travel Time (s)	5.1		8.9			16.3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	24		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	31.0	19.0	40.0	31.0	19.0	59.0
Total Split (%)	34.4%	21.1%	44.4%	34.4%	21.1%	65.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 88 (98%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Day St. & SR-60 EB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	615	288	956	706	155	950
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	628	294	976	720	158	969
Adj No. of Lanes	2	1	2	1	1	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	770	739	1416	988	431	3495
Arrive On Green	0.22	0.22	0.80	0.80	0.49	1.00
Sat Flow, veh/h	3442	1583	3632	1583	1774	5253
Grp Volume(v), veh/h	628	294	976	720	158	969
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1695
Q Serve(g_s), s	15.6	0.0	11.1	36.0	5.0	0.0
Cycle Q Clear(g_c), s	15.6	0.0	11.1	36.0	5.0	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	770	739	1416	988	431	3495
V/C Ratio(X)	0.82	0.40	0.69	0.73	0.37	0.28
Avail Cap(c_a), veh/h	1032	859	1416	988	431	3495
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.71	0.71	0.90	0.90
Uniform Delay (d), s/veh	33.2	15.7	6.5	4.4	18.8	0.0
Incr Delay (d2), s/veh	3.8	0.3	2.0	3.4	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	4.7	5.3	18.5	2.5	0.1
LnGrp Delay(d),s/veh	37.0	16.1	8.5	7.8	19.3	0.2
LnGrp LOS	D	B	A	A	B	A
Approach Vol, veh/h	922		1696			1127
Approach Delay, s/veh	30.3		8.2			2.9
Approach LOS	C		A			A

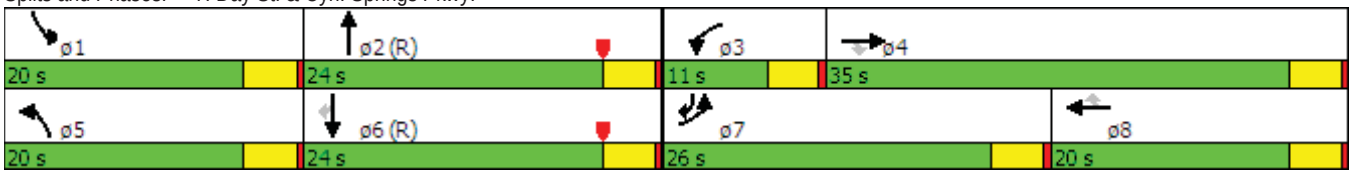
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	25.9	40.0				65.9		24.1
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	15.0	36.0				55.0		27.0
Max Q Clear Time (g_c+I1), s	7.0	38.0				2.0		17.6
Green Ext Time (p_c), s	4.1	0.0				8.6		2.6

Intersection Summary	
HCM 2010 Ctrl Delay	12.0
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	626	118	158	45	69	222	206	814	58	203	726	481
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	145		0	165		0	170		200
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	95			100			120			80		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		1120			404			728			524	
Travel Time (s)		19.1			7.9			12.4			8.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												50%
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			20			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	26.0	35.0	35.0	11.0	20.0	20.0	20.0	24.0		20.0	24.0	26.0
Total Split (%)	28.9%	38.9%	38.9%	12.2%	22.2%	22.2%	22.2%	26.7%		22.2%	26.7%	28.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 80 (89%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Day St. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	626	118	158	45	69	222	206	814	58	203	726	481
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	639	120	161	46	70	227	210	831	59	207	741	491
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	731	606	516	94	310	263	242	1497	106	239	1716	1645
Arrive On Green	0.21	0.33	0.33	0.05	0.17	0.17	0.27	0.62	0.62	0.27	0.61	0.61
Sat Flow, veh/h	3442	1863	1583	1774	1863	1583	1774	4849	343	1774	5588	3167
Grp Volume(v), veh/h	639	120	161	46	70	227	210	580	310	207	741	491
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1863	1583	1774	1695	1802	1774	1863	1583
Q Serve(g_s), s	16.2	4.2	6.9	2.3	2.9	12.6	10.1	9.0	9.0	10.0	6.3	5.4
Cycle Q Clear(g_c), s	16.2	4.2	6.9	2.3	2.9	12.6	10.1	9.0	9.0	10.0	6.3	5.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	731	606	516	94	310	263	242	1046	556	239	1716	1645
V/C Ratio(X)	0.87	0.20	0.31	0.49	0.23	0.86	0.87	0.55	0.56	0.87	0.43	0.30
Avail Cap(c_a), veh/h	841	642	545	138	331	281	315	1046	556	315	1716	1645
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.83	0.83	0.83	1.00	1.00	1.00	0.92	0.92	0.92	0.89	0.89	0.89
Uniform Delay (d), s/veh	34.3	21.9	22.8	41.4	32.5	36.5	31.9	13.6	13.6	32.1	13.2	6.5
Incr Delay (d2), s/veh	7.7	0.1	0.3	3.9	0.4	22.0	16.7	2.0	3.7	15.7	0.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	2.2	3.0	1.2	1.5	7.1	6.0	4.3	4.9	5.9	3.3	2.3
LnGrp Delay(d),s/veh	42.0	22.0	23.1	45.3	32.9	58.6	48.7	15.6	17.3	47.8	14.0	6.9
LnGrp LOS	D	C	C	D	C	E	D	B	B	D	B	A
Approach Vol, veh/h		920			343			1100			1439	
Approach Delay, s/veh		36.1			51.5			22.4			16.4	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	31.8	8.8	33.3	16.3	31.6	23.1	19.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	20.0	7.0	31.0	16.0	20.0	22.0	16.0
Max Q Clear Time (g_c+I1), s	12.0	11.0	4.3	8.9	12.1	8.3	18.2	14.6
Green Ext Time (p_c), s	0.2	6.9	0.0	2.3	0.2	8.6	1.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	26.1
HCM 2010 LOS	C

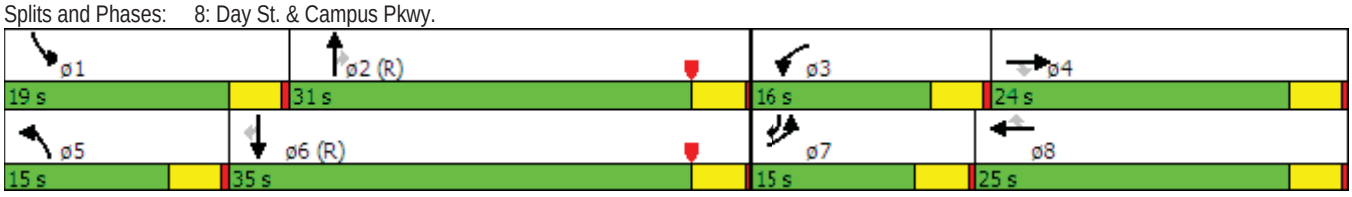
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	176	84	166	83	183	236	181	666	91	247	643	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		50	200		0	130		50	190		0
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	60			120			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		938			519			1025			728	
Travel Time (s)		16.0			10.1			17.5			12.4	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	15.0	24.0	24.0	16.0	25.0	25.0	15.0	31.0	31.0	19.0	35.0	15.0
Total Split (%)	16.7%	26.7%	26.7%	17.8%	27.8%	27.8%	16.7%	34.4%	34.4%	21.1%	38.9%	16.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 77 (86%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Day St. & Campus Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	176	84	166	83	183	236	181	666	91	247	643	48
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	183	88	173	86	191	246	189	694	95	257	670	50
Adj No. of Lanes	2	1	1	1	2	1	2	3	1	2	3	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	368	312	122	669	299	270	2331	726	337	2430	878
Arrive On Green	0.08	0.20	0.20	0.07	0.19	0.19	0.03	0.15	0.15	0.20	0.96	0.96
Sat Flow, veh/h	3442	1863	1583	1774	3539	1583	3442	5085	1583	3442	5085	1583
Grp Volume(v), veh/h	183	88	173	86	191	246	189	694	95	257	670	50
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1770	1583	1721	1695	1583	1721	1695	1583
Q Serve(g_s), s	4.7	3.6	8.9	4.3	4.2	13.4	4.9	10.9	4.7	6.4	0.7	0.1
Cycle Q Clear(g_c), s	4.7	3.6	8.9	4.3	4.2	13.4	4.9	10.9	4.7	6.4	0.7	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	265	368	312	122	669	299	270	2331	726	337	2430	878
V/C Ratio(X)	0.69	0.24	0.55	0.71	0.29	0.82	0.70	0.30	0.13	0.76	0.28	0.06
Avail Cap(c_a), veh/h	421	414	352	237	826	369	421	2331	726	574	2430	878
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.88	0.88	0.88
Uniform Delay (d), s/veh	40.5	30.4	32.5	41.0	31.3	35.0	42.8	25.3	22.7	35.2	1.1	0.8
Incr Delay (d2), s/veh	3.2	0.3	1.5	7.2	0.2	11.5	3.2	0.3	0.4	3.2	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	1.9	4.0	2.3	2.1	6.8	2.5	5.2	2.1	3.1	0.3	0.1
LnGrp Delay(d),s/veh	43.7	30.8	34.1	48.3	31.5	46.6	46.0	25.6	23.0	38.4	1.3	0.9
LnGrp LOS	D	C	C	D	C	D	D	C	C	D	A	A
Approach Vol, veh/h		444			523			978			977	
Approach Delay, s/veh		37.4			41.3			29.3			11.0	
Approach LOS		D			D			C			B	

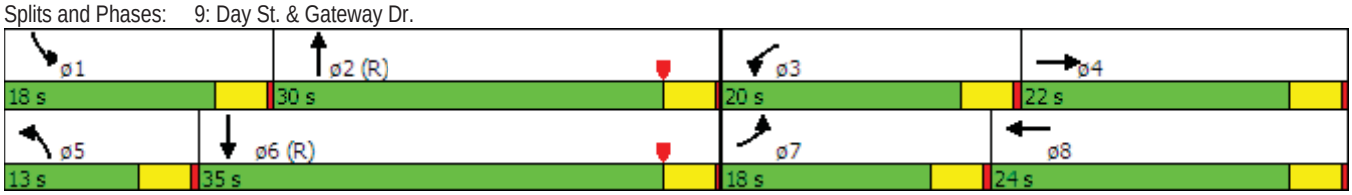
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	45.3	10.2	21.8	11.0	47.0	10.9	21.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	27.0	12.0	20.0	11.0	31.0	11.0	21.0
Max Q Clear Time (g_c+I1), s	8.4	12.9	6.3	10.9	6.9	2.7	6.7	15.4
Green Ext Time (p_c), s	0.5	7.8	0.1	2.2	0.2	11.2	0.2	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	26.6
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	89	105	67	115	99	180	57	498	115	201	540	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	100		0	190		400	260		0
Storage Lanes	1		0	1		0	1		1	2		0
Taper Length (ft)	0			120			60			165		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		318			585			592			1025	
Travel Time (s)		5.4			11.4			10.1			17.5	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	18.0	22.0		20.0	24.0		13.0	30.0		18.0	35.0	
Total Split (%)	20.0%	24.4%		22.2%	26.7%		14.4%	33.3%		20.0%	38.9%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 22 (24%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

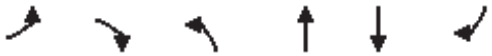
Splits and Phases: 9: Day St. & Gateway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	89	105	67	115	99	180	57	498	115	201	540	35
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	91	107	68	117	101	184	58	508	117	205	551	36
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	124	295	175	149	269	241	106	2143	482	291	2640	171
Arrive On Green	0.07	0.14	0.14	0.08	0.15	0.15	0.06	0.52	0.52	0.03	0.18	0.18
Sat Flow, veh/h	1774	2140	1269	1774	1770	1583	1774	4154	934	3442	4881	317
Grp Volume(v), veh/h	91	87	88	117	101	184	58	412	213	205	381	206
Grp Sat Flow(s),veh/h/ln	1774	1770	1639	1774	1770	1583	1774	1695	1698	1721	1695	1807
Q Serve(g_s), s	4.5	4.0	4.4	5.8	4.6	10.0	2.9	6.0	6.2	5.3	8.6	8.7
Cycle Q Clear(g_c), s	4.5	4.0	4.4	5.8	4.6	10.0	2.9	6.0	6.2	5.3	8.6	8.7
Prop In Lane	1.00		0.77	1.00		1.00	1.00		0.55	1.00		0.18
Lane Grp Cap(c), veh/h	124	244	226	149	269	241	106	1749	876	291	1834	978
V/C Ratio(X)	0.74	0.36	0.39	0.79	0.38	0.76	0.55	0.24	0.24	0.70	0.21	0.21
Avail Cap(c_a), veh/h	276	354	328	315	393	352	177	1749	876	535	1834	978
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	0.96	0.96
Uniform Delay (d), s/veh	41.0	35.2	35.3	40.4	34.3	36.6	41.1	12.0	12.1	42.6	20.5	20.6
Incr Delay (d2), s/veh	8.2	0.9	1.1	8.8	0.9	5.8	4.4	0.3	0.7	3.0	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	2.0	2.0	3.2	2.3	4.8	1.5	2.9	3.1	2.7	4.1	4.5
LnGrp Delay(d),s/veh	49.2	36.1	36.4	49.2	35.2	42.4	45.5	12.3	12.7	45.6	20.8	21.0
LnGrp LOS	D	D	D	D	D	D	D	B	B	D	C	C
Approach Vol, veh/h		266			402			683			792	
Approach Delay, s/veh		40.7			42.6			15.3			27.3	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	50.4	11.5	16.4	9.4	52.7	10.3	17.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	26.0	16.0	18.0	9.0	31.0	14.0	20.0
Max Q Clear Time (g_c+I1), s	7.3	8.2	7.8	6.4	4.9	10.7	6.5	12.0
Green Ext Time (p_c), s	0.3	7.1	0.2	2.0	0.0	7.5	0.1	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	28.0
HCM 2010 LOS	C



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	12	9	2	850	757	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	25			0
Storage Lanes	1	0	1			0
Taper Length (ft)	60		25			
Link Speed (mph)	30			40	40	
Link Distance (ft)	264			453	180	
Travel Time (s)	6.0			7.7	3.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	18	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			30	30	
Two way Left Turn Lane				Yes		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	12	9	2	850	757	1
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	-	25	-	-	-
Veh in Median Storage, #	1	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	10	2	914	814	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1276	408	815	0	-	0
Stage 1	815	-	-	-	-	-
Stage 2	461	-	-	-	-	-
Critical Hdwy	6.29	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	189	506	480	-	-	-
Stage 1	321	-	-	-	-	-
Stage 2	582	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	188	506	480	-	-	-
Mov Cap-2 Maneuver	262	-	-	-	-	-
Stage 1	321	-	-	-	-	-
Stage 2	580	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.7	0	0
HCM LOS	C		

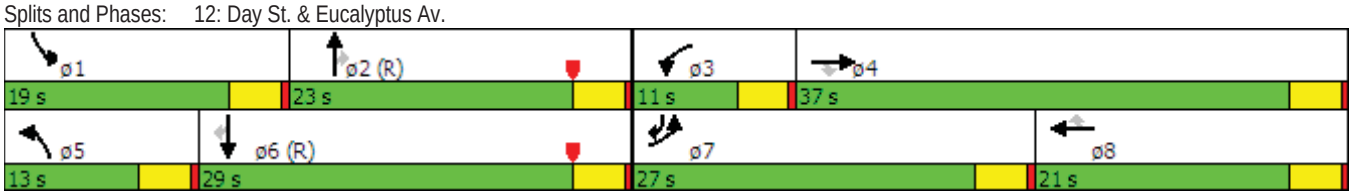
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	480	-	330	-	-
HCM Lane V/C Ratio	0.004	-	0.068	-	-
HCM Control Delay (s)	12.5	-	16.7	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	229	528	164	31	330	133	76	323	33	134	376	219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		50	175		0	100		100	200		0
Storage Lanes	1		1	1		1	1		2	1		1
Taper Length (ft)	100			75			80			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			40	
Link Distance (ft)		2104			1174			390			453	
Travel Time (s)		35.9			20.0			7.6			7.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	27.0	37.0	37.0	11.0	21.0	21.0	13.0	23.0	23.0	19.0	29.0	27.0
Total Split (%)	30.0%	41.1%	41.1%	12.2%	23.3%	23.3%	14.4%	25.6%	25.6%	21.1%	32.2%	30.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 12: Day St. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	229	528	164	31	330	133	76	323	33	134	376	219
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	241	556	173	33	347	140	80	340	35	141	396	231
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	284	957	428	78	545	244	119	1449	648	175	1560	952
Arrive On Green	0.11	0.18	0.18	0.04	0.15	0.15	0.07	0.41	0.41	0.10	0.44	0.44
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	241	556	173	33	347	140	80	340	35	141	396	231
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	12.0	12.9	8.7	1.6	8.3	7.4	4.0	5.6	1.2	7.0	6.3	6.1
Cycle Q Clear(g_c), s	12.0	12.9	8.7	1.6	8.3	7.4	4.0	5.6	1.2	7.0	6.3	6.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	284	957	428	78	545	244	119	1449	648	175	1560	952
V/C Ratio(X)	0.85	0.58	0.40	0.43	0.64	0.57	0.67	0.23	0.05	0.80	0.25	0.24
Avail Cap(c_a), veh/h	453	1298	581	138	669	299	177	1449	648	296	1560	952
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.85	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.1	32.2	30.4	41.9	35.7	35.3	41.0	17.4	16.1	39.7	15.8	8.4
Incr Delay (d2), s/veh	7.2	0.5	0.5	3.7	1.4	2.1	6.4	0.4	0.2	8.3	0.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	6.4	3.9	0.9	4.2	3.4	2.1	2.8	0.6	3.9	3.2	2.8
LnGrp Delay(d),s/veh	46.3	32.7	31.0	45.6	37.1	37.5	47.4	17.7	16.2	48.0	16.2	9.0
LnGrp LOS	D	C	C	D	D	D	D	B	B	D	B	A
Approach Vol, veh/h		970			520			455			768	
Approach Delay, s/veh		35.7			37.8			22.8			19.9	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	40.8	7.9	28.3	10.1	43.7	18.4	17.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	19.0	7.0	33.0	9.0	25.0	23.0	17.0
Max Q Clear Time (g_c+I1), s	9.0	7.6	3.6	14.9	6.0	8.3	14.0	10.3
Green Ext Time (p_c), s	0.2	4.3	0.0	6.5	0.0	5.1	0.4	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	29.5
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	86	9	11	80	110	11	253	16	145	273	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	95		95	80		0	100		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	60			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			25			35	
Link Distance (ft)		861			839			1320			2260	
Travel Time (s)		16.8			16.3			36.0			44.0	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	11.0	22.0		11.0	22.0	22.0	11.0	35.0		22.0	46.0	
Total Split (%)	12.2%	24.4%		12.2%	24.4%	24.4%	12.2%	38.9%		24.4%	51.1%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Day St. & Cottonwood Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	23	86	9	11	80	110	11	253	16	145	273	21
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	26	98	10	12	91	125	12	288	18	165	310	24
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	66	210	21	36	204	173	36	975	61	202	1119	87
Arrive On Green	0.04	0.13	0.13	0.02	0.11	0.11	0.02	0.56	0.56	0.11	0.66	0.66
Sat Flow, veh/h	1774	1663	170	1774	1863	1583	1774	1735	108	1774	1707	132
Grp Volume(v), veh/h	26	0	108	12	91	125	12	0	306	165	0	334
Grp Sat Flow(s),veh/h/ln	1774	0	1833	1774	1863	1583	1774	0	1844	1774	0	1839
Q Serve(g_s), s	1.3	0.0	4.9	0.6	4.1	6.9	0.6	0.0	7.8	8.2	0.0	6.9
Cycle Q Clear(g_c), s	1.3	0.0	4.9	0.6	4.1	6.9	0.6	0.0	7.8	8.2	0.0	6.9
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.06	1.00		0.07
Lane Grp Cap(c), veh/h	66	0	232	36	204	173	36	0	1036	202	0	1206
V/C Ratio(X)	0.39	0.00	0.47	0.34	0.45	0.72	0.34	0.00	0.30	0.82	0.00	0.28
Avail Cap(c_a), veh/h	138	0	367	138	373	317	138	0	1036	355	0	1206
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.3	0.0	36.5	43.5	37.5	38.8	43.5	0.0	10.4	39.0	0.0	6.5
Incr Delay (d2), s/veh	3.8	0.0	1.5	5.4	1.5	5.6	5.4	0.0	0.7	7.8	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	2.6	0.3	2.2	3.3	0.3	0.0	4.2	4.4	0.0	3.6
LnGrp Delay(d),s/veh	46.1	0.0	38.0	48.9	39.1	44.3	48.9	0.0	11.1	46.8	0.0	7.1
LnGrp LOS	D		D	D	D	D	D		B	D		A
Approach Vol, veh/h		134			228			318			499	
Approach Delay, s/veh		39.5			42.5			12.5			20.2	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	54.6	5.8	15.4	5.8	63.0	7.3	13.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	31.0	7.0	18.0	7.0	42.0	7.0	18.0
Max Q Clear Time (g_c+I1), s	10.2	9.8	2.6	6.9	2.6	8.9	3.3	8.9
Green Ext Time (p_c), s	0.2	4.0	0.0	1.1	0.0	4.4	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	24.6
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	41	13	9	22	18	12	243	5	19	279	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		861			839			634			1320	
Travel Time (s)		19.6			19.1			17.3			36.0	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	8	41	13	0	9	22	18	0	12	243	5
Peak Hour Factor	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	9	45	14	0	10	24	20	0	13	267	5
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	9.2	9	10.4
HCM LOS	A	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	5%	16%	0%	29%	0%	6%
Vol Thru, %	93%	84%	0%	71%	0%	92%
Vol Right, %	2%	0%	100%	0%	100%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	260	49	13	31	18	304
LT Vol	12	8	0	9	0	19
Through Vol	243	41	0	22	0	279
RT Vol	5	0	13	0	18	6
Lane Flow Rate	286	54	14	34	20	334
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.369	0.091	0.021	0.059	0.029	0.427
Departure Headway (Hd)	4.651	6.106	5.312	6.195	5.336	4.602
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	771	583	668	574	664	778
Service Time	2.7	3.888	3.093	3.98	3.12	2.649
HCM Lane V/C Ratio	0.371	0.093	0.021	0.059	0.03	0.429
HCM Control Delay	10.4	9.5	8.2	9.4	8.3	11.1
HCM Lane LOS	B	A	A	A	A	B
HCM 95th-tile Q	1.7	0.3	0.1	0.2	0.1	2.2

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	19	279	6
Peak Hour Factor	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	21	307	7
Number of Lanes	0	0	1	0

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

Lane

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	127	1193	5	4	805	120	11	14	7	177	20	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	245		0	220		75	50		50	200		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	100			120			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		861			839			831			716	
Travel Time (s)		13.0			12.7			16.2			19.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		
Detector Phase	5	2		1	6	6	8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (s)	19.0	50.0		11.0	42.0	42.0	29.0	29.0	29.0	29.0	29.0	
Total Split (%)	21.1%	55.6%		12.2%	46.7%	46.7%	32.2%	32.2%	32.2%	32.2%	32.2%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max		None	C-Max	C-Max	Max	Max	Max	Max	Max	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 15: Day St. & Alessandro Bl.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	127	1193	5	4	805	120	11	14	7	177	20	81
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	135	1269	5	4	856	128	12	15	7	188	21	86
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	169	3040	12	13	1748	782	371	517	440	456	89	364
Arrive On Green	0.10	0.58	0.58	0.01	0.49	0.49	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1774	5229	21	1774	3539	1583	1281	1863	1583	1384	320	1311
Grp Volume(v), veh/h	135	823	451	4	856	128	12	15	7	188	0	107
Grp Sat Flow(s),veh/h/ln	1774	1695	1859	1774	1770	1583	1281	1863	1583	1384	0	1631
Q Serve(g_s), s	6.7	12.1	12.1	0.2	14.5	4.0	0.7	0.5	0.3	10.3	0.0	4.6
Cycle Q Clear(g_c), s	6.7	12.1	12.1	0.2	14.5	4.0	5.2	0.5	0.3	10.8	0.0	4.6
Prop In Lane	1.00		0.01	1.00		1.00	1.00		1.00	1.00		0.80
Lane Grp Cap(c), veh/h	169	1971	1081	13	1748	782	371	517	440	456	0	453
V/C Ratio(X)	0.80	0.42	0.42	0.30	0.49	0.16	0.03	0.03	0.02	0.41	0.00	0.24
Avail Cap(c_a), veh/h	296	1971	1081	138	1748	782	371	517	440	456	0	453
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.9	10.4	10.4	44.4	15.2	12.5	27.1	23.7	23.6	27.6	0.0	25.1
Incr Delay (d2), s/veh	8.5	0.7	1.2	12.5	1.0	0.5	0.2	0.1	0.1	2.7	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	5.8	6.5	0.1	7.3	1.8	0.3	0.3	0.1	4.3	0.0	2.2
LnGrp Delay(d),s/veh	48.3	11.1	11.6	56.9	16.2	13.0	27.3	23.8	23.6	30.3	0.0	26.3
LnGrp LOS	D	B	B	E	B	B	C	C	C	C		C
Approach Vol, veh/h		1409			988			34			295	
Approach Delay, s/veh		14.8			15.9			25.0			28.9	
Approach LOS		B			B			C			C	

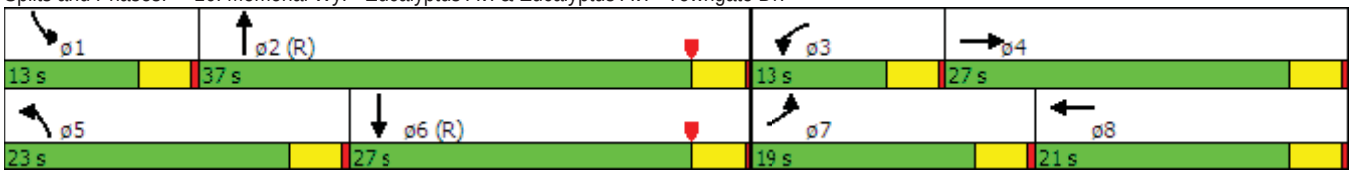
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	56.3		29.0	12.6	48.4		29.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	46.0		25.0	15.0	38.0		25.0
Max Q Clear Time (g_c+I1), s	2.2	14.1		12.8	8.7	16.5		7.2
Green Ext Time (p_c), s	0.0	18.6		1.1	0.2	14.4		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	16.9
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	115	260	213	26	240	61	153	265	20	53	271	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		0	150		0	200		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	19.0	27.0		13.0	21.0		23.0	37.0		13.0	27.0	
Total Split (%)	21.1%	30.0%		14.4%	23.3%		25.6%	41.1%		14.4%	30.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	115	260	213	26	240	61	153	265	20	53	271	81
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	122	277	227	28	255	65	163	282	21	56	288	86
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	657	307	69	597	145	200	1773	131	104	1287	377
Arrive On Green	0.09	0.19	0.19	0.04	0.15	0.15	0.11	0.53	0.53	0.06	0.48	0.48
Sat Flow, veh/h	1774	3390	1583	1774	4086	992	1774	3341	247	1774	2701	792
Grp Volume(v), veh/h	122	277	227	28	209	111	163	149	154	56	187	187
Grp Sat Flow(s),veh/h/ln	1774	1695	1583	1774	1695	1688	1774	1770	1819	1774	1770	1723
Q Serve(g_s), s	6.1	6.5	12.1	1.4	5.1	5.4	8.1	3.9	3.9	2.8	5.6	5.7
Cycle Q Clear(g_c), s	6.1	6.5	12.1	1.4	5.1	5.4	8.1	3.9	3.9	2.8	5.6	5.7
Prop In Lane	1.00		1.00	1.00		0.59	1.00		0.14	1.00		0.46
Lane Grp Cap(c), veh/h	154	657	307	69	495	246	200	939	965	104	843	821
V/C Ratio(X)	0.79	0.42	0.74	0.40	0.42	0.45	0.81	0.16	0.16	0.54	0.22	0.23
Avail Cap(c_a), veh/h	296	866	405	177	640	319	375	939	965	177	843	821
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.3	31.9	34.1	42.2	35.0	35.1	39.0	10.8	10.8	41.2	13.8	13.8
Incr Delay (d2), s/veh	8.7	0.4	5.0	3.7	0.6	1.3	7.8	0.4	0.4	4.3	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.0	5.7	0.7	2.4	2.6	4.4	2.0	2.1	1.5	2.8	2.9
LnGrp Delay(d),s/veh	49.0	32.3	39.1	45.9	35.6	36.4	46.8	11.2	11.2	45.5	14.4	14.5
LnGrp LOS	D	C	D	D	D	D	D	B	B	D	B	B
Approach Vol, veh/h		626			348			466			430	
Approach Delay, s/veh		38.0			36.7			23.6			18.5	
Approach LOS		D			D			C			B	

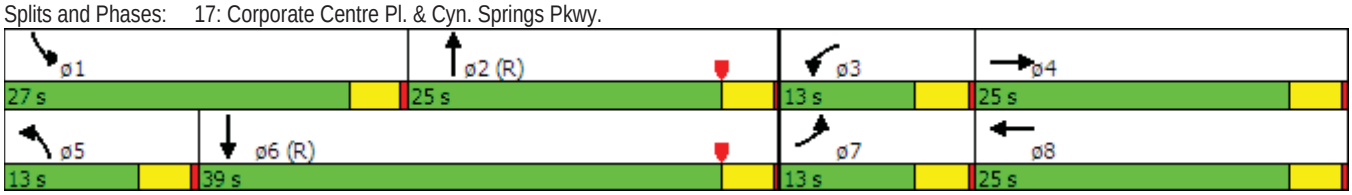
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	51.8	7.5	21.4	14.2	46.9	11.8	17.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	33.0	9.0	23.0	19.0	23.0	15.0	17.0
Max Q Clear Time (g_c+I1), s	4.8	5.9	3.4	14.1	10.1	7.7	8.1	7.4
Green Ext Time (p_c), s	0.0	3.9	0.0	3.3	0.3	3.3	0.1	3.5

Intersection Summary	
HCM 2010 Ctrl Delay	29.7
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	40	365	31	41	417	97	26	45	52	163	56	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	175		0	130		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			90			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		476			1120			987			205	
Travel Time (s)		8.1			19.1			16.8			4.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	13.0	25.0		13.0	25.0		13.0	25.0		27.0	39.0	
Total Split (%)	14.4%	27.8%		14.4%	27.8%		14.4%	27.8%		30.0%	43.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 11 (12%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 17: Corporate Centre Pl. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	365	31	41	417	97	26	45	52	163	56	32
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	42	384	33	43	439	102	27	47	55	172	59	34
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	90	802	68	91	699	158	68	857	766	211	627	361
Arrive On Green	0.05	0.17	0.17	0.05	0.17	0.17	0.04	0.48	0.48	0.12	0.56	0.56
Sat Flow, veh/h	1774	4777	405	1774	4151	937	1774	1770	1583	1774	1110	640
Grp Volume(v), veh/h	42	271	146	43	356	185	27	47	55	172	0	93
Grp Sat Flow(s),veh/h/ln	1774	1695	1791	1774	1695	1697	1774	1770	1583	1774	0	1750
Q Serve(g_s), s	2.1	6.5	6.6	2.1	8.8	9.1	1.3	1.3	1.7	8.5	0.0	2.2
Cycle Q Clear(g_c), s	2.1	6.5	6.6	2.1	8.8	9.1	1.3	1.3	1.7	8.5	0.0	2.2
Prop In Lane	1.00		0.23	1.00		0.55	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	90	569	301	91	571	286	68	857	766	211	0	989
V/C Ratio(X)	0.47	0.48	0.49	0.47	0.62	0.65	0.40	0.05	0.07	0.81	0.00	0.09
Avail Cap(c_a), veh/h	177	791	418	177	791	396	177	857	766	453	0	989
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.89	0.89	0.89	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.5	33.9	33.9	41.5	34.8	34.9	42.3	12.3	12.4	38.7	0.0	9.0
Incr Delay (d2), s/veh	3.8	0.6	1.2	3.4	1.0	2.2	3.8	0.1	0.2	7.4	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.1	3.4	1.1	4.2	4.4	0.7	0.6	0.8	4.6	0.0	1.1
LnGrp Delay(d),s/veh	45.3	34.5	35.1	44.9	35.8	37.1	46.0	12.4	12.6	46.1	0.0	9.2
LnGrp LOS	D	C	D	D	D	D	D	B	B	D		A
Approach Vol, veh/h		459			584			129			265	
Approach Delay, s/veh		35.7			36.8			19.5			33.1	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	47.6	8.6	19.1	7.4	54.8	8.6	19.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	21.0	9.0	21.0	9.0	35.0	9.0	21.0
Max Q Clear Time (g_c+I1), s	10.5	3.7	4.1	8.6	3.3	4.2	4.1	11.1
Green Ext Time (p_c), s	0.4	0.9	0.0	4.6	0.0	1.1	0.0	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	34.2
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	161	19	60	129	46	9	72	61	38	83	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	170		0	100		0	130		0	135		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			45			60			60		
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		474			710			623			987	
Travel Time (s)		8.1			12.1			10.6			16.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes			Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	22	161	19	0	60	129	46	0	9	72	61
Peak Hour Factor	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	24	173	20	0	65	139	49	0	10	77	66
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	3
HCM Control Delay	9.9	9.7	9.5
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	28%	0%	100%	74%	0%	100%	48%	0%	100%
Vol Right, %	0%	0%	72%	0%	0%	26%	0%	0%	52%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	9	48	85	22	107	73	60	86	89	38	55
LT Vol	9	0	0	22	0	0	60	0	0	38	0
Through Vol	0	48	24	0	107	54	0	86	43	0	55
RT Vol	0	0	61	0	0	19	0	0	46	0	0
Lane Flow Rate	10	52	91	24	115	78	65	92	96	41	59
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.018	0.09	0.146	0.043	0.194	0.127	0.116	0.154	0.15	0.076	0.103
Departure Headway (Hd)	6.768	6.268	5.766	6.553	6.053	5.87	6.487	5.987	5.625	6.74	6.24
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	529	572	622	547	593	612	554	600	638	532	575
Service Time	4.502	4.002	3.5	4.282	3.782	3.599	4.214	3.714	3.353	4.475	3.975
HCM Lane V/C Ratio	0.019	0.091	0.146	0.044	0.194	0.127	0.117	0.153	0.15	0.077	0.103
HCM Control Delay	9.6	9.6	9.5	9.6	10.2	9.5	10.1	9.8	9.3	10	9.7
HCM Lane LOS	A	A	A	A	B	A	B	A	A	A	A
HCM 95th-tile Q	0.1	0.3	0.5	0.1	0.7	0.4	0.4	0.5	0.5	0.2	0.3

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	38	83	28
Peak Hour Factor	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	41	89	30
Number of Lanes	0	1	2	0

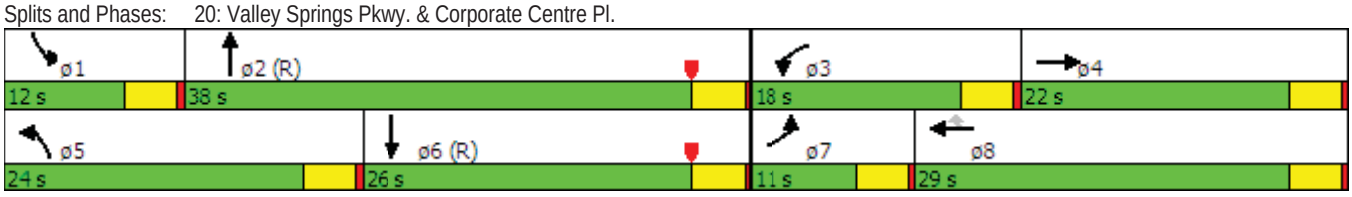
Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	9.6
HCM LOS	A

Lane	SBLn3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	41	105	102	57	3	172	393	63	38	413	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		70	140		50	150		0	120		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			40			40			40	
Link Distance (ft)		327			603			402			804	
Travel Time (s)		7.4			10.3			6.9			13.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	11.0	22.0		18.0	29.0	29.0	24.0	38.0		12.0	26.0	
Total Split (%)	12.2%	24.4%		20.0%	32.2%	32.2%	26.7%	42.2%		13.3%	28.9%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Valley Springs Pkwy. & Corporate Centre Pl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	32	41	105	102	57	3	172	393	63	38	413	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	33	42	108	105	59	3	177	405	65	39	426	31
Adj No. of Lanes	1	1	0	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	54	140	134	530	237	211	2574	404	86	2469	178
Arrive On Green	0.04	0.12	0.12	0.08	0.15	0.15	0.24	1.00	1.00	0.05	0.51	0.51
Sat Flow, veh/h	1774	463	1190	1774	3539	1583	1774	4435	695	1774	4843	349
Grp Volume(v), veh/h	33	0	150	105	59	3	177	307	163	39	297	160
Grp Sat Flow(s),veh/h/ln	1774	0	1653	1774	1770	1583	1774	1695	1740	1774	1695	1801
Q Serve(g_s), s	1.6	0.0	7.9	5.2	1.3	0.1	8.5	0.0	0.0	1.9	4.2	4.3
Cycle Q Clear(g_c), s	1.6	0.0	7.9	5.2	1.3	0.1	8.5	0.0	0.0	1.9	4.2	4.3
Prop In Lane	1.00		0.72	1.00		1.00	1.00		0.40	1.00		0.19
Lane Grp Cap(c), veh/h	78	0	194	134	530	237	211	1968	1010	86	1728	918
V/C Ratio(X)	0.43	0.00	0.77	0.78	0.11	0.01	0.84	0.16	0.16	0.45	0.17	0.17
Avail Cap(c_a), veh/h	138	0	331	276	983	440	394	1968	1010	158	1728	918
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.9	0.0	38.5	40.9	33.1	32.6	33.5	0.0	0.0	41.7	11.9	11.9
Incr Delay (d2), s/veh	3.7	0.0	6.4	9.5	0.1	0.0	8.5	0.2	0.3	3.7	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	4.0	2.9	0.6	0.1	4.6	0.0	0.1	1.0	2.0	2.2
LnGrp Delay(d),s/veh	45.6	0.0	44.9	50.3	33.2	32.6	42.0	0.2	0.3	45.4	12.1	12.3
LnGrp LOS	D		D	D	C	C	D	A	A	D	B	B
Approach Vol, veh/h		183			167			647			496	
Approach Delay, s/veh		45.0			44.0			11.7			14.8	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	56.2	10.8	14.6	14.7	49.9	7.9	17.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	34.0	14.0	18.0	20.0	22.0	7.0	25.0
Max Q Clear Time (g_c+I1), s	3.9	2.0	7.2	9.9	10.5	6.3	3.6	3.3
Green Ext Time (p_c), s	0.0	6.2	0.1	0.7	0.3	5.0	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	20.4
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	0	31	0	0	0	18	617	0	0	605	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	25		0	75		50
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	60			60			10			80		
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		252			253			418			402	
Travel Time (s)		5.7			5.8			7.1			6.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	11	0	31	0	0	0	18	617	0	0	605	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	0	32	0	0	0	18	630	0	0	617	15

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	914	1291	316	633	0	0	630	0	0
Stage 1	625	625	-	-	-	-	-	-	-
Stage 2	289	666	-	-	-	-	-	-	-
Critical Hdwy	5.74	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	6.64	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.04	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	343	162	580	586	-	-	588	-	-
Stage 1	407	475	-	-	-	-	-	-	-
Stage 2	674	456	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	327	0	580	586	-	-	588	-	-
Mov Cap-2 Maneuver	327	0	-	-	-	-	-	-	-
Stage 1	407	0	-	-	-	-	-	-	-
Stage 2	642	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.2	0.5	0
HCM LOS	B		

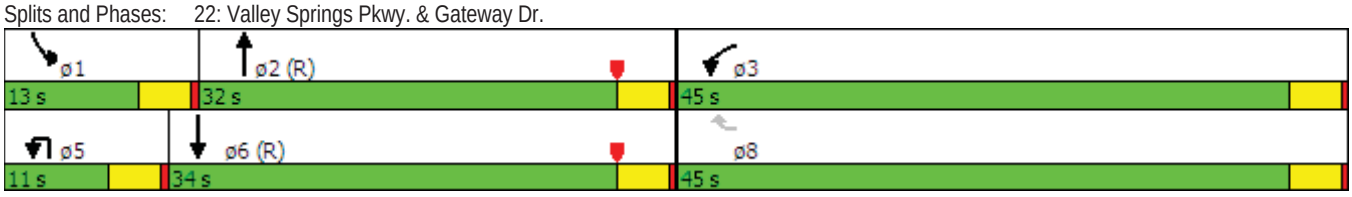
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	586	-	-	482	588	-	-
HCM Lane V/C Ratio	0.031	-	-	0.089	-	-	-
HCM Control Delay (s)	11.3	0.2	-	13.2	0	-	-
HCM Lane LOS	B	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0	-	-

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (vph)	336	72	0	563	106	38	598
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	180		0	115	
Storage Lanes	1	1	1		0	1	
Taper Length (ft)	60		100			120	
Right Turn on Red		Yes			Yes		
Link Speed (mph)	40			40			40
Link Distance (ft)	609			576			418
Travel Time (s)	10.4			9.8			7.1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Shared Lane Traffic (%)							
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Right	Left	Left
Median Width(ft)	24			12			12
Link Offset(ft)	0			0			0
Crosswalk Width(ft)	16			16			16
Two way Left Turn Lane	Yes						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	9		9	15	
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	3		5	2		1	6
Permitted Phases		8					
Detector Phase	3	8	5	2		1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	11.0	20.0	11.0	20.0		11.0	20.0
Total Split (s)	45.0	45.0	11.0	32.0		13.0	34.0
Total Split (%)	50.0%	50.0%	12.2%	35.6%		14.4%	37.8%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead	Lag		Lead	Lag
Lead-Lag Optimize?			Yes	Yes		Yes	Yes
Recall Mode	None	None	None	C-Max		None	C-Max

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 22: Valley Springs Pkwy. & Gateway Dr.



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	336	72	0	563	106	38	598
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1900	1863	1863
Adj Flow Rate, veh/h	382	82		640	120	43	680
Adj No. of Lanes	1	1		3	0	1	3
Peak Hour Factor	0.88	0.88		0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	434	387		2463	455	91	3389
Arrive On Green	0.24	0.24		1.00	1.00	0.10	1.00
Sat Flow, veh/h	1774	1583		4482	798	1774	5253
Grp Volume(v), veh/h	382	82		501	259	43	680
Grp Sat Flow(s),veh/h/ln	1774	1583		1695	1722	1774	1695
Q Serve(g_s), s	18.7	3.7		0.0	0.0	2.1	0.0
Cycle Q Clear(g_c), s	18.7	3.7		0.0	0.0	2.1	0.0
Prop In Lane	1.00	1.00			0.46	1.00	
Lane Grp Cap(c), veh/h	434	387		1935	983	91	3389
V/C Ratio(X)	0.88	0.21		0.26	0.26	0.47	0.20
Avail Cap(c_a), veh/h	808	721		1935	983	177	3389
HCM Platoon Ratio	1.00	1.00		2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.7	27.1		0.0	0.0	39.2	0.0
Incr Delay (d2), s/veh	5.9	0.3		0.3	0.7	3.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	1.6		0.1	0.2	1.1	0.0
LnGrp Delay(d),s/veh	38.7	27.3		0.3	0.7	43.0	0.1
LnGrp LOS	D	C		A	A	D	A
Approach Vol, veh/h	464			760			723
Approach Delay, s/veh	36.7			0.4			2.7
Approach LOS	D			A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.6	55.4				64.0		26.0
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	9.0	28.0				30.0		41.0
Max Q Clear Time (g_c+I1), s	4.1	2.0				2.0		20.7
Green Ext Time (p_c), s	0.0	10.5				10.8		1.4

Intersection Summary	
HCM 2010 Ctrl Delay	9.9
HCM 2010 LOS	A

Notes

User approved ignoring U-Turning movement.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	10	159	306	15	14	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	60				60	
Link Speed (mph)		40	40		30	
Link Distance (ft)		609	672		287	
Travel Time (s)		10.4	11.5		6.5	
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	10	159	306	15	14	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	215	414	20	19	28

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	434	0	-	0	558	217
Stage 1	-	-	-	-	424	-
Stage 2	-	-	-	-	134	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1122	-	-	-	460	787
Stage 1	-	-	-	-	628	-
Stage 2	-	-	-	-	878	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1122	-	-	-	454	787
Mov Cap-2 Maneuver	-	-	-	-	526	-
Stage 1	-	-	-	-	628	-
Stage 2	-	-	-	-	867	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1122	-	-	-	657
HCM Lane V/C Ratio	0.012	-	-	-	0.072
HCM Control Delay (s)	8.2	-	-	-	10.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	31	142	174	43	44	147
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125			0	150	0
Storage Lanes	1			0	0	1
Taper Length (ft)	60				60	
Link Speed (mph)		40	40		40	
Link Distance (ft)		672	394		405	
Travel Time (s)		11.5	6.7		6.9	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes		Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	31	142	174	43	44	147
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	171	210	52	53	177

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	261	0	-	0	396	131
Stage 1	-	-	-	-	236	-
Stage 2	-	-	-	-	160	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1300	-	-	-	581	894
Stage 1	-	-	-	-	781	-
Stage 2	-	-	-	-	852	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1300	-	-	-	564	894
Mov Cap-2 Maneuver	-	-	-	-	624	-
Stage 1	-	-	-	-	781	-
Stage 2	-	-	-	-	828	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1300	-	-	-	624	894
HCM Lane V/C Ratio	0.029	-	-	-	0.085	0.198
HCM Control Delay (s)	7.9	-	-	-	11.3	10
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3	0.7

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	213	5	16	175	5	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	25		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			0		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	226			318	265	
Travel Time (s)	3.9			5.4	6.0	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane	Yes			Yes		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	213	5	16	175	5	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	25	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	222	5	17	182	5	50

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	227	0	348	114
Stage 1	-	-	-	-	224	-
Stage 2	-	-	-	-	124	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1339	-	623	917
Stage 1	-	-	-	-	792	-
Stage 2	-	-	-	-	888	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1339	-	615	917
Mov Cap-2 Maneuver	-	-	-	-	658	-
Stage 1	-	-	-	-	792	-
Stage 2	-	-	-	-	877	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	884	-	-	1339	-
HCM Lane V/C Ratio	0.062	-	-	0.012	-
HCM Control Delay (s)	9.3	-	-	7.7	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	217	30	82	199	44	23	26	28	34	31	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		50	110		100	100		50	0		50
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		710			938			620			207	
Travel Time (s)		12.1			16.0			10.6			4.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes			Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	13	217	30	0	82	199	44	0	23	26	28
Peak Hour Factor	0.92	0.98	0.98	0.98	0.92	0.98	0.98	0.98	0.92	0.98	0.98	0.98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	13	221	31	0	84	203	45	0	23	27	29
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	2	3
HCM Control Delay	9.9	9.7	9.3
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	52%	0%
Vol Thru, %	0%	100%	24%	0%	100%	71%	0%	100%	60%	48%	0%
Vol Right, %	0%	0%	76%	0%	0%	29%	0%	0%	40%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	23	17	37	13	145	102	82	133	110	65	13
LT Vol	23	0	0	13	0	0	82	0	0	34	0
Through Vol	0	17	9	0	145	72	0	133	66	31	0
RT Vol	0	0	28	0	0	30	0	0	44	0	13
Lane Flow Rate	23	18	37	13	148	104	84	135	113	66	13
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.045	0.031	0.061	0.023	0.234	0.159	0.141	0.21	0.166	0.122	0.021
Departure Headway (Hd)	6.875	6.375	5.839	6.296	5.808	5.602	6.187	5.685	5.405	6.599	5.638
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	524	564	616	571	621	644	583	635	668	547	638
Service Time	4.581	4.081	3.546	4.009	3.508	3.302	3.887	3.385	3.105	4.303	3.342
HCM Lane V/C Ratio	0.044	0.032	0.06	0.023	0.238	0.161	0.144	0.213	0.169	0.121	0.02
HCM Control Delay	9.9	9.3	8.9	9.2	10.3	9.4	9.9	9.9	9.2	10.2	8.5
HCM Lane LOS	A	A	A	A	B	A	A	A	A	B	A
HCM 95th-tile Q	0.1	0.1	0.2	0.1	0.9	0.6	0.5	0.8	0.6	0.4	0.1

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	34	31	13
Peak Hour Factor	0.92	0.98	0.98	0.98
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	35	32	13
Number of Lanes	0	0	1	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	9.9
HCM LOS	A

Lane

APPENDIX 3.3:

EXISTING (2014) TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

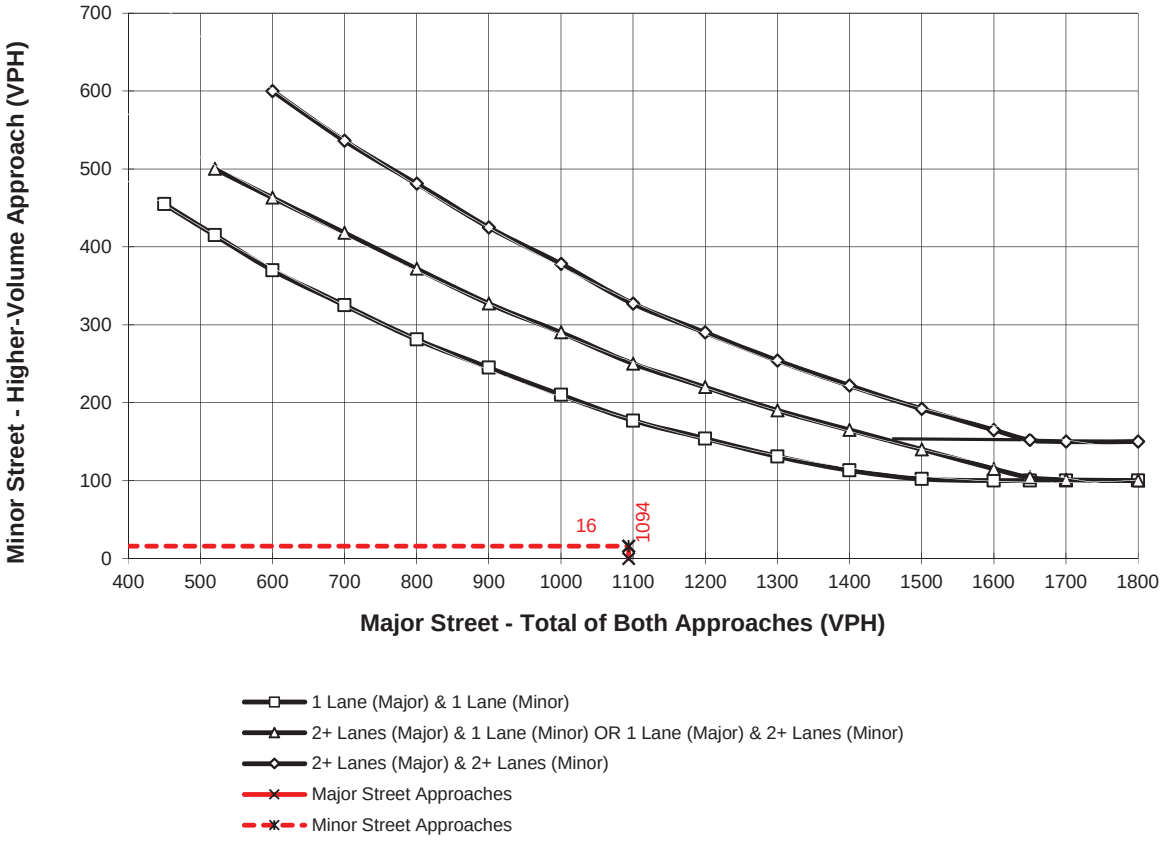
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing Conditions - Weekday AM Peak Hour**

Major Street Name = **Day St.**
Total of Both Approaches (VPH) = **1,094**
Number of Approach Lanes on Major Street = **3**

Minor Street Name = **Dwy. 2**
High Volume Approach (VPH) = **16**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing Conditions - Weekday PM Peak Hour**

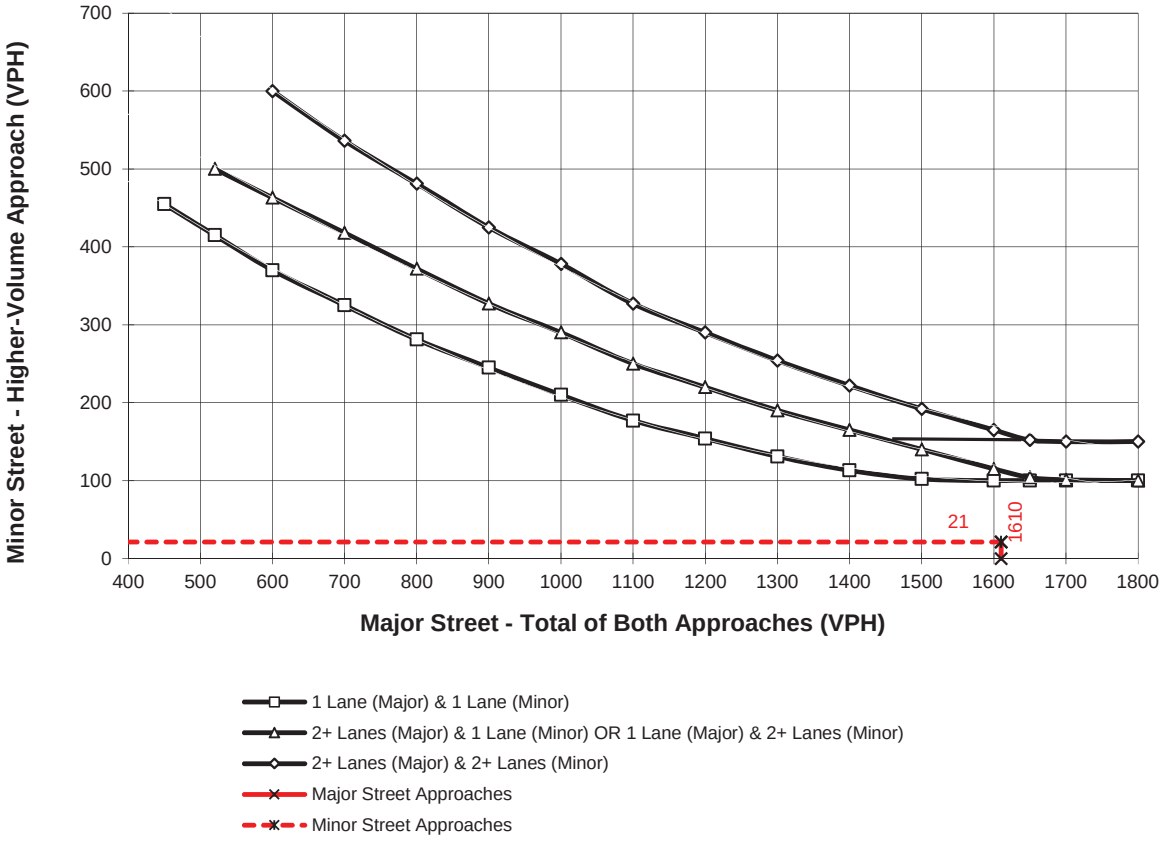
Major Street Name = **Day St.**

Total of Both Approaches (VPH) = **1,610**
Number of Approach Lanes on Major Street = **3**

Minor Street Name = **Dwy. 2**

High Volume Approach (VPH) = **21**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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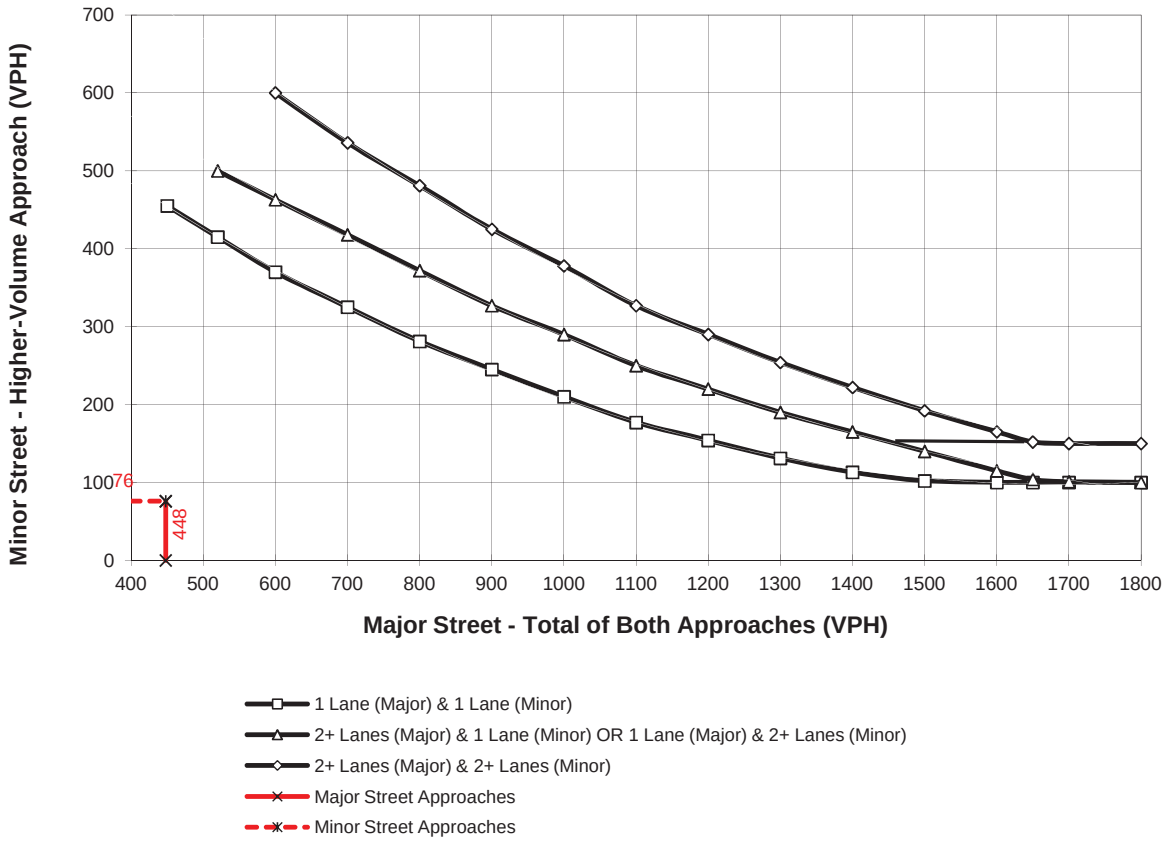
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2014) Conditions - Weekday AM Peak Hour**

Major Street Name = **Day St.**
Total of Both Approaches (VPH) = **448**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Bay Av.**
High Volume Approach (VPH) = **76**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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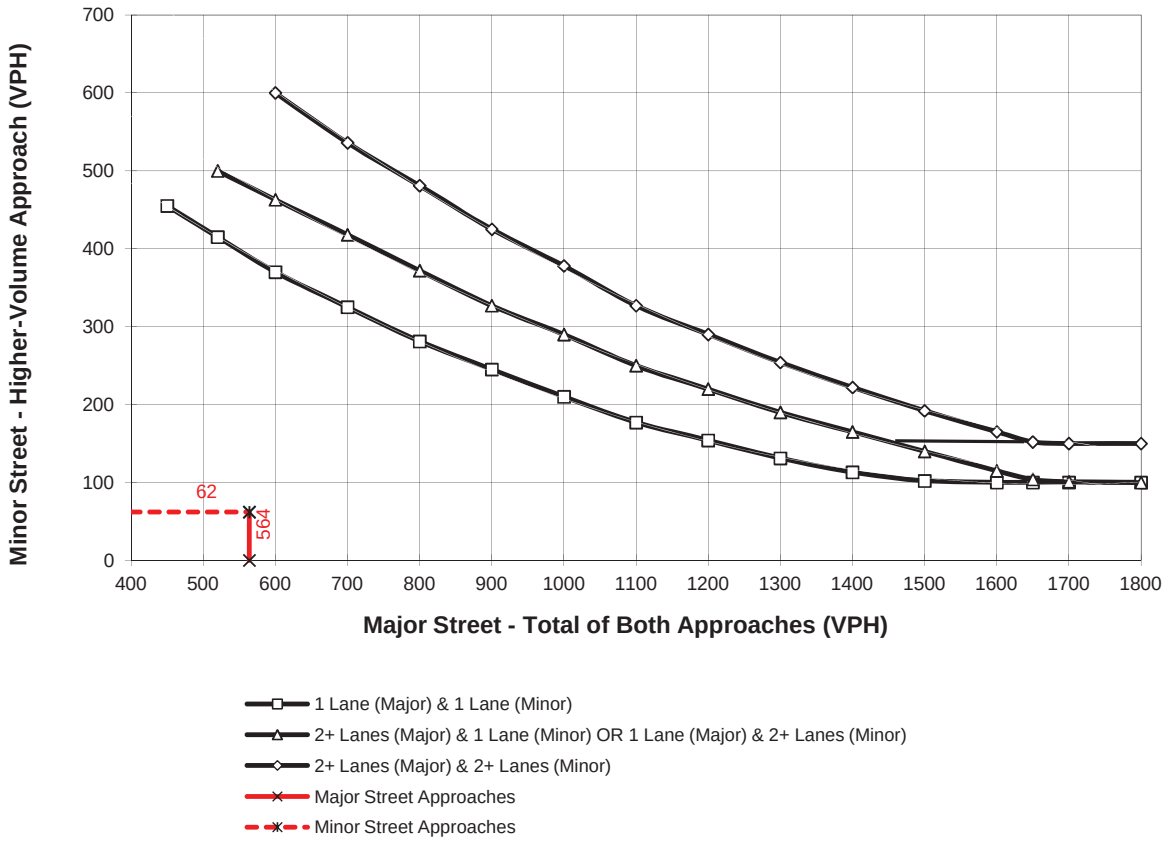
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2014) Conditions - Weekday PM Peak Hour**

Major Street Name = **Day St.**
Total of Both Approaches (VPH) = **564**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Bay Av.**
High Volume Approach (VPH) = **62**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

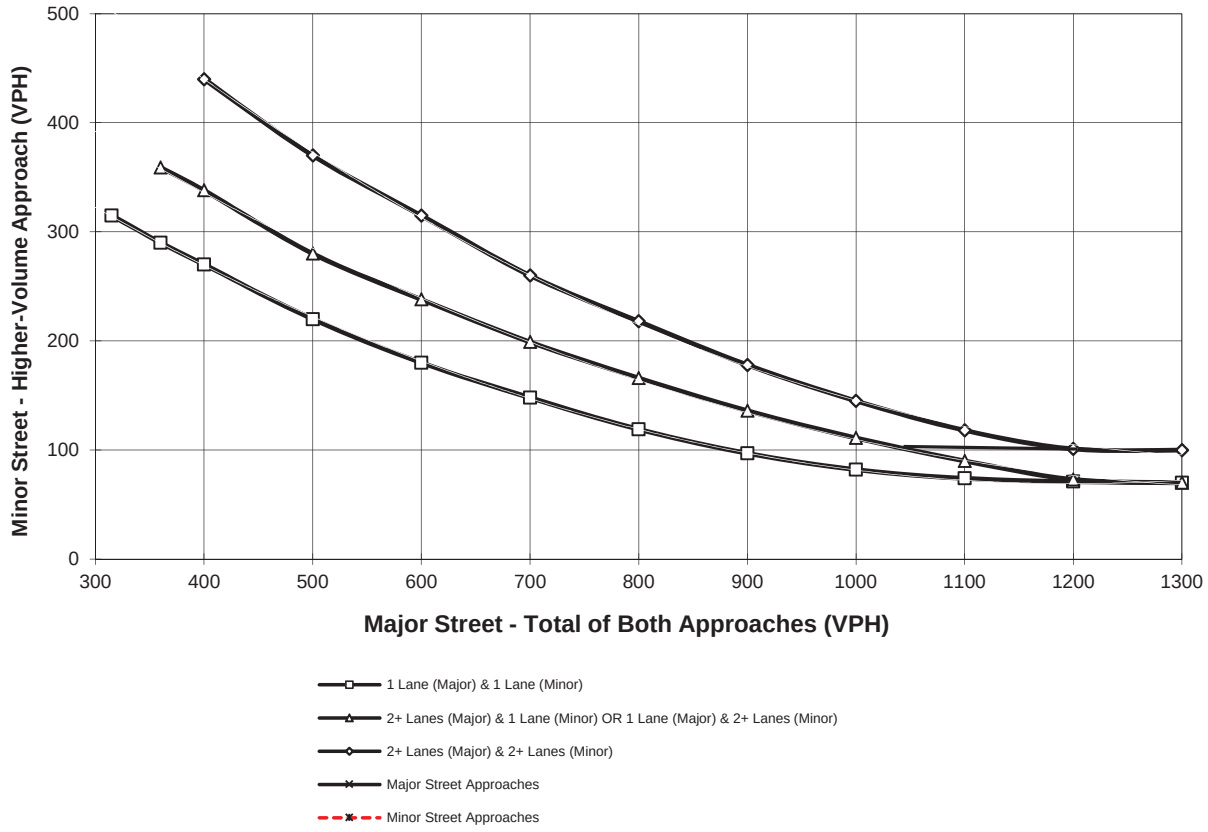
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2014) Conditions - Weekday AM Peak Hour**

Major Street Name = **Campus Pkwy.**
Total of Both Approaches (VPH) = **161**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Corporate Centre Pl.**
High Volume Approach (VPH) = **71**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

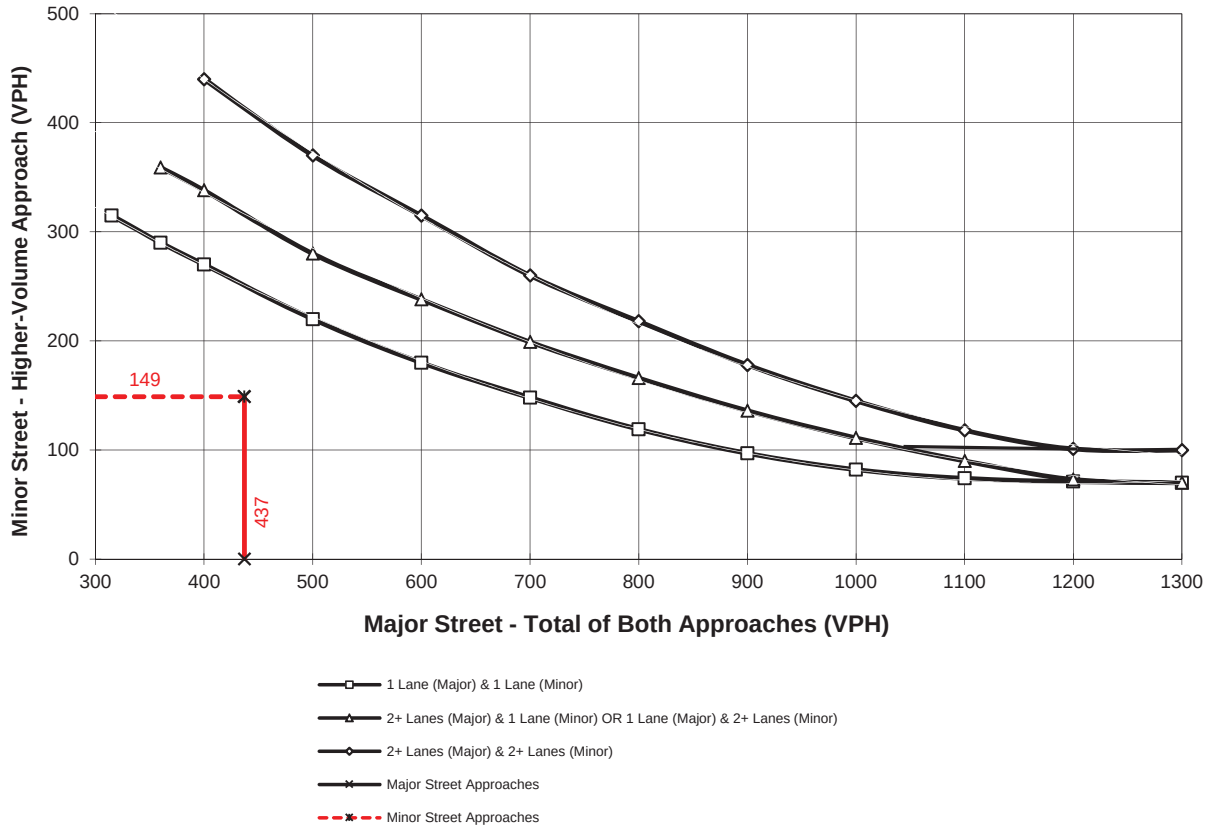
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2014) Conditions - Weekday PM Peak Hour**

Major Street Name = **Campus Pkwy.**
Total of Both Approaches (VPH) = **437**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Corporate Centre Pl.**
High Volume Approach (VPH) = **149**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

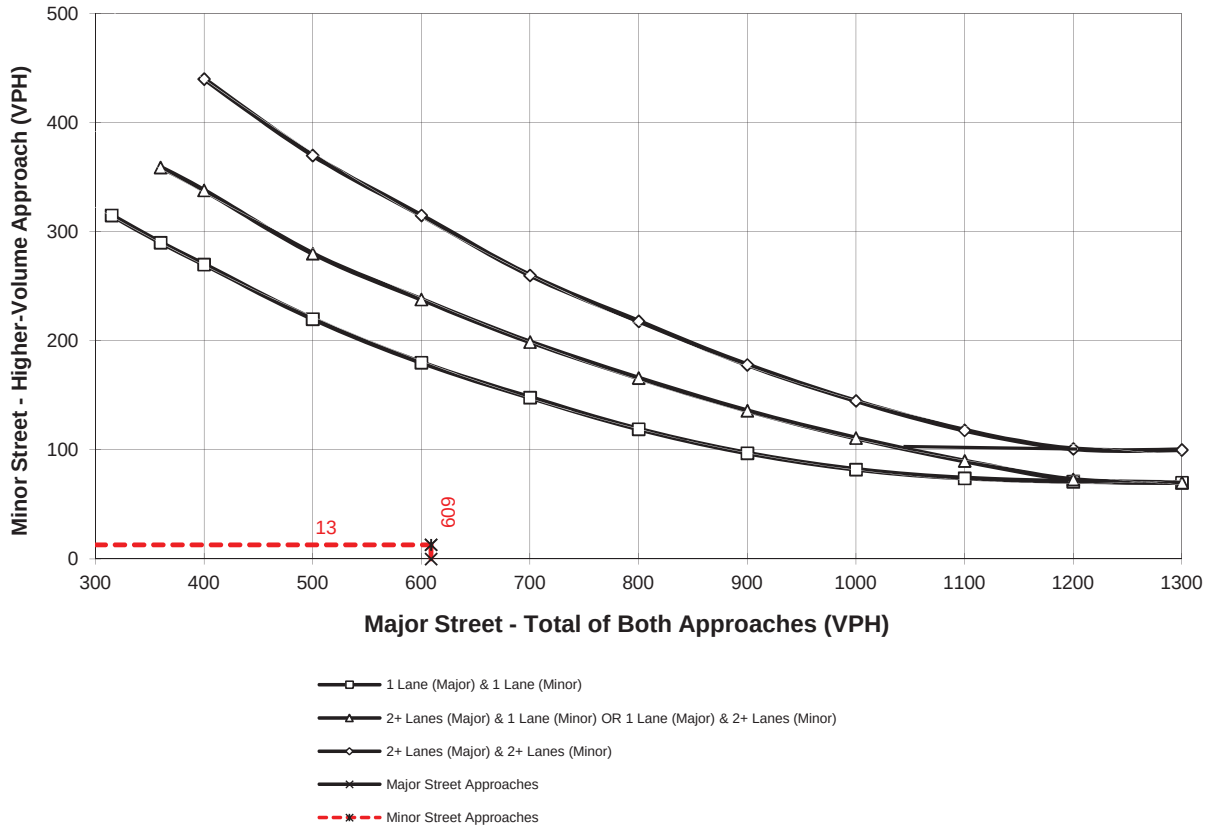
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2014) Conditions - Weekday AM Peak Hour**

Major Street Name = **Valley Springs Pkwy.** Total of Both Approaches (VPH) = **609**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 4** High Volume Approach (VPH) = **13**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

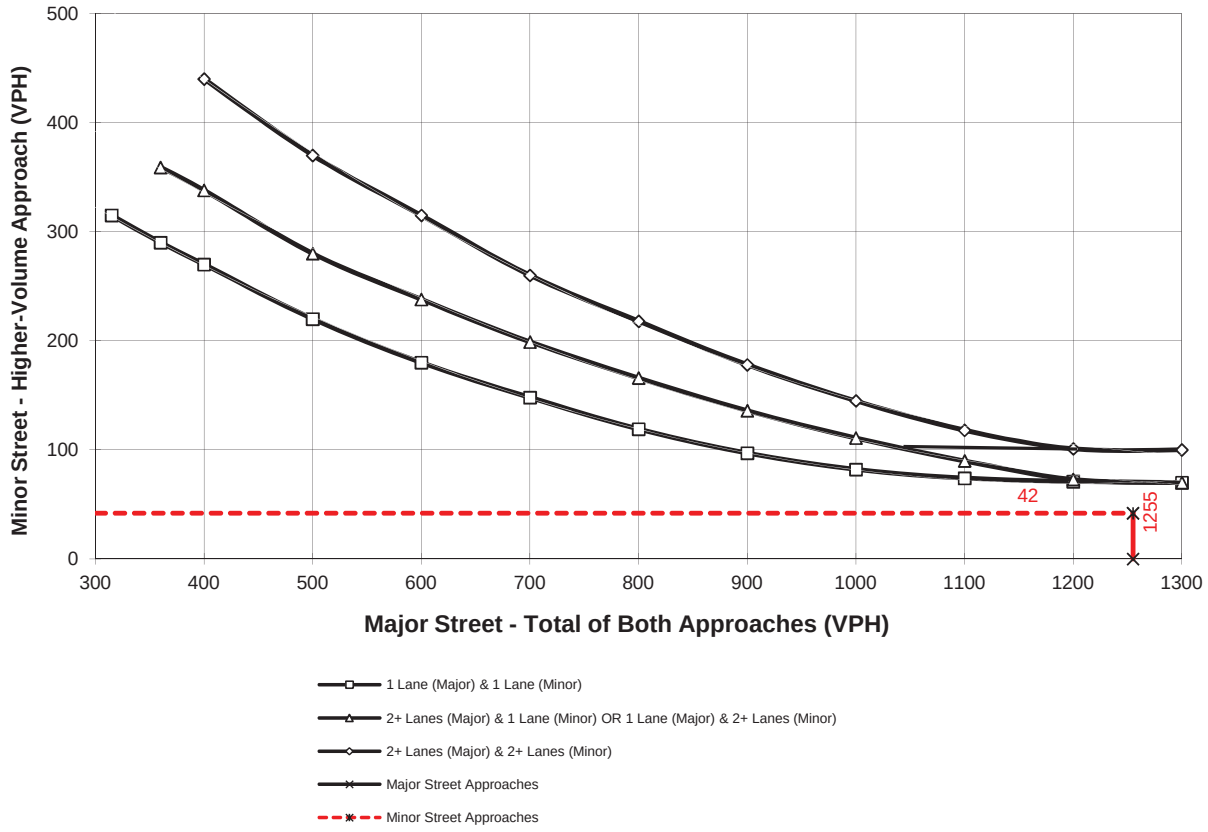
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2014) Conditions - Weekday PM Peak Hour**

Major Street Name = **Valley Springs Pkwy.**
Total of Both Approaches (VPH) = **1,255**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 4**
High Volume Approach (VPH) = **42**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

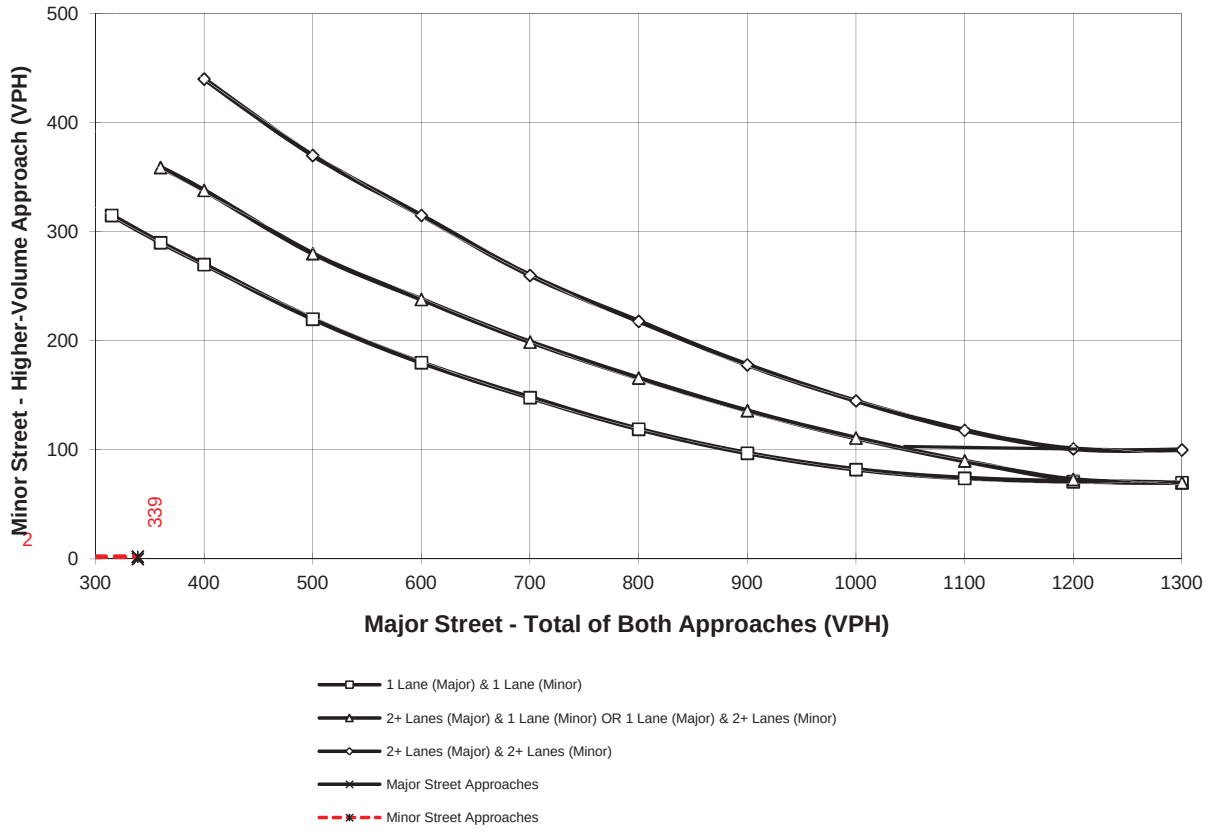
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2014) Conditions - Weekday AM Peak Hour**

Major Street Name = **Gateway Dr.**
Total of Both Approaches (VPH) = **339**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 6**
High Volume Approach (VPH) = **2**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

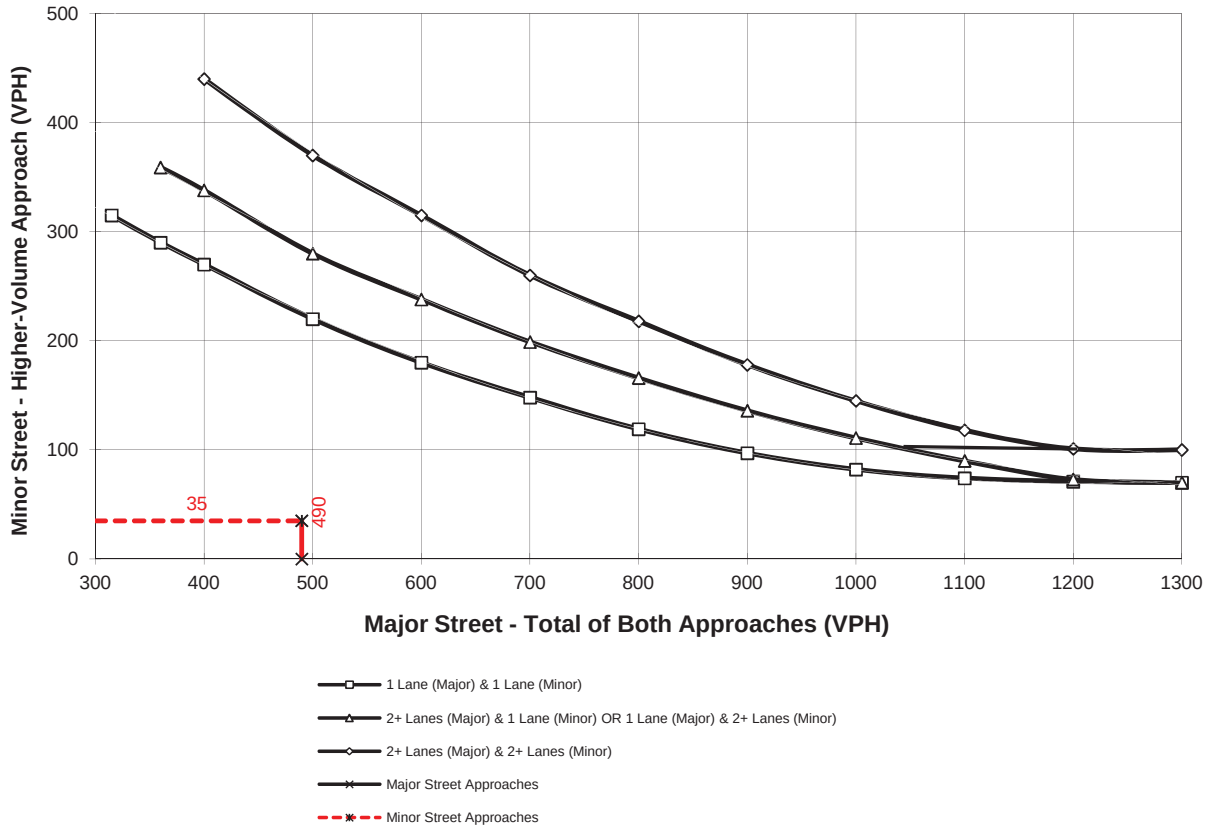
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2014) Conditions - Weekday PM Peak Hour**

Major Street Name = **Gateway Dr.**
Total of Both Approaches (VPH) = **490**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 6**
High Volume Approach (VPH) = **35**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

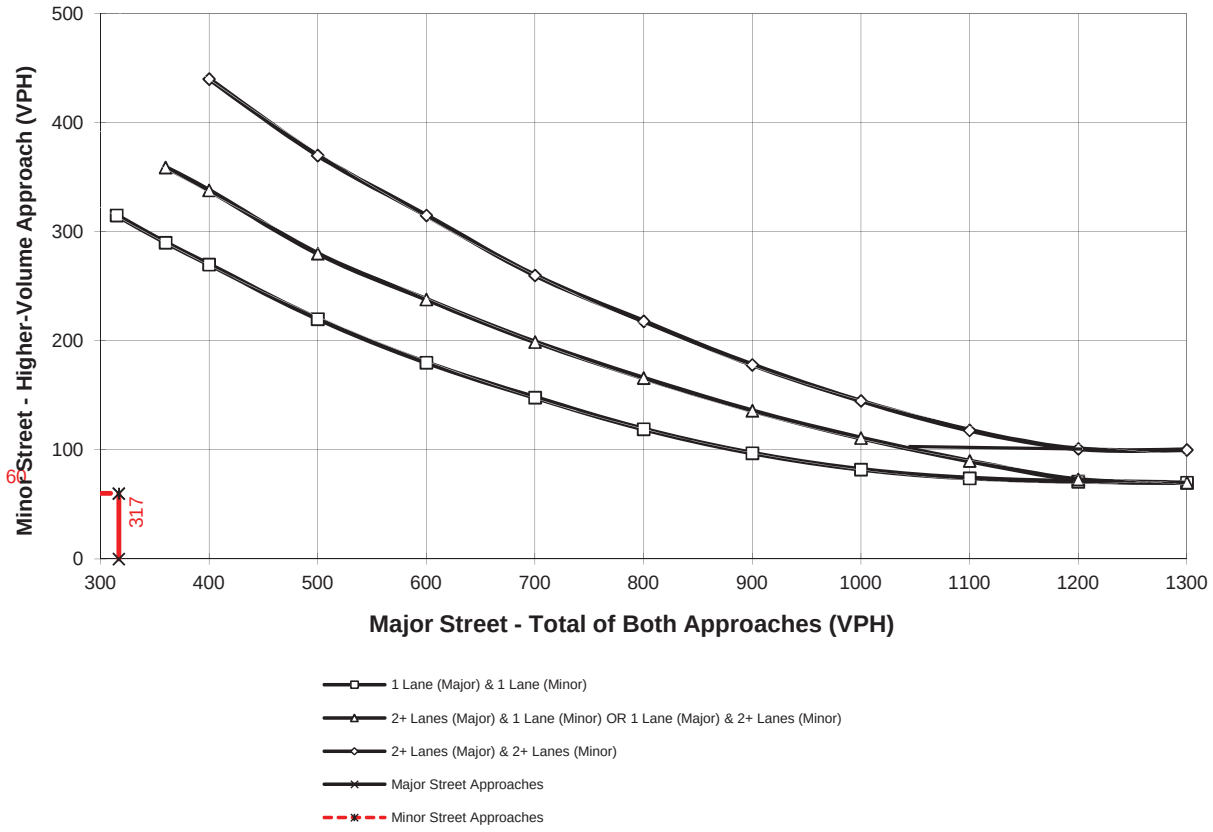
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2014) Conditions - Weekday AM Peak Hour**

Major Street Name = **Gateway Dr.** Total of Both Approaches (VPH) = **317**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Canyon Park Dr. - Dwy. 7** High Volume Approach (VPH) = **60**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

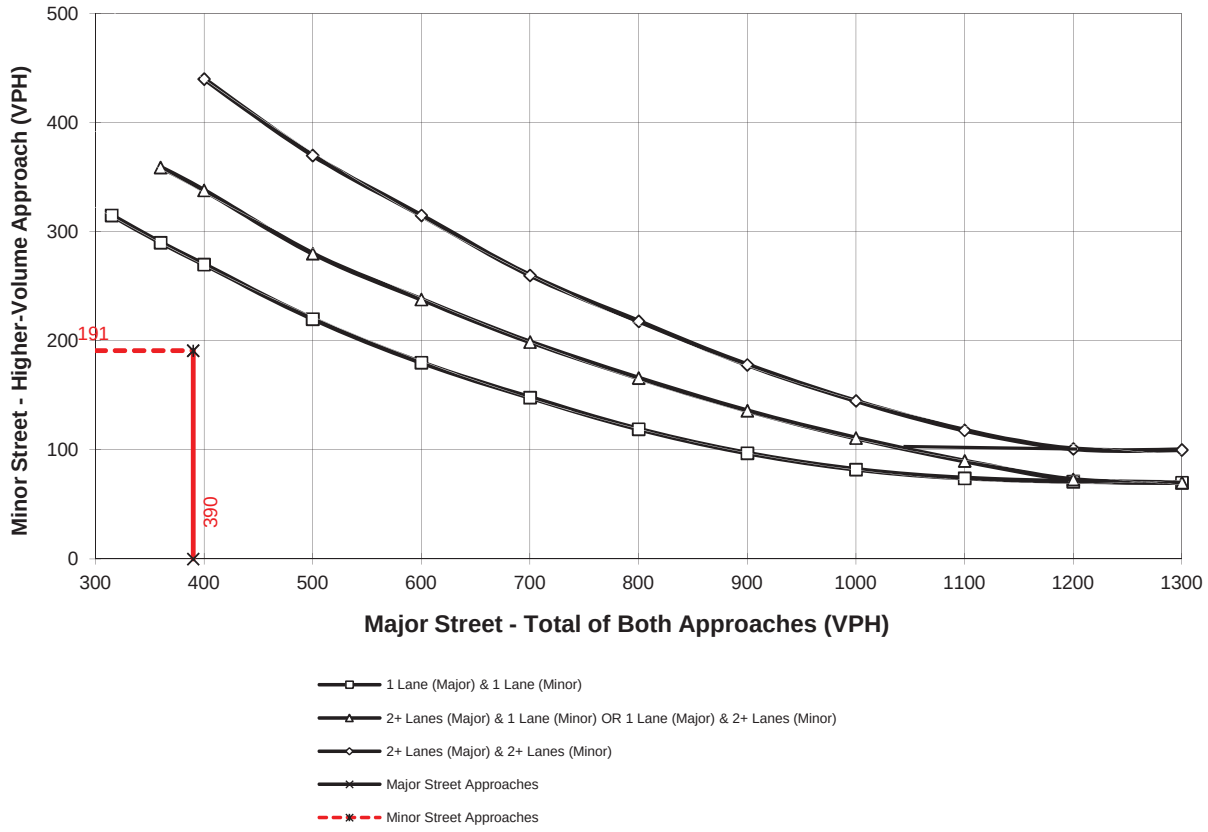
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2014) Conditions - Weekday PM Peak Hour**

Major Street Name = **Gateway Dr.** Total of Both Approaches (VPH) = **390**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Canyon Park Dr. - Dwy. 7** High Volume Approach (VPH) = **191**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

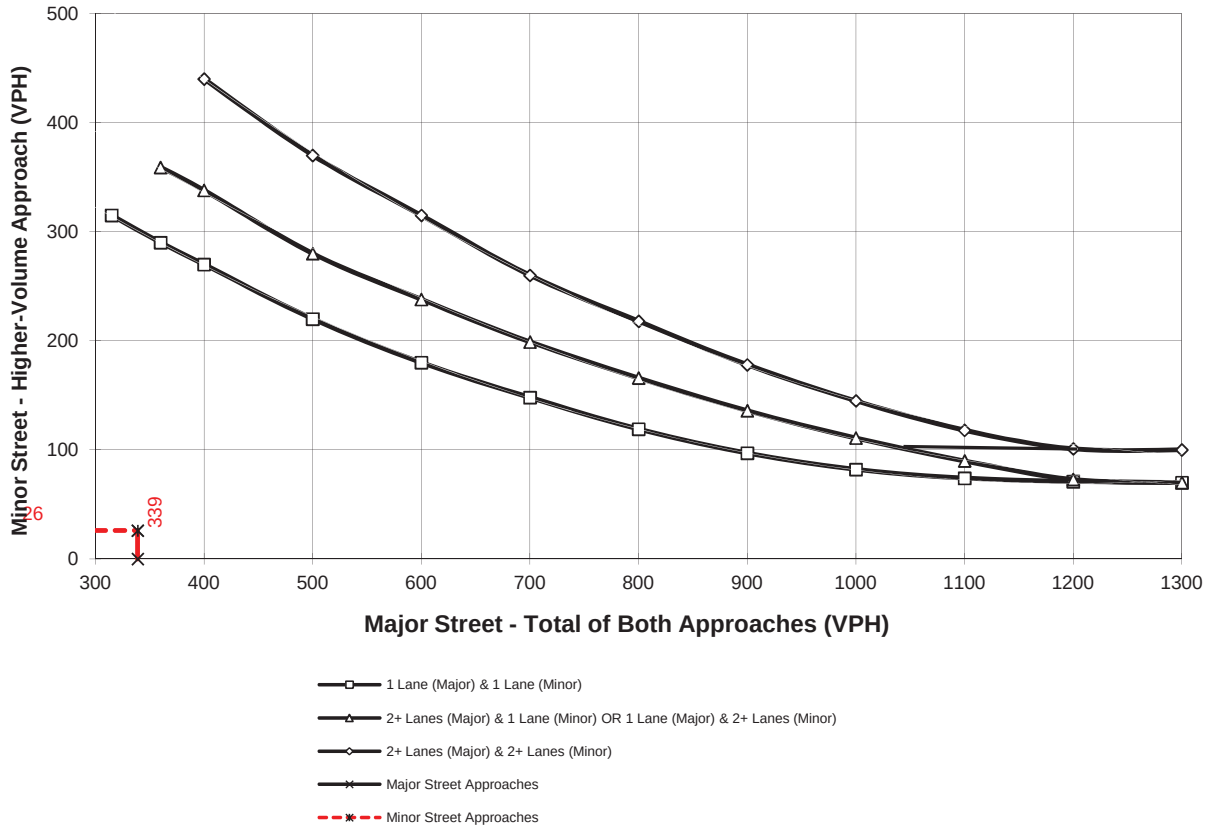
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2014) Conditions - Weekday AM Peak Hour**

Major Street Name = **Gateway Dr.**
Total of Both Approaches (VPH) = **339**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 9**
High Volume Approach (VPH) = **26**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

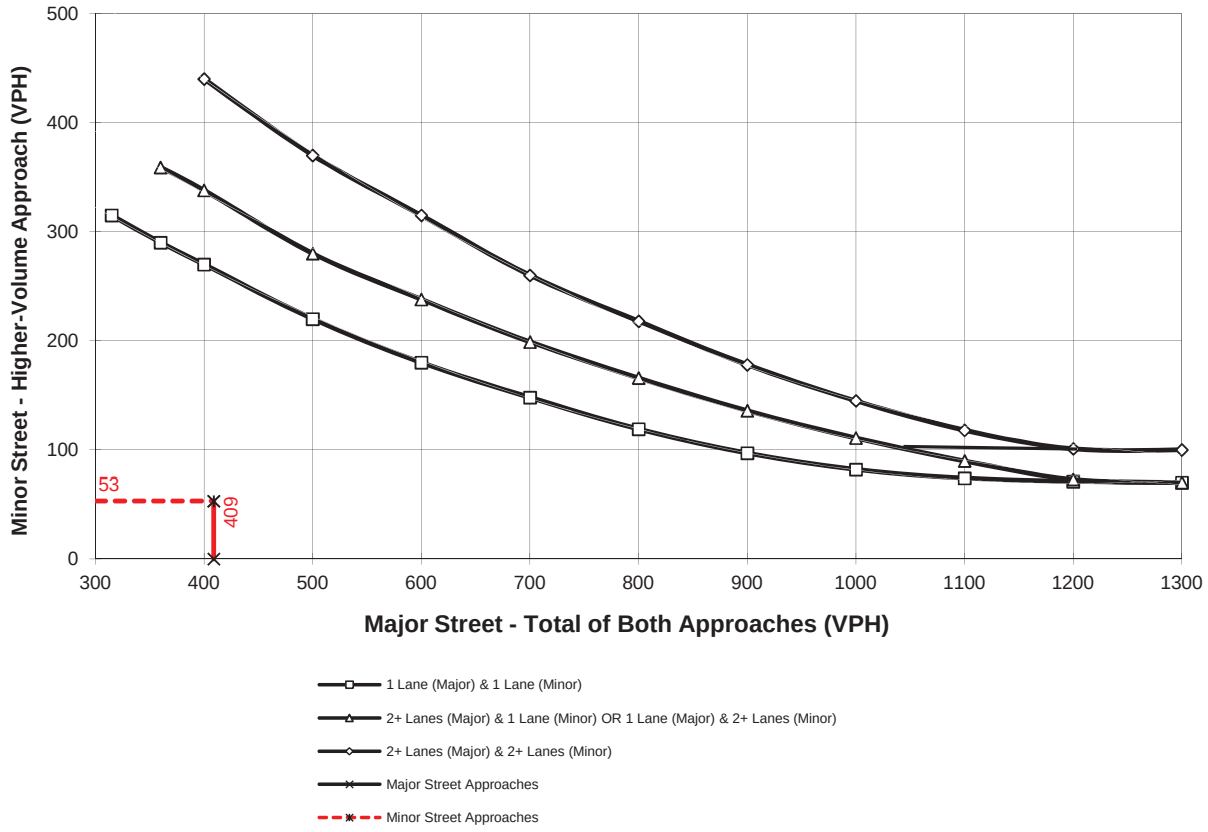
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2014) Conditions - Weekday PM Peak Hour**

Major Street Name = **Gateway Dr.**
Total of Both Approaches (VPH) = **409**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 9**
High Volume Approach (VPH) = **53**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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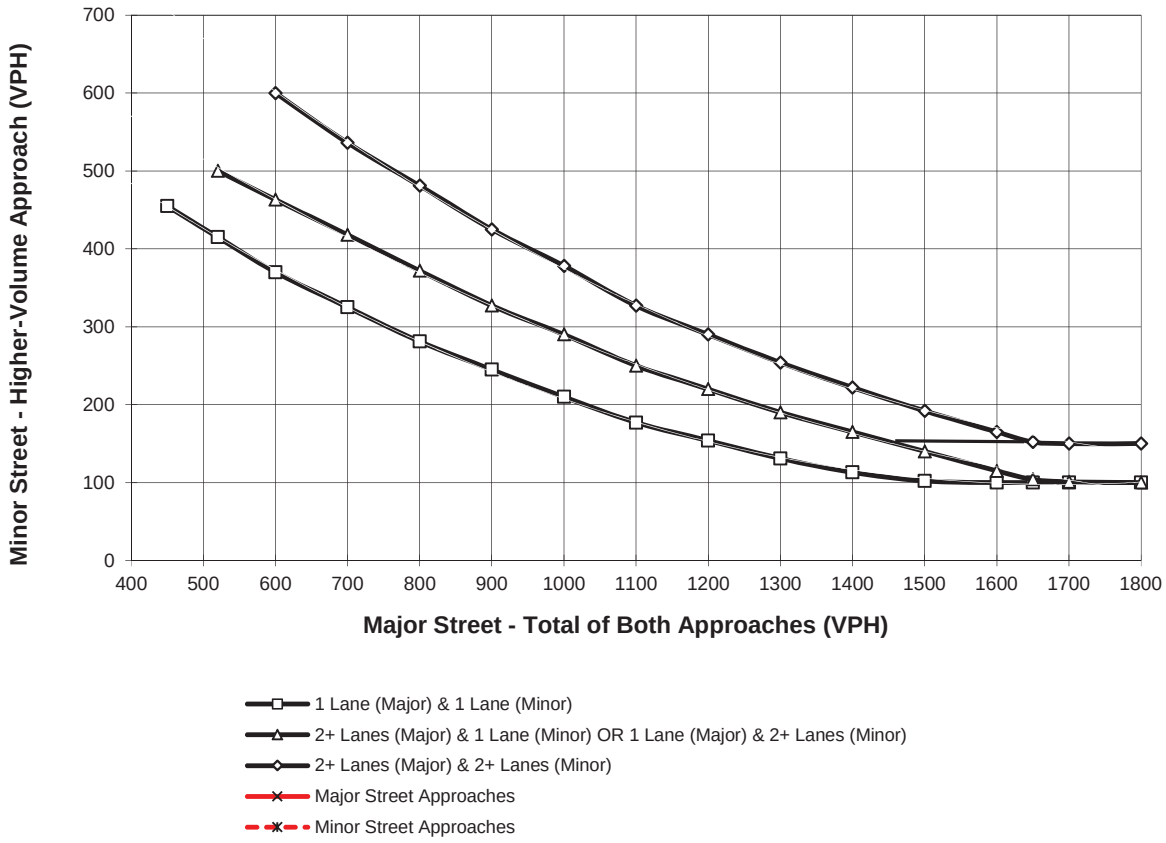
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2014) Conditions - Weekday AM Peak Hour**

Major Street Name = **Campus Pkwy.** Total of Both Approaches (VPH) = **212**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Canyon Park Dr.** High Volume Approach (VPH) = **52**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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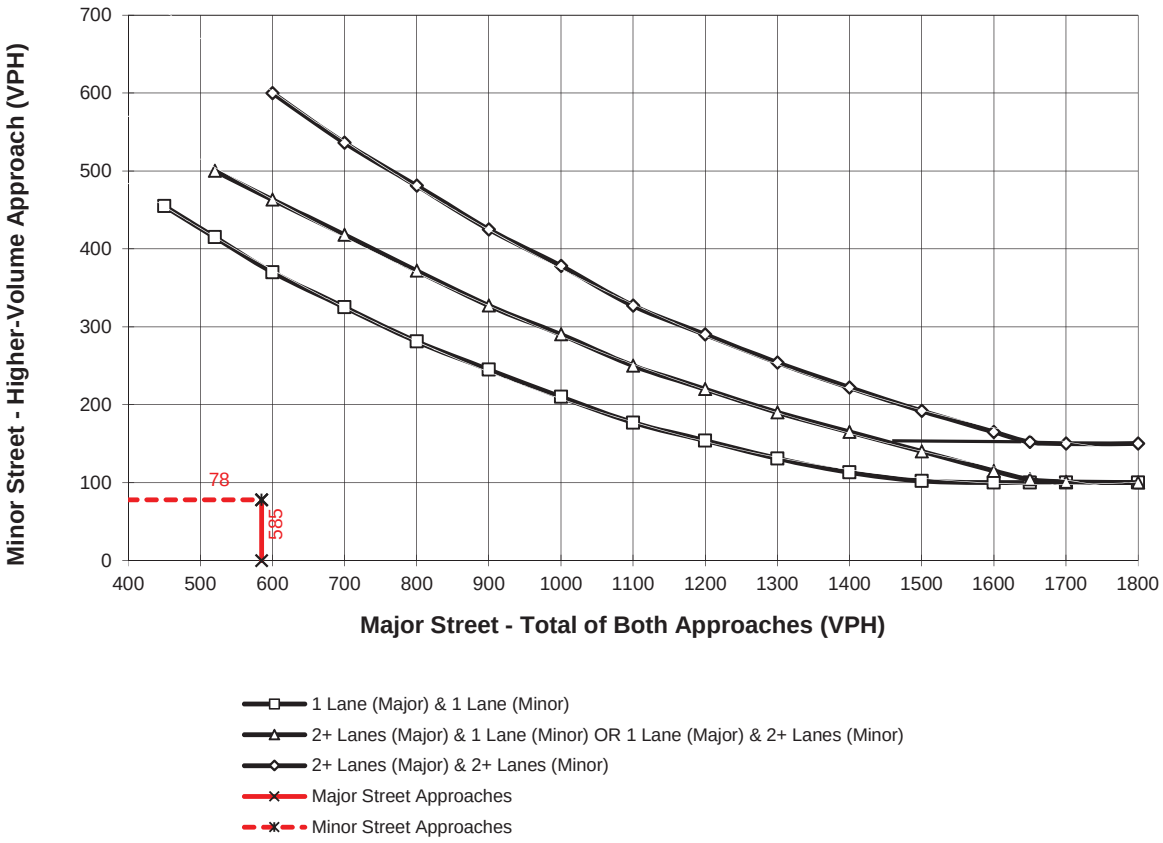
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2014) Conditions - Weekday PM Peak Hour**

Major Street Name = **Campus Pkwy.**
Total of Both Approaches (VPH) = **585**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Canyon Park Dr.**
High Volume Approach (VPH) = **78**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

APPENDIX 3.4:

EXISTING (2014) CONDITIONS BASIC FREEWAY SEGMENT ANALYSIS WORKSHEETS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*South of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4155*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1618*	pc/h/ln
S	*68.0*	mph
D = v_p / S	*23.8*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3690*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1437*	pc/h/ln
S	*69.3*	mph
D = v_p / S	*20.7*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*North of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4064*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1583*	pc/h/ln
S	*68.3*	mph
D = v_p / S	*23.2*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 10-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*North Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5047*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*		E_R	*1.2*
E_T	*1.5*		$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1179*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*16.8*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4693*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1828*	pc/h/ln
S	*65.4*	mph
D = v_p / S	*27.9*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*South of Eucalyptus*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5123*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1995*	pc/h/ln
S	*62.7*	mph
D = v_p / S	*31.8*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3428*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*983*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*14.0*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*2835*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1084*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*15.5*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3146*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1203*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*17.2*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
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LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3358*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*6*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*642*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*9.2*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*2895*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*830*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*11.9*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3373*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*774*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*11.1*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*JC*	Highway/Direction of Travel	*I-215 NB*
Agency or Company	*Urban Crossroads*	From/To	*South of Eucalyptus Av.*
Date Performed	*01/12/2015*	Jurisdiction	*Caltrans*
Analysis Time Period	*PM Peak Hour*	Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4420*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1722*	pc/h/ln
S	*66.8*	mph
D = v_p / S	*25.8*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3750*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1461*	pc/h/ln
S	*69.2*	mph
D = v_p / S	*21.1*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*North of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4239*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1651*	pc/h/ln
S	*67.6*	mph
D = v_p / S	*24.4*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*North Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6287*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1469*	pc/h/ln
S	*69.2*	mph
D = v_p / S	*21.2*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 10-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5354*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2085*	pc/h/ln
S	*60.9*	mph
D = v_p / S	*34.2*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*South of Eucalyptus*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6087*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2371*	pc/h/ln
S	*54.1*	mph
D = v_p / S	*43.8*	pc/mi/ln
LOS	*E*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3623*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1039*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*14.8*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3011*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1151*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*16.4*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3517*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1344*	pc/h/ln
S	*69.8*	mph
D = v_p / S	*19.3*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5382*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*6*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1029*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*14.7*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4479*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1284*	pc/h/ln
S	*69.9*	mph
D = v_p / S	*18.4*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*Existing (2014)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5340*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1225*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*17.5*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX 3.5:

EXISTING (2014) CONDITIONS FREEWAY RAMP JUNCTION (MERGE/DIVERGE) ANALYSIS WORKSHEETS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	Existing (2014)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 3	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2400 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 374 veh/h
	Freeway Volume, V_F: 4155	
	Ramp Volume, V_R: 465	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4155	0.92	Level	15	0	0.930	1.00	4855
Ramp	465	0.92	Level	2	0	0.990	1.00	510
UpStream								
DownStream	374	0.92	Level	2	0	0.990	1.00	411

Merge Areas | Diverge Areas

Estimation of v_{12} — Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Estimation of v_{12} — Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.615 using Equation (Exhibit 13-7)

V_{12} = 3183 pc/h

V_3 or V_{av34} 1672 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks — Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Capacity Checks — Diverge Areas

	Actual	Capacity		LOS F?
V_F	4855	Exhibit 13-8	7200	No
$V_{FO} = V_F - V_R$	4345	Exhibit 13-8	7200	No
V_R	510	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	3183	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F) — Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Level of Service Determination (if not F) — Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 30.0 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination — Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Speed Determination — Diverge Areas

D_s = 0.474 (Exhibit 13-12)

S_R = 56.7 mph (Exhibit 13-12)

S_0 = 74.2 mph (Exhibit 13-12)

S = 61.7 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	Existing (2014)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2400 ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = 465 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3690	
	Ramp Volume, V_R: 374	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3690	0.92	Level	15	0	0.930	1.00	4312
Ramp	374	0.92	Level	2	0	0.990	1.00	411
UpStream	465	0.92	Level	2	0	0.990	1.00	510
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 616.52 (Equation 13-6 or 13-7)

P_{FM} = 0.589 using Equation (Exhibit 13-6)

V_{12} = 2538 pc/h

V_3 or V_{av34} 1774 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 2538 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4723	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2949	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 25.8 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.367 (Exibit 13-11)

S_R= 59.7 mph (Exhibit 13-11)

S_0= 65.4 mph (Exhibit 13-11)

S = 61.7 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	Existing (2014)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp
☐ Yes ☐ On
☑ No ☐ Off
L_{up} = ft
V_u = veh/h

Freeway Number of Lanes, N	5
Ramp Number of Lanes, N	2
Acceleration Lane Length, L_A	
Deceleration Lane Length L_D	180
Freeway Volume, V_F	5047
Ramp Volume, V_R	354
Freeway Free-Flow Speed, S_{FF}	70.0
Ramp Free-Flow Speed, S_{FR}	35.0

Downstream Adj Ramp
☑ Yes ☑ On
☐ No ☐ Off
L_{down} = 2900 ft
V_D = 430 veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5047	0.92	Level	15	0	0.930	1.00	5897
Ramp	354	0.92	Level	2	0	0.990	1.00	389
UpStream								
DownStream	430	0.92	Level	2	0	0.990	1.00	472

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)
P_{FM} = using Equation (Exhibit 13-6)
V_{12} = pc/h
V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)
LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)
S_R= mph (Exhibit 13-11)
S_0= mph (Exhibit 13-11)
S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)
P_{FD} = 0.260 using Equation (Exhibit 13-7)
V_{12} = 1591 pc/h
V_3 or V_{av34} 1711 pc/h (Equation 13-14 or 13-17)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No
If Yes, V_{12a} = 2005 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5013	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4624	Exhibit 13-8	9600	No
V_R	389	Exhibit 13-10	4000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1591	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 9.3 (pc/mi/ln)
LOS = A (Exhibit 13-2)

Speed Determination

D_s = 0.463 (Exhibit 13-12)
S_R= 57.0 mph (Exhibit 13-12)
S_0= 74.8 mph (Exhibit 13-12)
S = 66.5 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	Existing (2014)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp
☑ Yes ☐ On
☐ No ☑ Off
L_{up} = 2900 ft
V_u = 354 veh/h

Freeway Number of Lanes, N	3
Ramp Number of Lanes, N	1
Acceleration Lane Length, L_A	600
Deceleration Lane Length L_D	
Freeway Volume, V_F	4693
Ramp Volume, V_R	430
Freeway Free-Flow Speed, S_{FF}	70.0
Ramp Free-Flow Speed, S_{FR}	35.0

Downstream Adj Ramp
☐ Yes ☐ On
☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4693	0.92	Level	15	0	0.930	1.00	5484
Ramp	430	0.92	Level	2	0	0.990	1.00	472
UpStream	354	0.92	Level	2	0	0.990	1.00	389
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$
L_{EQ} = 969.18 (Equation 13-6 or 13-7)
P_{FM} = 0.594 using Equation (Exhibit 13-6)
V_{12} = 3259 pc/h
V_3 or V_{av34} 2225 pc/h (Equation 13-14 or 13-17)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No
If Yes,V_{12a} = 3259 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5956	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3731	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$
D_R = 30.6 (pc/mi/ln)
LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.442 (Exibit 13-11)
S_R= 57.6 mph (Exhibit 13-11)
S_0= 63.8 mph (Exhibit 13-11)
S = 59.8 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$
L_{EQ} = (Equation 13-12 or 13-13)
P_{FD} = using Equation (Exhibit 13-7)
V_{12} = pc/h
V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$
D_R = (pc/mi/ln)
LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)
S_R= mph (Exhibit 13-12)
S_0= mph (Exhibit 13-12)
S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	Existing (2014)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 4	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 1400 ft
V_u = veh/h	Deceleration Lane Length L_D: 1000	V_D = 311 veh/h
	Freeway Volume, V_F: 3428	
	Ramp Volume, V_R: 593	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3428	0.92	Level	11	0	0.948	1.00	3931
Ramp	593	0.92	Level	2	0	0.990	1.00	651
UpStream								
DownStream	311	0.92	Level	2	0	0.990	1.00	341

Merge Areas | Diverge Areas

Estimation of v_{12} — Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Estimation of v_{12} — Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2081 pc/h

V_3 or V_{av34} 925 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks — Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Capacity Checks — Diverge Areas

	Actual	Capacity		LOS F?
V_F	3931	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3280	Exhibit 13-8	9600	No
V_R	651	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2081	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F) — Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Level of Service Determination (if not F) — Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 13.1 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination — Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Speed Determination — Diverge Areas

D_s = 0.487 (Exhibit 13-12)

S_R = 56.4 mph (Exhibit 13-12)

S_0 = 76.8 mph (Exhibit 13-12)

S = 64.4 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	Existing (2014)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 1400 ft	Acceleration Lane Length, L_A: 900	L_{down} = ft
V_u = 593 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 2835	
	Ramp Volume, V_R: 311	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	2835	0.92	Level	11	0	0.948	1.00	3251
Ramp	311	0.92	Level	2	0	0.990	1.00	341
UpStream	593	0.92	Level	2	0	0.990	1.00	651
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 596.49 (Equation 13-6 or 13-7)

P_{FM} = 0.603 using Equation (Exhibit 13-6)

V_{12} = 1959 pc/h

V_3 or V_{av34} 1292 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 1959 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	3592	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2300	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 17.6 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

M_S = 0.297 (Exibit 13-11)

S_R= 61.7 mph (Exhibit 13-11)

S_0= 67.1 mph (Exhibit 13-11)

S = 63.5 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	Existing (2014) Conditions

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☑ Yes	☑ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☐ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	180	L_{down} =	2000 ft
V_u =	veh/h	Freeway Volume, V_F	3358	V_D =	478 veh/h
		Ramp Volume, V_R	463		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	35.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3358	0.92	Level	11	0	0.948	1.00	3851
Ramp	463	0.92	Level	2	0	0.990	1.00	508
UpStream								
DownStream	478	0.92	Level	2	0	0.990	1.00	525

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R= mph (Exhibit 13-11)

S_0= mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 1377 pc/h

V_3 or V_{av34} 1237 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1540 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	3851	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3343	Exhibit 13-8	9600	No
V_R	508	Exhibit 13-10	4000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1377	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 13.4 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.474 (Exhibit 13-12)

S_R= 56.7 mph (Exhibit 13-12)

S_0= 76.2 mph (Exhibit 13-12)

S = 67.0 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	Existing (2014)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 4	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2000 ft	Acceleration Lane Length, L_A: 1000	L_{down} = ft
V_u = 463 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 2895	
	Ramp Volume, V_R: 478	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	2895	0.92	Level	11	0	0.948	1.00	3320
Ramp	478	0.92	Level	2	0	0.990	1.00	525
UpStream	463	0.92	Level	2	0	0.990	1.00	508
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 695.03 (Equation 13-6 or 13-7)

P_{FM} = 0.152 using Equation (Exhibit 13-6)

V_{12} = 505 pc/h

V_3 or V_{av34} = 1407 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1328 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	3845	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1853	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 13.4 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

M_S = 0.276 (Exibit 13-11)

S_R = 62.3 mph (Exhibit 13-11)

S_0 = 68.2 mph (Exhibit 13-11)

S = 65.2 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	Existing (2014)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 3	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2400 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 489 veh/h
	Freeway Volume, V_F: 4420	
	Ramp Volume, V_R: 670	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4420	0.92	Level	15	0	0.930	1.00	5165
Ramp	670	0.92	Level	2	0	0.990	1.00	736
UpStream								
DownStream	489	0.92	Level	2	0	0.990	1.00	537

Merge Areas | Diverge Areas

Estimation of v_{12}

Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.597 using Equation (Exhibit 13-7)

V_{12} = 3380 pc/h

V_3 or V_{av34} 1785 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Diverge Areas

	Actual	Capacity		LOS F?
V_F	5165	Exhibit 13-8	7200	No
$V_{FO} = V_F - V_R$	4429	Exhibit 13-8	7200	No
V_R	736	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	3380	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 31.7 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

D_s = 0.494 (Exhibit 13-12)

S_R = 56.2 mph (Exhibit 13-12)

S_0 = 73.7 mph (Exhibit 13-12)

S = 61.2 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	Existing (2014)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp
☑ Yes ☐ On
☐ No ☑ Off
L_{up} = 2400 ft
V_u = 670 veh/h

Freeway Number of Lanes, N	3
Ramp Number of Lanes, N	1
Acceleration Lane Length, L_A	400
Deceleration Lane Length L_D	
Freeway Volume, V_F	3750
Ramp Volume, V_R	489
Freeway Free-Flow Speed, S_{FF}	70.0
Ramp Free-Flow Speed, S_{FR}	35.0

Downstream Adj Ramp
☐ Yes ☐ On
☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3750	0.92	Level	15	0	0.930	1.00	4382
Ramp	489	0.92	Level	2	0	0.990	1.00	537
UpStream	670	0.92	Level	2	0	0.990	1.00	736
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$
L_{EQ} = 658.47 (Equation 13-6 or 13-7)
P_{FM} = 0.589 using Equation (Exhibit 13-6)
V_{12} = 2580 pc/h
V_3 or V_{av34} 1802 pc/h (Equation 13-14 or 13-17)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No
If Yes,V_{12a} = 2580 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4919	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3117	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$
D_R = 27.0 (pc/mi/ln)
LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.381 (Exibit 13-11)
S_R= 59.3 mph (Exhibit 13-11)
S_0= 65.3 mph (Exhibit 13-11)
S = 61.4 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$
L_{EQ} = (Equation 13-12 or 13-13)
P_{FD} = using Equation (Exhibit 13-7)
V_{12} = pc/h
V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$
D_R = (pc/mi/ln)
LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)
S_R= mph (Exhibit 13-12)
S_0= mph (Exhibit 13-12)
S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	Existing (2014)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☑ Yes	☑ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☐ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	180	L_{down} =	2900 ft
V_u =	veh/h	Freeway Volume, V_F	6287	V_D =	733 veh/h
		Ramp Volume, V_R	933		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	35.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6287	0.92	Level	15	0	0.930	1.00	7346
Ramp	933	0.92	Level	2	0	0.990	1.00	1024
UpStream								
DownStream	733	0.92	Level	2	0	0.990	1.00	805

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R= mph (Exhibit 13-11)

S_0= mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2286 pc/h

V_3 or V_{av34} 1795 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2350 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5877	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4853	Exhibit 13-8	9600	No
V_R	1024	Exhibit 13-10	4000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2286	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 12.2 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.520 (Exhibit 13-12)

S_R= 55.4 mph (Exhibit 13-12)

S_0= 73.8 mph (Exhibit 13-12)

S = 65.2 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	Existing (2014)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp
☑ Yes ☐ On
☐ No ☑ Off
L_{up} = 2900 ft
V_u = 933 veh/h

Freeway Number of Lanes, N	3
Ramp Number of Lanes, N	1
Acceleration Lane Length, L_A	600
Deceleration Lane Length L_D	
Freeway Volume, V_F	5354
Ramp Volume, V_R	733
Freeway Free-Flow Speed, S_{FF}	70.0
Ramp Free-Flow Speed, S_{FR}	35.0

Downstream Adj Ramp
☐ Yes ☐ On
☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5354	0.92	Level	15	0	0.930	1.00	6256
Ramp	733	0.92	Level	2	0	0.990	1.00	805
UpStream	933	0.92	Level	2	0	0.990	1.00	1024
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$
L_{EQ} = 1205.65 (Equation 13-6 or 13-7)
P_{FM} = 0.594 using Equation (Exhibit 13-6)
V_{12} = 3718 pc/h
V_3 or V_{av34} 2538 pc/h (Equation 13-14 or 13-17)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No
If Yes,V_{12a} = 3718 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	7061	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	4523	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$
D_R = 36.6 (pc/mi/ln)
LOS = E (Exhibit 13-2)

Speed Determination

M_S = 0.638 (Exibit 13-11)
S_R= 52.1 mph (Exhibit 13-11)
S_0= 62.0 mph (Exhibit 13-11)
S = 55.3 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$
L_{EQ} = (Equation 13-12 or 13-13)
P_{FD} = using Equation (Exhibit 13-7)
V_{12} = pc/h
V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$
D_R = (pc/mi/ln)
LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)
S_R= mph (Exhibit 13-12)
S_0= mph (Exhibit 13-12)
S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	Existing (2014)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 4	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 1400 ft
V_u = veh/h	Deceleration Lane Length L_D: 1000	V_D = 506 veh/h
	Freeway Volume, V_F: 3623	
	Ramp Volume, V_R: 612	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3623	0.92	Level	11	0	0.948	1.00	4155
Ramp	612	0.92	Level	2	0	0.990	1.00	672
UpStream								
DownStream	506	0.92	Level	2	0	0.990	1.00	555

Merge Areas | Diverge Areas

Estimation of v_{12}

Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2191 pc/h

V_3 or V_{av34} 982 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Diverge Areas

	Actual	Capacity		LOS F?
V_F	4155	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3483	Exhibit 13-8	9600	No
V_R	672	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2191	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 14.1 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

D_s = 0.488 (Exhibit 13-12)

S_R = 56.3 mph (Exhibit 13-12)

S_0 = 76.8 mph (Exhibit 13-12)

S = 64.4 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	Existing (2014)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 1400 ft	Acceleration Lane Length, L_A: 900	L_{down} = ft
V_u = 612 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3011	
	Ramp Volume, V_R: 506	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3011	0.92	Level	11	0	0.948	1.00	3453
Ramp	506	0.92	Level	2	0	0.990	1.00	555
UpStream	612	0.92	Level	2	0	0.990	1.00	672
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 685.51 (Equation 13-6 or 13-7)

P_{FM} = 0.603 using Equation (Exhibit 13-6)

V_{12} = 2081 pc/h

V_3 or V_{av34} 1372 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 2081 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4008	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2636	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 20.1 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.312 (Exibit 13-11)

S_R= 61.3 mph (Exhibit 13-11)

S_0= 66.9 mph (Exhibit 13-11)

S = 63.1 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	Existing (2014) Conditions

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☑ Yes	☑ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☐ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	180	L_{down} =	2000 ft
V_u =	veh/h	Freeway Volume, V_F	5382	V_D =	861 veh/h
		Ramp Volume, V_R	903		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	35.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5382	0.92	Level	11	0	0.948	1.00	6172
Ramp	903	0.92	Level	2	0	0.990	1.00	991
UpStream								
DownStream	861	0.92	Level	2	0	0.990	1.00	945

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R= mph (Exhibit 13-11)

S_0= mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2098 pc/h

V_3 or V_{av34} 1574 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2098 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5247	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4256	Exhibit 13-8	9600	No
V_R	991	Exhibit 13-10	4000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2098	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 18.2 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.517 (Exhibit 13-12)

S_R= 55.5 mph (Exhibit 13-12)

S_0= 74.6 mph (Exhibit 13-12)

S = 65.6 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	Existing (2014)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 4	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2000 ft	Acceleration Lane Length, L_A: 1000	L_{down} = ft
V_u = 903 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 4479	
	Ramp Volume, V_R: 861	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4479	0.92	Level	11	0	0.948	1.00	5136
Ramp	861	0.92	Level	2	0	0.990	1.00	945
UpStream	903	0.92	Level	2	0	0.990	1.00	991
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 1173.53 (Equation 13-6 or 13-7)

P_{FM} = 0.100 using Equation (Exhibit 13-6)

V_{12} = 512 pc/h

V_3 or V_{av34} = 2312 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2054 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6081	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2999	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 22.2 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.329 (Exibit 13-11)

S_R = 60.8 mph (Exhibit 13-11)

S_0 = 66.3 mph (Exhibit 13-11)

S = 63.4 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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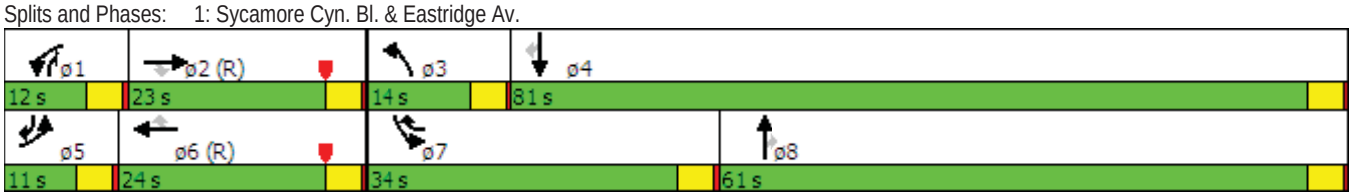
APPENDIX 5.1:

EXISTING PLUS PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	63	10	97	153	401	137	1035	160	120	119	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		150	310		200	360		320	275		110
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	120			120			120			200		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		910			577			817			952	
Travel Time (s)		15.5			9.8			12.4			14.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	11.0	11.0	20.0	11.0
Total Split (s)	11.0	23.0	23.0	12.0	24.0	34.0	14.0	61.0	12.0	34.0	81.0	11.0
Total Split (%)	8.5%	17.7%	17.7%	9.2%	18.5%	26.2%	10.8%	46.9%	9.2%	26.2%	62.3%	8.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	Max	None	None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 54 (42%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Sycamore Cyn. Bl. & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	25	63	10	97	153	401	137	1035	160	120	119	28
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	27	69	0	107	168	441	151	1137	176	132	131	31
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	879	274	181	680	392	203	2109	1027	191	2096	991
Arrive On Green	0.03	0.17	0.00	0.05	0.19	0.19	0.06	0.60	0.60	0.06	0.59	0.59
Sat Flow, veh/h	3442	5085	1583	3442	3539	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	27	69	0	107	168	441	151	1137	176	132	131	31
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1770	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	1.0	1.5	0.0	4.0	5.2	25.0	5.6	24.9	5.7	4.9	2.0	1.0
Cycle Q Clear(g_c), s	1.0	1.5	0.0	4.0	5.2	25.0	5.6	24.9	5.7	4.9	2.0	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	115	879	274	181	680	392	203	2109	1027	191	2096	991
V/C Ratio(X)	0.23	0.08	0.00	0.59	0.25	1.13	0.74	0.54	0.17	0.69	0.06	0.03
Avail Cap(c_a), veh/h	185	879	274	212	680	392	265	2109	1027	794	2096	991
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.2	45.1	0.0	60.2	44.5	48.9	60.2	15.6	9.0	60.3	11.2	9.3
Incr Delay (d2), s/veh	1.0	0.2	0.0	3.1	0.9	84.1	7.8	1.0	0.4	4.4	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.7	0.0	2.0	2.6	23.2	2.9	12.5	2.6	2.4	1.0	0.4
LnGrp Delay(d),s/veh	62.2	45.3	0.0	63.3	45.4	133.0	68.0	16.6	9.4	64.7	11.3	9.3
LnGrp LOS	E	D		E	D	F	E	B	A	E	B	A
Approach Vol, veh/h		96			716			1464			294	
Approach Delay, s/veh		50.0			102.0			21.1			35.1	
Approach LOS		D			F			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	26.5	11.7	81.0	8.4	29.0	11.2	81.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	19.0	10.0	77.0	7.0	20.0	30.0	57.0
Max Q Clear Time (g_c+I1), s	6.0	3.5	7.6	4.0	3.0	27.0	6.9	26.9
Green Ext Time (p_c), s	0.0	2.7	0.1	12.8	0.0	0.0	0.4	10.9

Intersection Summary	
HCM 2010 Ctrl Delay	46.3
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	61	243	15	57	702	350	10	11	56	43	2	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		80	150		0	75		160	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		760			700			315			411	
Travel Time (s)		13.0			11.9			7.2			9.3	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0		11.0	20.0	20.0	11.0	20.0	
Total Split (s)	16.0	77.0	77.0	16.0	77.0		11.0	22.0	22.0	15.0	26.0	
Total Split (%)	12.3%	59.2%	59.2%	12.3%	59.2%		8.5%	16.9%	16.9%	11.5%	20.0%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Box Springs Bl. & Eastridge Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	61	243	15	57	702	350	10	11	56	43	2	4
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	67	267	16	63	771	385	11	12	62	47	2	4
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	2271	1016	86	1468	731	31	266	226	78	299	268
Arrive On Green	0.05	0.64	0.64	0.05	0.64	0.64	0.02	0.14	0.14	0.04	0.17	0.17
Sat Flow, veh/h	1774	3539	1583	1774	2291	1140	1774	1863	1583	1774	1770	1583
Grp Volume(v), veh/h	67	267	16	63	595	561	11	12	62	47	2	4
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1661	1774	1863	1583	1774	1770	1583
Q Serve(g_s), s	4.9	3.8	0.5	4.6	23.6	23.8	0.8	0.7	4.5	3.4	0.1	0.3
Cycle Q Clear(g_c), s	4.9	3.8	0.5	4.6	23.6	23.8	0.8	0.7	4.5	3.4	0.1	0.3
Prop In Lane	1.00		1.00	1.00		0.69	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	87	2271	1016	86	1134	1065	31	266	226	78	299	268
V/C Ratio(X)	0.77	0.12	0.02	0.74	0.52	0.53	0.35	0.05	0.27	0.60	0.01	0.01
Avail Cap(c_a), veh/h	164	2271	1016	164	1134	1065	96	266	226	150	299	268
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.1	9.0	8.4	61.0	12.6	12.6	63.1	48.1	49.7	61.0	44.9	45.0
Incr Delay (d2), s/veh	13.3	0.1	0.0	11.5	1.7	1.9	6.6	0.3	3.0	7.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	1.9	0.2	2.5	12.0	11.3	0.4	0.4	2.2	1.8	0.1	0.1
LnGrp Delay(d),s/veh	74.3	9.1	8.5	72.5	14.4	14.5	69.7	48.4	52.7	68.3	45.0	45.1
LnGrp LOS	E	A	A	E	B	B	E	D	D	E	D	D
Approach Vol, veh/h		350			1219			85			53	
Approach Delay, s/veh		21.6			17.4			54.3			65.6	
Approach LOS		C			B			D			E	

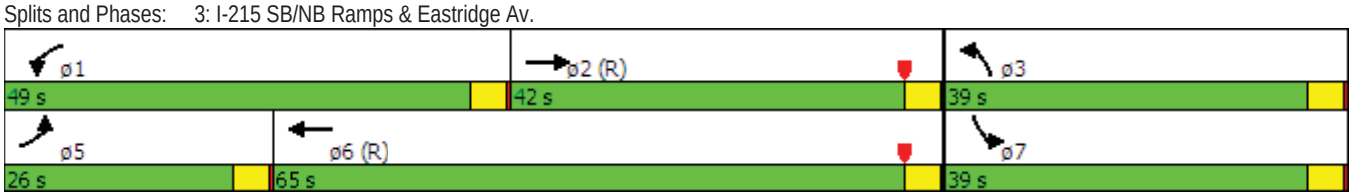
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	87.4	6.3	26.0	10.4	87.3	9.7	22.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	73.0	7.0	22.0	12.0	73.0	11.0	18.0
Max Q Clear Time (g_c+I1), s	6.6	5.8	2.8	2.3	6.9	25.8	5.4	6.5
Green Ext Time (p_c), s	0.0	13.3	0.0	0.2	0.0	12.7	0.0	0.1

Intersection Summary	
HCM 2010 Ctrl Delay	21.6
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	196	0	431	614	0	286	0	0	311	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	275		0	0		0	0		0
Storage Lanes	0		0	0		0	2		0	2		0
Taper Length (ft)	90			190			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		241			359			784			672	
Travel Time (s)		4.1			6.1			15.3			13.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.25	0.90	0.90	0.25	0.90
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot			Prot		
Protected Phases	5	2		1	6		3			7		
Permitted Phases												
Detector Phase	5	2		1	6		3			7		
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0			7.0		
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0			11.0		
Total Split (s)	26.0	42.0		49.0	65.0		39.0			39.0		
Total Split (%)	20.0%	32.3%		37.7%	50.0%		30.0%			30.0%		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5			3.5		
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5			0.5		
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0			0.0		
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0			4.0		
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		None			None		

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 24 (18%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: I-215 SB/NB Ramps & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	76	196	0	431	614	0	286	0	0	311	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	0	0	1863	0	0
Adj Flow Rate, veh/h	84	218	0	479	682	0	318	0	0	346	0	0
Adj No. of Lanes	1	2	0	2	2	0	2	0	0	2	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.25	0.90	0.90	0.25	0.90
Percent Heavy Veh, %	2	2	0	2	2	0	2	0	0	2	0	0
Cap, veh/h	107	2215	0	550	2566	0	421	0	0	421	0	0
Arrive On Green	0.02	0.21	0.00	0.32	1.00	0.00	0.12	0.00	0.00	0.12	0.00	0.00
Sat Flow, veh/h	1774	3632	0	3442	3632	0	3442	318		3442	346	
Grp Volume(v), veh/h	84	218	0	479	682	0	318	58.0		346	59.7	
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1721	1770	0	1721	E		1721	E	
Q Serve(g_s), s	6.1	6.5	0.0	17.1	0.0	0.0	11.6			12.8		
Cycle Q Clear(g_c), s	6.1	6.5	0.0	17.1	0.0	0.0	11.6			12.8		
Prop In Lane	1.00		0.00	1.00		0.00	1.00			1.00		
Lane Grp Cap(c), veh/h	107	2215	0	550	2566	0	421			421		
V/C Ratio(X)	0.78	0.10	0.00	0.87	0.27	0.00	0.76			0.82		
Avail Cap(c_a), veh/h	300	2215	0	1191	2566	0	927			927		
HCM Platoon Ratio	0.33	0.33	1.00	2.00	2.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.99	0.99	0.00	1.00			1.00		
Uniform Delay (d), s/veh	62.9	21.9	0.0	43.0	0.0	0.0	55.2			55.7		
Incr Delay (d2), s/veh	11.7	0.1	0.0	4.4	0.3	0.0	2.8			4.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	3.4	3.2	0.0	8.3	0.1	0.0	5.7			6.3		
LnGrp Delay(d),s/veh	74.5	22.0	0.0	47.4	0.3	0.0	58.0			59.7		
LnGrp LOS	E	C		D	A		E			E		
Approach Vol, veh/h		302			1161							
Approach Delay, s/veh		36.6			19.7							
Approach LOS		D			B							

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3		5	6	7	
Phs Duration (G+Y+Rc), s	24.8	85.3	19.9		11.9	98.2	19.9	
Change Period (Y+Rc), s	4.0	4.0	4.0		4.0	4.0	4.0	
Max Green Setting (Gmax), s	45.0	38.0	35.0		22.0	61.0	35.0	
Max Q Clear Time (g_c+I1), s	19.1	8.5	13.6		8.1	2.0	14.8	
Green Ext Time (p_c), s	1.7	6.4	1.1		0.1	6.9	1.1	

Intersection Summary	
HCM 2010 Ctrl Delay	34.3
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	272	69	0	900	0	0	0	0	0	0	209
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		700			241			458			364	
Travel Time (s)		11.9			4.1			8.9			7.1	
Peak Hour Factor	0.25	0.90	0.90	0.25	0.90	0.25	0.25	0.25	0.25	0.25	0.25	0.90
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	272	69	0	900	0	0	0	0	0	0	209
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	1082	515	456	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	25	90	90	25	90	25	25	25	25	25	25	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	302	77	0	1000	0	0	0	0	0	0	232

Major/Minor	Major1			Major2						Minor2		
Conflicting Flow All	1000	0	-	302	0	0				1121	1302	500
Stage 1	-	-	-	-	-	-				1000	1000	-
Stage 2	-	-	-	-	-	-				121	302	-
Critical Hdwy	4.14	-	-	5.34	-	-				6.29	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-				5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-				6.04	5.54	-
Follow-up Hdwy	2.22	-	-	3.12	-	-				3.67	4.02	3.32
Pot Cap-1 Maneuver	688	-	0	838	-	-				232	160	516
Stage 1	-	-	0	-	-	-				309	319	-
Stage 2	-	-	0	-	-	-				851	663	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	688	-	-	838	-	-				232	0	516
Mov Cap-2 Maneuver	-	-	-	-	-	-				274	0	-
Stage 1	-	-	-	-	-	-				309	0	-
Stage 2	-	-	-	-	-	-				851	0	-

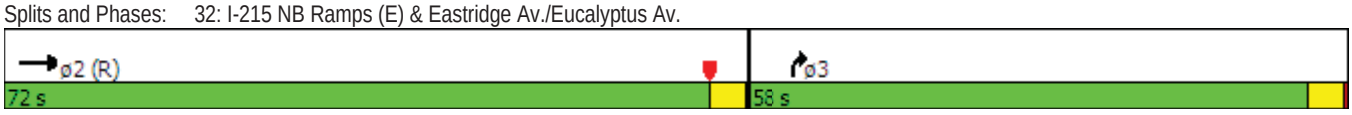
Approach	EB	WB	SB
HCM Control Delay, s	0	0	17.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	688	-	838	-	-	516
HCM Lane V/C Ratio	-	-	-	-	-	0.45
HCM Control Delay (s)	0	-	0	-	-	17.6
HCM Lane LOS	A	-	A	-	-	C
HCM 95th %tile Q(veh)	0	-	0	-	-	2.3

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	507	0	0	0	0	391
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Right Turn on Red		Yes				Yes
Link Speed (mph)	30			40	30	
Link Distance (ft)	100			131	592	
Travel Time (s)	2.3			2.2	13.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA					Prot
Protected Phases	2					3
Permitted Phases						
Detector Phase	2					3
Switch Phase						
Minimum Initial (s)	7.0					7.0
Minimum Split (s)	20.0					11.0
Total Split (s)	72.0					58.0
Total Split (%)	55.4%					44.6%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	0.5					0.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	4.0					4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max					None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	

Splits and Phases: 32: I-215 NB Ramps (E) & Eastridge Av./Eucalyptus Av.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	507	0	0	0	0	391
Number	2	12			3	18
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)		1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0			0	1863
Adj Flow Rate, veh/h	563	0			0	434
Adj No. of Lanes	2	0			0	2
Peak Hour Factor	0.90	0.90			0.90	0.90
Percent Heavy Veh, %	2	0			0	2
Cap, veh/h	3430	0			0	0
Arrive On Green	0.97	0.00			0.00	0.00
Sat Flow, veh/h	3725	0			0	
Grp Volume(v), veh/h	563	0			0.0	
Grp Sat Flow(s),veh/h/ln	1770	0				
Q Serve(g_s), s	0.8	0.0				
Cycle Q Clear(g_c), s	0.8	0.0				
Prop In Lane		0.00				
Lane Grp Cap(c), veh/h	3430	0				
V/C Ratio(X)	0.16	0.00				
Avail Cap(c_a), veh/h	3430	0				
HCM Platoon Ratio	1.00	1.00				
Upstream Filter(I)	1.00	0.00				
Uniform Delay (d), s/veh	0.1	0.0				
Incr Delay (d2), s/veh	0.1	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile BackOfQ(50%),veh/ln	0.4	0.0				
LnGrp Delay(d),s/veh	0.2	0.0				
LnGrp LOS	A					
Approach Vol, veh/h	563					
Approach Delay, s/veh	0.2					
Approach LOS	A					

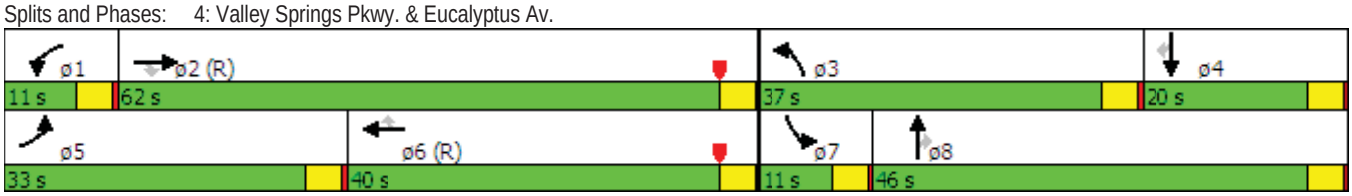
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		130.0						
Change Period (Y+Rc), s		4.0						
Max Green Setting (Gmax), s		68.0						
Max Q Clear Time (g_c+I1), s		2.8						
Green Ext Time (p_c), s		4.4						

Intersection Summary	
HCM 2010 Ctrl Delay	0.2
HCM 2010 LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	588	291	20	22	715	89	323	407	123	32	45	359
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	1		1	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0
Total Split (s)	33.0	62.0	62.0	11.0	40.0	40.0	37.0	46.0	46.0	11.0	20.0	20.0
Total Split (%)	25.4%	47.7%	47.7%	8.5%	30.8%	30.8%	28.5%	35.4%	35.4%	8.5%	15.4%	15.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	Max	None	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	588	291	20	22	715	89	323	407	123	32	45	359
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	661	327	22	25	803	100	363	457	138	36	51	403
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	712	1708	764	57	1090	488	391	1143	512	69	265	396
Arrive On Green	0.35	0.81	0.81	0.03	0.31	0.31	0.22	0.32	0.32	0.04	0.14	0.14
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	1774	3539	1583	1774	1863	2787
Grp Volume(v), veh/h	661	327	22	25	803	100	363	457	138	36	51	403
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1774	1770	1583	1774	1863	1393
Q Serve(g_s), s	24.1	2.8	0.4	1.8	26.4	6.1	26.1	13.0	8.4	2.6	3.1	18.5
Cycle Q Clear(g_c), s	24.1	2.8	0.4	1.8	26.4	6.1	26.1	13.0	8.4	2.6	3.1	18.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	712	1708	764	57	1090	488	391	1143	512	69	265	396
V/C Ratio(X)	0.93	0.19	0.03	0.44	0.74	0.21	0.93	0.40	0.27	0.52	0.19	1.02
Avail Cap(c_a), veh/h	768	1708	764	96	1090	488	450	1143	512	96	265	396
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	0.73	0.73	0.73	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	41.6	6.8	6.6	61.8	40.3	33.2	49.7	34.2	32.6	61.3	49.2	55.8
Incr Delay (d2), s/veh	16.2	0.2	0.1	3.9	3.3	0.7	24.1	1.0	1.3	5.8	1.6	49.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.9	1.3	0.2	0.9	13.4	2.7	15.4	6.5	3.9	1.4	1.7	9.8
LnGrp Delay(d),s/veh	57.8	7.0	6.6	65.6	43.5	33.9	73.8	35.2	33.9	67.0	50.8	105.2
LnGrp LOS	E	A	A	E	D	C	E	D	C	E	D	F
Approach Vol, veh/h		1010			928			958			490	
Approach Delay, s/veh		40.3			43.1			49.6			96.7	
Approach LOS		D			D			D			F	

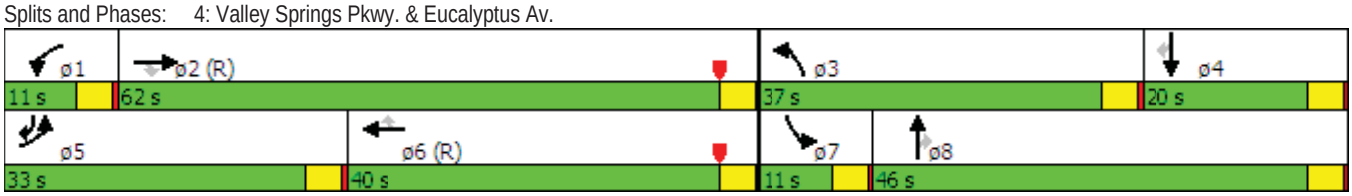
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	66.7	32.6	22.5	30.9	44.0	9.1	46.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	58.0	33.0	16.0	29.0	36.0	7.0	42.0
Max Q Clear Time (g_c+I1), s	3.8	4.8	28.1	20.5	26.1	28.4	4.6	15.0
Green Ext Time (p_c), s	0.0	10.0	0.5	0.0	0.8	4.3	0.0	5.9

Intersection Summary	
HCM 2010 Ctrl Delay	51.9
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	588	291	20	22	715	89	323	407	123	32	45	359
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	1		1	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	33.0	62.0	62.0	11.0	40.0	40.0	37.0	46.0	46.0	11.0	20.0	33.0
Total Split (%)	25.4%	47.7%	47.7%	8.5%	30.8%	30.8%	28.5%	35.4%	35.4%	8.5%	15.4%	25.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	Max	None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	588	291	20	22	715	89	323	407	123	32	45	359
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	661	327	22	25	803	100	363	457	138	36	51	403
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	712	1708	764	57	1090	488	391	1143	512	69	265	972
Arrive On Green	0.35	0.81	0.81	0.03	0.31	0.31	0.22	0.32	0.32	0.04	0.14	0.14
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	1774	3539	1583	1774	1863	2787
Grp Volume(v), veh/h	661	327	22	25	803	100	363	457	138	36	51	403
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1774	1770	1583	1774	1863	1393
Q Serve(g_s), s	24.1	2.8	0.4	1.8	26.4	6.1	26.1	13.0	8.4	2.6	3.1	14.3
Cycle Q Clear(g_c), s	24.1	2.8	0.4	1.8	26.4	6.1	26.1	13.0	8.4	2.6	3.1	14.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	712	1708	764	57	1090	488	391	1143	512	69	265	972
V/C Ratio(X)	0.93	0.19	0.03	0.44	0.74	0.21	0.93	0.40	0.27	0.52	0.19	0.41
Avail Cap(c_a), veh/h	768	1708	764	96	1090	488	450	1143	512	96	265	972
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	0.73	0.73	0.73	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	41.6	6.8	6.6	61.8	40.3	33.2	49.7	34.2	32.6	61.3	49.2	32.2
Incr Delay (d2), s/veh	16.2	0.2	0.1	3.9	3.3	0.7	24.1	1.0	1.3	5.8	1.6	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.9	1.3	0.2	0.9	13.4	2.7	15.4	6.5	3.9	1.4	1.7	5.7
LnGrp Delay(d),s/veh	57.8	7.0	6.6	65.6	43.5	33.9	73.8	35.2	33.9	67.0	50.8	33.5
LnGrp LOS	E	A	A	E	D	C	E	D	C	E	D	C
Approach Vol, veh/h		1010			928			958			490	
Approach Delay, s/veh		40.3			43.1			49.6			37.8	
Approach LOS		D			D			D			D	

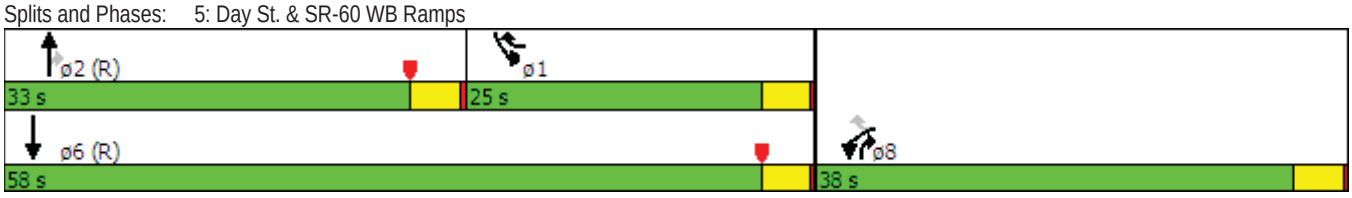
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	66.7	32.6	22.5	30.9	44.0	9.1	46.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	58.0	33.0	16.0	29.0	36.0	7.0	42.0
Max Q Clear Time (g_c+I1), s	3.8	4.8	28.1	16.3	26.1	28.4	4.6	15.0
Green Ext Time (p_c), s	0.0	10.0	0.5	0.0	0.8	4.3	0.0	5.9

Intersection Summary	
HCM 2010 Ctrl Delay	43.3
HCM 2010 LOS	D

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	525	230	361	220	124	522
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		175	200	
Storage Lanes	2	1		1	1	
Taper Length (ft)	60				80	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		40			40
Link Distance (ft)	307		957			795
Travel Time (s)	6.0		16.3			13.6
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	38.0	25.0	33.0	38.0	25.0	58.0
Total Split (%)	39.6%	26.0%	34.4%	39.6%	26.0%	60.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 94 (98%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: Day St. & SR-60 WB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	525	230	361	220	124	522
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	541	237	372	227	128	538
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	682	907	1069	792	665	2542
Arrive On Green	0.20	0.20	0.60	0.60	0.37	0.72
Sat Flow, veh/h	3442	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	541	237	372	227	128	538
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1770
Q Serve(g_s), s	14.4	0.0	5.1	5.5	4.7	4.8
Cycle Q Clear(g_c), s	14.4	0.0	5.1	5.5	4.7	4.8
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	682	907	1069	792	665	2542
V/C Ratio(X)	0.79	0.26	0.35	0.29	0.19	0.21
Avail Cap(c_a), veh/h	1219	1154	1069	792	665	2542
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.97	0.97	1.00	1.00
Uniform Delay (d), s/veh	36.6	10.3	14.3	7.6	20.2	4.5
Incr Delay (d2), s/veh	2.1	0.2	0.9	0.9	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	3.1	2.5	3.5	2.3	2.4
LnGrp Delay(d),s/veh	38.7	10.4	15.1	8.5	20.4	4.7
LnGrp LOS	D	B	B	A	C	A
Approach Vol, veh/h	778		599			666
Approach Delay, s/veh	30.1		12.6			7.7
Approach LOS	C		B			A

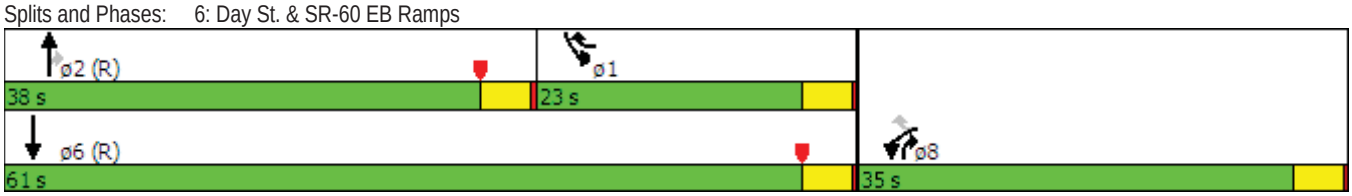
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	40.0	33.0				73.0		23.0
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	21.0	29.0				54.0		34.0
Max Q Clear Time (g_c+I1), s	6.7	7.5				6.8		16.4
Green Ext Time (p_c), s	3.2	3.0				4.1		2.7

Intersection Summary	
HCM 2010 Ctrl Delay	17.7
HCM 2010 LOS	B

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	479	81	500	425	107	940
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	200		0	425	
Storage Lanes	2	0		1	1	
Taper Length (ft)	60				60	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		40			40
Link Distance (ft)	263		524			957
Travel Time (s)	5.1		8.9			16.3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	35.0	23.0	38.0	35.0	23.0	61.0
Total Split (%)	36.5%	24.0%	39.6%	36.5%	24.0%	63.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 90 (94%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Day St. & SR-60 EB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	479	81	500	425	107	940
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	489	83	510	434	109	959
Adj No. of Lanes	2	1	2	1	1	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	608	825	1253	840	611	3763
Arrive On Green	0.18	0.18	0.12	0.12	0.69	1.00
Sat Flow, veh/h	3442	1583	3632	1583	1774	5253
Grp Volume(v), veh/h	489	83	510	434	109	959
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1695
Q Serve(g_s), s	13.1	0.0	12.8	18.6	2.1	0.0
Cycle Q Clear(g_c), s	13.1	0.0	12.8	18.6	2.1	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	608	825	1253	840	611	3763
V/C Ratio(X)	0.80	0.10	0.41	0.52	0.18	0.25
Avail Cap(c_a), veh/h	1111	1056	1253	840	611	3763
HCM Platoon Ratio	1.00	1.00	0.33	0.33	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.94	0.94	0.88	0.88
Uniform Delay (d), s/veh	37.9	11.6	33.0	20.4	10.1	0.0
Incr Delay (d2), s/veh	2.6	0.1	0.9	2.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	1.1	6.4	11.7	1.0	0.1
LnGrp Delay(d),s/veh	40.5	11.7	34.0	22.5	10.3	0.1
LnGrp LOS	D	B	C	C	B	A
Approach Vol, veh/h	572		944			1068
Approach Delay, s/veh	36.3		28.7			1.2
Approach LOS	D		C			A

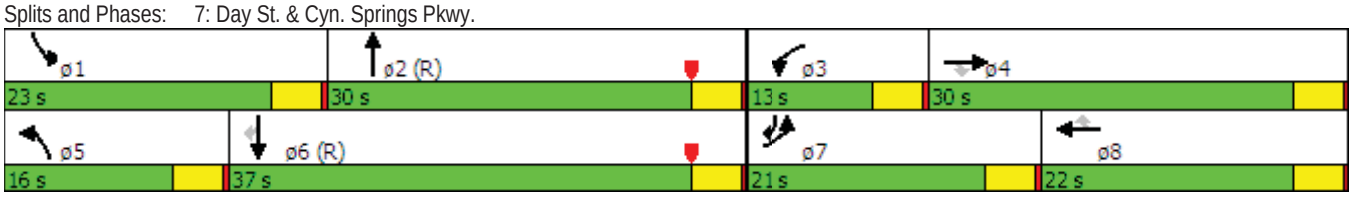
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	37.0	38.0				75.0		21.0
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	19.0	34.0				57.0		31.0
Max Q Clear Time (g_c+I1), s	4.1	20.6				2.0		15.1
Green Ext Time (p_c), s	5.8	4.1				8.3		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	19.0
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	264	28	32	30	30	102	61	559	51	159	925	258
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	145		0	165		0	170		200
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	95			100			120			80		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		1120			404			728			524	
Travel Time (s)		19.1			7.9			12.4			8.9	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												19%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	21.0	30.0	30.0	13.0	22.0	22.0	16.0	30.0		23.0	37.0	21.0
Total Split (%)	21.9%	31.3%	31.3%	13.5%	22.9%	22.9%	16.7%	31.3%		24.0%	38.5%	21.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 57 (59%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Day St. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	264	28	32	30	30	102	61	559	51	159	925	258
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	272	29	33	31	31	105	63	576	53	164	987	244
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	4	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	356	284	241	73	168	143	105	2512	229	196	4326	1083
Arrive On Green	0.10	0.15	0.15	0.04	0.09	0.09	0.08	0.70	0.70	0.22	1.00	1.00
Sat Flow, veh/h	3442	1863	1583	1774	1863	1583	1774	4744	432	1774	7451	1583
Grp Volume(v), veh/h	272	29	33	31	31	105	63	410	219	164	987	244
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1863	1583	1774	1695	1786	1774	1863	1583
Q Serve(g_s), s	7.4	1.3	1.7	1.6	1.5	6.2	3.3	4.1	4.2	8.5	0.0	0.0
Cycle Q Clear(g_c), s	7.4	1.3	1.7	1.6	1.5	6.2	3.3	4.1	4.2	8.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	356	284	241	73	168	143	105	1795	946	196	4326	1083
V/C Ratio(X)	0.76	0.10	0.14	0.43	0.18	0.74	0.60	0.23	0.23	0.84	0.23	0.23
Avail Cap(c_a), veh/h	609	504	429	166	349	297	222	1795	946	351	4326	1083
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	2.00	2.00	2.00
Upstream Filter(I)	0.94	0.94	0.94	1.00	1.00	1.00	0.99	0.99	0.99	0.92	0.92	0.92
Uniform Delay (d), s/veh	41.9	35.0	35.2	44.9	40.4	42.6	43.1	7.3	7.3	36.6	0.0	0.0
Incr Delay (d2), s/veh	3.2	0.1	0.2	3.9	0.5	7.2	5.3	0.3	0.6	8.4	0.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.7	0.8	0.9	0.8	3.0	1.8	2.0	2.2	4.6	0.0	0.1
LnGrp Delay(d),s/veh	45.1	35.2	35.5	48.8	40.9	49.7	48.4	7.6	7.9	45.0	0.1	0.4
LnGrp LOS	D	D	D	D	D	D	D	A	A	D	A	A
Approach Vol, veh/h		334			167			692			1395	
Approach Delay, s/veh		43.3			47.9			11.4			5.4	
Approach LOS		D			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	54.8	7.9	18.6	9.7	59.7	13.9	12.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	26.0	9.0	26.0	12.0	33.0	17.0	18.0
Max Q Clear Time (g_c+I1), s	10.5	6.2	3.6	3.7	5.3	2.0	9.4	8.2
Green Ext Time (p_c), s	0.3	11.4	0.0	0.7	0.1	14.5	0.5	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	14.7
HCM 2010 LOS	B

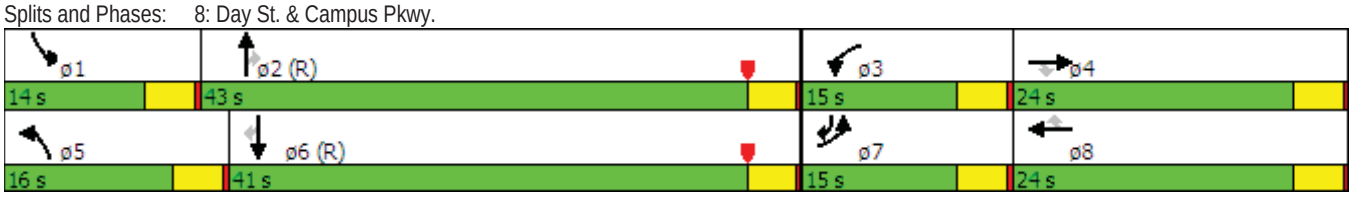
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	26	49	20	66	62	112	561	37	53	773	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		50	200		0	130		50	190		0
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	60			120			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		938			519			1025			728	
Travel Time (s)		16.0			10.1			17.5			12.4	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	15.0	24.0	24.0	15.0	24.0	24.0	16.0	43.0	43.0	14.0	41.0	15.0
Total Split (%)	15.6%	25.0%	25.0%	15.6%	25.0%	25.0%	16.7%	44.8%	44.8%	14.6%	42.7%	15.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 8 (8%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Day St. & Campus Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	47	26	49	20	66	62	112	561	37	53	773	119
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	47	26	49	20	67	63	113	567	37	54	781	120
Adj No. of Lanes	2	1	1	1	2	1	2	3	1	2	3	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	176	150	53	257	115	239	3320	1034	191	3250	1094
Arrive On Green	0.05	0.09	0.09	0.03	0.07	0.07	0.14	1.00	1.00	0.02	0.21	0.21
Sat Flow, veh/h	3442	1863	1583	1774	3539	1583	3442	5085	1583	3442	5085	1583
Grp Volume(v), veh/h	47	26	49	20	67	63	113	567	37	54	781	120
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1770	1583	1721	1695	1583	1721	1695	1583
Q Serve(g_s), s	1.3	1.2	2.8	1.1	1.7	3.7	2.9	0.0	0.0	1.5	12.3	5.0
Cycle Q Clear(g_c), s	1.3	1.2	2.8	1.1	1.7	3.7	2.9	0.0	0.0	1.5	12.3	5.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	179	176	150	53	257	115	239	3320	1034	191	3250	1094
V/C Ratio(X)	0.26	0.15	0.33	0.37	0.26	0.55	0.47	0.17	0.04	0.28	0.24	0.11
Avail Cap(c_a), veh/h	394	388	330	203	737	330	430	3320	1034	359	3250	1094
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97
Uniform Delay (d), s/veh	43.7	39.9	40.6	45.7	42.1	43.0	39.7	0.0	0.0	45.2	18.5	11.7
Incr Delay (d2), s/veh	0.8	0.4	1.3	4.3	0.5	4.0	1.4	0.1	0.1	0.8	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.7	1.3	0.6	0.9	1.7	1.4	0.0	0.0	0.7	5.8	2.3
LnGrp Delay(d),s/veh	44.5	40.3	41.9	49.9	42.6	47.0	41.2	0.1	0.1	46.0	18.7	11.9
LnGrp LOS	D	D	D	D	D	D	D	A	A	D	B	B
Approach Vol, veh/h		122			150			717			955	
Approach Delay, s/veh		42.5			45.4			6.6			19.4	
Approach LOS		D			D			A			B	

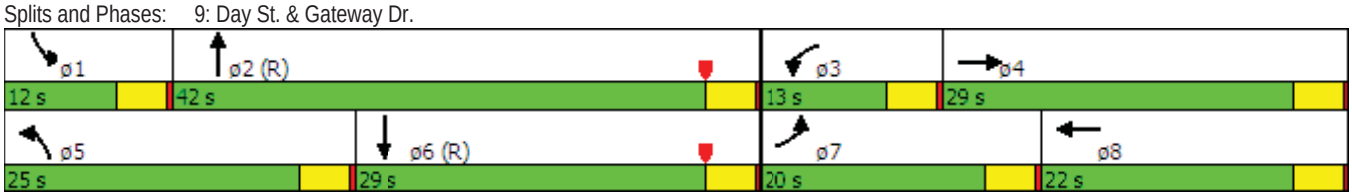
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	66.7	6.9	13.1	10.7	65.4	9.0	11.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	39.0	11.0	20.0	12.0	37.0	11.0	20.0
Max Q Clear Time (g_c+I1), s	3.5	2.0	3.1	4.8	4.9	14.3	3.3	5.7
Green Ext Time (p_c), s	0.0	12.1	0.0	0.7	0.2	10.1	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	18.1
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	125	41	62	34	102	98	166	457	46	77	351	317
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	100		0	190		400	260		0
Storage Lanes	1		0	1		0	1		1	2		0
Taper Length (ft)	0			120			60			165		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		318			585			592			1025	
Travel Time (s)		5.4			11.4			10.1			17.5	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	20.0	29.0		13.0	22.0		25.0	42.0		12.0	29.0	
Total Split (%)	20.8%	30.2%		13.5%	22.9%		26.0%	43.8%		12.5%	30.2%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

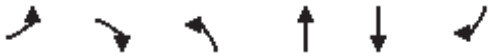
Splits and Phases: 9: Day St. & Gateway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	125	41	62	34	102	98	166	457	46	77	351	317
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	126	41	63	34	103	99	168	462	46	78	355	320
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	158	247	221	77	169	147	203	2761	271	220	1816	848
Arrive On Green	0.09	0.14	0.14	0.04	0.09	0.09	0.15	0.78	0.78	0.11	0.89	0.89
Sat Flow, veh/h	1774	1770	1583	1774	1792	1564	1774	4709	463	3442	3390	1583
Grp Volume(v), veh/h	126	41	63	34	102	100	168	331	177	78	355	320
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1587	1774	1695	1781	1721	1695	1583
Q Serve(g_s), s	6.7	2.0	3.4	1.8	5.3	5.9	8.8	2.4	2.4	2.0	1.3	3.1
Cycle Q Clear(g_c), s	6.7	2.0	3.4	1.8	5.3	5.9	8.8	2.4	2.4	2.0	1.3	3.1
Prop In Lane	1.00		1.00	1.00		0.99	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	158	247	221	77	167	150	203	1988	1044	220	1816	848
V/C Ratio(X)	0.80	0.17	0.28	0.44	0.61	0.67	0.83	0.17	0.17	0.36	0.20	0.38
Avail Cap(c_a), veh/h	296	461	412	166	332	298	388	1988	1044	287	1816	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.67	1.67	1.67
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	42.9	36.4	37.0	44.8	41.8	42.0	39.8	4.6	4.6	41.1	2.4	2.5
Incr Delay (d2), s/veh	8.9	0.3	0.7	3.9	3.6	5.1	8.3	0.2	0.4	1.0	0.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	1.0	1.5	1.0	2.8	2.8	4.8	1.2	1.3	1.0	0.6	1.6
LnGrp Delay(d),s/veh	51.8	36.7	37.7	48.7	45.3	47.2	48.1	4.8	5.0	42.0	2.6	3.8
LnGrp LOS	D	D	D	D	D	D	D	A	A	D	A	A
Approach Vol, veh/h		230			236			676			753	
Approach Delay, s/veh		45.2			46.6			15.6			7.2	
Approach LOS		D			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	60.3	8.2	17.4	15.0	55.4	12.5	13.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	38.0	9.0	25.0	21.0	25.0	16.0	18.0
Max Q Clear Time (g_c+I1), s	4.0	4.4	3.8	5.4	10.8	5.1	8.7	7.9
Green Ext Time (p_c), s	0.1	8.8	0.0	1.6	0.3	7.4	0.2	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	19.7
HCM 2010 LOS	B



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	8	7	46	761	453	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	80			0
Storage Lanes	1	0	1			0
Taper Length (ft)	60		30			
Link Speed (mph)	30			40	40	
Link Distance (ft)	364			180	592	
Travel Time (s)	8.3			3.1	10.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

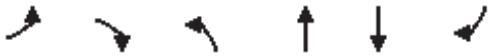
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	8	7	46	761	453	23
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	-	80	-	-	-
Veh in Median Storage, #	1	-	-	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	9	8	50	827	492	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1019	259	517	0	-	0
Stage 1	505	-	-	-	-	-
Stage 2	514	-	-	-	-	-
Critical Hdwy	6.29	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	266	631	665	-	-	-
Stage 1	494	-	-	-	-	-
Stage 2	547	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	246	631	665	-	-	-
Mov Cap-2 Maneuver	340	-	-	-	-	-
Stage 1	494	-	-	-	-	-
Stage 2	506	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.6	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	665	-	433	-	-
HCM Lane V/C Ratio	0.075	-	0.038	-	-
HCM Control Delay (s)	10.9	-	13.6	-	-
HCM Lane LOS	B	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.1	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	7	14	21	800	426	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	25			0
Storage Lanes	1	0	1			0
Taper Length (ft)	60		25			
Link Speed (mph)	30			40	40	
Link Distance (ft)	364			453	180	
Travel Time (s)	8.3			7.7	3.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	7	14	21	800	426	35
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	-	25	-	-	-
Veh in Median Storage, #	1	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	15	23	860	458	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	952	248	496	0	-	0
Stage 1	477	-	-	-	-	-
Stage 2	475	-	-	-	-	-
Critical Hdwy	6.29	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	290	641	680	-	-	-
Stage 1	514	-	-	-	-	-
Stage 2	573	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	280	641	680	-	-	-
Mov Cap-2 Maneuver	371	-	-	-	-	-
Stage 1	514	-	-	-	-	-
Stage 2	554	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.3	0.3	0
HCM LOS	B		

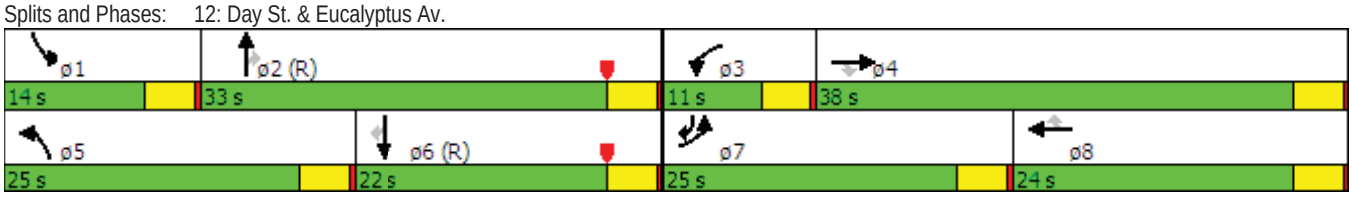
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	680	-	516	-	-
HCM Lane V/C Ratio	0.033	-	0.044	-	-
HCM Control Delay (s)	10.5	-	12.3	-	-
HCM Lane LOS	B	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	215	214	75	19	479	126	224	393	39	78	152	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		50	175		0	100		100	200		0
Storage Lanes	1		1	1		1	1		2	1		1
Taper Length (ft)	100			75			80			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			40	
Link Distance (ft)		2104			1174			390			453	
Travel Time (s)		35.9			20.0			7.6			7.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	25.0	38.0	38.0	11.0	24.0	24.0	25.0	33.0	33.0	14.0	22.0	25.0
Total Split (%)	26.0%	39.6%	39.6%	11.5%	25.0%	25.0%	26.0%	34.4%	34.4%	14.6%	22.9%	26.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary

Area Type: Other
Cycle Length: 96
Actuated Cycle Length: 96
Offset: 13 (14%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 12: Day St. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	215	214	75	19	479	126	224	393	39	78	152	175
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	226	225	79	20	504	133	236	414	41	82	160	184
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	263	1058	473	53	639	286	273	1556	696	115	1239	789
Arrive On Green	0.15	0.30	0.30	0.03	0.18	0.18	0.15	0.44	0.44	0.06	0.35	0.35
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	226	225	79	20	504	133	236	414	41	82	160	184
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	11.9	4.6	3.5	1.1	13.1	7.2	12.5	7.1	1.4	4.4	3.0	6.3
Cycle Q Clear(g_c), s	11.9	4.6	3.5	1.1	13.1	7.2	12.5	7.1	1.4	4.4	3.0	6.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	263	1058	473	53	639	286	273	1556	696	115	1239	789
V/C Ratio(X)	0.86	0.21	0.17	0.37	0.79	0.46	0.86	0.27	0.06	0.71	0.13	0.23
Avail Cap(c_a), veh/h	388	1253	561	129	737	330	388	1556	696	185	1239	789
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.9	25.2	24.8	45.7	37.6	35.2	39.6	17.1	15.5	44.0	21.2	13.7
Incr Delay (d2), s/veh	11.9	0.1	0.2	4.3	5.0	1.2	13.2	0.4	0.2	8.0	0.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	2.2	1.6	0.6	6.8	3.3	7.1	3.5	0.7	2.4	1.5	2.9
LnGrp Delay(d),s/veh	51.8	25.3	25.0	49.9	42.6	36.4	52.8	17.5	15.6	52.0	21.4	14.3
LnGrp LOS	D	C	C	D	D	D	D	B	B	D	C	B
Approach Vol, veh/h		530			657			691			426	
Approach Delay, s/veh		36.5			41.6			29.5			24.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	46.2	6.9	32.7	18.8	37.6	18.2	21.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	29.0	7.0	34.0	21.0	18.0	21.0	20.0
Max Q Clear Time (g_c+I1), s	6.4	9.1	3.1	6.6	14.5	8.3	13.9	15.1
Green Ext Time (p_c), s	0.0	4.3	0.0	5.7	0.4	3.1	0.3	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	33.6
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	74	4	19	99	142	3	383	10	86	159	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	95		95	80		0	100		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	60			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			25			35	
Link Distance (ft)		861			839			1320			2260	
Travel Time (s)		16.8			16.3			36.0			44.0	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	11.0	22.0		11.0	22.0	22.0	11.0	46.0		17.0	52.0	
Total Split (%)	11.5%	22.9%		11.5%	22.9%	22.9%	11.5%	47.9%		17.7%	54.2%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Day St. & Cottonwood Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	34	74	4	19	99	142	3	383	10	86	159	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	39	84	5	22	112	161	3	435	11	98	181	27
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	84	250	15	57	239	204	10	1062	27	125	1033	154
Arrive On Green	0.05	0.14	0.14	0.03	0.13	0.13	0.01	0.59	0.59	0.07	0.65	0.65
Sat Flow, veh/h	1774	1741	104	1774	1863	1583	1774	1809	46	1774	1585	236
Grp Volume(v), veh/h	39	0	89	22	112	161	3	0	446	98	0	208
Grp Sat Flow(s),veh/h/ln	1774	0	1844	1774	1863	1583	1774	0	1855	1774	0	1821
Q Serve(g_s), s	2.1	0.0	4.2	1.2	5.4	9.5	0.2	0.0	12.6	5.2	0.0	4.3
Cycle Q Clear(g_c), s	2.1	0.0	4.2	1.2	5.4	9.5	0.2	0.0	12.6	5.2	0.0	4.3
Prop In Lane	1.00		0.06	1.00		1.00	1.00		0.02	1.00		0.13
Lane Grp Cap(c), veh/h	84	0	264	57	239	204	10	0	1089	125	0	1187
V/C Ratio(X)	0.47	0.00	0.34	0.38	0.47	0.79	0.30	0.00	0.41	0.78	0.00	0.18
Avail Cap(c_a), veh/h	129	0	346	129	349	297	129	0	1089	240	0	1187
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.6	0.0	37.0	45.5	38.8	40.6	47.5	0.0	10.8	43.9	0.0	6.6
Incr Delay (d2), s/veh	4.0	0.0	0.7	4.1	1.4	8.7	16.1	0.0	1.1	10.2	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	2.2	0.6	2.8	4.6	0.1	0.0	6.7	2.9	0.0	2.2
LnGrp Delay(d),s/veh	48.6	0.0	37.8	49.7	40.2	49.2	63.6	0.0	11.9	54.1	0.0	6.9
LnGrp LOS	D		D	D	D	D	E		B	D		A
Approach Vol, veh/h		128			295			449			306	
Approach Delay, s/veh		41.0			45.8			12.3			22.0	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	60.4	7.1	17.8	4.5	66.6	8.5	16.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	42.0	7.0	18.0	7.0	48.0	7.0	18.0
Max Q Clear Time (g_c+I1), s	7.2	14.6	3.2	6.2	2.2	6.3	4.1	11.5
Green Ext Time (p_c), s	0.1	4.5	0.0	1.2	0.0	4.8	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	26.3
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	27	16	7	22	58	6	325	1	20	151	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		861			839			634			1320	
Travel Time (s)		19.6			19.1			17.3			36.0	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	11.6
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	19	27	16	0	7	22	58	0	6	325	1
Peak Hour Factor	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	24	34	20	0	9	27	72	0	7	406	1
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	9.6	9.2	13.4
HCM LOS	A	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	2%	41%	0%	24%	0%	11%
Vol Thru, %	98%	59%	0%	76%	0%	84%
Vol Right, %	0%	0%	100%	0%	100%	4%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	332	46	16	29	58	179
LT Vol	6	19	0	7	0	20
Through Vol	325	27	0	22	0	151
RT Vol	1	0	16	0	58	8
Lane Flow Rate	415	58	20	36	72	224
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.544	0.104	0.031	0.064	0.112	0.307
Departure Headway (Hd)	4.721	6.518	5.595	6.385	5.55	4.936
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	755	553	643	564	650	718
Service Time	2.802	4.223	3.299	4.089	3.253	3.031
HCM Lane V/C Ratio	0.55	0.105	0.031	0.064	0.111	0.312
HCM Control Delay	13.4	10	8.5	9.5	9	10.2
HCM Lane LOS	B	A	A	A	A	B
HCM 95th-tile Q	3.3	0.3	0.1	0.2	0.4	1.3

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	20	151	8
Peak Hour Factor	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	25	189	10
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	10.2
HCM LOS	B

Lane

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	155	695	15	4	1057	113	14	45	18	79	14	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	245		0	220		75	50		50	200		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	100			120			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		861			839			831			716	
Travel Time (s)		13.0			12.7			16.2			19.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		
Detector Phase	5	2		1	6	6	8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (s)	22.0	64.0		11.0	53.0	53.0	21.0	21.0	21.0	21.0	21.0	
Total Split (%)	22.9%	66.7%		11.5%	55.2%	55.2%	21.9%	21.9%	21.9%	21.9%	21.9%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max		None	C-Max	C-Max	Max	Max	Max	Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 42 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 15: Day St. & Alessandro Bl.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	155	695	15	4	1057	113	14	45	18	79	14	70
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	165	739	16	4	1124	120	15	48	19	84	15	74
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	200	3537	76	13	2071	927	244	330	280	281	48	239
Arrive On Green	0.11	0.69	0.69	0.01	0.59	0.59	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1774	5123	111	1774	3539	1583	1303	1863	1583	1329	274	1351
Grp Volume(v), veh/h	165	489	266	4	1124	120	15	48	19	84	0	89
Grp Sat Flow(s),veh/h/ln	1774	1695	1843	1774	1770	1583	1303	1863	1583	1329	0	1624
Q Serve(g_s), s	8.7	5.0	5.0	0.2	18.5	3.3	1.0	2.1	1.0	5.5	0.0	4.6
Cycle Q Clear(g_c), s	8.7	5.0	5.0	0.2	18.5	3.3	5.6	2.1	1.0	7.6	0.0	4.6
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.83
Lane Grp Cap(c), veh/h	200	2341	1273	13	2071	927	244	330	280	281	0	288
V/C Ratio(X)	0.82	0.21	0.21	0.31	0.54	0.13	0.06	0.15	0.07	0.30	0.00	0.31
Avail Cap(c_a), veh/h	333	2341	1273	129	2071	927	244	330	280	281	0	288
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.7	5.4	5.4	47.4	12.1	8.9	36.8	33.4	32.9	36.6	0.0	34.4
Incr Delay (d2), s/veh	8.3	0.2	0.4	12.6	1.0	0.3	0.5	0.9	0.5	2.7	0.0	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	2.4	2.6	0.2	9.3	1.5	0.4	1.2	0.5	2.2	0.0	2.3
LnGrp Delay(d),s/veh	49.9	5.6	5.7	60.0	13.1	9.2	37.3	34.3	33.4	39.3	0.0	37.2
LnGrp LOS	D	A	A	E	B	A	D	C	C	D		D
Approach Vol, veh/h		920			1248			82			173	
Approach Delay, s/veh		13.6			12.9			34.6			38.2	
Approach LOS		B			B			C			D	

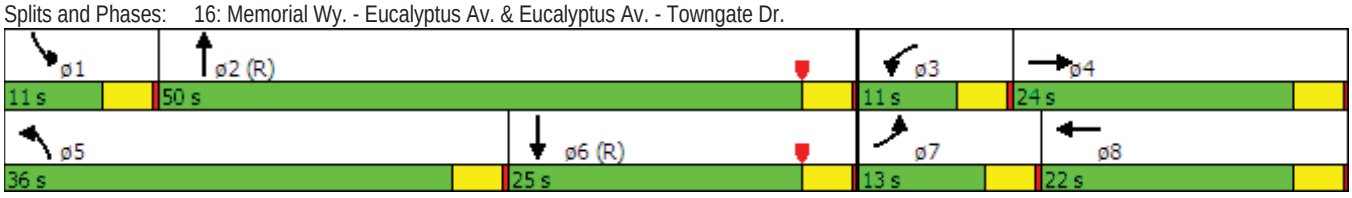
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	70.3		21.0	14.8	60.2		21.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	60.0		17.0	18.0	49.0		17.0
Max Q Clear Time (g_c+I1), s	2.2	7.0		9.6	10.7	20.5		7.6
Green Ext Time (p_c), s	0.0	20.0		0.6	0.2	15.4		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	15.7
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	190	134	9	206	30	253	160	15	14	82	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		0	150		0	200		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	13.0	24.0		11.0	22.0		36.0	50.0		11.0	25.0	
Total Split (%)	13.5%	25.0%		11.5%	22.9%		37.5%	52.1%		11.5%	26.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	39	190	134	9	206	30	253	160	15	14	82	42
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	42	207	146	10	224	33	275	174	16	15	89	46
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	457	214	30	463	66	317	2157	196	43	1162	565
Arrive On Green	0.05	0.13	0.13	0.02	0.10	0.10	0.18	0.66	0.66	0.02	0.50	0.50
Sat Flow, veh/h	1774	3390	1583	1774	4498	642	1774	3281	299	1774	2312	1123
Grp Volume(v), veh/h	42	207	146	10	167	90	275	93	97	15	67	68
Grp Sat Flow(s),veh/h/ln	1774	1695	1583	1774	1695	1749	1774	1770	1810	1774	1770	1665
Q Serve(g_s), s	2.2	5.4	8.4	0.5	4.5	4.7	14.5	1.8	1.9	0.8	1.9	2.0
Cycle Q Clear(g_c), s	2.2	5.4	8.4	0.5	4.5	4.7	14.5	1.8	1.9	0.8	1.9	2.0
Prop In Lane	1.00		1.00	1.00		0.37	1.00		0.17	1.00		0.67
Lane Grp Cap(c), veh/h	87	457	214	30	349	180	317	1163	1190	43	890	837
V/C Ratio(X)	0.48	0.45	0.68	0.33	0.48	0.50	0.87	0.08	0.08	0.35	0.08	0.08
Avail Cap(c_a), veh/h	166	706	330	129	636	328	591	1163	1190	129	890	837
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.5	38.3	39.6	46.6	40.6	40.7	38.3	6.0	6.0	46.1	12.3	12.4
Incr Delay (d2), s/veh	4.1	0.7	3.8	6.2	1.0	2.1	7.2	0.1	0.1	4.9	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	2.6	3.9	0.3	2.1	2.4	7.7	0.9	1.0	0.4	0.9	1.0
LnGrp Delay(d),s/veh	48.5	39.0	43.4	52.8	41.7	42.9	45.6	6.1	6.1	51.0	12.5	12.6
LnGrp LOS	D	D	D	D	D	D	D	A	A	D	B	B
Approach Vol, veh/h		395			267			465			150	
Approach Delay, s/veh		41.6			42.5			29.4			16.4	
Approach LOS		D			D			C			B	

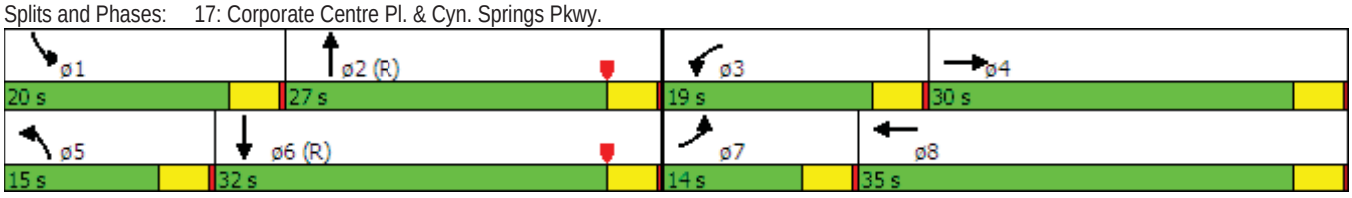
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	67.1	5.6	17.0	21.1	52.3	8.7	13.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	46.0	7.0	20.0	32.0	21.0	9.0	18.0
Max Q Clear Time (g_c+I1), s	2.8	3.9	2.5	10.4	16.5	4.0	4.2	6.7
Green Ext Time (p_c), s	0.0	1.8	0.0	2.5	0.7	1.5	0.0	2.8

Intersection Summary	
HCM 2010 Ctrl Delay	34.4
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	6	170	5	24	242	23	11	11	30	25	12	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	175		0	130		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			90			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		476			1120			987			205	
Travel Time (s)		8.1			19.1			16.8			4.7	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	14.0	30.0		19.0	35.0		15.0	27.0		20.0	32.0	
Total Split (%)	14.6%	31.3%		19.8%	36.5%		15.6%	28.1%		20.8%	33.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 91 (95%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 17: Corporate Centre Pl. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	170	5	24	242	23	11	11	30	25	12	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	7	198	6	28	281	27	13	13	35	29	14	8
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	22	446	13	68	539	51	38	1182	1057	70	764	436
Arrive On Green	0.01	0.09	0.09	0.01	0.04	0.04	0.02	0.67	0.67	0.04	0.69	0.69
Sat Flow, veh/h	1774	5073	153	1774	4728	446	1774	1770	1583	1774	1114	637
Grp Volume(v), veh/h	7	132	72	28	200	108	13	13	35	29	0	22
Grp Sat Flow(s),veh/h/ln	1774	1695	1836	1774	1695	1784	1774	1770	1583	1774	0	1750
Q Serve(g_s), s	0.4	3.5	3.6	1.5	5.6	5.7	0.7	0.2	0.7	1.5	0.0	0.4
Cycle Q Clear(g_c), s	0.4	3.5	3.6	1.5	5.6	5.7	0.7	0.2	0.7	1.5	0.0	0.4
Prop In Lane	1.00		0.08	1.00		0.25	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	22	298	162	68	386	203	38	1182	1057	70	0	1200
V/C Ratio(X)	0.32	0.44	0.45	0.41	0.52	0.53	0.34	0.01	0.03	0.42	0.00	0.02
Avail Cap(c_a), veh/h	185	918	497	277	1095	576	203	1182	1057	296	0	1200
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.0	41.5	41.6	46.3	43.6	43.7	46.3	5.3	5.4	45.0	0.0	4.8
Incr Delay (d2), s/veh	8.0	1.0	1.9	3.9	1.1	2.1	5.3	0.0	0.1	3.9	0.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.7	1.9	0.8	2.7	2.9	0.4	0.1	0.3	0.8	0.0	0.2
LnGrp Delay(d),s/veh	55.0	42.6	43.5	50.2	44.7	45.8	51.6	5.4	5.5	49.0	0.0	4.8
LnGrp LOS	E	D	D	D	D	D	D	A	A	D		A
Approach Vol, veh/h		211			336			61			51	
Approach Delay, s/veh		43.3			45.5			15.3			29.9	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	68.1	7.7	12.4	6.1	69.8	5.2	14.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	23.0	15.0	26.0	11.0	28.0	10.0	31.0
Max Q Clear Time (g_c+I1), s	3.5	2.7	3.5	5.6	2.7	2.4	2.4	7.7
Green Ext Time (p_c), s	0.0	0.3	0.0	2.9	0.0	0.3	0.0	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.8
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	64	4	23	68	12	14	47	22	14	24	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	170		0	100		0	130		0	135		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			45			60			60		
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		474			710			623			987	
Travel Time (s)		8.1			12.1			10.6			16.8	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	11	64	4	0	23	68	12	0	14	47	22
Peak Hour Factor	0.92	0.85	0.85	0.85	0.92	0.85	0.85	0.85	0.92	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	13	75	5	0	27	80	14	0	16	55	26
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	3
HCM Control Delay	8.2	8.2	8.2
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	42%	0%	100%	84%	0%	100%	65%	0%	100%
Vol Right, %	0%	0%	58%	0%	0%	16%	0%	0%	35%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	14	31	38	11	43	25	23	45	35	14	16
LT Vol	14	0	0	11	0	0	23	0	0	14	0
Through Vol	0	31	16	0	43	21	0	45	23	0	16
RT Vol	0	0	22	0	0	4	0	0	12	0	0
Lane Flow Rate	16	37	44	13	50	30	27	53	41	16	19
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.026	0.054	0.059	0.02	0.073	0.042	0.042	0.076	0.056	0.027	0.028
Departure Headway (Hd)	5.732	5.232	4.823	5.701	5.201	5.091	5.649	5.149	4.907	5.793	5.293
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	625	685	742	628	688	703	634	695	730	618	676
Service Time	3.464	2.964	2.555	3.435	2.935	2.825	3.382	2.882	2.639	3.526	3.026
HCM Lane V/C Ratio	0.026	0.054	0.059	0.021	0.073	0.043	0.043	0.076	0.056	0.026	0.028
HCM Control Delay	8.6	8.3	7.9	8.6	8.3	8	8.6	8.3	7.9	8.7	8.2
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	14	24	17
Peak Hour Factor	0.92	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	16	28	20
Number of Lanes	0	1	2	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	8.1
HCM LOS	A

Lane	SBLn3

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	75	0	0	51	3	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	50		0	0
Storage Lanes		0	0		1	1
Taper Length (ft)			40		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	135			597	203	
Travel Time (s)	2.3			10.2	4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	75	0	0	51	3	9
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	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	82	0	0	55	3	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	82	0	110	41
Stage 1	-	-	-	-	82	-
Stage 2	-	-	-	-	28	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1513	-	875	1021
Stage 1	-	-	-	-	932	-
Stage 2	-	-	-	-	991	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1513	-	875	1021
Mov Cap-2 Maneuver	-	-	-	-	834	-
Stage 1	-	-	-	-	932	-
Stage 2	-	-	-	-	991	-

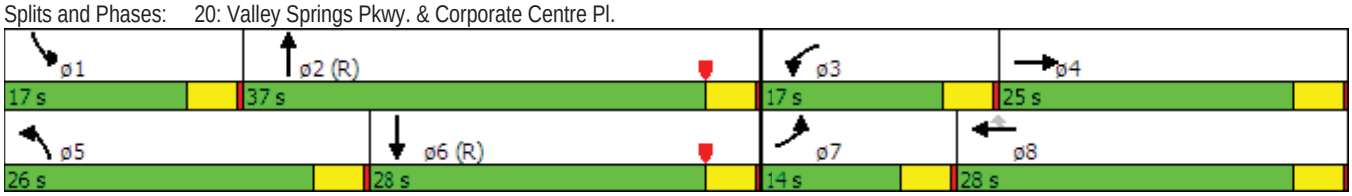
Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	834	1021	-	-	1513	-
HCM Lane V/C Ratio	0.004	0.01	-	-	-	-
HCM Control Delay (s)	9.3	8.6	-	-	0	-
HCM Lane LOS	A	A	-	-	A	-
HCM 95th %tile Q(veh)	0	0	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	8	34	31	15	2	89	256	44	24	194	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		70	140		50	150		0	120		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			40			40			40	
Link Distance (ft)		327			603			402			804	
Travel Time (s)		7.4			10.3			6.9			13.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	14.0	25.0		17.0	28.0	28.0	26.0	37.0		17.0	28.0	
Total Split (%)	14.6%	26.0%		17.7%	29.2%	29.2%	27.1%	38.5%		17.7%	29.2%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 47 (49%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Valley Springs Pkwy. & Corporate Centre Pl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	9	8	34	31	15	2	89	256	44	24	194	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	10	9	37	33	16	2	96	275	47	26	209	12
Adj No. of Lanes	1	1	0	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.93	0.93	0.93	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	2	2	2	2	2	2	2
Cap, veh/h	30	20	82	76	313	140	123	3040	503	65	3244	184
Arrive On Green	0.02	0.06	0.06	0.04	0.09	0.09	0.14	1.00	1.00	0.04	0.66	0.66
Sat Flow, veh/h	1774	319	1312	1774	3539	1583	1774	4397	727	1774	4925	279
Grp Volume(v), veh/h	10	0	46	33	16	2	96	210	112	26	143	78
Grp Sat Flow(s),veh/h/ln	1774	0	1631	1774	1770	1583	1774	1695	1734	1774	1695	1814
Q Serve(g_s), s	0.5	0.0	2.6	1.7	0.4	0.1	5.0	0.0	0.0	1.4	1.4	1.5
Cycle Q Clear(g_c), s	0.5	0.0	2.6	1.7	0.4	0.1	5.0	0.0	0.0	1.4	1.4	1.5
Prop In Lane	1.00		0.80	1.00		1.00	1.00		0.42	1.00		0.15
Lane Grp Cap(c), veh/h	30	0	102	76	313	140	123	2344	1199	65	2233	1195
V/C Ratio(X)	0.33	0.00	0.45	0.44	0.05	0.01	0.78	0.09	0.09	0.40	0.06	0.07
Avail Cap(c_a), veh/h	185	0	357	240	885	396	407	2344	1199	240	2233	1195
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	0.0	43.4	44.8	40.1	39.9	40.7	0.0	0.0	45.2	5.8	5.8
Incr Delay (d2), s/veh	6.2	0.0	3.1	3.9	0.1	0.0	10.4	0.1	0.2	4.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	1.3	0.9	0.2	0.1	2.8	0.0	0.1	0.7	0.7	0.8
LnGrp Delay(d),s/veh	52.8	0.0	46.4	48.7	40.1	40.0	51.0	0.1	0.2	49.2	5.9	5.9
LnGrp LOS	D		D	D	D	D	D	A	A	D	A	A
Approach Vol, veh/h		56			51			418			247	
Approach Delay, s/veh		47.6			45.7			11.8			10.5	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	70.4	8.1	10.0	10.6	67.2	5.6	12.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	33.0	13.0	21.0	22.0	24.0	10.0	24.0
Max Q Clear Time (g_c+I1), s	3.4	2.0	3.7	4.6	7.0	3.5	2.5	2.4
Green Ext Time (p_c), s	0.0	3.4	0.0	0.2	0.2	3.1	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	16.2
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	0	10	14	0	4	11	382	7	2	246	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	25		0	75		50
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	60			60			10			80		
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		252			253			418			402	
Travel Time (s)		5.7			5.8			7.1			6.9	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	0	10	14	0	4	11	382	7	2	246	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	0	13	19	0	5	15	509	9	3	328	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	574	889	171	680	891	259	343	0	0	519	0	0
Stage 1	341	341	-	543	543	-	-	-	-	-	-	-
Stage 2	233	548	-	137	348	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	451	281	717	392	280	631	802	-	-	663	-	-
Stage 1	560	637	-	410	518	-	-	-	-	-	-	-
Stage 2	688	515	-	783	633	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	437	272	717	376	271	631	802	-	-	663	-	-
Mov Cap-2 Maneuver	437	272	-	376	271	-	-	-	-	-	-	-
Stage 1	545	634	-	399	505	-	-	-	-	-	-	-
Stage 2	664	502	-	765	630	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.9	14.3	0.4	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	802	-	-	625	413	663	-	-
HCM Lane V/C Ratio	0.018	-	-	0.028	0.058	0.004	-	-
HCM Control Delay (s)	9.6	0.1	-	10.9	14.3	10.5	-	-
HCM Lane LOS	A	A	-	B	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.2	0	-	-

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (vph)	161	44	0	357	386	58	212
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	180		0	115	
Storage Lanes	1	1	1		0	1	
Taper Length (ft)	60		100			120	
Right Turn on Red		Yes			Yes		
Link Speed (mph)	40			40			40
Link Distance (ft)	609			576			418
Travel Time (s)	10.4			9.8			7.1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)							
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	3		5	2		1	6
Permitted Phases		8					
Detector Phase	3	8	5	2		1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	11.0	20.0	11.0	20.0		11.0	20.0
Total Split (s)	33.0	33.0	11.0	42.0		21.0	52.0
Total Split (%)	34.4%	34.4%	11.5%	43.8%		21.9%	54.2%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead	Lag		Lead	Lag
Lead-Lag Optimize?			Yes	Yes		Yes	Yes
Recall Mode	None	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 91 (95%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 22: Valley Springs Pkwy. & Gateway Dr.

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	161	44	0	357	386	58	212
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1900	1863	1863
Adj Flow Rate, veh/h	169	46		376	406	61	223
Adj No. of Lanes	1	1		3	0	1	3
Peak Hour Factor	0.95	0.95		0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	211	188		2365	1105	104	4057
Arrive On Green	0.12	0.12		1.00	1.00	0.02	0.26
Sat Flow, veh/h	1774	1583		3558	1583	1774	5253
Grp Volume(v), veh/h	169	46		376	406	61	223
Grp Sat Flow(s),veh/h/ln	1774	1583		1695	1583	1774	1695
Q Serve(g_s), s	8.9	2.5		0.0	0.0	3.3	3.1
Cycle Q Clear(g_c), s	8.9	2.5		0.0	0.0	3.3	3.1
Prop In Lane	1.00	1.00			1.00	1.00	
Lane Grp Cap(c), veh/h	211	188		2365	1105	104	4057
V/C Ratio(X)	0.80	0.24		0.16	0.37	0.59	0.05
Avail Cap(c_a), veh/h	536	478		2365	1105	314	4057
HCM Platoon Ratio	1.00	1.00		1.67	1.67	0.33	0.33
Upstream Filter(I)	1.00	1.00		0.95	0.95	1.00	1.00
Uniform Delay (d), s/veh	41.2	38.4		0.0	0.0	45.9	8.3
Incr Delay (d2), s/veh	6.9	0.7		0.1	0.9	5.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	1.1		0.0	0.3	1.8	1.5
LnGrp Delay(d),s/veh	48.1	39.1		0.1	0.9	51.1	8.3
LnGrp LOS	D	D		A	A	D	A
Approach Vol, veh/h	215			782			284
Approach Delay, s/veh	46.2			0.5			17.5
Approach LOS	D			A			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.6	71.0				80.6		15.4
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	17.0	38.0				48.0		29.0
Max Q Clear Time (g_c+I1), s	5.3	2.0				5.1		10.9
Green Ext Time (p_c), s	0.1	7.6				7.8		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	12.0
HCM 2010 LOS	B

Notes

User approved ignoring U-Turning movement.

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (vph)	108	14	0	728	356	45	328
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	195		100	150	
Storage Lanes	1	1	1		0	1	
Taper Length (ft)	60		100			80	
Right Turn on Red		Yes			Yes		
Link Speed (mph)	30			40			40
Link Distance (ft)	400			560			576
Travel Time (s)	9.1			9.5			9.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)							
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	8		5	2		1	6
Permitted Phases		8					
Detector Phase	8	8	5	2		1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	20.0	20.0	11.0	20.0		11.0	20.0
Total Split (s)	28.0	28.0	11.0	53.0		15.0	57.0
Total Split (%)	29.2%	29.2%	11.5%	55.2%		15.6%	59.4%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead	Lag		Lead	Lag
Lead-Lag Optimize?			Yes	Yes		Yes	Yes
Recall Mode	None	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 23: Valley Springs Pkwy. & Dwy. 5

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	108	14	0	728	356	45	328
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1900	1863	1863
Adj Flow Rate, veh/h	117	15		791	387	49	357
Adj No. of Lanes	1	1		3	0	1	3
Peak Hour Factor	0.92	0.92		0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	152	136		2496	1165	94	4226
Arrive On Green	0.09	0.09		0.74	0.74	0.11	1.00
Sat Flow, veh/h	1774	1583		3558	1583	1774	5253
Grp Volume(v), veh/h	117	15		791	387	49	357
Grp Sat Flow(s),veh/h/ln	1774	1583		1695	1583	1774	1695
Q Serve(g_s), s	6.2	0.8		7.7	8.2	2.5	0.0
Cycle Q Clear(g_c), s	6.2	0.8		7.7	8.2	2.5	0.0
Prop In Lane	1.00	1.00			1.00	1.00	
Lane Grp Cap(c), veh/h	152	136		2496	1165	94	4226
V/C Ratio(X)	0.77	0.11		0.32	0.33	0.52	0.08
Avail Cap(c_a), veh/h	444	396		2496	1165	203	4226
HCM Platoon Ratio	1.00	1.00		1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00		0.73	0.73	0.96	0.96
Uniform Delay (d), s/veh	43.0	40.5		4.4	4.4	41.7	0.0
Incr Delay (d2), s/veh	7.9	0.4		0.2	0.6	4.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.4		3.6	3.7	1.3	0.0
LnGrp Delay(d),s/veh	50.9	40.9		4.6	5.0	45.9	0.0
LnGrp LOS	D	D		A	A	D	A
Approach Vol, veh/h	132			1178			406
Approach Delay, s/veh	49.7			4.7			5.6
Approach LOS	D			A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.1	74.7				83.8		12.2
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	11.0	49.0				53.0		24.0
Max Q Clear Time (g_c+I1), s	4.5	10.2				2.0		8.2
Green Ext Time (p_c), s	0.0	13.6				14.5		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	8.4
HCM 2010 LOS	A

Notes

User approved ignoring U-Turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	323	7	5	203	12	2	1	2	11	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		609			244			257			287	
Travel Time (s)		10.4			4.2			5.8			6.5	
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
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	12	323	7	5	203	12	2	1	2	11	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	351	8	5	221	13	2	1	2	12	1	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	234	0	0	359	0	0	503	626	179	440	623	117
Stage 1	-	-	-	-	-	-	381	381	-	238	238	-
Stage 2	-	-	-	-	-	-	122	245	-	202	385	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1331	-	-	1196	-	-	451	399	833	501	401	913
Stage 1	-	-	-	-	-	-	613	612	-	744	707	-
Stage 2	-	-	-	-	-	-	869	702	-	781	609	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1331	-	-	1196	-	-	445	393	833	493	395	913
Mov Cap-2 Maneuver	-	-	-	-	-	-	445	393	-	493	395	-
Stage 1	-	-	-	-	-	-	607	606	-	737	704	-
Stage 2	-	-	-	-	-	-	864	699	-	770	603	-

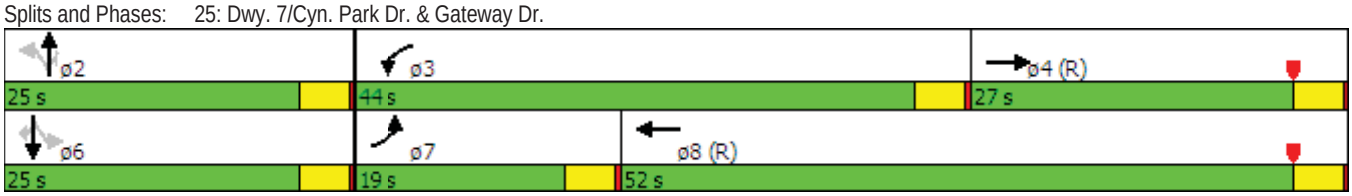
Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.2	11.9	12.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	530	1331	-	-	1196	-	-	483
HCM Lane V/C Ratio	0.01	0.01	-	-	0.005	-	-	0.027
HCM Control Delay (s)	11.9	7.7	-	-	8	-	-	12.7
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	176	18	169	277	28	5	12	51	20	36	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	150		0	100		0	150		0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		428			394			265			189	
Travel Time (s)		7.3			6.7			6.0			3.2	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0		11.0	20.0		20.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	19.0	27.0		44.0	52.0		25.0	25.0	25.0	25.0	25.0	25.0
Total Split (%)	19.8%	28.1%		45.8%	54.2%		26.0%	26.0%	26.0%	26.0%	26.0%	26.0%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		Max	Max	Max	Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 25: Dwy. 7/Cyn. Park Dr. & Gateway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	68	176	18	169	277	28	5	12	51	20	36	41
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	71	183	19	176	289	29	5	12	53	21	38	43
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	1733	178	215	1932	192	341	407	346	359	407	346
Arrive On Green	0.06	0.53	0.53	0.12	0.59	0.59	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1774	3241	333	1774	3251	324	1312	1863	1583	1331	1863	1583
Grp Volume(v), veh/h	71	99	103	176	156	162	5	12	53	21	38	43
Grp Sat Flow(s),veh/h/ln	1774	1770	1804	1774	1770	1806	1312	1863	1583	1331	1863	1583
Q Serve(g_s), s	3.8	2.6	2.7	9.3	3.8	3.8	0.3	0.5	2.6	1.2	1.6	2.1
Cycle Q Clear(g_c), s	3.8	2.6	2.7	9.3	3.8	3.8	1.9	0.5	2.6	1.7	1.6	2.1
Prop In Lane	1.00		0.18	1.00		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	110	947	965	215	1052	1073	341	407	346	359	407	346
V/C Ratio(X)	0.65	0.10	0.11	0.82	0.15	0.15	0.01	0.03	0.15	0.06	0.09	0.12
Avail Cap(c_a), veh/h	277	947	965	739	1052	1073	341	407	346	359	407	346
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.0	11.0	11.0	41.1	8.7	8.7	30.6	29.5	30.3	30.2	29.9	30.1
Incr Delay (d2), s/veh	6.2	0.2	0.2	7.4	0.3	0.3	0.1	0.1	0.9	0.3	0.5	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	1.4	1.4	5.0	1.9	2.0	0.1	0.3	1.2	0.5	0.9	1.0
LnGrp Delay(d),s/veh	50.2	11.2	11.2	48.6	9.0	9.0	30.7	29.6	31.2	30.5	30.4	30.9
LnGrp LOS	D	B	B	D	A	A	C	C	C	C	C	C
Approach Vol, veh/h		273			494			70			102	
Approach Delay, s/veh		21.4			23.1			30.9			30.6	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		25.0	15.7	55.3		25.0	9.9	61.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		21.0	40.0	23.0		21.0	15.0	48.0
Max Q Clear Time (g_c+I1), s		4.6	11.3	4.7		4.1	5.8	5.8
Green Ext Time (p_c), s		0.5	0.5	2.6		0.5	0.1	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	24.0
HCM 2010 LOS	C

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	1	216	479	1	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	25			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	0				60	
Link Speed (mph)		40	40		30	
Link Distance (ft)		394	226		243	
Travel Time (s)		6.7	3.9		5.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	1	216	479	1	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	25	-	-	-	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	1	235	521	1	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	522	0	-	0	641	261
Stage 1	-	-	-	-	521	-
Stage 2	-	-	-	-	120	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1041	-	-	-	407	738
Stage 1	-	-	-	-	561	-
Stage 2	-	-	-	-	892	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1041	-	-	-	407	738
Mov Cap-2 Maneuver	-	-	-	-	478	-
Stage 1	-	-	-	-	561	-
Stage 2	-	-	-	-	891	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1041	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	-	-
HCM Control Delay (s)	8.5	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	197	17	93	478	13	1	0	25	7	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	25		0	25		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	1			0			60			60		
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		226			318			265			243	
Travel Time (s)		3.9			5.4			6.0			5.5	
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
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	197	17	93	478	13	1	0	25	7	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	221	19	104	537	15	1	0	28	8	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	552	0	0	240	0	0	716	999	120	870	1000	276
Stage 1	-	-	-	-	-	-	238	238	-	753	753	-
Stage 2	-	-	-	-	-	-	478	761	-	117	247	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1014	-	-	1324	-	-	317	242	909	246	242	721
Stage 1	-	-	-	-	-	-	744	707	-	368	416	-
Stage 2	-	-	-	-	-	-	537	412	-	875	701	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1014	-	-	1324	-	-	297	222	909	224	222	721
Mov Cap-2 Maneuver	-	-	-	-	-	-	297	222	-	224	222	-
Stage 1	-	-	-	-	-	-	742	705	-	367	383	-
Stage 2	-	-	-	-	-	-	494	380	-	845	699	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.3	9.4	20.3
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	842	1014	-	-	1324	-	-	245
HCM Lane V/C Ratio	0.035	0.003	-	-	0.079	-	-	0.037
HCM Control Delay (s)	9.4	8.6	-	-	8	-	-	20.3
HCM Lane LOS	A	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0.3	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	61	36	58	83	23	17	17	35	13	32	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		50	110		100	100		50	0		50
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		710			938			284			207	
Travel Time (s)		12.1			16.0			4.8			4.7	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	3	61	36	0	58	83	23	0	17	17	35
Peak Hour Factor	0.92	0.84	0.84	0.84	0.92	0.84	0.84	0.84	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	4	73	43	0	69	99	27	0	20	20	42
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	2	3
HCM Control Delay	8.3	8.5	8.3
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	29%	0%
Vol Thru, %	0%	100%	14%	0%	100%	36%	0%	100%	55%	71%	0%
Vol Right, %	0%	0%	86%	0%	0%	64%	0%	0%	45%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	17	11	41	3	41	56	58	55	51	45	3
LT Vol	17	0	0	3	0	0	58	0	0	13	0
Through Vol	0	11	6	0	41	20	0	55	28	32	0
RT Vol	0	0	35	0	0	36	0	0	23	0	3
Lane Flow Rate	20	13	48	4	48	67	69	66	60	54	4
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.034	0.02	0.065	0.006	0.072	0.091	0.109	0.094	0.081	0.084	0.005
Departure Headway (Hd)	5.966	5.466	4.864	5.82	5.319	4.871	5.665	5.164	4.846	5.649	4.804
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	599	653	733	614	672	734	632	693	738	633	742
Service Time	3.714	3.214	2.612	3.563	3.062	2.613	3.405	2.904	2.586	3.397	2.552
HCM Lane V/C Ratio	0.033	0.02	0.065	0.007	0.071	0.091	0.109	0.095	0.081	0.085	0.005
HCM Control Delay	8.9	8.3	8	8.6	8.5	8.1	9.1	8.4	8	8.9	7.6
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0.2	0	0.2	0.3	0.4	0.3	0.3	0.3	0

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	13	32	3
Peak Hour Factor	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	15	38	4
Number of Lanes	0	0	1	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	8.8
HCM LOS	A

Lane

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	1	2	106	0	0	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	50	
Storage Lanes	1	0		0	0	
Taper Length (ft)	60				25	
Link Speed (mph)	30		40			40
Link Distance (ft)	223		216			336
Travel Time (s)	5.1		3.7			5.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	1	2	106	0	0	100
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	1	2	115	0	0	109

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	169	58	0	0	115	0
Stage 1	115	-	-	-	-	-
Stage 2	54	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	805	996	-	-	1472	-
Stage 1	897	-	-	-	-	-
Stage 2	962	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	805	996	-	-	1472	-
Mov Cap-2 Maneuver	788	-	-	-	-	-
Stage 1	897	-	-	-	-	-
Stage 2	962	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	915	1472	-
HCM Lane V/C Ratio	-	-	0.004	-	-
HCM Control Delay (s)	-	-	8.9	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	1	4	106	2	8	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	25	
Storage Lanes	1	0		0	1	
Taper Length (ft)	60				25	
Link Speed (mph)	30		40			40
Link Distance (ft)	223		336			284
Travel Time (s)	5.1		5.7			4.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	1	4	106	2	8	99
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	-	-	-	25	-
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	1	4	115	2	9	108

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	187	59	0	0	117	0
Stage 1	116	-	-	-	-	-
Stage 2	71	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	784	994	-	-	1469	-
Stage 1	896	-	-	-	-	-
Stage 2	943	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	779	994	-	-	1469	-
Mov Cap-2 Maneuver	772	-	-	-	-	-
Stage 1	896	-	-	-	-	-
Stage 2	937	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	0.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	940	1469	-
HCM Lane V/C Ratio	-	-	0.006	0.006	-
HCM Control Delay (s)	-	-	8.9	7.5	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	0	0	106	2	3	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	25	
Storage Lanes	1	0		0	1	
Taper Length (ft)	60				25	
Link Speed (mph)	30		40			40
Link Distance (ft)	219		189			216
Travel Time (s)	5.0		3.2			3.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	0	106	2	3	98
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	-	-	-	25	-
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	115	2	3	107

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	176	59	0	0	117	0
Stage 1	116	-	-	-	-	-
Stage 2	60	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	797	994	-	-	1469	-
Stage 1	896	-	-	-	-	-
Stage 2	955	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	795	994	-	-	1469	-
Mov Cap-2 Maneuver	782	-	-	-	-	-
Stage 1	896	-	-	-	-	-
Stage 2	953	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1469	-
HCM Lane V/C Ratio	-	-	-	0.002	-
HCM Control Delay (s)	-	-	0	7.5	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	221	116	137	186	34	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	50		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			60		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	244			428	257	
Travel Time (s)	4.2			7.3	5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	221	116	137	186	34	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	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	240	126	149	202	37	45

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	366	0	702	183
Stage 1	-	-	-	-	303	-
Stage 2	-	-	-	-	399	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1189	-	372	828
Stage 1	-	-	-	-	723	-
Stage 2	-	-	-	-	647	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1189	-	325	828
Mov Cap-2 Maneuver	-	-	-	-	434	-
Stage 1	-	-	-	-	723	-
Stage 2	-	-	-	-	566	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.6	12.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	587	-	-	1189	-
HCM Lane V/C Ratio	0.139	-	-	0.125	-
HCM Control Delay (s)	12.1	-	-	8.5	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	0.4	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	75	2	5	49	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	25		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	493			135	181	
Travel Time (s)	8.4			2.3	4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	75	2	5	49	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	-	-	25	-	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	82	2	5	53	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	84	0	121	42
Stage 1	-	-	-	-	83	-
Stage 2	-	-	-	-	38	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1511	-	862	1019
Stage 1	-	-	-	-	931	-
Stage 2	-	-	-	-	980	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1511	-	859	1019
Mov Cap-2 Maneuver	-	-	-	-	825	-
Stage 1	-	-	-	-	931	-
Stage 2	-	-	-	-	977	-

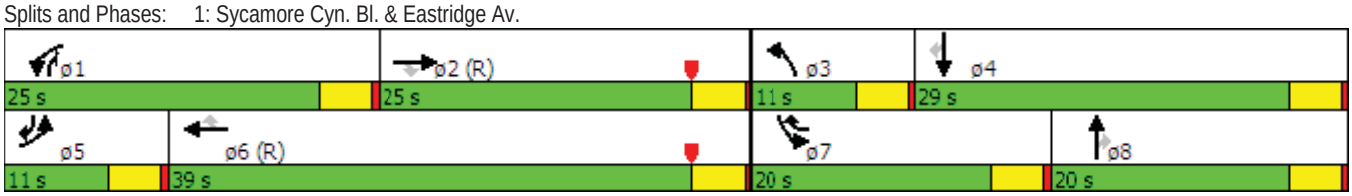
Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1511	-
HCM Lane V/C Ratio	-	-	-	0.004	-
HCM Control Delay (s)	0	-	-	7.4	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	69	155	61	463	91	262	34	202	120	293	310	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		150	310		200	360		320	275		110
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	120			120			120			200		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		910			577			817			952	
Travel Time (s)		15.5			9.8			12.4			14.4	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	11.0	11.0	20.0	11.0
Total Split (s)	11.0	25.0	25.0	25.0	39.0	20.0	11.0	20.0	25.0	20.0	29.0	11.0
Total Split (%)	12.2%	27.8%	27.8%	27.8%	43.3%	22.2%	12.2%	22.2%	27.8%	22.2%	32.2%	12.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	Max	None	None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 26 (29%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Sycamore Cyn. Bl. & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	69	155	61	463	91	262	34	202	120	293	310	20
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	78	174	0	520	102	294	38	227	135	329	348	22
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	2	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	230	1613	502	618	1522	873	164	723	608	417	983	545
Arrive On Green	0.07	0.32	0.00	0.18	0.43	0.43	0.05	0.20	0.20	0.12	0.28	0.28
Sat Flow, veh/h	3442	5085	1583	3442	3539	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	78	174	0	520	102	294	38	227	135	329	348	22
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1770	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	1.9	2.2	0.0	13.1	1.5	9.2	1.0	4.9	5.2	8.4	7.1	0.8
Cycle Q Clear(g_c), s	1.9	2.2	0.0	13.1	1.5	9.2	1.0	4.9	5.2	8.4	7.1	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	230	1613	502	618	1522	873	164	723	608	417	983	545
V/C Ratio(X)	0.34	0.11	0.00	0.84	0.07	0.34	0.23	0.31	0.22	0.79	0.35	0.04
Avail Cap(c_a), veh/h	268	1613	502	803	1522	873	268	723	608	612	983	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	21.7	0.0	35.7	15.1	11.1	41.3	30.5	18.7	38.4	26.0	19.6
Incr Delay (d2), s/veh	0.9	0.1	0.0	6.3	0.1	1.0	0.7	1.1	0.8	4.2	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.0	0.0	6.8	0.8	4.2	0.5	2.5	2.4	4.2	3.6	0.4
LnGrp Delay(d),s/veh	41.0	21.9	0.0	42.0	15.1	12.2	42.0	31.6	19.5	42.7	27.0	19.7
LnGrp LOS	D	C		D	B	B	D	C	B	D	C	B
Approach Vol, veh/h		252			916			400			699	
Approach Delay, s/veh		27.8			29.4			28.5			34.2	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.2	32.5	8.3	29.0	10.0	42.7	14.9	22.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	21.0	7.0	25.0	7.0	35.0	16.0	16.0
Max Q Clear Time (g_c+I1), s	15.1	4.2	3.0	9.1	3.9	11.2	10.4	7.2
Green Ext Time (p_c), s	1.0	2.4	0.0	3.5	0.0	2.7	0.6	2.6

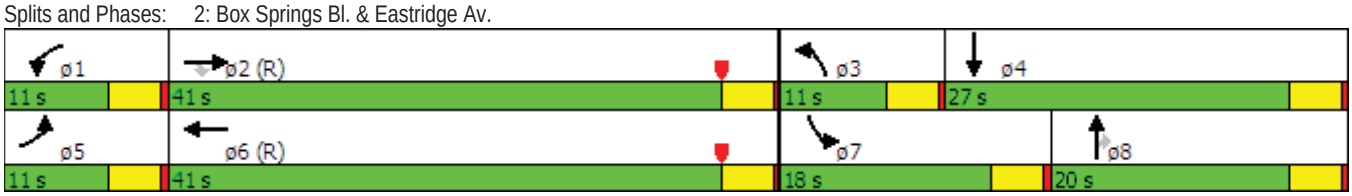
Intersection Summary	
HCM 2010 Ctrl Delay	30.5
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	574	3	40	780	70	18	3	34	104	2	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		80	150		0	75		160	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		760			700			315			411	
Travel Time (s)		13.0			11.9			7.2			9.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0		11.0	20.0	20.0	11.0	20.0	
Total Split (s)	11.0	41.0	41.0	11.0	41.0		11.0	20.0	20.0	18.0	27.0	
Total Split (%)	12.2%	45.6%	45.6%	12.2%	45.6%		12.2%	22.2%	22.2%	20.0%	30.0%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: Box Springs Bl. & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	574	3	40	780	70	18	3	34	104	2	37
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	12	592	3	41	804	72	19	3	35	107	2	38
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	36	1725	772	88	1699	152	52	387	329	137	452	405
Arrive On Green	0.02	0.49	0.49	0.03	0.35	0.35	0.03	0.21	0.21	0.08	0.26	0.26
Sat Flow, veh/h	1774	3539	1583	1774	3286	294	1774	1863	1583	1774	1770	1583
Grp Volume(v), veh/h	12	592	3	41	433	443	19	3	35	107	2	38
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1811	1774	1863	1583	1774	1770	1583
Q Serve(g_s), s	0.6	9.3	0.1	2.0	17.2	17.2	0.9	0.1	1.6	5.3	0.1	1.6
Cycle Q Clear(g_c), s	0.6	9.3	0.1	2.0	17.2	17.2	0.9	0.1	1.6	5.3	0.1	1.6
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	36	1725	772	88	915	936	52	387	329	137	452	405
V/C Ratio(X)	0.34	0.34	0.00	0.46	0.47	0.47	0.36	0.01	0.11	0.78	0.00	0.09
Avail Cap(c_a), veh/h	138	1725	772	138	915	936	138	387	329	276	452	405
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.5	14.2	11.8	42.3	19.8	19.8	42.9	28.3	28.9	40.8	25.0	25.6
Incr Delay (d2), s/veh	5.4	0.5	0.0	3.7	1.8	1.7	4.2	0.0	0.6	9.3	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	4.7	0.0	1.1	8.9	9.1	0.5	0.1	0.8	3.0	0.0	0.8
LnGrp Delay(d),s/veh	48.9	14.7	11.9	46.1	21.6	21.5	47.1	28.3	29.5	50.1	25.0	26.0
LnGrp LOS	D	B	B	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		607			917			57			147	
Approach Delay, s/veh		15.4			22.7			35.3			43.6	
Approach LOS		B			C			D			D	

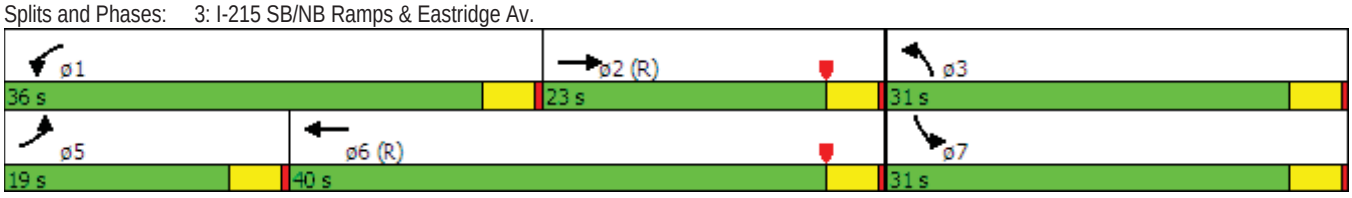
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	47.9	6.6	27.0	5.8	50.5	10.9	22.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	37.0	7.0	23.0	7.0	37.0	14.0	16.0
Max Q Clear Time (g_c+I1), s	4.0	11.3	2.9	3.6	2.6	19.2	7.3	3.6
Green Ext Time (p_c), s	0.0	10.4	0.0	0.3	0.0	8.7	0.1	0.2

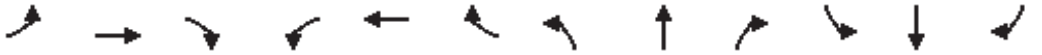
Intersection Summary	
HCM 2010 Ctrl Delay	22.3
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	161	418	0	869	450	0	137	0	0	721	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	275		0	0		0	0		0
Storage Lanes	0		0	0		0	2		0	2		0
Taper Length (ft)	90			190			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		241			359			784			672	
Travel Time (s)		4.1			6.1			15.3			13.1	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot			Prot		
Protected Phases	5	2		1	6		3			7		
Permitted Phases												
Detector Phase	5	2		1	6		3			7		
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0			7.0		
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0			11.0		
Total Split (s)	19.0	23.0		36.0	40.0		31.0			31.0		
Total Split (%)	21.1%	25.6%		40.0%	44.4%		34.4%			34.4%		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5			3.5		
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5			0.5		
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0			0.0		
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0			4.0		
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		None			None		

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 13 (14%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: I-215 SB/NB Ramps & Eastridge Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	161	418	0	869	450	0	137	0	0	721	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	0	0	1863	0	0
Adj Flow Rate, veh/h	166	431	0	896	464	0	141	0	0	743	0	0
Adj No. of Lanes	1	2	0	2	2	0	2	0	0	2	0	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0	2	2	0	2	0	0	2	0	0
Cap, veh/h	204	1132	0	1029	1783	0	853	0	0	853	0	0
Arrive On Green	0.04	0.11	0.00	0.20	0.34	0.00	0.25	0.00	0.00	0.25	0.00	0.00
Sat Flow, veh/h	1774	3632	0	3442	3632	0	3442	141		3442	743	
Grp Volume(v), veh/h	166	431	0	896	464	0	141	26.6		743	39.6	
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1721	1770	0	1721	C		1721	D	
Q Serve(g_s), s	8.4	10.2	0.0	22.7	8.6	0.0	2.9			18.6		
Cycle Q Clear(g_c), s	8.4	10.2	0.0	22.7	8.6	0.0	2.9			18.6		
Prop In Lane	1.00		0.00	1.00		0.00	1.00			1.00		
Lane Grp Cap(c), veh/h	204	1132	0	1029	1783	0	853			853		
V/C Ratio(X)	0.81	0.38	0.00	0.87	0.26	0.00	0.17			0.87		
Avail Cap(c_a), veh/h	296	1132	0	1224	1783	0	1032			1032		
HCM Platoon Ratio	0.33	0.33	1.00	0.67	0.67	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.99	0.99	0.00	1.00			1.00		
Uniform Delay (d), s/veh	42.3	31.9	0.0	34.3	17.6	0.0	26.5			32.5		
Incr Delay (d2), s/veh	10.6	1.0	0.0	6.1	0.3	0.0	0.1			7.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	4.7	5.2	0.0	11.7	4.3	0.0	1.4			9.7		
LnGrp Delay(d),s/veh	53.0	32.9	0.0	40.4	18.0	0.0	26.6			39.6		
LnGrp LOS	D	C		D	B		C			D		
Approach Vol, veh/h		597			1360							
Approach Delay, s/veh		38.5			32.7							
Approach LOS		D			C							

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3		5	6	7	
Phs Duration (G+Y+Rc), s	30.9	32.8	26.3		14.4	49.3	26.3	
Change Period (Y+Rc), s	4.0	4.0	4.0		4.0	4.0	4.0	
Max Green Setting (Gmax), s	32.0	19.0	27.0		15.0	36.0	27.0	
Max Q Clear Time (g_c+I1), s	24.7	12.2	4.9		10.4	10.6	20.6	
Green Ext Time (p_c), s	2.2	3.0	0.4		0.2	6.0	1.7	

Intersection Summary	
HCM 2010 Ctrl Delay	35.4
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	579	133	0	587	0	0	0	0	0	0	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		700			241			458			364	
Travel Time (s)		11.9			4.1			8.9			7.1	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	579	133	0	587	0	0	0	0	0	0	304
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	1082515456		-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	597	137	0	605	0	0	0	0	0	0	313

Major/Minor	Major1			Major2						Minor2		
Conflicting Flow All	605	0	-	597	0	0				844	1202	303
Stage 1	-	-	-	-	-	-				605	605	-
Stage 2	-	-	-	-	-	-				239	597	-
Critical Hdwy	4.14	-	-	5.34	-	-				6.29	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-				5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-				6.04	5.54	-
Follow-up Hdwy	2.22	-	-	3.12	-	-				3.67	4.02	3.32
Pot Cap-1 Maneuver	969	-	0	610	-	-				335	183	693
Stage 1	-	-	0	-	-	-				493	486	-
Stage 2	-	-	0	-	-	-				740	490	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	969	-	-	610	-	-				335	0	693
Mov Cap-2 Maneuver	-	-	-	-	-	-				410	0	-
Stage 1	-	-	-	-	-	-				493	0	-
Stage 2	-	-	-	-	-	-				740	0	-

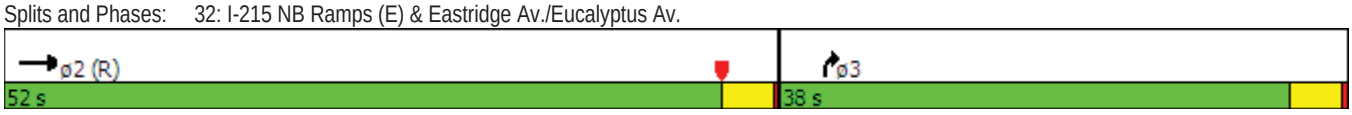
Approach	EB	WB	SB
HCM Control Delay, s	0	0	14.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	969	-	610	-	-	693
HCM Lane V/C Ratio	-	-	-	-	-	0.452
HCM Control Delay (s)	0	-	0	-	-	14.4
HCM Lane LOS	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0	-	0	-	-	2.4

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1139	0	0	0	0	652
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Right Turn on Red		Yes				Yes
Link Speed (mph)	30			40	30	
Link Distance (ft)	100			131	592	
Travel Time (s)	2.3			2.2	13.5	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA					Prot
Protected Phases	2					3
Permitted Phases						
Detector Phase	2					3
Switch Phase						
Minimum Initial (s)	7.0					7.0
Minimum Split (s)	20.0					11.0
Total Split (s)	52.0					38.0
Total Split (%)	57.8%					42.2%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	0.5					0.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	4.0					4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max					None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	

Splits and Phases: 32: I-215 NB Ramps (E) & Eastridge Av./Eucalyptus Av.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	1139	0	0	0	0	652
Number	2	12			3	18
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)		1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0			0	1863
Adj Flow Rate, veh/h	1174	0			0	672
Adj No. of Lanes	2	0			0	2
Peak Hour Factor	0.97	0.97			0.97	0.97
Percent Heavy Veh, %	2	0			0	2
Cap, veh/h	3382	0			0	0
Arrive On Green	0.96	0.00			0.00	0.00
Sat Flow, veh/h	3725	0			0	
Grp Volume(v), veh/h	1174	0			0.0	
Grp Sat Flow(s),veh/h/ln	1770	0				
Q Serve(g_s), s	2.0	0.0				
Cycle Q Clear(g_c), s	2.0	0.0				
Prop In Lane		0.00				
Lane Grp Cap(c), veh/h	3382	0				
V/C Ratio(X)	0.35	0.00				
Avail Cap(c_a), veh/h	3382	0				
HCM Platoon Ratio	1.00	1.00				
Upstream Filter(I)	1.00	0.00				
Uniform Delay (d), s/veh	0.1	0.0				
Incr Delay (d2), s/veh	0.3	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile BackOfQ(50%),veh/ln	0.9	0.0				
LnGrp Delay(d),s/veh	0.4	0.0				
LnGrp LOS	A					
Approach Vol, veh/h	1174					
Approach Delay, s/veh	0.4					
Approach LOS	A					

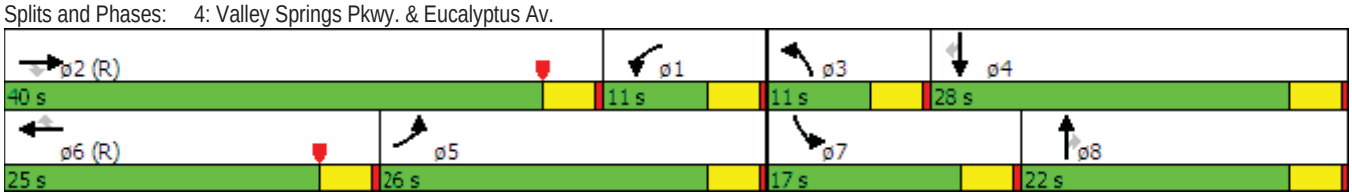
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		90.0						
Change Period (Y+Rc), s		4.0						
Max Green Setting (Gmax), s		48.0						
Max Q Clear Time (g_c+I1), s		4.0						
Green Ext Time (p_c), s		11.7						

Intersection Summary	
HCM 2010 Ctrl Delay	0.4
HCM 2010 LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	700	889	203	38	612	76	55	163	47	128	237	1190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	1		1	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0
Total Split (s)	26.0	40.0	40.0	11.0	25.0	25.0	11.0	22.0	22.0	17.0	28.0	28.0
Total Split (%)	28.9%	44.4%	44.4%	12.2%	27.8%	27.8%	12.2%	24.4%	24.4%	18.9%	31.1%	31.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	Max	None	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	700	889	203	38	612	76	55	163	47	128	237	1190
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	729	926	211	40	638	79	57	170	49	133	247	1240
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	906	1416	633	171	826	369	105	819	366	167	497	743
Arrive On Green	0.44	0.67	0.67	0.19	0.47	0.47	0.06	0.23	0.23	0.03	0.09	0.09
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	1774	3539	1583	1774	1863	2787
Grp Volume(v), veh/h	729	926	211	40	638	79	57	170	49	133	247	1240
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1774	1770	1583	1774	1863	1393
Q Serve(g_s), s	16.5	13.9	3.9	1.7	13.5	2.0	2.8	3.5	1.7	6.7	11.4	12.5
Cycle Q Clear(g_c), s	16.5	13.9	3.9	1.7	13.5	2.0	2.8	3.5	1.7	6.7	11.4	12.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	906	1416	633	171	826	369	105	819	366	167	497	743
V/C Ratio(X)	0.80	0.65	0.33	0.23	0.77	0.21	0.54	0.21	0.13	0.79	0.50	1.67
Avail Cap(c_a), veh/h	906	1416	633	171	826	369	138	819	366	256	497	743
HCM Platoon Ratio	1.67	1.67	1.67	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.76	0.76	0.76	0.86	0.86	0.86	1.00	1.00	1.00	0.82	0.82	0.82
Uniform Delay (d), s/veh	23.2	11.3	5.6	33.5	22.0	11.1	41.2	27.9	15.8	42.7	35.3	11.1
Incr Delay (d2), s/veh	4.1	1.8	1.1	0.6	6.0	1.1	4.3	0.6	0.8	7.7	2.9	305.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	7.0	1.8	0.9	7.1	1.0	1.5	1.8	0.8	3.7	6.3	36.4
LnGrp Delay(d),s/veh	27.3	13.1	6.6	34.1	28.1	12.2	45.5	28.5	16.6	50.4	38.2	316.9
LnGrp LOS	C	B	A	C	C	B	D	C	B	D	D	F
Approach Vol, veh/h		1866			757			276			1620	
Approach Delay, s/veh		17.9			26.7			29.9			252.5	
Approach LOS		B			C			C			F	

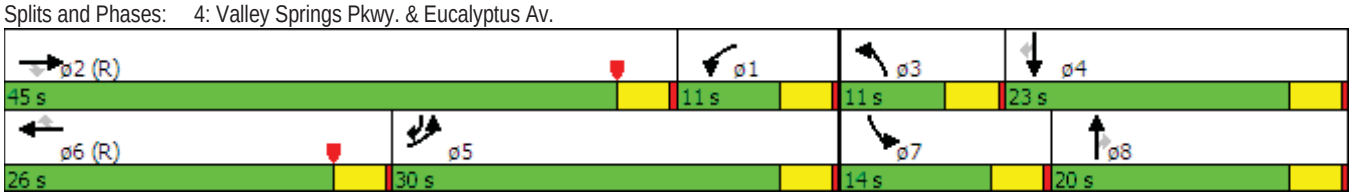
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	40.0	9.3	28.0	27.7	25.0	12.5	24.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	36.0	7.0	24.0	22.0	21.0	13.0	18.0
Max Q Clear Time (g_c+I1), s	3.7	15.9	4.8	14.5	18.5	15.5	8.7	5.5
Green Ext Time (p_c), s	1.0	7.0	0.0	5.6	1.1	2.0	0.1	6.8

Intersection Summary	
HCM 2010 Ctrl Delay	104.2
HCM 2010 LOS	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	700	889	203	38	612	76	55	163	47	128	237	1190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	1		1	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	30.0	45.0	45.0	11.0	26.0	26.0	11.0	20.0	20.0	14.0	23.0	30.0
Total Split (%)	33.3%	50.0%	50.0%	12.2%	28.9%	28.9%	12.2%	22.2%	22.2%	15.6%	25.6%	33.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	Max	None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	700	889	203	38	612	76	55	163	47	128	237	1190
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	729	926	211	40	638	79	57	170	49	133	247	1240
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1054	1612	721	169	865	387	105	629	281	166	396	1445
Arrive On Green	0.51	0.76	0.76	0.03	0.08	0.08	0.06	0.18	0.18	0.03	0.07	0.07
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	1774	3539	1583	1774	1863	2787
Grp Volume(v), veh/h	729	926	211	40	638	79	57	170	49	133	247	1240
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1774	1770	1583	1774	1863	1393
Q Serve(g_s), s	14.4	10.0	2.7	2.0	15.9	3.2	2.8	3.7	1.8	6.7	11.6	6.4
Cycle Q Clear(g_c), s	14.4	10.0	2.7	2.0	15.9	3.2	2.8	3.7	1.8	6.7	11.6	6.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1054	1612	721	169	865	387	105	629	281	166	396	1445
V/C Ratio(X)	0.69	0.57	0.29	0.24	0.74	0.20	0.54	0.27	0.17	0.80	0.62	0.86
Avail Cap(c_a), veh/h	1054	1612	721	169	865	387	138	629	281	197	396	1445
HCM Platoon Ratio	1.67	1.67	1.67	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.76	0.76	0.76	0.86	0.86	0.86	1.00	1.00	1.00	0.82	0.82	0.82
Uniform Delay (d), s/veh	18.8	7.1	3.3	40.4	38.5	19.1	41.2	32.0	18.9	42.8	38.4	10.5
Incr Delay (d2), s/veh	1.5	1.1	0.8	0.6	4.9	1.0	4.3	1.1	1.3	14.9	6.0	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	5.0	1.3	1.0	8.4	1.5	1.5	1.9	0.9	4.0	6.7	3.6
LnGrp Delay(d),s/veh	20.2	8.2	4.1	41.0	43.4	20.1	45.5	33.0	20.2	57.7	44.3	16.1
LnGrp LOS	C	A	A	D	D	C	D	C	C	E	D	B
Approach Vol, veh/h		1866			757			276			1620	
Approach Delay, s/veh		12.4			40.8			33.3			23.8	
Approach LOS		B			D			C			C	

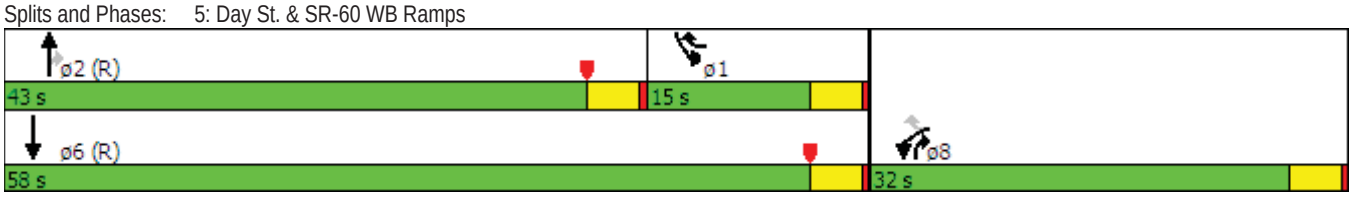
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	45.0	9.3	23.1	31.6	26.0	12.4	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	41.0	7.0	19.0	26.0	22.0	10.0	16.0
Max Q Clear Time (g_c+I1), s	4.0	12.0	4.8	13.6	16.4	17.9	8.7	5.7
Green Ext Time (p_c), s	1.0	7.9	0.0	3.6	2.1	1.6	0.0	5.9

Intersection Summary	
HCM 2010 Ctrl Delay	22.6
HCM 2010 LOS	C

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	562	142	838	554	75	646
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		175	200	
Storage Lanes	2	1		1	1	
Taper Length (ft)	60				80	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	30		40			40
Link Distance (ft)	307		957			795
Travel Time (s)	7.0		16.3			13.6
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	32.0	15.0	43.0	32.0	15.0	58.0
Total Split (%)	35.6%	16.7%	47.8%	35.6%	16.7%	64.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 14 (16%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: Day St. & SR-60 WB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	562	142	838	554	75	646
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	579	146	864	571	77	666
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	713	686	1534	1014	401	2491
Arrive On Green	0.21	0.21	0.87	0.87	0.23	0.70
Sat Flow, veh/h	3442	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	579	146	864	571	77	666
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1770
Q Serve(g_s), s	14.4	0.0	5.7	9.9	3.2	6.2
Cycle Q Clear(g_c), s	14.4	0.0	5.7	9.9	3.2	6.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	713	686	1534	1014	401	2491
V/C Ratio(X)	0.81	0.21	0.56	0.56	0.19	0.27
Avail Cap(c_a), veh/h	1071	851	1534	1014	401	2491
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.70	0.70	1.00	1.00
Uniform Delay (d), s/veh	34.0	15.9	3.8	1.8	28.2	4.9
Incr Delay (d2), s/veh	3.0	0.2	1.1	1.6	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	2.3	2.6	6.2	1.6	3.1
LnGrp Delay(d),s/veh	37.0	16.1	4.8	3.4	28.4	5.1
LnGrp LOS	D	B	A	A	C	A
Approach Vol, veh/h	725		1435			743
Approach Delay, s/veh	32.8		4.3			7.5
Approach LOS	C		A			A

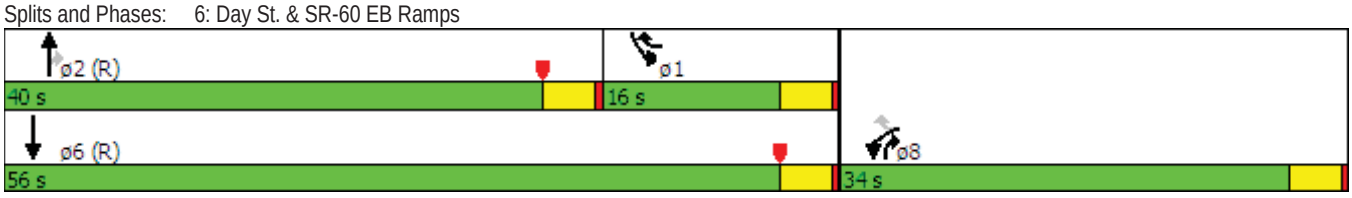
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	24.4	43.0				67.4		22.6
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	11.0	39.0				54.0		28.0
Max Q Clear Time (g_c+I1), s	5.2	11.9				8.2		16.4
Green Ext Time (p_c), s	2.2	9.1				5.1		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	12.2
HCM 2010 LOS	B

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	671	288	1104	911	155	1052
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	200		0	425	
Storage Lanes	2	0		1	1	
Taper Length (ft)	60				60	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		40			40
Link Distance (ft)	263		524			957
Travel Time (s)	5.1		8.9			16.3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	34.0	16.0	40.0	34.0	16.0	56.0
Total Split (%)	37.8%	17.8%	44.4%	37.8%	17.8%	62.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 88 (98%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Day St. & SR-60 EB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	671	288	1104	911	155	1052
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	685	294	1127	930	158	1073
Adj No. of Lanes	2	1	2	1	1	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	837	739	1416	1018	396	3397
Arrive On Green	0.24	0.24	0.80	0.80	0.45	1.00
Sat Flow, veh/h	3442	1583	3632	1583	1774	5253
Grp Volume(v), veh/h	685	294	1127	930	158	1073
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1695
Q Serve(g_s), s	16.9	0.0	15.8	36.0	5.4	0.0
Cycle Q Clear(g_c), s	16.9	0.0	15.8	36.0	5.4	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	837	739	1416	1018	396	3397
V/C Ratio(X)	0.82	0.40	0.80	0.91	0.40	0.32
Avail Cap(c_a), veh/h	1147	882	1416	1018	396	3397
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.56	0.56	0.88	0.88
Uniform Delay (d), s/veh	32.2	15.7	7.0	4.1	20.8	0.0
Incr Delay (d2), s/veh	3.4	0.3	2.7	8.5	0.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	4.8	7.7	25.1	2.7	0.1
LnGrp Delay(d),s/veh	35.6	16.1	9.7	12.6	21.4	0.2
LnGrp LOS	D	B	A	B	C	A
Approach Vol, veh/h	979		2057			1231
Approach Delay, s/veh	29.7		11.0			2.9
Approach LOS	C		B			A

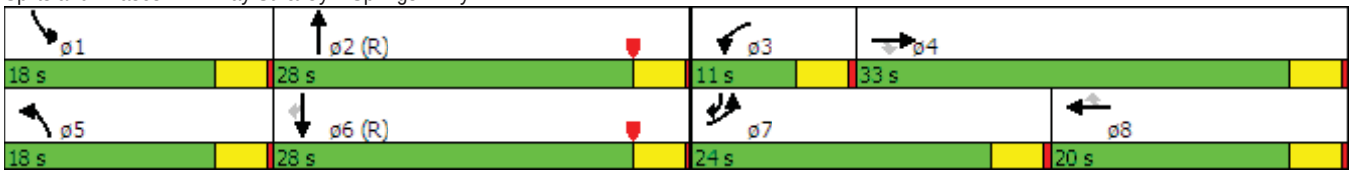
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	24.1	40.0				64.1		25.9
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	12.0	36.0				52.0		30.0
Max Q Clear Time (g_c+I1), s	7.4	38.0				2.0		18.9
Green Ext Time (p_c), s	2.9	0.0				9.8		3.0

Intersection Summary	
HCM 2010 Ctrl Delay	13.0
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	629	118	158	45	69	222	207	1164	58	203	881	484
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	145		0	165		0	170		200
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	95			100			120			80		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		1120			404			728			524	
Travel Time (s)		19.1			7.9			12.4			8.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												49%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	24.0	33.0	33.0	11.0	20.0	20.0	18.0	28.0		18.0	28.0	24.0
Total Split (%)	26.7%	36.7%	36.7%	12.2%	22.2%	22.2%	20.0%	31.1%		20.0%	31.1%	26.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Day St. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	629	118	158	45	69	222	207	1164	58	203	881	484
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	642	120	161	46	70	227	211	1188	59	207	890	500
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	719	600	510	94	310	263	246	1553	77	238	1723	1638
Arrive On Green	0.21	0.32	0.32	0.05	0.17	0.17	0.14	0.31	0.31	0.27	0.62	0.62
Sat Flow, veh/h	3442	1863	1583	1774	1863	1583	1774	4963	246	1774	5588	3167
Grp Volume(v), veh/h	642	120	161	46	70	227	211	811	436	207	890	500
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1863	1583	1774	1695	1819	1774	1863	1583
Q Serve(g_s), s	16.3	4.2	6.9	2.3	2.9	12.6	10.5	19.5	19.5	10.0	8.1	5.6
Cycle Q Clear(g_c), s	16.3	4.2	6.9	2.3	2.9	12.6	10.5	19.5	19.5	10.0	8.1	5.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	719	600	510	94	310	263	246	1061	569	238	1723	1638
V/C Ratio(X)	0.89	0.20	0.32	0.49	0.23	0.86	0.86	0.76	0.77	0.87	0.52	0.31
Avail Cap(c_a), veh/h	765	600	510	138	331	281	276	1061	569	276	1723	1638
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.84	0.84	0.84	1.00	1.00	1.00	0.87	0.87	0.87	0.88	0.88	0.88
Uniform Delay (d), s/veh	34.6	22.1	23.0	41.4	32.5	36.5	37.9	27.9	27.9	32.2	13.5	6.6
Incr Delay (d2), s/veh	10.7	0.1	0.3	3.9	0.4	22.0	18.7	4.6	8.3	20.2	1.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	2.2	3.0	1.2	1.5	7.1	6.4	9.8	11.1	6.2	4.1	2.5
LnGrp Delay(d),s/veh	45.4	22.2	23.3	45.3	32.9	58.6	56.6	32.5	36.2	52.4	14.5	7.0
LnGrp LOS	D	C	C	D	C	E	E	C	D	D	B	A
Approach Vol, veh/h		923			343			1458			1597	
Approach Delay, s/veh		38.5			51.5			37.1			17.0	
Approach LOS		D			D			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	32.2	8.8	33.0	16.5	31.7	22.8	19.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	24.0	7.0	29.0	14.0	24.0	20.0	16.0
Max Q Clear Time (g_c+I1), s	12.0	21.5	4.3	8.9	12.5	10.1	18.3	14.6
Green Ext Time (p_c), s	0.1	2.4	0.0	2.2	0.1	11.4	0.5	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	31.1
HCM 2010 LOS	C

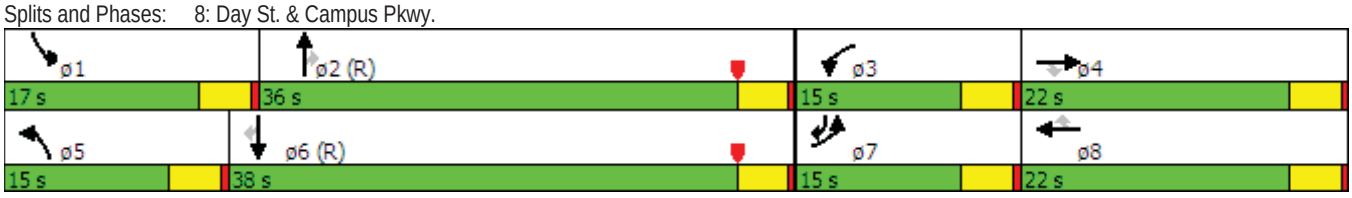
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	188	97	172	83	190	236	188	1006	92	247	786	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		50	200		0	130		50	190		0
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	60			120			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		938			519			1025			728	
Travel Time (s)		16.0			10.1			17.5			12.4	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	15.0	22.0	22.0	15.0	22.0	22.0	15.0	36.0	36.0	17.0	38.0	15.0
Total Split (%)	16.7%	24.4%	24.4%	16.7%	24.4%	24.4%	16.7%	40.0%	40.0%	18.9%	42.2%	16.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 23 (26%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Day St. & Campus Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	188	97	172	83	190	236	188	1006	92	247	786	61
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	196	101	179	86	198	246	196	1048	96	257	819	64
Adj No. of Lanes	2	1	1	1	2	1	2	3	1	2	3	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	274	360	306	122	645	289	277	2357	734	333	2440	886
Arrive On Green	0.08	0.19	0.19	0.07	0.18	0.18	0.03	0.15	0.15	0.19	0.96	0.96
Sat Flow, veh/h	3442	1863	1583	1774	3539	1583	3442	5085	1583	3442	5085	1583
Grp Volume(v), veh/h	196	101	179	86	198	246	196	1048	96	257	819	64
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1770	1583	1721	1695	1583	1721	1695	1583
Q Serve(g_s), s	5.0	4.2	9.3	4.3	4.4	13.5	5.1	16.9	4.7	6.4	0.9	0.1
Cycle Q Clear(g_c), s	5.0	4.2	9.3	4.3	4.4	13.5	5.1	16.9	4.7	6.4	0.9	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	274	360	306	122	645	289	277	2357	734	333	2440	886
V/C Ratio(X)	0.72	0.28	0.59	0.71	0.31	0.85	0.71	0.44	0.13	0.77	0.34	0.07
Avail Cap(c_a), veh/h	421	373	317	217	708	317	421	2357	734	497	2440	886
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.81	0.81	0.81	0.83	0.83	0.83
Uniform Delay (d), s/veh	40.4	31.0	33.0	41.0	31.9	35.6	42.8	27.6	22.4	35.3	1.0	0.7
Incr Delay (d2), s/veh	3.5	0.4	2.6	7.2	0.3	18.3	2.7	0.5	0.3	3.6	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	2.2	4.3	2.3	2.1	7.4	2.5	8.0	2.1	3.2	0.4	0.1
LnGrp Delay(d),s/veh	43.9	31.4	35.6	48.3	32.1	54.0	45.4	28.1	22.7	38.9	1.3	0.8
LnGrp LOS	D	C	D	D	C	D	D	C	C	D	A	A
Approach Vol, veh/h		476			530			1340			1140	
Approach Delay, s/veh		38.1			44.9			30.2			9.7	
Approach LOS		D			D			C			A	

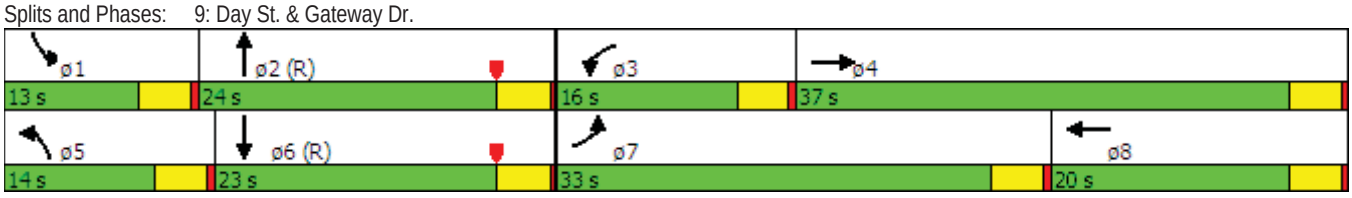
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	45.7	10.2	21.4	11.2	47.2	11.2	20.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	32.0	11.0	18.0	11.0	34.0	11.0	18.0
Max Q Clear Time (g_c+I1), s	8.4	18.9	6.3	11.3	7.1	2.9	7.0	15.5
Green Ext Time (p_c), s	0.4	9.5	0.1	1.9	0.2	17.0	0.2	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	26.8
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	395	129	180	116	110	180	114	540	117	201	559	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	100		0	190		400	260		0
Storage Lanes	1		0	1		0	1		1	2		0
Taper Length (ft)	0			120			60			165		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		318			585			592			1025	
Travel Time (s)		5.4			11.4			10.1			17.5	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	33.0	37.0		16.0	20.0		14.0	24.0		13.0	23.0	
Total Split (%)	36.7%	41.1%		17.8%	22.2%		15.6%	26.7%		14.4%	25.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 36 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

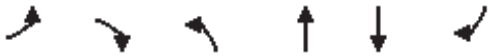
Splits and Phases: 9: Day St. & Gateway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	395	129	180	116	110	180	114	540	117	201	559	165
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	403	132	184	118	112	184	116	551	119	205	570	168
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	437	551	493	149	263	236	147	1451	307	282	1350	389
Arrive On Green	0.41	0.52	0.52	0.08	0.15	0.15	0.03	0.11	0.11	0.03	0.11	0.11
Sat Flow, veh/h	1774	1770	1583	1774	1770	1583	1774	4206	890	3442	3923	1130
Grp Volume(v), veh/h	403	132	184	118	112	184	116	442	228	205	491	247
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1695	1706	1721	1695	1663
Q Serve(g_s), s	19.4	3.7	6.2	5.9	5.2	10.1	5.9	10.9	11.2	5.3	12.1	12.5
Cycle Q Clear(g_c), s	19.4	3.7	6.2	5.9	5.2	10.1	5.9	10.9	11.2	5.3	12.1	12.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.52	1.00		0.68
Lane Grp Cap(c), veh/h	437	551	493	149	263	236	147	1169	588	282	1166	572
V/C Ratio(X)	0.92	0.24	0.37	0.79	0.43	0.78	0.79	0.38	0.39	0.73	0.42	0.43
Avail Cap(c_a), veh/h	572	649	581	237	315	281	197	1169	588	344	1166	572
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.94	0.94	0.94
Uniform Delay (d), s/veh	25.7	15.8	16.4	40.5	34.8	36.9	43.0	30.9	31.1	42.8	31.5	31.7
Incr Delay (d2), s/veh	17.5	0.2	0.5	9.1	1.1	11.2	14.1	0.9	1.9	5.5	1.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.4	1.8	2.7	3.3	2.6	5.1	3.5	5.3	5.6	2.8	5.9	6.1
LnGrp Delay(d),s/veh	43.1	16.0	16.8	49.6	35.9	48.0	57.1	31.9	33.0	48.3	32.6	33.9
LnGrp LOS	D	B	B	D	D	D	E	C	C	D	C	C
Approach Vol, veh/h		719			414			786			943	
Approach Delay, s/veh		31.4			45.2			35.9			36.4	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	35.0	11.5	32.0	11.5	35.0	26.2	17.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	20.0	12.0	33.0	10.0	19.0	29.0	16.0
Max Q Clear Time (g_c+I1), s	7.3	13.2	7.9	8.2	7.9	14.5	21.4	12.1
Green Ext Time (p_c), s	0.1	4.4	0.1	3.7	0.0	3.1	0.8	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	36.3
HCM 2010 LOS	D



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	41	36	24	922	879	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	80			0
Storage Lanes	1	0	1			0
Taper Length (ft)	60		30			
Link Speed (mph)	30			40	40	
Link Distance (ft)	364			180	592	
Travel Time (s)	8.3			3.1	10.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

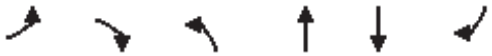
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	41	36	24	922	879	12
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	-	80	-	-	-
Veh in Median Storage, #	1	-	-	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	45	39	26	1002	955	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1515	484	968	0	-	0
Stage 1	962	-	-	-	-	-
Stage 2	553	-	-	-	-	-
Critical Hdwy	6.29	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	136	452	406	-	-	-
Stage 1	261	-	-	-	-	-
Stage 2	523	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	127	452	406	-	-	-
Mov Cap-2 Maneuver	205	-	-	-	-	-
Stage 1	261	-	-	-	-	-
Stage 2	490	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.7	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	406	-	275	-	-
HCM Lane V/C Ratio	0.064	-	0.304	-	-
HCM Control Delay (s)	14.5	-	23.7	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	1.2	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	12	35	2	934	910	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	25			0
Storage Lanes	1	0	1			0
Taper Length (ft)	60		25			
Link Speed (mph)	30			40	40	
Link Distance (ft)	364			453	180	
Travel Time (s)	8.3			7.7	3.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	12	35	2	934	910	5
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	-	25	-	-	-
Veh in Median Storage, #	1	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	38	2	1004	978	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1487	492	984	0	-	0
Stage 1	981	-	-	-	-	-
Stage 2	506	-	-	-	-	-
Critical Hdwy	6.29	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	142	447	398	-	-	-
Stage 1	254	-	-	-	-	-
Stage 2	553	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	141	447	398	-	-	-
Mov Cap-2 Maneuver	210	-	-	-	-	-
Stage 1	254	-	-	-	-	-
Stage 2	550	-	-	-	-	-

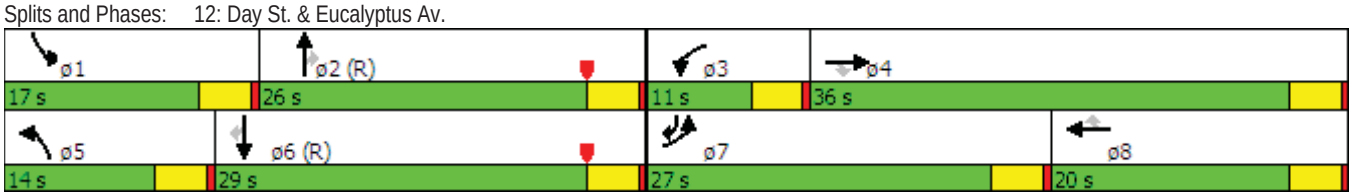
Approach	EB	NB	SB
HCM Control Delay, s	17.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	398	-	347	-	-
HCM Lane V/C Ratio	0.005	-	0.146	-	-
HCM Control Delay (s)	14.1	-	17.1	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	265	574	186	31	351	148	85	356	33	167	448	293
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		50	175		0	100		100	200		0
Storage Lanes	1		1	1		1	1		2	1		1
Taper Length (ft)	100			75			80			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			40	
Link Distance (ft)		2104			1174			390			453	
Travel Time (s)		35.9			20.0			7.6			7.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	27.0	36.0	36.0	11.0	20.0	20.0	14.0	26.0	26.0	17.0	29.0	27.0
Total Split (%)	30.0%	40.0%	40.0%	12.2%	22.2%	22.2%	15.6%	28.9%	28.9%	18.9%	32.2%	30.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 12 (13%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Day St. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	265	574	186	31	351	148	85	356	33	167	448	293
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	279	604	196	33	369	156	89	375	35	176	472	308
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	325	1042	466	78	549	246	123	1293	578	211	1468	946
Arrive On Green	0.06	0.10	0.10	0.04	0.16	0.16	0.07	0.37	0.37	0.12	0.41	0.41
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	279	604	196	33	369	156	89	375	35	176	472	308
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	14.0	14.7	10.5	1.6	8.9	8.3	4.4	6.8	1.3	8.7	8.1	8.7
Cycle Q Clear(g_c), s	14.0	14.7	10.5	1.6	8.9	8.3	4.4	6.8	1.3	8.7	8.1	8.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	325	1042	466	78	549	246	123	1293	578	211	1468	946
V/C Ratio(X)	0.86	0.58	0.42	0.43	0.67	0.64	0.72	0.29	0.06	0.83	0.32	0.33
Avail Cap(c_a), veh/h	453	1258	563	138	629	281	197	1293	578	256	1468	946
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.1	35.3	33.4	41.9	35.9	35.6	41.0	20.3	18.5	38.8	17.8	9.0
Incr Delay (d2), s/veh	9.3	0.4	0.5	3.7	2.3	3.8	7.8	0.6	0.2	17.7	0.6	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	7.3	4.7	0.9	4.5	3.9	2.4	3.4	0.6	5.3	4.1	4.0
LnGrp Delay(d),s/veh	50.5	35.7	33.9	45.6	38.2	39.4	48.8	20.8	18.7	56.5	18.4	10.0
LnGrp LOS	D	D	C	D	D	D	D	C	B	E	B	A
Approach Vol, veh/h		1079			558			499			956	
Approach Delay, s/veh		39.2			39.0			25.7			22.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	36.9	7.9	30.5	10.2	41.3	20.5	18.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	22.0	7.0	32.0	10.0	25.0	23.0	16.0
Max Q Clear Time (g_c+I1), s	10.7	8.8	3.6	16.7	6.4	10.7	16.0	10.9
Green Ext Time (p_c), s	0.1	5.5	0.0	6.6	0.1	5.7	0.5	3.1

Intersection Summary	
HCM 2010 Ctrl Delay	31.9
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	86	9	11	80	117	11	288	16	159	352	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	95		95	80		0	100		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	60			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			25			35	
Link Distance (ft)		861			839			1320			2260	
Travel Time (s)		16.8			16.3			36.0			44.0	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	40.0		19.0	48.0	
Total Split (%)	12.2%	22.2%		12.2%	22.2%	22.2%	12.2%	44.4%		21.1%	53.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 46 (51%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Day St. & Cottonwood Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	24	86	9	11	80	117	11	288	16	159	352	22
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	27	98	10	12	91	133	12	327	18	181	400	25
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	68	217	22	36	210	178	36	960	53	217	1130	71
Arrive On Green	0.04	0.13	0.13	0.02	0.11	0.11	0.02	0.55	0.55	0.12	0.65	0.65
Sat Flow, veh/h	1774	1663	170	1774	1863	1583	1774	1749	96	1774	1735	108
Grp Volume(v), veh/h	27	0	108	12	91	133	12	0	345	181	0	425
Grp Sat Flow(s),veh/h/ln	1774	0	1833	1774	1863	1583	1774	0	1846	1774	0	1844
Q Serve(g_s), s	1.3	0.0	4.9	0.6	4.1	7.3	0.6	0.0	9.3	9.0	0.0	9.4
Cycle Q Clear(g_c), s	1.3	0.0	4.9	0.6	4.1	7.3	0.6	0.0	9.3	9.0	0.0	9.4
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.05	1.00		0.06
Lane Grp Cap(c), veh/h	68	0	239	36	210	178	36	0	1013	217	0	1201
V/C Ratio(X)	0.40	0.00	0.45	0.34	0.43	0.75	0.34	0.00	0.34	0.83	0.00	0.35
Avail Cap(c_a), veh/h	138	0	326	138	331	281	138	0	1013	296	0	1201
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.3	0.0	36.1	43.5	37.3	38.7	43.5	0.0	11.3	38.6	0.0	7.1
Incr Delay (d2), s/veh	3.8	0.0	1.3	5.4	1.4	6.1	5.4	0.0	0.9	13.7	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	2.6	0.3	2.2	3.5	0.3	0.0	5.0	5.2	0.0	5.0
LnGrp Delay(d),s/veh	46.0	0.0	37.5	48.9	38.7	44.8	48.9	0.0	12.2	52.3	0.0	7.9
LnGrp LOS	D		D	D	D	D	D		B	D		A
Approach Vol, veh/h		135			236			357			606	
Approach Delay, s/veh		39.2			42.6			13.4			21.2	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	53.4	5.8	15.8	5.8	62.6	7.4	14.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	36.0	7.0	16.0	7.0	44.0	7.0	16.0
Max Q Clear Time (g_c+I1), s	11.0	11.3	2.6	6.9	2.6	11.4	3.3	9.3
Green Ext Time (p_c), s	0.2	5.2	0.0	1.0	0.0	5.5	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	24.7
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	41	13	9	22	24	12	267	5	33	332	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		861			839			634			1320	
Travel Time (s)		19.6			19.1			17.3			36.0	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	12
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	13	41	13	0	9	22	24	0	12	267	5
Peak Hour Factor	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	14	45	14	0	10	24	26	0	13	293	5
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	9.7	9.3	11.3
HCM LOS	A	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	4%	24%	0%	29%	0%	9%
Vol Thru, %	94%	76%	0%	71%	0%	87%
Vol Right, %	2%	0%	100%	0%	100%	5%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	284	54	13	31	24	383
LT Vol	12	13	0	9	0	33
Through Vol	267	41	0	22	0	332
RT Vol	5	0	13	0	24	18
Lane Flow Rate	312	59	14	34	26	421
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.416	0.108	0.023	0.062	0.042	0.547
Departure Headway (Hd)	4.803	6.539	5.702	6.598	5.736	4.677
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	743	551	631	546	628	766
Service Time	2.884	4.242	3.405	4.302	3.439	2.751
HCM Lane V/C Ratio	0.42	0.107	0.022	0.062	0.041	0.55
HCM Control Delay	11.3	10	8.5	9.7	8.7	13.3
HCM Lane LOS	B	A	A	A	A	B
HCM 95th-tile Q	2.1	0.4	0.1	0.2	0.1	3.4

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	33	332	18
Peak Hour Factor	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	36	365	20
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	13.3
HCM LOS	B

Lane

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	134	1193	5	4	805	131	11	20	7	203	33	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	245		0	220		75	50		50	200		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	100			120			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		861			839			831			716	
Travel Time (s)		13.0			12.7			16.2			19.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		
Detector Phase	5	2		1	6	6	8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (s)	20.0	49.0		11.0	40.0	40.0	30.0	30.0	30.0	30.0	30.0	
Total Split (%)	22.2%	54.4%		12.2%	44.4%	44.4%	33.3%	33.3%	33.3%	33.3%	33.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max		None	C-Max	C-Max	Max	Max	Max	Max	Max	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 15: Day St. & Alessandro Bl.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	134	1193	5	4	805	131	11	20	7	203	33	95
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	143	1269	5	4	856	139	12	21	7	216	35	101
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	178	2982	12	13	1690	756	361	538	457	466	122	353
Arrive On Green	0.10	0.57	0.57	0.01	0.48	0.48	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1774	5229	21	1774	3539	1583	1248	1863	1583	1377	424	1223
Grp Volume(v), veh/h	143	823	451	4	856	139	12	21	7	216	0	136
Grp Sat Flow(s),veh/h/ln	1774	1695	1859	1774	1770	1583	1248	1863	1583	1377	0	1647
Q Serve(g_s), s	7.1	12.4	12.4	0.2	15.0	4.5	0.7	0.7	0.3	12.0	0.0	5.8
Cycle Q Clear(g_c), s	7.1	12.4	12.4	0.2	15.0	4.5	6.4	0.7	0.3	12.8	0.0	5.8
Prop In Lane	1.00		0.01	1.00		1.00	1.00		1.00	1.00		0.74
Lane Grp Cap(c), veh/h	178	1934	1060	13	1690	756	361	538	457	466	0	476
V/C Ratio(X)	0.80	0.43	0.43	0.30	0.51	0.18	0.03	0.04	0.02	0.46	0.00	0.29
Avail Cap(c_a), veh/h	315	1934	1060	138	1690	756	361	538	457	466	0	476
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.6	11.0	11.0	44.4	16.2	13.5	27.3	23.0	22.9	27.6	0.0	24.8
Incr Delay (d2), s/veh	8.2	0.7	1.3	12.5	1.1	0.5	0.2	0.1	0.1	3.3	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	5.9	6.6	0.1	7.5	2.1	0.3	0.4	0.1	5.0	0.0	2.8
LnGrp Delay(d),s/veh	47.9	11.7	12.2	56.9	17.3	14.0	27.5	23.2	22.9	30.9	0.0	26.3
LnGrp LOS	D	B	B	E	B	B	C	C	C	C		C
Approach Vol, veh/h		1417			999			40			352	
Approach Delay, s/veh		15.5			17.0			24.4			29.1	
Approach LOS		B			B			C			C	

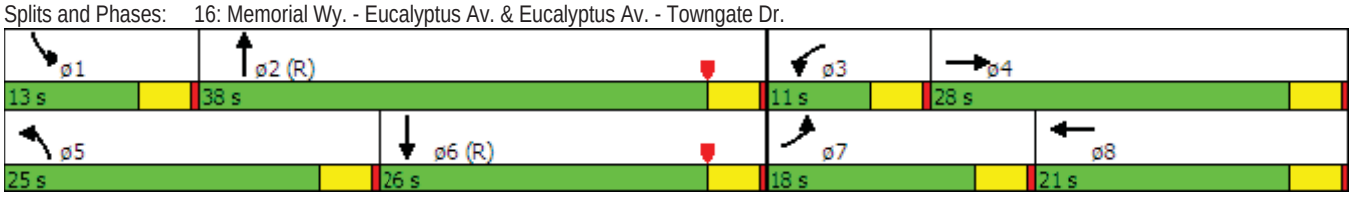
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	55.3		30.0	13.0	47.0		30.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	45.0		26.0	16.0	36.0		26.0
Max Q Clear Time (g_c+I1), s	2.2	14.4		14.8	9.1	17.0		8.4
Green Ext Time (p_c), s	0.0	18.2		1.3	0.2	13.3		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	17.9
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	115	299	253	26	258	61	171	265	20	53	271	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		0	150		0	200		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	18.0	28.0		11.0	21.0		25.0	38.0		13.0	26.0	
Total Split (%)	20.0%	31.1%		12.2%	23.3%		27.8%	42.2%		14.4%	28.9%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	115	299	253	26	258	61	171	265	20	53	271	81
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	122	318	269	28	274	65	182	282	21	56	288	86
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	743	347	69	711	161	221	1689	125	104	1187	348
Arrive On Green	0.09	0.22	0.22	0.04	0.17	0.17	0.12	0.51	0.51	0.06	0.44	0.44
Sat Flow, veh/h	1774	3390	1583	1774	4146	941	1774	3341	247	1774	2701	792
Grp Volume(v), veh/h	122	318	269	28	222	117	182	149	154	56	187	187
Grp Sat Flow(s),veh/h/ln	1774	1695	1583	1774	1695	1697	1774	1770	1819	1774	1770	1723
Q Serve(g_s), s	6.1	7.3	14.4	1.4	5.2	5.5	9.0	4.1	4.1	2.8	6.0	6.1
Cycle Q Clear(g_c), s	6.1	7.3	14.4	1.4	5.2	5.5	9.0	4.1	4.1	2.8	6.0	6.1
Prop In Lane	1.00		1.00	1.00		0.55	1.00		0.14	1.00		0.46
Lane Grp Cap(c), veh/h	154	743	347	69	581	291	221	894	919	104	778	757
V/C Ratio(X)	0.79	0.43	0.78	0.40	0.38	0.40	0.82	0.17	0.17	0.54	0.24	0.25
Avail Cap(c_a), veh/h	276	904	422	138	640	320	414	894	919	177	778	757
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.3	30.3	33.1	42.2	33.1	33.2	38.4	12.0	12.0	41.2	15.8	15.9
Incr Delay (d2), s/veh	8.8	0.4	7.2	3.7	0.4	0.9	7.5	0.4	0.4	4.3	0.7	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.4	7.0	0.7	2.5	2.7	4.9	2.1	2.2	1.5	3.1	3.1
LnGrp Delay(d),s/veh	49.1	30.7	40.3	45.9	33.5	34.1	45.9	12.4	12.4	45.5	16.5	16.6
LnGrp LOS	D	C	D	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		709			367			485			430	
Approach Delay, s/veh		37.5			34.6			25.0			20.4	
Approach LOS		D			C			C			C	

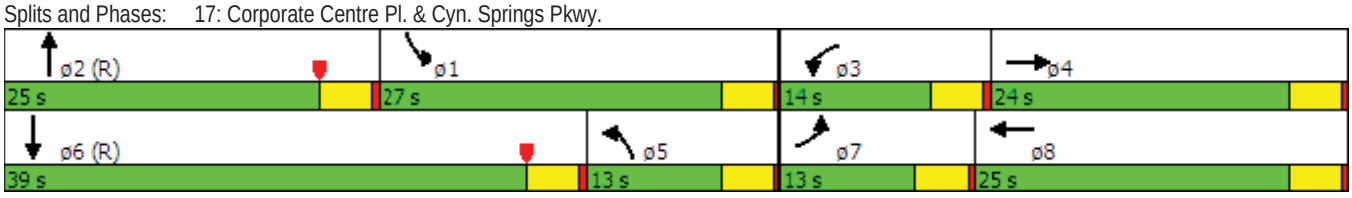
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	49.5	7.5	23.7	15.2	43.5	11.8	19.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	34.0	7.0	24.0	21.0	22.0	14.0	17.0
Max Q Clear Time (g_c+I1), s	4.8	6.1	3.4	16.4	11.0	8.1	8.1	7.5
Green Ext Time (p_c), s	0.0	3.9	0.0	3.3	0.3	3.2	0.1	3.9

Intersection Summary	
HCM 2010 Ctrl Delay	30.2
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	40	365	31	44	417	97	26	45	55	163	56	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	175		0	130		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			90			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		476			1120			987			205	
Travel Time (s)		8.1			19.1			16.8			4.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	13.0	24.0		14.0	25.0		13.0	25.0		27.0	39.0	
Total Split (%)	14.4%	26.7%		15.6%	27.8%		14.4%	27.8%		30.0%	43.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 11 (12%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 17: Corporate Centre Pl. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	365	31	44	417	97	26	45	55	163	56	32
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	42	384	33	46	439	102	27	47	58	172	59	34
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	90	810	69	94	715	161	374	413	369	650	432	249
Arrive On Green	0.05	0.17	0.17	0.02	0.06	0.06	0.21	0.23	0.23	0.37	0.39	0.39
Sat Flow, veh/h	1774	4777	405	1774	4151	937	1774	1770	1583	1774	1110	640
Grp Volume(v), veh/h	42	271	146	46	356	185	27	47	58	172	0	93
Grp Sat Flow(s),veh/h/ln	1774	1695	1791	1774	1695	1697	1774	1770	1583	1774	0	1750
Q Serve(g_s), s	2.1	6.5	6.6	2.3	9.2	9.6	1.1	1.9	2.6	6.1	0.0	3.1
Cycle Q Clear(g_c), s	2.1	6.5	6.6	2.3	9.2	9.6	1.1	1.9	2.6	6.1	0.0	3.1
Prop In Lane	1.00		0.23	1.00		0.55	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	90	575	304	94	584	292	374	413	369	650	0	680
V/C Ratio(X)	0.47	0.47	0.48	0.49	0.61	0.63	0.07	0.11	0.16	0.26	0.00	0.14
Avail Cap(c_a), veh/h	177	753	398	197	791	396	374	413	369	650	0	680
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.88	0.88	0.88	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.5	33.7	33.8	43.0	39.5	39.7	28.5	27.2	27.5	20.0	0.0	17.7
Incr Delay (d2), s/veh	3.8	0.6	1.2	3.4	0.9	2.0	0.1	0.6	0.9	0.2	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.1	3.4	1.2	4.4	4.7	0.5	1.0	1.2	3.0	0.0	1.6
LnGrp Delay(d),s/veh	45.3	34.3	35.0	46.4	40.4	41.7	28.6	27.7	28.4	20.2	0.0	18.2
LnGrp LOS	D	C	C	D	D	D	C	C	C	C		B
Approach Vol, veh/h		459			587			132			265	
Approach Delay, s/veh		35.5			41.3			28.2			19.5	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.0	25.0	8.8	19.3	23.0	39.0	8.6	19.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	21.0	10.0	20.0	9.0	35.0	9.0	21.0
Max Q Clear Time (g_c+I1), s	8.1	4.6	4.3	8.6	3.1	5.1	4.1	11.6
Green Ext Time (p_c), s	0.5	0.4	0.0	4.4	0.3	0.5	0.0	3.9

Intersection Summary	
HCM 2010 Ctrl Delay	34.3
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	167	19	69	142	58	9	75	70	43	86	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	170		0	100		0	130		0	135		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			45			60			60		
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		474			710			623			987	
Travel Time (s)		8.1			12.1			10.6			16.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	22	167	19	0	69	142	58	0	9	75	70
Peak Hour Factor	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	24	180	20	0	74	153	62	0	10	81	75
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	3
HCM Control Delay	10.2	10	9.9
HCM LOS	B	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	26%	0%	100%	75%	0%	100%	45%	0%	100%
Vol Right, %	0%	0%	74%	0%	0%	25%	0%	0%	55%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	9	50	95	22	111	75	69	95	105	43	57
LT Vol	9	0	0	22	0	0	69	0	0	43	0
Through Vol	0	50	25	0	111	56	0	95	47	0	57
RT Vol	0	0	70	0	0	19	0	0	58	0	0
Lane Flow Rate	10	54	102	24	120	80	74	102	113	46	62
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.019	0.096	0.168	0.044	0.207	0.135	0.136	0.172	0.179	0.089	0.11
Departure Headway (Hd)	6.926	6.426	5.91	6.713	6.213	6.035	6.591	6.091	5.705	6.903	6.403
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	517	558	606	533	577	593	544	588	629	519	559
Service Time	4.669	4.169	3.654	4.455	3.955	3.777	4.333	3.833	3.447	4.648	4.148
HCM Lane V/C Ratio	0.019	0.097	0.168	0.045	0.208	0.135	0.136	0.173	0.18	0.089	0.111
HCM Control Delay	9.8	9.9	9.9	9.8	10.6	9.7	10.4	10.1	9.7	10.3	9.9
HCM Lane LOS	A	A	A	A	B	A	B	B	A	B	A
HCM 95th-tile Q	0.1	0.3	0.6	0.1	0.8	0.5	0.5	0.6	0.6	0.3	0.4

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	43	86	28
Peak Hour Factor	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	46	92	30
Number of Lanes	0	1	2	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	9.9
HCM LOS	A

Lane	SBLn3

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	146	0	0	175	3	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	50		0	0
Storage Lanes		0	0		1	1
Taper Length (ft)			40		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	135			597	203	
Travel Time (s)	2.3			10.2	4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	146	0	0	175	3	8
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	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	159	0	0	190	3	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	159	0	254	79
Stage 1	-	-	-	-	159	-
Stage 2	-	-	-	-	95	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1418	-	713	965
Stage 1	-	-	-	-	853	-
Stage 2	-	-	-	-	918	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1418	-	713	965
Mov Cap-2 Maneuver	-	-	-	-	727	-
Stage 1	-	-	-	-	853	-
Stage 2	-	-	-	-	918	-

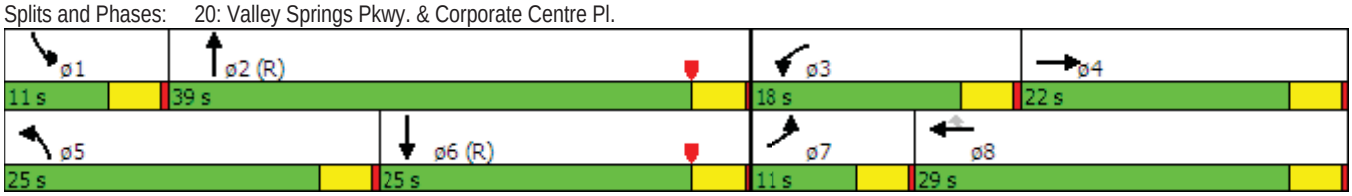
Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	727	965	-	-	1418	-
HCM Lane V/C Ratio	0.004	0.009	-	-	-	-
HCM Control Delay (s)	10	8.8	-	-	0	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0	0	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	41	110	108	57	3	184	418	69	38	424	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		70	140		50	150		0	120		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			40			40			40	
Link Distance (ft)		327			603			402			804	
Travel Time (s)		7.4			10.3			6.9			13.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	11.0	22.0		18.0	29.0	29.0	25.0	39.0		11.0	25.0	
Total Split (%)	12.2%	24.4%		20.0%	32.2%	32.2%	27.8%	43.3%		12.2%	27.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Valley Springs Pkwy. & Corporate Centre Pl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	32	41	110	108	57	3	184	418	69	38	424	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	33	42	113	111	59	3	190	431	71	39	437	31
Adj No. of Lanes	1	1	0	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	54	145	141	555	248	225	2532	408	86	2402	169
Arrive On Green	0.04	0.12	0.12	0.08	0.16	0.16	0.25	1.00	1.00	0.05	0.50	0.50
Sat Flow, veh/h	1774	447	1203	1774	3539	1583	1774	4416	711	1774	4852	341
Grp Volume(v), veh/h	33	0	155	111	59	3	190	329	173	39	304	164
Grp Sat Flow(s),veh/h/ln	1774	0	1650	1774	1770	1583	1774	1695	1737	1774	1695	1803
Q Serve(g_s), s	1.6	0.0	8.2	5.5	1.3	0.1	9.2	0.0	0.0	1.9	4.5	4.5
Cycle Q Clear(g_c), s	1.6	0.0	8.2	5.5	1.3	0.1	9.2	0.0	0.0	1.9	4.5	4.5
Prop In Lane	1.00		0.73	1.00		1.00	1.00		0.41	1.00		0.19
Lane Grp Cap(c), veh/h	78	0	199	141	555	248	225	1944	996	86	1679	892
V/C Ratio(X)	0.43	0.00	0.78	0.79	0.11	0.01	0.85	0.17	0.17	0.45	0.18	0.18
Avail Cap(c_a), veh/h	138	0	330	276	983	440	414	1944	996	138	1679	892
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.9	0.0	38.4	40.7	32.5	32.1	32.8	0.0	0.0	41.7	12.6	12.6
Incr Delay (d2), s/veh	3.7	0.0	6.4	9.2	0.1	0.0	8.5	0.2	0.4	3.7	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	4.1	3.1	0.6	0.1	5.0	0.1	0.1	1.0	2.1	2.3
LnGrp Delay(d),s/veh	45.6	0.0	44.8	49.9	32.6	32.1	41.2	0.2	0.4	45.4	12.8	13.1
LnGrp LOS	D		D	D	C	C	D	A	A	D	B	B
Approach Vol, veh/h		188			173			692			507	
Approach Delay, s/veh		44.9			43.7			11.5			15.4	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	55.6	11.2	14.9	15.4	48.6	7.9	18.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	35.0	14.0	18.0	21.0	21.0	7.0	25.0
Max Q Clear Time (g_c+I1), s	3.9	2.0	7.5	10.2	11.2	6.5	3.6	3.3
Green Ext Time (p_c), s	0.0	6.6	0.1	0.7	0.3	5.0	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	20.4
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	0	31	13	0	4	18	656	14	4	623	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	25		0	75		50
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	60			60			10			80		
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		252			253			418			402	
Travel Time (s)		5.7			5.8			7.1			6.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	11	0	31	13	0	4	18	656	14	4	623	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	0	32	13	0	4	18	669	14	4	636	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	956	1372	326	975	1372	342	651	0	0	684	0	0
Stage 1	652	652	-	713	713	-	-	-	-	-	-	-
Stage 2	304	720	-	262	659	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	271	145	572	264	145	558	575	-	-	554	-	-
Stage 1	346	462	-	314	434	-	-	-	-	-	-	-
Stage 2	624	430	-	661	459	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	257	137	572	238	137	558	575	-	-	554	-	-
Mov Cap-2 Maneuver	257	137	-	238	137	-	-	-	-	-	-	-
Stage 1	328	459	-	298	412	-	-	-	-	-	-	-
Stage 2	588	408	-	620	456	-	-	-	-	-	-	-

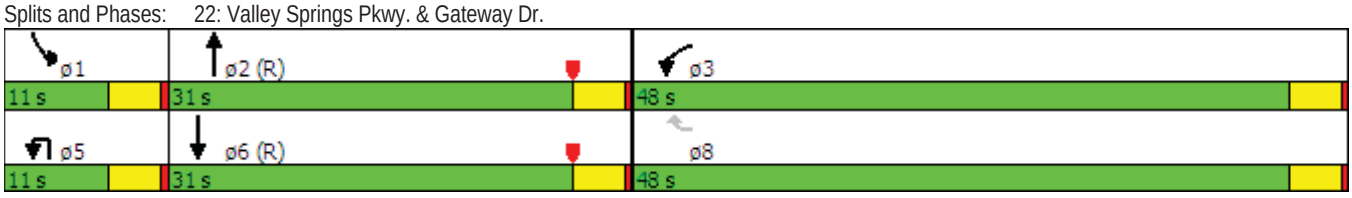
Approach	EB	WB	NB	SB
HCM Control Delay, s	14.2	19	0.5	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	575	-	-	433	275	554	-	-
HCM Lane V/C Ratio	0.032	-	-	0.099	0.063	0.007	-	-
HCM Control Delay (s)	11.5	0.2	-	14.2	19	11.5	-	-
HCM Lane LOS	B	A	-	B	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.2	0	-	-

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (vph)	511	87	0	601	210	45	622
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	180		0	115	
Storage Lanes	1	1	1		0	1	
Taper Length (ft)	60		100			120	
Right Turn on Red		Yes			Yes		
Link Speed (mph)	40			40			40
Link Distance (ft)	609			576			418
Travel Time (s)	10.4			9.8			7.1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Shared Lane Traffic (%)							
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	3		5	2		1	6
Permitted Phases		8					
Detector Phase	3	8	5	2		1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	11.0	20.0	11.0	20.0		11.0	20.0
Total Split (s)	48.0	48.0	11.0	31.0		11.0	31.0
Total Split (%)	53.3%	53.3%	12.2%	34.4%		12.2%	34.4%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead	Lag		Lead	Lag
Lead-Lag Optimize?			Yes	Yes		Yes	Yes
Recall Mode	None	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 22: Valley Springs Pkwy. & Gateway Dr.



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	511	87	0	601	210	45	622
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1900	1863	1863
Adj Flow Rate, veh/h	581	99		683	239	51	707
Adj No. of Lanes	1	1		3	0	1	3
Peak Hour Factor	0.88	0.88		0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	634	566		1694	584	99	2817
Arrive On Green	0.36	0.36		0.91	0.91	0.11	1.00
Sat Flow, veh/h	1774	1583		3905	1288	1774	5253
Grp Volume(v), veh/h	581	99		619	303	51	707
Grp Sat Flow(s),veh/h/ln	1774	1583		1695	1635	1774	1695
Q Serve(g_s), s	28.2	3.9		2.4	2.5	2.4	0.0
Cycle Q Clear(g_c), s	28.2	3.9		2.4	2.5	2.4	0.0
Prop In Lane	1.00	1.00			0.79	1.00	
Lane Grp Cap(c), veh/h	634	566		1537	741	99	2817
V/C Ratio(X)	0.92	0.18		0.40	0.41	0.51	0.25
Avail Cap(c_a), veh/h	867	774		1537	741	138	2817
HCM Platoon Ratio	1.00	1.00		2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00		0.93	0.93	1.00	1.00
Uniform Delay (d), s/veh	27.6	19.8		2.4	2.4	38.8	0.0
Incr Delay (d2), s/veh	11.5	0.1		0.7	1.6	4.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.7	1.7		1.2	1.3	1.3	0.1
LnGrp Delay(d),s/veh	39.2	20.0		3.1	4.0	42.8	0.2
LnGrp LOS	D	B		A	A	D	A
Approach Vol, veh/h	680			922			758
Approach Delay, s/veh	36.4			3.4			3.1
Approach LOS	D			A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.0	44.8				53.8		36.2
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	7.0	27.0				27.0		44.0
Max Q Clear Time (g_c+I1), s	4.4	4.5				2.0		30.2
Green Ext Time (p_c), s	0.0	11.4				12.0		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	12.8
HCM 2010 LOS	B

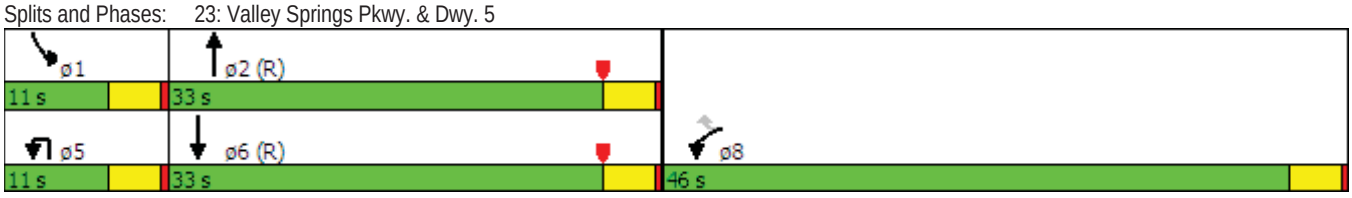
Notes

User approved ignoring U-Turning movement.

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (vph)	446	57	0	754	185	24	1108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	195		100	150	
Storage Lanes	1	1	1		0	1	
Taper Length (ft)	60		100			80	
Right Turn on Red		Yes			Yes		
Link Speed (mph)	30			40			40
Link Distance (ft)	400			560			576
Travel Time (s)	9.1			9.5			9.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)							
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	8		5	2		1	6
Permitted Phases		8					
Detector Phase	8	8	5	2		1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	20.0	20.0	11.0	20.0		11.0	20.0
Total Split (s)	46.0	46.0	11.0	33.0		11.0	33.0
Total Split (%)	51.1%	51.1%	12.2%	36.7%		12.2%	36.7%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead	Lag		Lead	Lag
Lead-Lag Optimize?			Yes	Yes		Yes	Yes
Recall Mode	None	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 23: Valley Springs Pkwy. & Dwy. 5



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	446	57	0	754	185	24	1108
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1900	1863	1863
Adj Flow Rate, veh/h	485	62		820	201	26	1204
Adj No. of Lanes	1	1		3	0	1	3
Peak Hour Factor	0.92	0.92		0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	537	480		2150	523	66	3093
Arrive On Green	0.30	0.30		0.53	0.53	0.07	1.00
Sat Flow, veh/h	1774	1583		4251	994	1774	5253
Grp Volume(v), veh/h	485	62		680	341	26	1204
Grp Sat Flow(s),veh/h/ln	1774	1583		1695	1687	1774	1695
Q Serve(g_s), s	23.6	2.6		10.7	10.8	1.3	0.0
Cycle Q Clear(g_c), s	23.6	2.6		10.7	10.8	1.3	0.0
Prop In Lane	1.00	1.00			0.59	1.00	
Lane Grp Cap(c), veh/h	537	480		1785	888	66	3093
V/C Ratio(X)	0.90	0.13		0.38	0.38	0.39	0.39
Avail Cap(c_a), veh/h	828	739		1785	888	138	3093
HCM Platoon Ratio	1.00	1.00		1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00		0.63	0.63	0.84	0.84
Uniform Delay (d), s/veh	30.1	22.8		12.6	12.6	40.7	0.0
Incr Delay (d2), s/veh	9.0	0.1		0.4	0.8	3.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.9	1.1		5.1	5.2	0.7	0.1
LnGrp Delay(d),s/veh	39.1	22.9		13.0	13.4	43.9	0.3
LnGrp LOS	D	C		B	B	D	A
Approach Vol, veh/h	547			1021			1230
Approach Delay, s/veh	37.3			13.2			1.2
Approach LOS	D			B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.3	51.4				58.7		31.3
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	7.0	29.0				29.0		42.0
Max Q Clear Time (g_c+I1), s	3.3	12.8				2.0		25.6
Green Ext Time (p_c), s	0.0	12.2				17.7		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	12.6
HCM 2010 LOS	B

Notes

User approved ignoring U-Turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	266	4	3	486	26	9	1	7	19	1	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		609			244			257			287	
Travel Time (s)		10.4			4.2			5.8			6.5	
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	10	266	4	3	486	26	9	1	7	19	1	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	74	74	74	74	74	74	74	74	74	74	74	74
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	359	5	4	657	35	12	1	9	26	1	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	692	0	0	365	0	0	726	1089	182	889	1074	346
Stage 1	-	-	-	-	-	-	389	389	-	682	682	-
Stage 2	-	-	-	-	-	-	337	700	-	207	392	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	899	-	-	1190	-	-	312	214	829	238	218	650
Stage 1	-	-	-	-	-	-	606	607	-	406	448	-
Stage 2	-	-	-	-	-	-	651	440	-	776	605	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	899	-	-	1190	-	-	293	210	829	231	214	650
Mov Cap-2 Maneuver	-	-	-	-	-	-	293	210	-	231	214	-
Stage 1	-	-	-	-	-	-	597	598	-	400	446	-
Stage 2	-	-	-	-	-	-	619	439	-	753	596	-

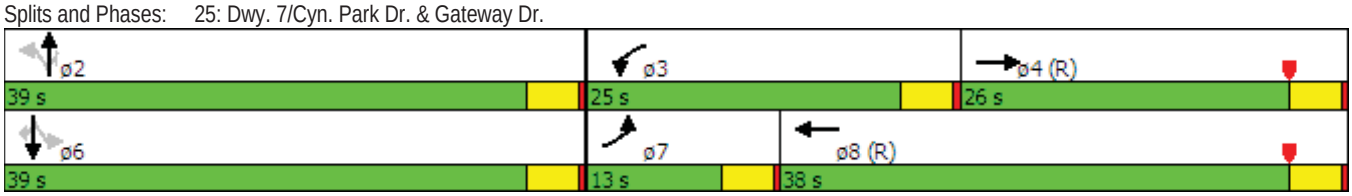
Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0	14.9	17.5
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	387	899	-	-	1190	-	-	344
HCM Lane V/C Ratio	0.059	0.015	-	-	0.003	-	-	0.161
HCM Control Delay (s)	14.9	9.1	-	-	8	-	-	17.5
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	360	9	88	269	43	23	46	212	44	20	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	150		0	100		0	150		0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		428			394			265			189	
Travel Time (s)		7.3			6.7			6.0			3.2	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0		11.0	20.0		20.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	13.0	26.0		25.0	38.0		39.0	39.0	39.0	39.0	39.0	39.0
Total Split (%)	14.4%	28.9%		27.8%	42.2%		43.3%	43.3%	43.3%	43.3%	43.3%	43.3%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		Max	Max	Max	Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 25: Dwy. 7/Cyn. Park Dr. & Gateway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	34	360	9	88	269	43	23	46	212	44	20	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	41	434	11	106	324	52	28	55	255	53	24	181
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	88	1413	36	137	1310	208	527	724	616	474	724	616
Arrive On Green	0.05	0.40	0.40	0.08	0.43	0.43	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1774	3527	89	1774	3060	486	1172	1863	1583	1065	1863	1583
Grp Volume(v), veh/h	41	217	228	106	186	190	28	55	255	53	24	181
Grp Sat Flow(s),veh/h/ln	1774	1770	1847	1774	1770	1777	1172	1863	1583	1065	1863	1583
Q Serve(g_s), s	2.0	7.6	7.6	5.3	6.0	6.2	1.4	1.7	10.6	3.0	0.7	7.1
Cycle Q Clear(g_c), s	2.0	7.6	7.6	5.3	6.0	6.2	2.1	1.7	10.6	4.6	0.7	7.1
Prop In Lane	1.00		0.05	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	88	709	740	137	757	760	527	724	616	474	724	616
V/C Ratio(X)	0.46	0.31	0.31	0.78	0.25	0.25	0.05	0.08	0.41	0.11	0.03	0.29
Avail Cap(c_a), veh/h	177	709	740	414	757	760	527	724	616	474	724	616
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.6	18.4	18.4	40.8	16.5	16.5	17.7	17.3	20.0	18.8	17.0	19.0
Incr Delay (d2), s/veh	3.7	1.1	1.1	9.0	0.8	0.8	0.2	0.2	2.1	0.5	0.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.9	4.1	2.9	3.1	3.2	0.5	0.9	5.0	0.9	0.4	3.3
LnGrp Delay(d),s/veh	45.3	19.5	19.5	49.8	17.2	17.3	17.9	17.5	22.1	19.3	17.1	20.2
LnGrp LOS	D	B	B	D	B	B	B	B	C	B	B	C
Approach Vol, veh/h		486			482			338			258	
Approach Delay, s/veh		21.7			24.4			21.0			19.7	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		39.0	10.9	40.1		39.0	8.5	42.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		35.0	21.0	22.0		35.0	9.0	34.0
Max Q Clear Time (g_c+I1), s		12.6	7.3	9.6		9.1	4.0	8.2
Green Ext Time (p_c), s		2.2	0.2	3.7		2.3	0.0	4.8

Intersection Summary	
HCM 2010 Ctrl Delay	22.1
HCM 2010 LOS	C

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	1	647	363	1	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	25			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	0				60	
Link Speed (mph)		40	40		30	
Link Distance (ft)		394	226		243	
Travel Time (s)		6.7	3.9		5.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	1	647	363	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	25	-	-	-	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	1	703	395	1	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	396	0	-	0	749	198
Stage 1	-	-	-	-	395	-
Stage 2	-	-	-	-	354	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1159	-	-	-	348	810
Stage 1	-	-	-	-	650	-
Stage 2	-	-	-	-	681	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1159	-	-	-	348	810
Mov Cap-2 Maneuver	-	-	-	-	462	-
Stage 1	-	-	-	-	650	-
Stage 2	-	-	-	-	680	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1159	-	-	-	588
HCM Lane V/C Ratio	0.001	-	-	-	0.004
HCM Control Delay (s)	8.1	-	-	-	11.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	640	5	16	356	17	5	0	48	16	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	25		0	25		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	1			0			60			60		
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		226			318			265			243	
Travel Time (s)		3.9			5.4			6.0			5.5	
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
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	640	5	16	356	17	5	0	48	16	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	667	5	17	371	18	5	0	50	17	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	389	0	0	672	0	0	895	1098	336	753	1091	194
Stage 1	-	-	-	-	-	-	676	676	-	413	413	-
Stage 2	-	-	-	-	-	-	219	422	-	340	678	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1166	-	-	915	-	-	235	211	660	298	213	815
Stage 1	-	-	-	-	-	-	409	451	-	587	592	-
Stage 2	-	-	-	-	-	-	763	587	-	648	450	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1166	-	-	915	-	-	230	207	660	271	209	815
Mov Cap-2 Maneuver	-	-	-	-	-	-	230	207	-	271	209	-
Stage 1	-	-	-	-	-	-	408	450	-	585	581	-
Stage 2	-	-	-	-	-	-	746	576	-	597	449	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	12.1	17.7
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	561	1166	-	-	915	-	-	303
HCM Lane V/C Ratio	0.098	0.003	-	-	0.018	-	-	0.065
HCM Control Delay (s)	12.1	8.1	-	-	9	-	-	17.7
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	225	41	99	208	44	47	38	50	34	36	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		50	110		100	100		50	0		50
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		710			938			284			207	
Travel Time (s)		12.1			16.0			4.8			4.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	13	225	41	0	99	208	44	0	47	38	50
Peak Hour Factor	0.92	0.98	0.98	0.98	0.92	0.98	0.98	0.98	0.92	0.98	0.98	0.98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	13	230	42	0	101	212	45	0	48	39	51
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	2	3
HCM Control Delay	10.5	10.3	9.9
HCM LOS	B	B	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	49%	0%
Vol Thru, %	0%	100%	20%	0%	100%	65%	0%	100%	61%	51%	0%
Vol Right, %	0%	0%	80%	0%	0%	35%	0%	0%	39%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	47	25	63	13	150	116	99	139	113	70	13
LT Vol	47	0	0	13	0	0	99	0	0	34	0
Through Vol	0	25	13	0	150	75	0	139	69	36	0
RT Vol	0	0	50	0	0	41	0	0	44	0	13
Lane Flow Rate	48	26	64	13	153	118	101	141	116	71	13
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.094	0.047	0.107	0.024	0.26	0.193	0.182	0.235	0.183	0.137	0.022
Departure Headway (Hd)	7.075	6.574	6.015	6.614	6.111	5.862	6.472	5.97	5.697	6.897	5.954
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	506	544	595	541	588	612	555	601	630	520	600
Service Time	4.822	4.321	3.761	4.353	3.85	3.602	4.208	3.705	3.432	4.642	3.699
HCM Lane V/C Ratio	0.095	0.048	0.108	0.024	0.26	0.193	0.182	0.235	0.184	0.137	0.022
HCM Control Delay	10.6	9.6	9.5	9.5	11	10	10.7	10.5	9.7	10.7	8.8
HCM Lane LOS	B	A	A	A	B	A	B	B	A	B	A
HCM 95th-tile Q	0.3	0.1	0.4	0.1	1	0.7	0.7	0.9	0.7	0.5	0.1

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	34	36	13
Peak Hour Factor	0.92	0.98	0.98	0.98
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	35	37	13
Number of Lanes	0	0	1	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	10.4
HCM LOS	B

Lane

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	2	4	122	0	0	216
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	50	
Storage Lanes	1	0		0	0	
Taper Length (ft)	60				25	
Link Speed (mph)	30		40			40
Link Distance (ft)	223		216			336
Travel Time (s)	5.1		3.7			5.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	2	4	122	0	0	216
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	2	4	133	0	0	235

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	250	66	0	0	133	0
Stage 1	133	-	-	-	-	-
Stage 2	117	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	717	984	-	-	1449	-
Stage 1	879	-	-	-	-	-
Stage 2	895	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	717	984	-	-	1449	-
Mov Cap-2 Maneuver	732	-	-	-	-	-
Stage 1	879	-	-	-	-	-
Stage 2	895	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	883	1449	-
HCM Lane V/C Ratio	-	-	0.007	-	-
HCM Control Delay (s)	-	-	9.1	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	2	9	123	2	10	214
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	25	
Storage Lanes	1	0		0	1	
Taper Length (ft)	60				60	
Link Speed (mph)	30		40			40
Link Distance (ft)	223		336			284
Travel Time (s)	5.1		5.7			4.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	2	9	123	2	10	214
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	-	-	-	25	-
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	2	10	134	2	11	233

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	273	68	0	0	136	0
Stage 1	135	-	-	-	-	-
Stage 2	138	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	694	981	-	-	1446	-
Stage 1	877	-	-	-	-	-
Stage 2	874	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	689	981	-	-	1446	-
Mov Cap-2 Maneuver	712	-	-	-	-	-
Stage 1	877	-	-	-	-	-
Stage 2	867	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	918	1446	-
HCM Lane V/C Ratio	-	-	0.013	0.008	-
HCM Control Delay (s)	-	-	9	7.5	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	0	0	122	2	4	214
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	25	
Storage Lanes	1	0		0	1	
Taper Length (ft)	60				25	
Link Speed (mph)	30		40			40
Link Distance (ft)	219		189			216
Travel Time (s)	5.0		3.2			3.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	0	122	2	4	214
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	-	-	-	25	-
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	133	2	4	233

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	259	67	0	0	135	0
Stage 1	134	-	-	-	-	-
Stage 2	125	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	708	983	-	-	1447	-
Stage 1	878	-	-	-	-	-
Stage 2	887	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	706	983	-	-	1447	-
Mov Cap-2 Maneuver	724	-	-	-	-	-
Stage 1	878	-	-	-	-	-
Stage 2	885	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1447	-
HCM Lane V/C Ratio	-	-	-	0.003	-
HCM Control Delay (s)	-	-	0	7.5	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	232	60	71	370	145	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	50		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			60		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	244			428	257	
Travel Time (s)	4.2			7.3	5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	5.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	232	60	71	370	145	171
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	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	252	65	77	402	158	186

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	317	0	640	159
Stage 1	-	-	-	-	285	-
Stage 2	-	-	-	-	355	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1240	-	408	858
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	681	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1240	-	383	858
Mov Cap-2 Maneuver	-	-	-	-	485	-
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	639	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	17.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	634	-	-	1240	-
HCM Lane V/C Ratio	0.542	-	-	0.062	-
HCM Control Delay (s)	17.2	-	-	8.1	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	3.3	-	-	0.2	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	146	3	9	169	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	25		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	493			135	181	
Travel Time (s)	8.4			2.3	4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	146	3	9	169	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	-	-	25	-	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	159	3	10	184	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	162	0	271	81
Stage 1	-	-	-	-	160	-
Stage 2	-	-	-	-	111	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1414	-	696	963
Stage 1	-	-	-	-	852	-
Stage 2	-	-	-	-	901	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1414	-	691	963
Mov Cap-2 Maneuver	-	-	-	-	713	-
Stage 1	-	-	-	-	852	-
Stage 2	-	-	-	-	895	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1414	-
HCM Lane V/C Ratio	-	-	-	0.007	-
HCM Control Delay (s)	0	-	-	7.6	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

APPENDIX 5.2:

EXISTING PLUS PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

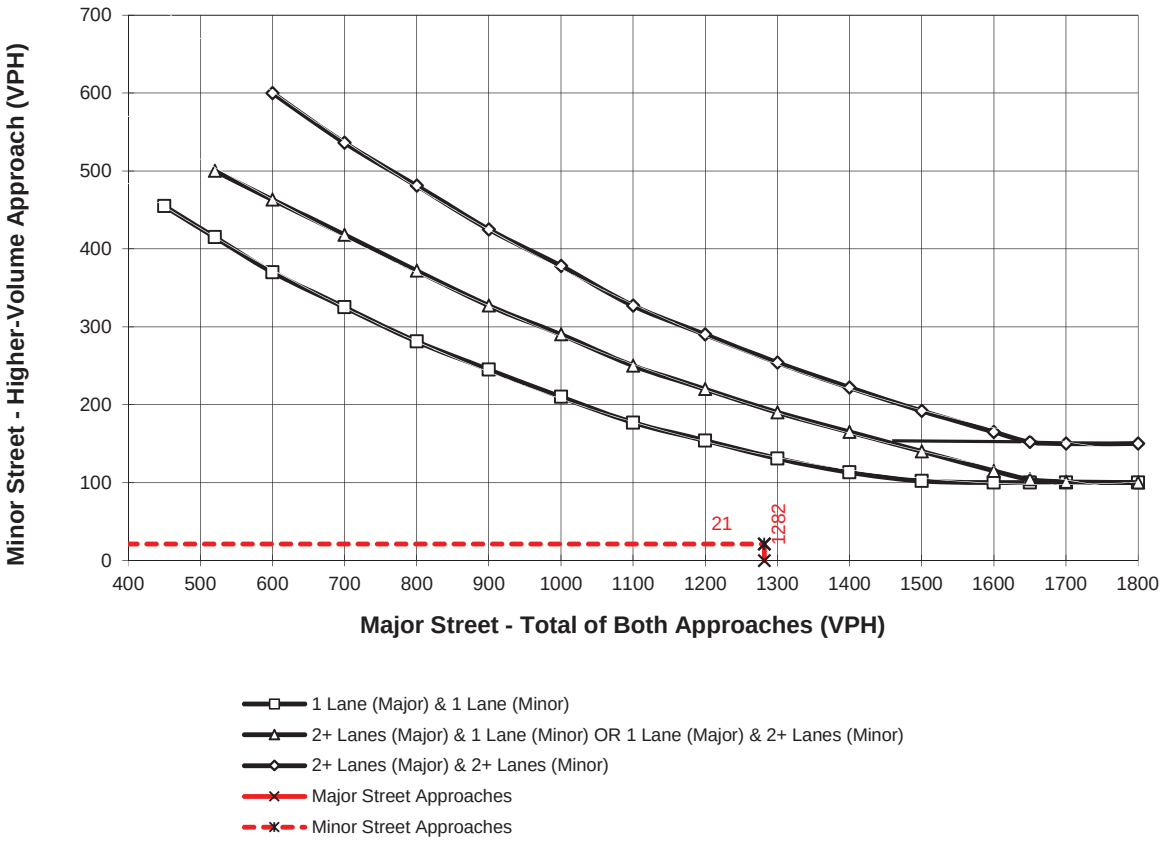
Major Street Name = **Day St.**

Total of Both Approaches (VPH) = **1,282**
Number of Approach Lanes on Major Street = **3**

Minor Street Name = **Dwy. 2**

High Volume Approach (VPH) = **21**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

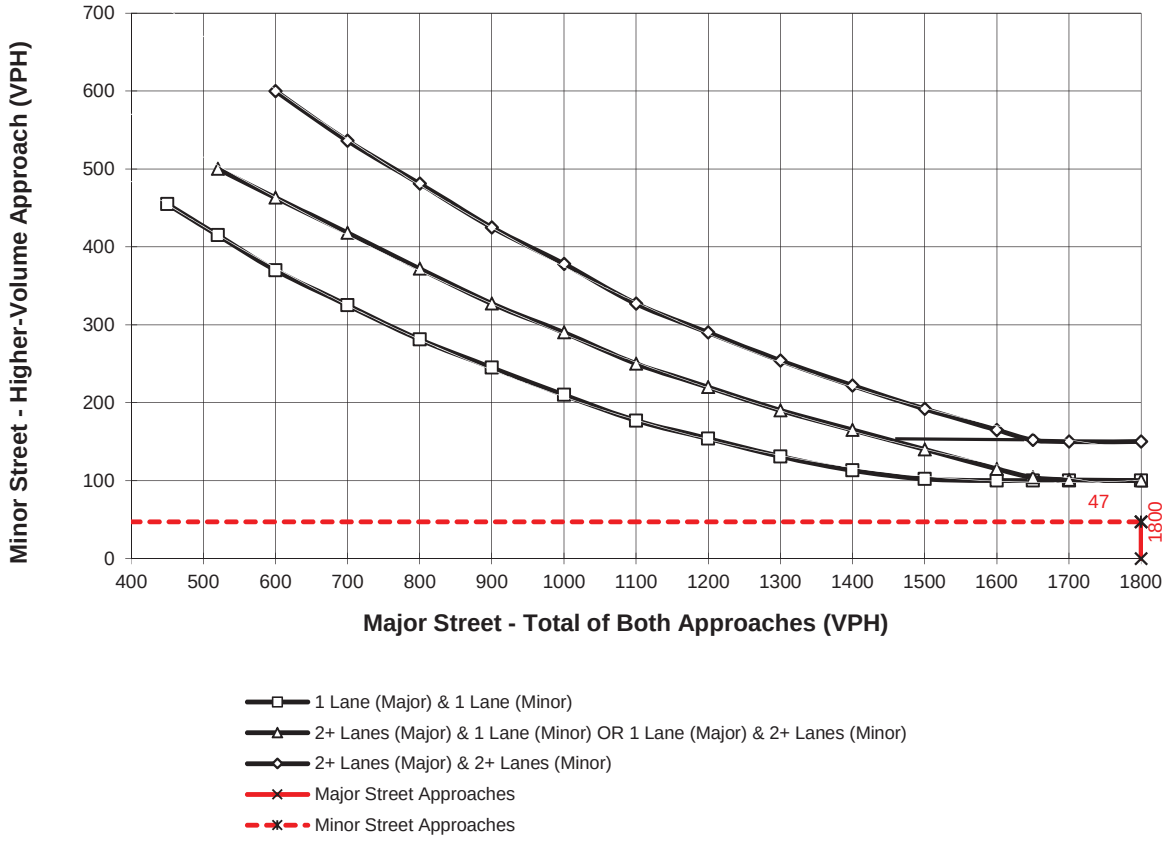
Major Street Name = **Day St.**

Total of Both Approaches (VPH) = **1,851**
Number of Approach Lanes on Major Street = **3**

Minor Street Name = **Dwy. 2**

High Volume Approach (VPH) = **47**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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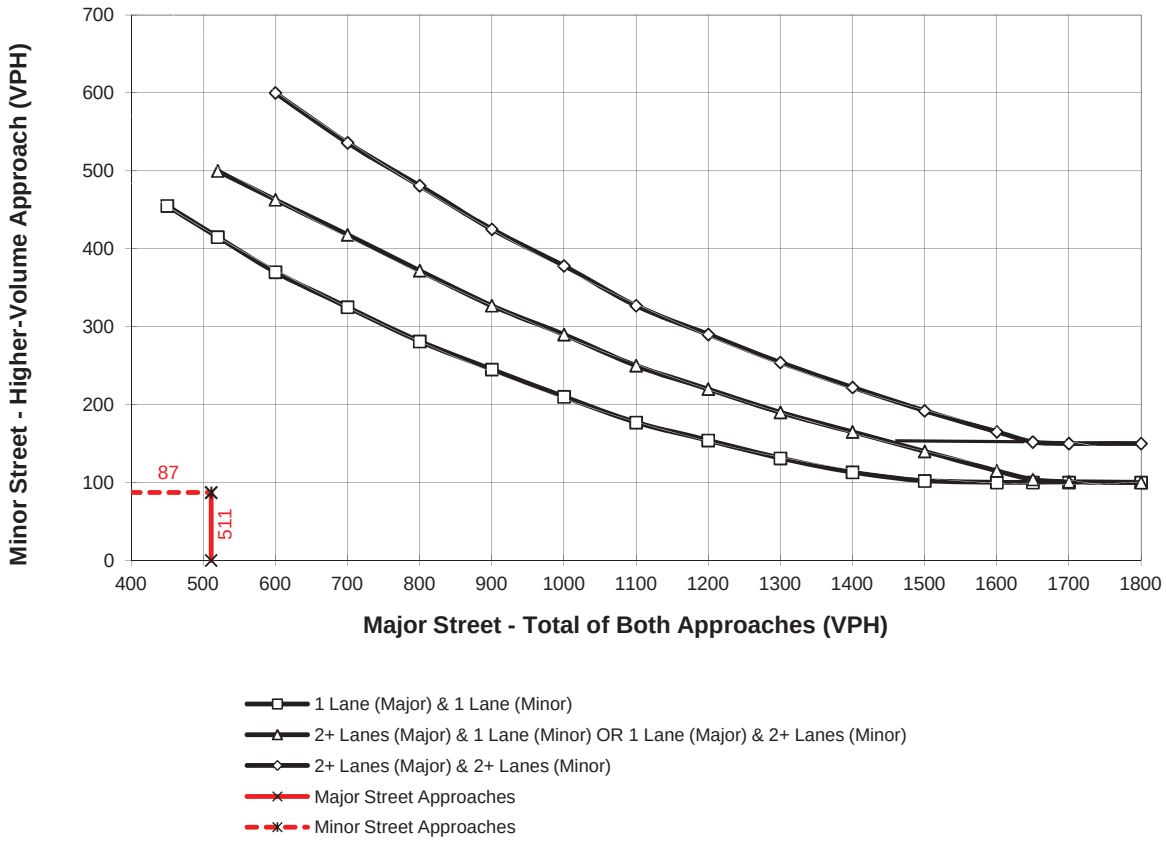
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

Major Street Name = **Day St.**
Total of Both Approaches (VPH) = **511**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Bay Av.**
High Volume Approach (VPH) = **87**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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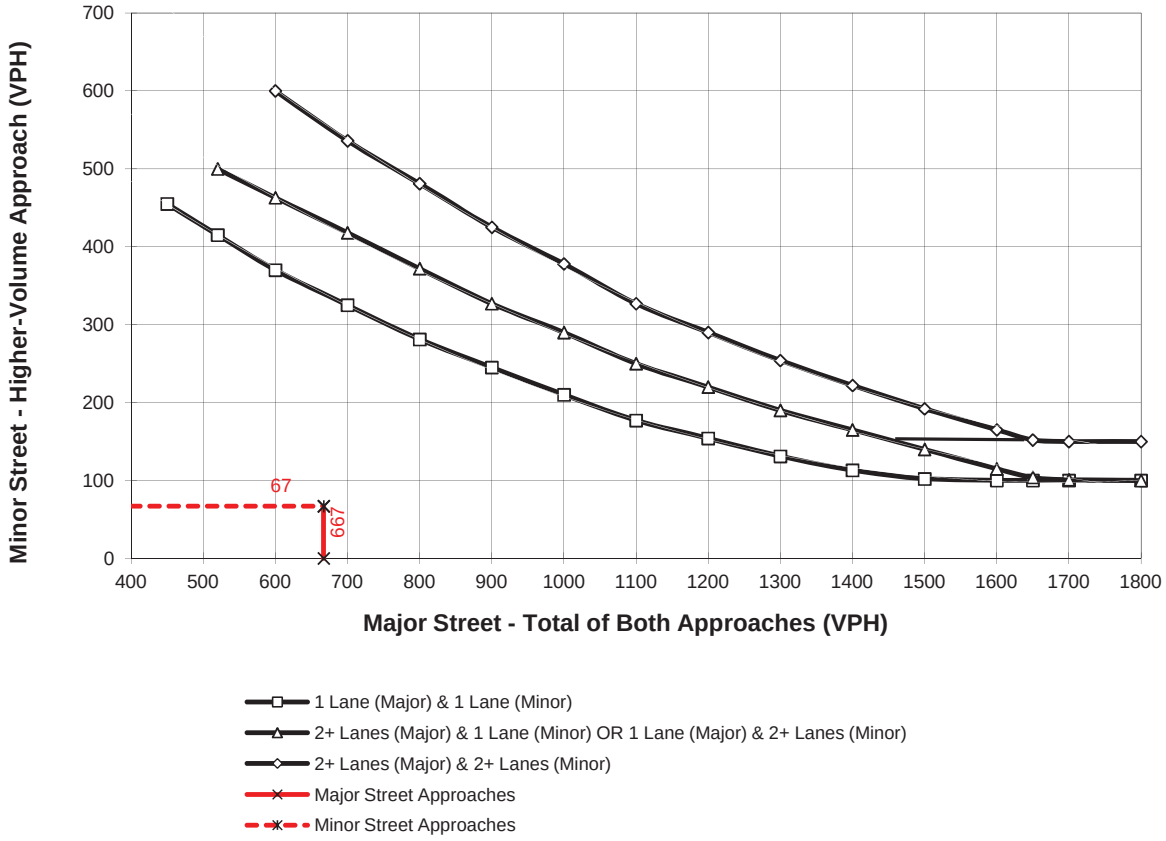
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

Major Street Name = **Day St.**
Total of Both Approaches (VPH) = **667**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Bay Av.**
High Volume Approach (VPH) = **67**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

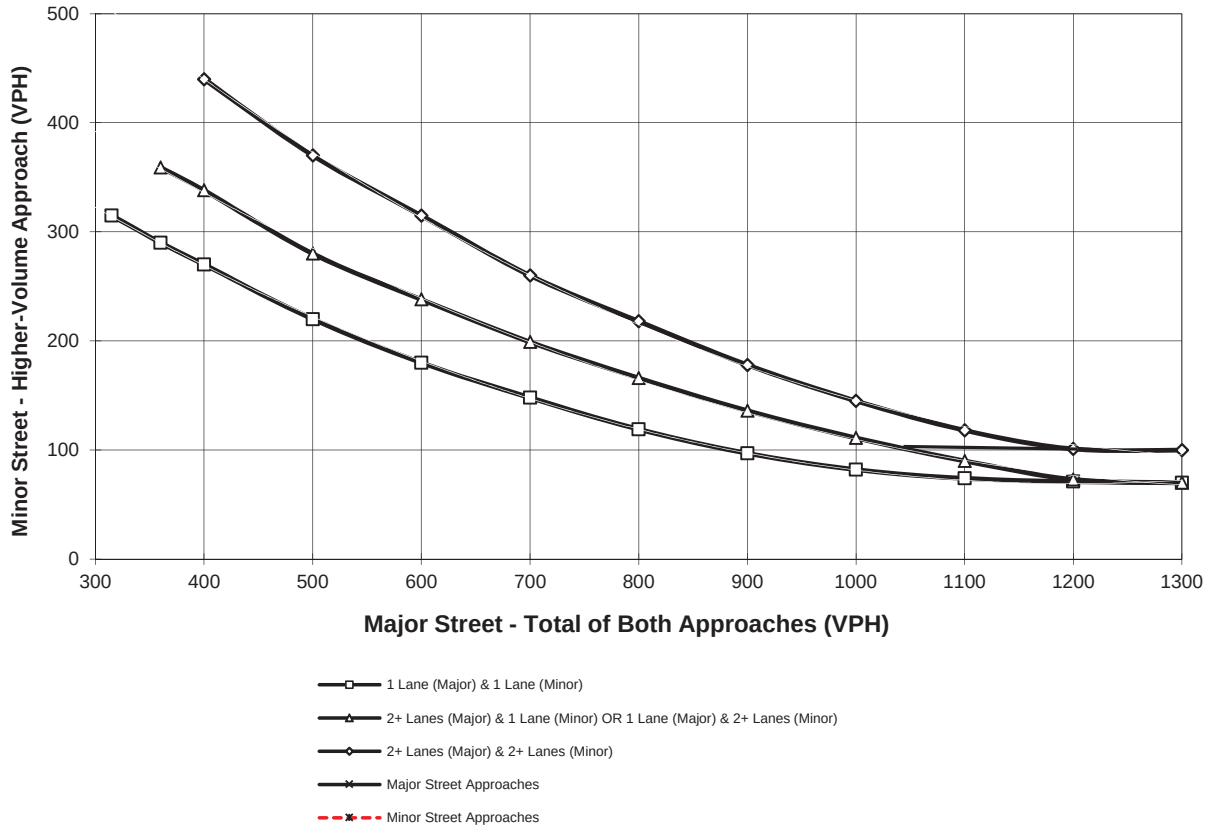
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

Major Street Name = **Campus Pkwy.**
Total of Both Approaches (VPH) = **182**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Corporate Centre Pl.**
High Volume Approach (VPH) = **83**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

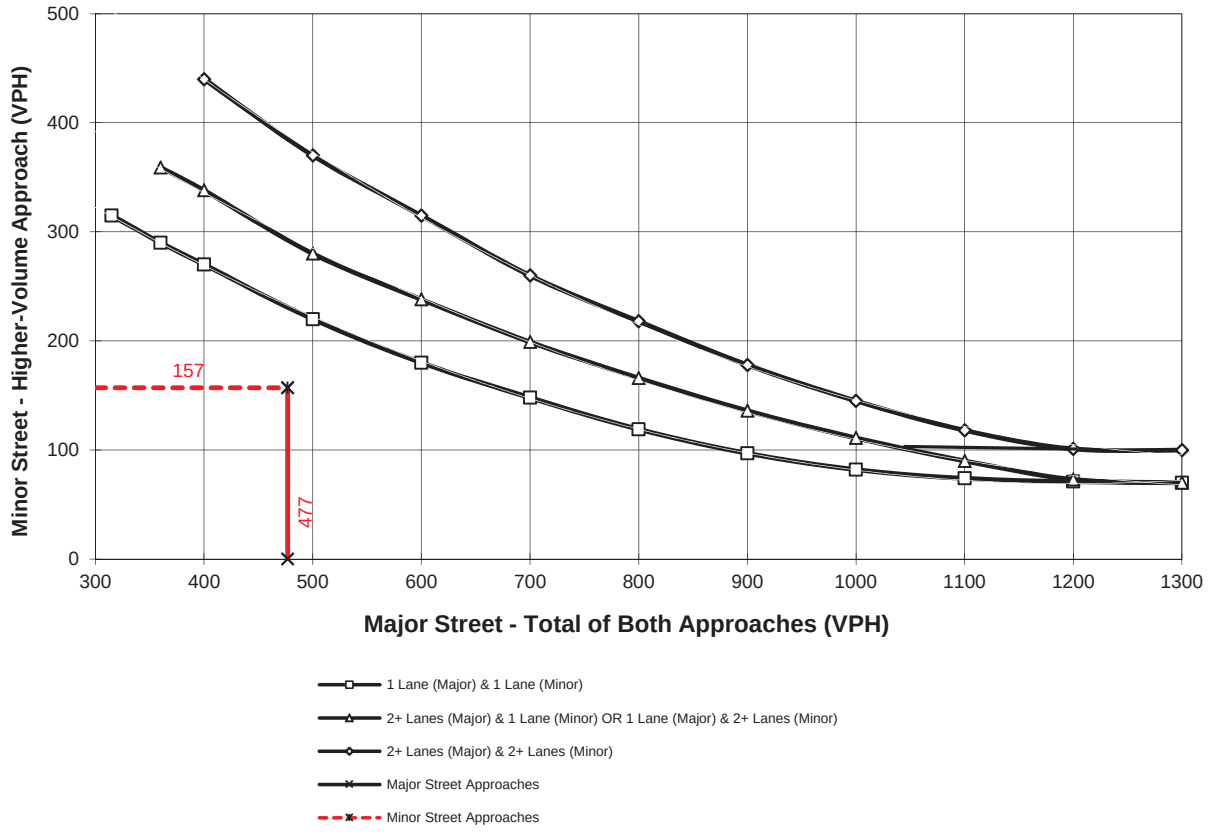
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

Major Street Name = **Campus Pkwy.**
Total of Both Approaches (VPH) = **477**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Corporate Centre Pl.**
High Volume Approach (VPH) = **157**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

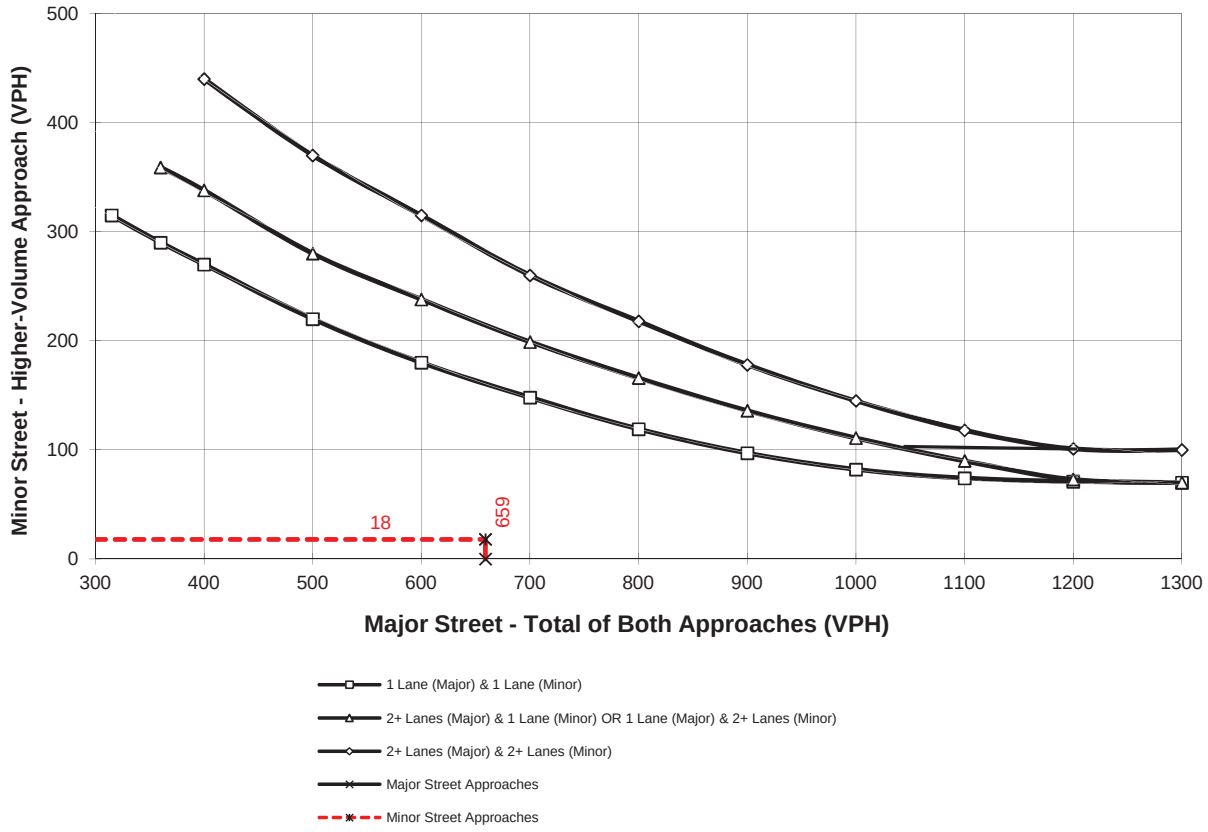
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

Major Street Name = **Valley Springs Pkwy.**
Total of Both Approaches (VPH) = **659**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 4**
High Volume Approach (VPH) = **18**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

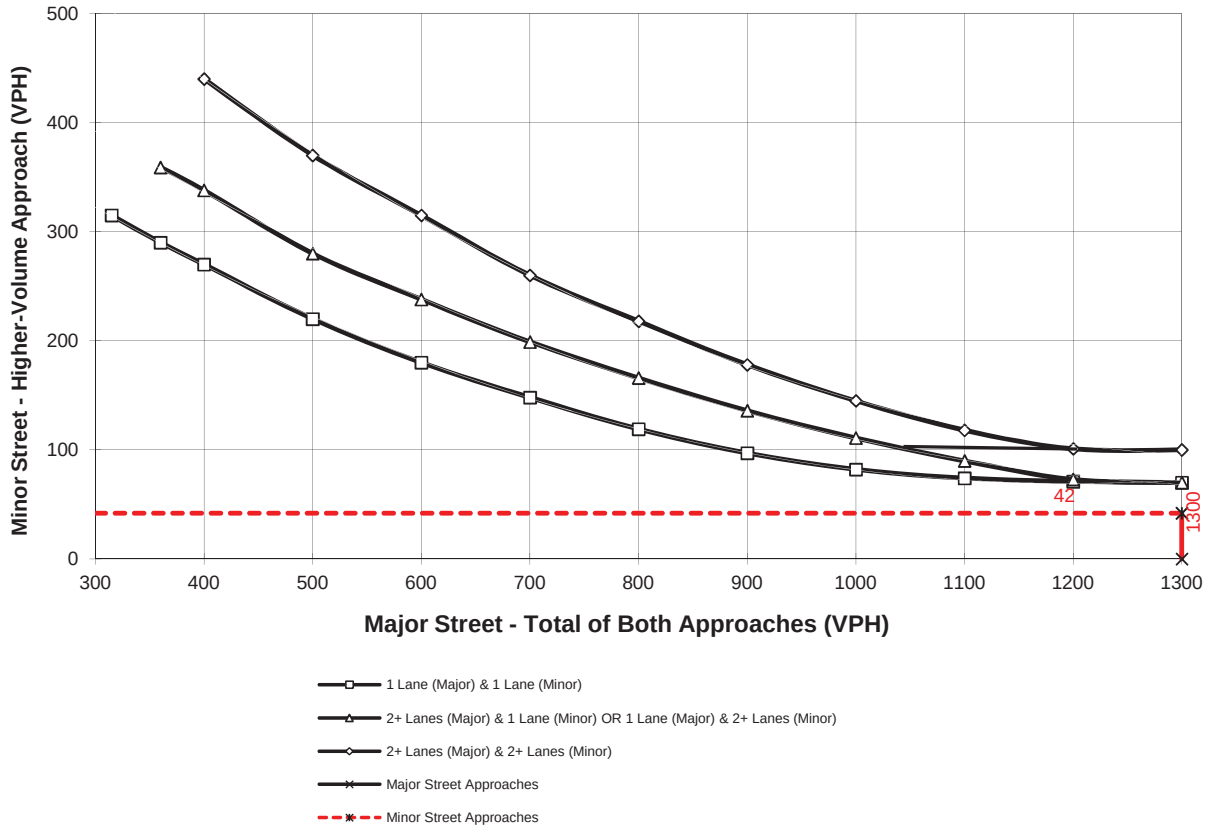
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

Major Street Name = **Valley Springs Pkwy.**
Total of Both Approaches (VPH) = **1,330**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 4**
High Volume Approach (VPH) = **42**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

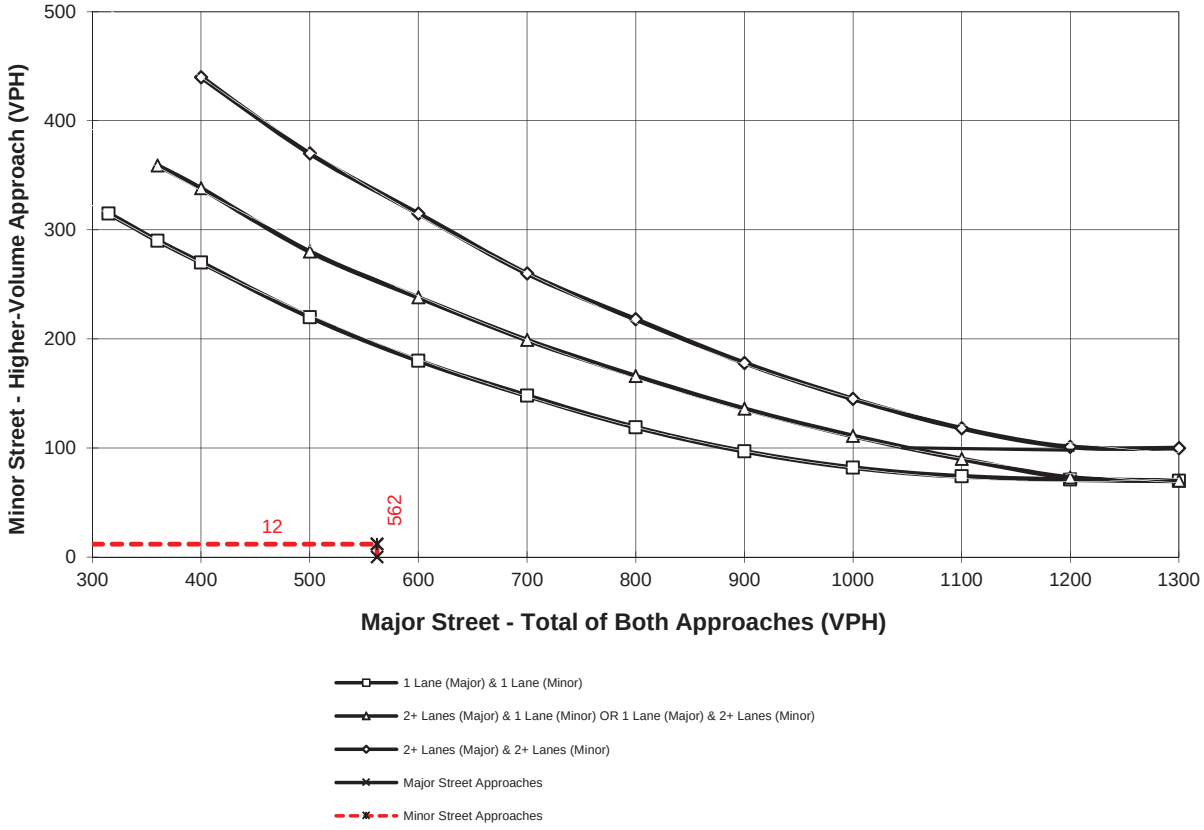
Major Street Name = **Gateway Dr.**

Total of Both Approaches (VPH) = **562**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 6**

High Volume Approach (VPH) = **12**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

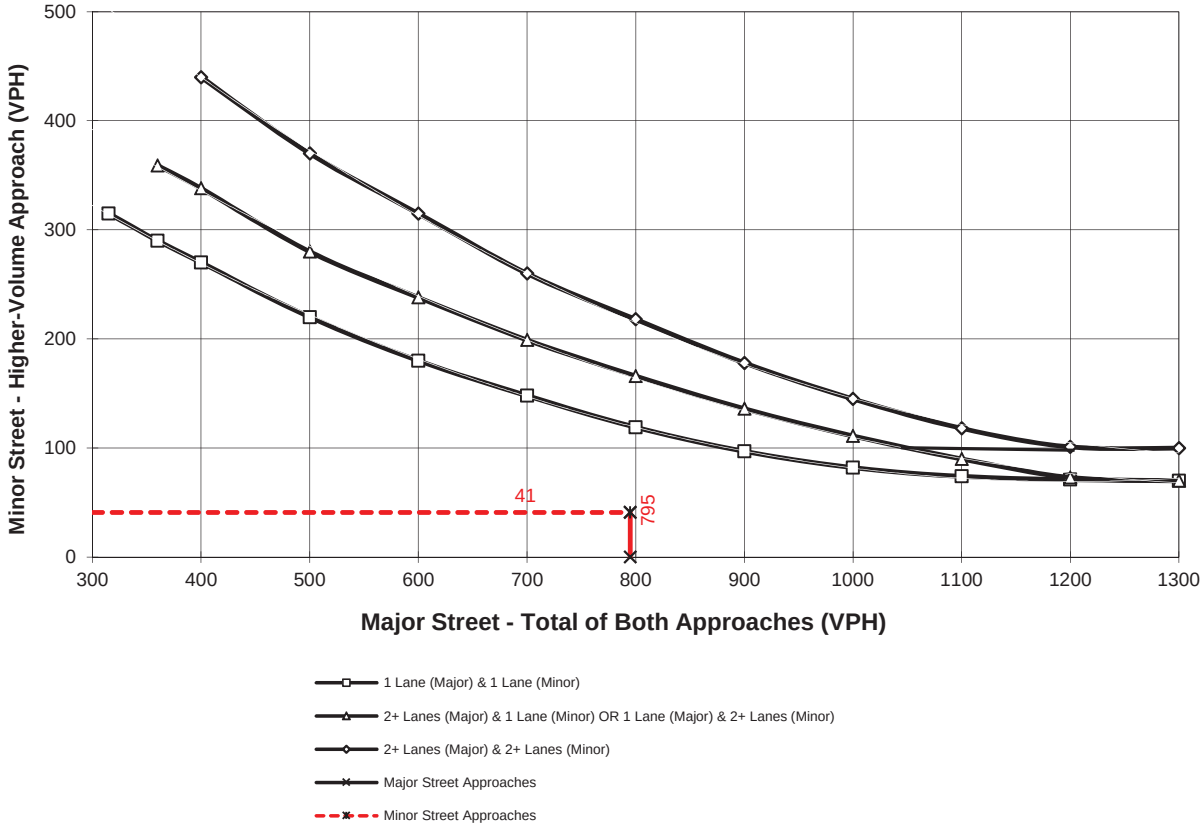
Major Street Name = **Gateway Dr.**

Total of Both Approaches (VPH) = **795**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 6**

High Volume Approach (VPH) = **41**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

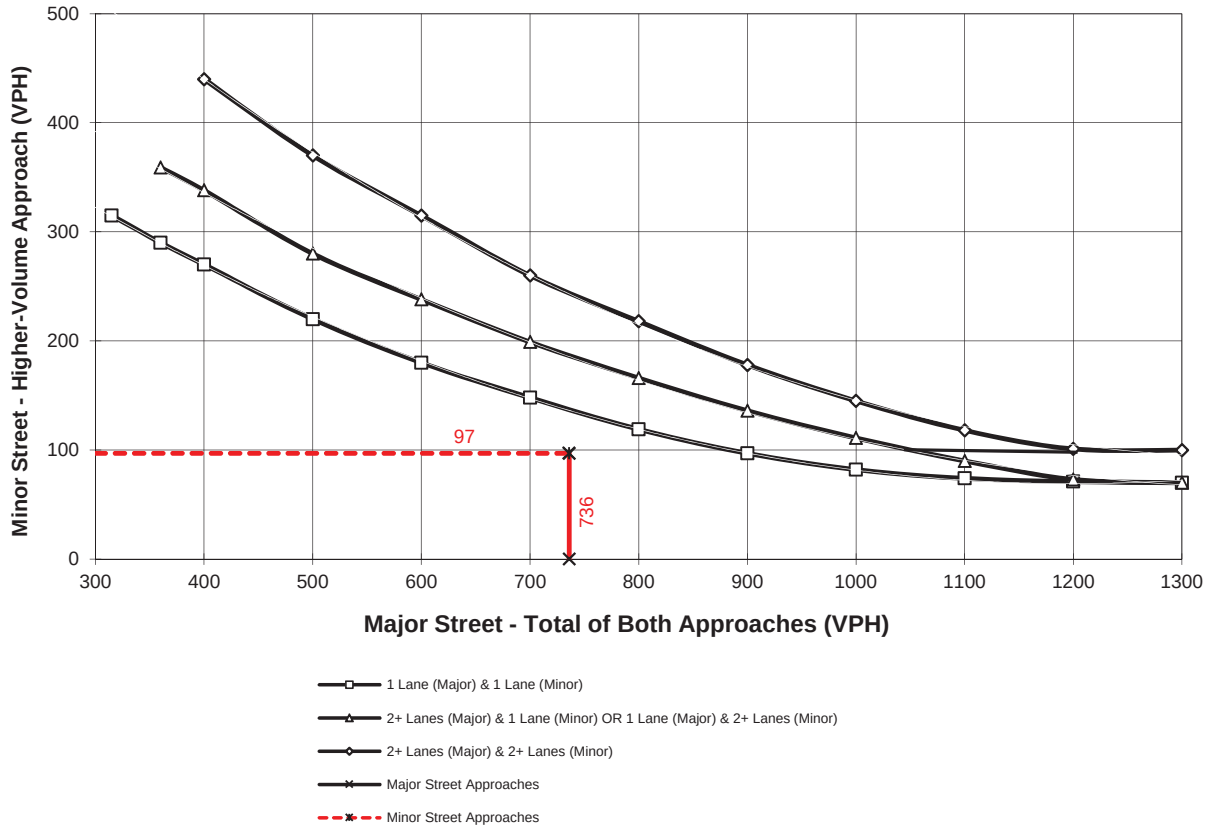
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

Major Street Name = **Gateway Dr.** Total of Both Approaches (VPH) = **736**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Canyon Park Dr. - Dwy. 7** High Volume Approach (VPH) = **97**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

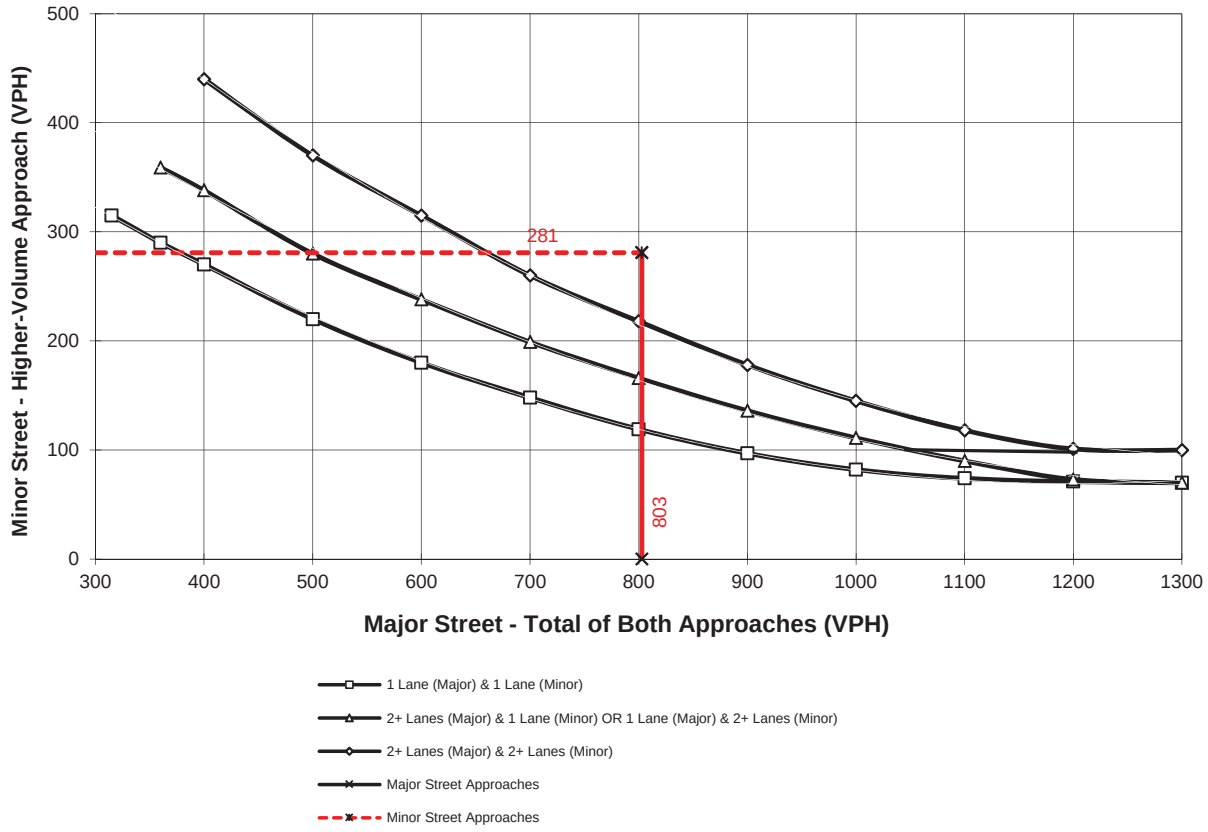
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

Major Street Name = **Gateway Dr.** Total of Both Approaches (VPH) = **803**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Canyon Park Dr. - Dwy. 7** High Volume Approach (VPH) = **281**
Number of Approach Lanes Minor Street = **2**

WARRANTED FOR A SIGNAL



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

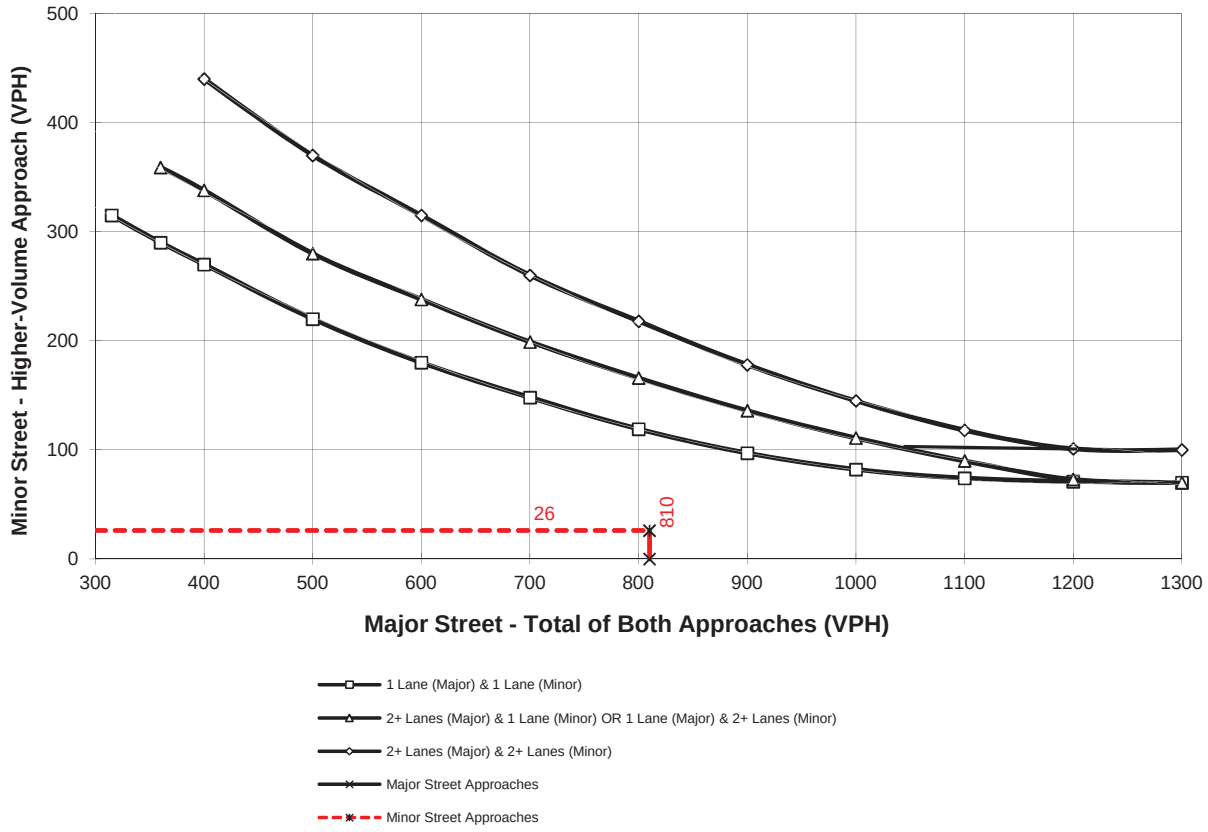
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

Major Street Name = **Gateway Dr.**
Total of Both Approaches (VPH) = **810**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 9**
High Volume Approach (VPH) = **26**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

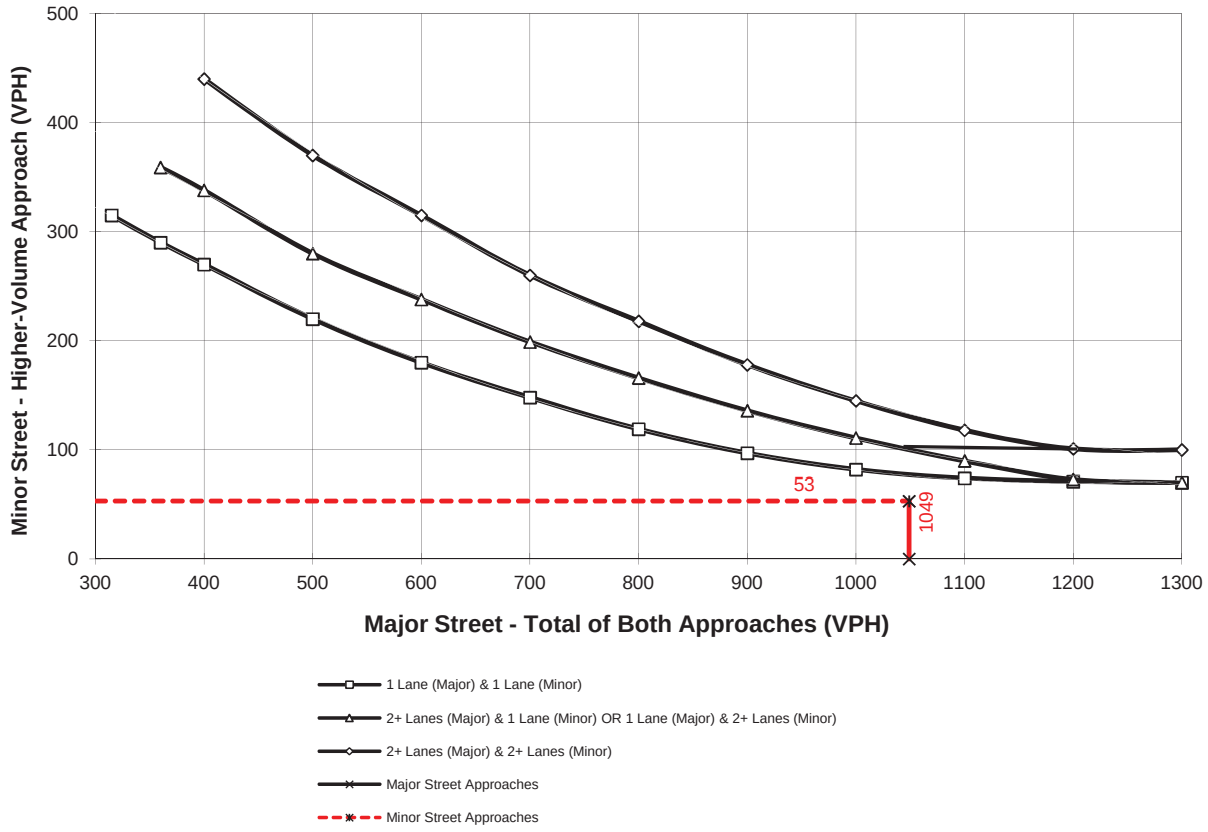
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

Major Street Name = **Gateway Dr.**
Total of Both Approaches (VPH) = **1,049**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 9**
High Volume Approach (VPH) = **53**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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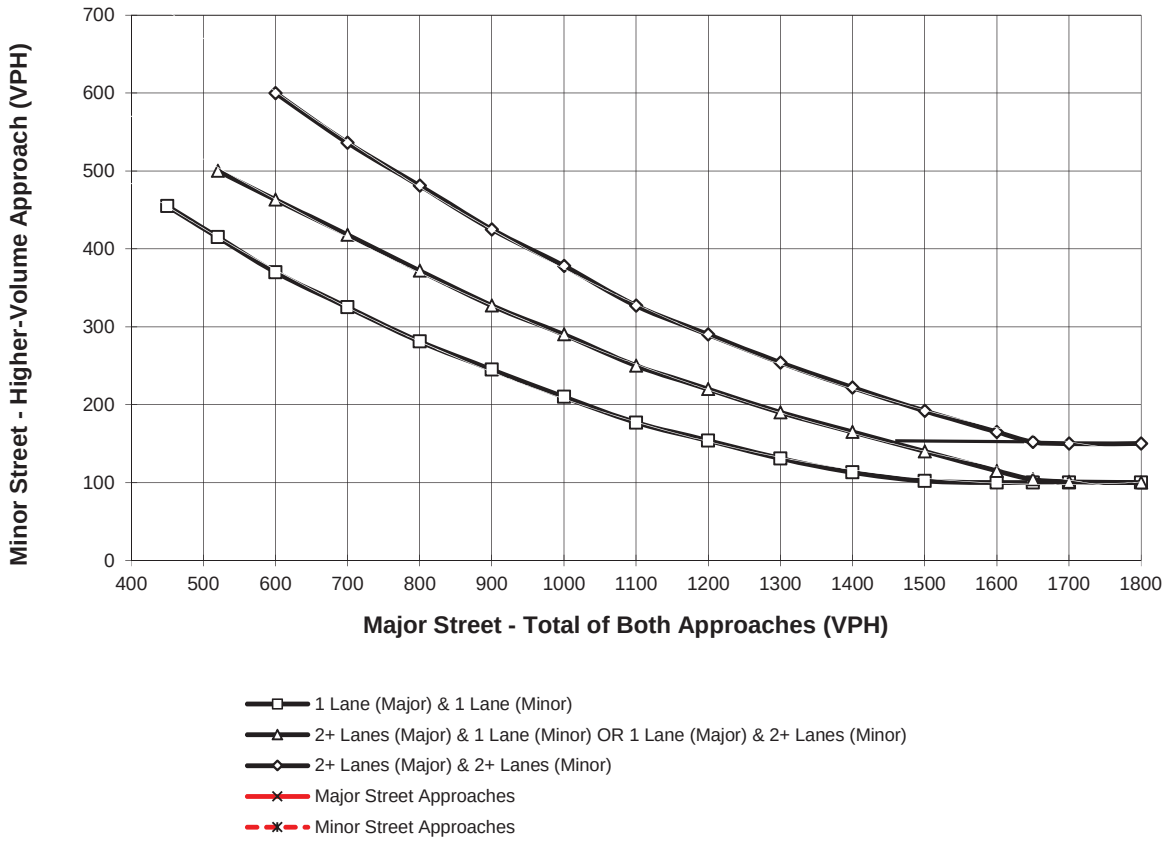
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

Major Street Name = **Campus Pkwy.**
Total of Both Approaches (VPH) = **256**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Canyon Park Dr.**
High Volume Approach (VPH) = **65**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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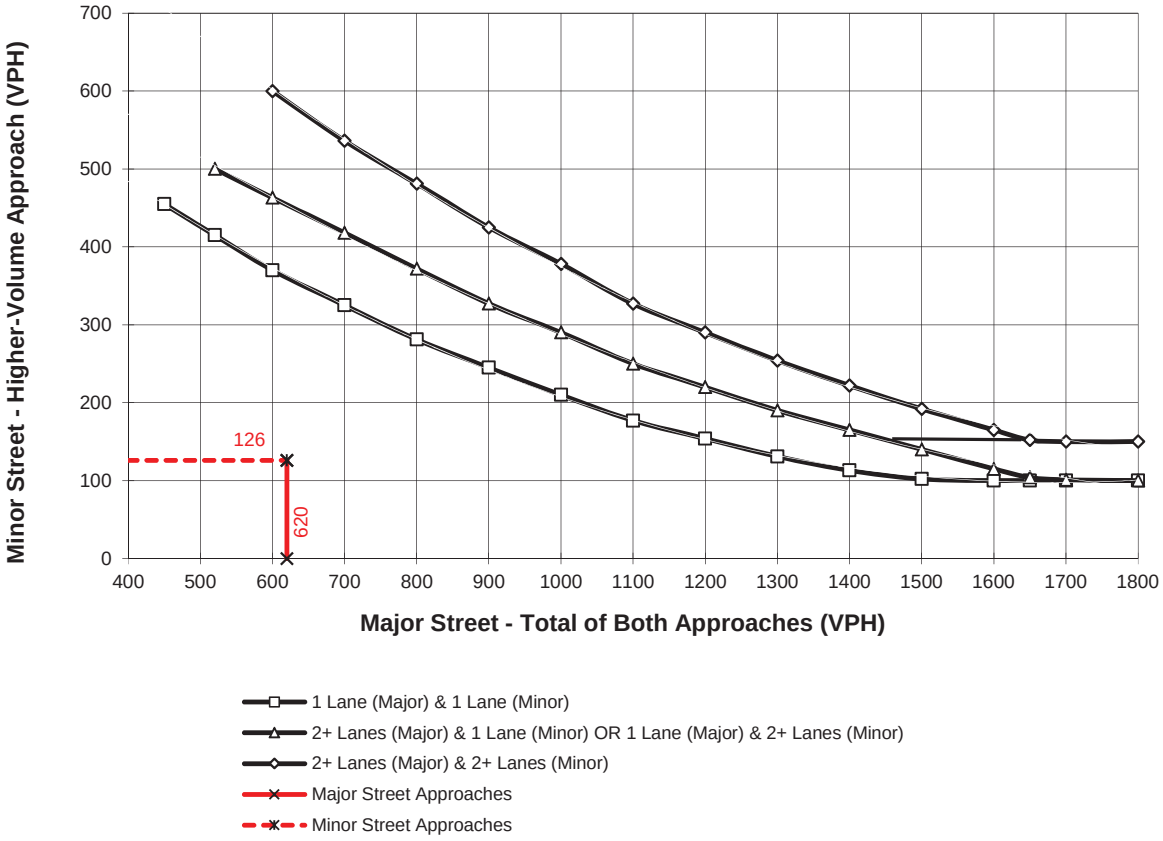
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

Major Street Name = **Campus Pkwy.**
Total of Both Approaches (VPH) = **620**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Canyon Park Dr.**
High Volume Approach (VPH) = **126**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM		TRAFFIC CONDITIONS		E+P
				CALC	JC	DATE	01/08/15
Jurisdiction:	**City of Riverside**			CHK		DATE	
Major Street:	**Day Street**				Critical Approach Speed (Major)		40 mph
Minor Street:	**Driveway 1**				Critical Approach Speed (Minor)		35 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lane **1** lane

Major Street Future ADT = **19,200** vpd Minor Street Future ADT = **600** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... [√]

or

In built up area of isolated community of < 10,000 population ..... [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / *1*	8,000	5,600	2,400	1,680
2 + **19,200** / *1* **600**	9,600	6,720 *	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / *1*	12,000	8,400	1,200	850
2 + **19,200** / *1* **600**	14,400	10,080 *	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ..... **A** 36% **B** 71%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM		TRAFFIC CONDITIONS		E+P
				CALC	JC	DATE	01/11/17
Jurisdiction:	**City of Riverside**			CHK		DATE	
Major Street:	**Valley Springs Parkway**				Critical Approach Speed (Major)		40 mph
Minor Street:	**Driveway 5**				Critical Approach Speed (Minor)		35 mph

Major Street Approach Lanes = **3** lane Minor Street Approach Lane **2** lane

Major Street Future ADT = **23,600** vpd Minor Street Future ADT = **3,500** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... [√]

or

In built up area of isolated community of < 10,000 population ..... [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume				
Satisfied: XX / Not Satisfied: RURAL XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / *1*	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + **23,600** / *2 +* **3,500**	9,600	6,720 *	3,200	2,240 *
1 / *2 +*	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				
Satisfied: XX / Not Satisfied				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / *1*	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + **23,600** / *2 +* **3,500**	14,400	10,080 *	1,600	1,120 *
1 / *2 +*	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied: XX / Not Satisfied				
No one condition satisfied, but following conditions fulfilled 80% of more ..... A: 100% B: 100%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P
				CALC JC	DATE 01/08/15
Jurisdiction: **City of Riverside**				CHK	DATE
Major Street: **Gateway Drive**				Critical Approach Speed (Major)	40 mph
Minor Street: **Driveway 8**				Critical Approach Speed (Minor)	35 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lane **1** lane

Major Street Future ADT = **11,100** vpd Minor Street Future ADT = **18** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... √

or

In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL: XX

CONDITION A - Minimum Vehicular Volume

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach		Minimum Requirements EADT			
Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
		Urban	Rural	Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **11,100**	1 **18**	9,600	6,720 *	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **11,100**	1 **18**	14,400	10,080 *	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied / Not Satisfied: XX

No one condition satisfied, but following conditions fulfilled 80% of more ..... **A** 1% **B** 2%

2 CONDITIONS 80%

2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM		TRAFFIC CONDITIONS		E+P
				CALC	JC	DATE	01/08/15
Jurisdiction:	**City of Riverside**			CHK		DATE	
Major Street:	**Canyon Park Drive**				Critical Approach Speed (Major)		40 mph
Minor Street:	**Driveway 10**				Critical Approach Speed (Minor)		35 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lane **1** lane

Major Street Future ADT = **3,900** vpd Minor Street Future ADT = **50** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. √

or

In built up area of isolated community of < 10,000 population ……

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
	XX				
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach					
Major Street	Minor Street				
1	*1*	8,000	5,600	2,400	1,680
2 + **3,900**	*1* **50**	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach					
Major Street	Minor Street				
1	*1*	12,000	8,400	1,200	850
2 + **3,900**	*1* **50**	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	A 3% B 6%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM		TRAFFIC CONDITIONS		E+P
				CALC	JC	DATE	12/21/16
Jurisdiction:	**City of Riverside**			CHK		DATE	
Major Street:	**Canyon Park Drive**				Critical Approach Speed (Major)		40 mph
Minor Street:	**Driveway 11**				Critical Approach Speed (Minor)		35 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lane **1** lane

Major Street Future ADT = **3,700** vpd Minor Street Future ADT = **100** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... [√]

or

In built up area of isolated community of < 10,000 population ..... [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / *1*	8,000	5,600	2,400	1,680
2 + **3,700** / *1* **100**	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				
Satisfied / Not Satisfied XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / *1*	12,000	8,400	1,200	850
2 + **3,700** / *1* **100**	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ..... **A** 6% **B** 12%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

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APPENDIX 5.3:

EXISTING PLUS PROJECT CONDITIONS BASIC FREEWAY SEGMENT ANALYSIS WORKSHEETS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*South of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4367*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1701*	pc/h/ln
S	*67.1*	mph
D = v_p / S	*25.4*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3690*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1437*	pc/h/ln
S	*69.3*	mph
D = v_p / S	*20.7*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*North of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4118*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1604*	pc/h/ln
S	*68.1*	mph
D = v_p / S	*23.6*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*North Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5213*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1218*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*17.4*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4693*	veh/h	Peak-Hour Factor, PHF	*0.93*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1808*	pc/h/ln
S	*65.7*	mph
D = v_p / S	*27.5*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*South of Eucalyptus*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5193*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2023*	pc/h/ln
S	*62.1*	mph
D = v_p / S	*32.6*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3590*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1029*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*14.7*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*2835*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1084*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*15.5*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3179*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1215*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*17.4*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3455*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*6*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*660*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*9.4*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*2895*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*830*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*11.9*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3427*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*786*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*11.2*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*South of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4539*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1768*	pc/h/ln
S	*66.3*	mph
D = v_p / S	*26.7*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3750*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1461*	pc/h/ln
S	*69.2*	mph
D = v_p / S	*21.1*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 10-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
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LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*North of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4449*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1733*	pc/h/ln
S	*66.7*	mph
D = v_p / S	*26.0*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*North Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6379*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1491*	pc/h/ln
S	*69.0*	mph
D = v_p / S	*21.6*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 10-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*JC*	Highway/Direction of Travel	*I-215 SB*
Agency or Company	*Urban Crossroads*	From/To	*Between Ramps*
Date Performed	*01/12/2015*	Jurisdiction	*Caltrans*
Analysis Time Period	*PM Peak Hour*	Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5354*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2085*	pc/h/ln
S	*60.9*	mph
D = v_p / S	*34.2*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*South of Eucalyptus*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6356*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2476*	pc/h/ln
S	*51.1*	mph
D = v_p / S	*48.4*	pc/mi/ln
LOS	*F*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3715*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1065*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*15.2*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*JC*	Highway/Direction of Travel	*SR-60 WB*
Agency or Company	*Urban Crossroads*	From/To	*Between Ramps*
Date Performed	*01/12/2015*	Jurisdiction	*Caltrans*
Analysis Time Period	*PM Peak Hour*	Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3011*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1151*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*16.4*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3640*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1391*	pc/h/ln
S	*69.6*	mph
D = v_p / S	*20.0*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5438*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*6*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1039*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*14.8*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4479*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1284*	pc/h/ln
S	*69.9*	mph
D = v_p / S	*18.4*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*E+P*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5545*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1272*	pc/h/ln
S	*69.9*	mph
D = v_p / S	*18.2*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX 5.4:

EXISTING PLUS PROJECT CONDITIONS FREEWAY RAMP JUNCTION (MERGE/DIVERGE) ANALYSIS WORKSHEETS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	E+P Conditions

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 3	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2400 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 428 veh/h
	Freeway Volume, V_F: 4367	
	Ramp Volume, V_R: 677	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4367	0.92	Level	15	0	0.930	1.00	5103
Ramp	677	0.92	Level	2	0	0.990	1.00	743
UpStream								
DownStream	428	0.92	Level	2	0	0.990	1.00	470

Merge Areas | Diverge Areas

Estimation of v_{12} — Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Estimation of v_{12} — Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.598 using Equation (Exhibit 13-7)

V_{12} = 3351 pc/h

V_3 or V_{av34} 1752 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks — Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Capacity Checks — Diverge Areas

	Actual	Capacity		LOS F?
V_F	5103	Exhibit 13-8	7200	No
$V_{FO} = V_F - V_R$	4360	Exhibit 13-8	7200	No
V_R	743	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	3351	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F) — Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Level of Service Determination (if not F) — Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 31.5 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination — Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Speed Determination — Diverge Areas

D_s = 0.495 (Exhibit 13-12)

S_R = 56.1 mph (Exhibit 13-12)

S_0 = 73.9 mph (Exhibit 13-12)

S = 61.2 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	E+P Conditions

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2400 ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = 677 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3690	
	Ramp Volume, V_R: 428	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3690	0.92	Level	15	0	0.930	1.00	4312
Ramp	428	0.92	Level	2	0	0.990	1.00	470
UpStream	677	0.92	Level	2	0	0.990	1.00	743
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 629.15 (Equation 13-6 or 13-7)

P_{FM} = 0.589 using Equation (Exhibit 13-6)

V_{12} = 2538 pc/h

V_3 or V_{av34} 1774 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 2538 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4782	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3008	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 26.2 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.372 (Exibit 13-11)

S_R= 59.6 mph (Exhibit 13-11)

S_0= 65.4 mph (Exhibit 13-11)

S = 61.6 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	E+P Conditions

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☑ Yes	☑ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☐ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	180	L_{down} =	2900 ft
V_u =	veh/h	Freeway Volume, V_F	5213	V_D =	500 veh/h
		Ramp Volume, V_R	520		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	35.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5213	0.92	Level	15	0	0.930	1.00	6091
Ramp	520	0.92	Level	2	0	0.990	1.00	571
UpStream								
DownStream	500	0.92	Level	2	0	0.990	1.00	549

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R= mph (Exhibit 13-11)

S_0= mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 1769 pc/h

V_3 or V_{av34} 1704 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2071 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5178	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4607	Exhibit 13-8	9600	No
V_R	571	Exhibit 13-10	4000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1769	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 9.8 (pc/mi/ln)

LOS = A (Exhibit 13-2)

Speed Determination

D_s = 0.479 (Exhibit 13-12)

S_R= 56.6 mph (Exhibit 13-12)

S_0= 74.6 mph (Exhibit 13-12)

S = 66.2 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	E+P Conditions

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2900 ft	Acceleration Lane Length, L_A: 600	L_{down} = ft
V_u = 520 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 4693	
	Ramp Volume, V_R: 500	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4693	0.92	Level	15	0	0.930	1.00	5484
Ramp	500	0.92	Level	2	0	0.990	1.00	549
UpStream	520	0.92	Level	2	0	0.990	1.00	571
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 985.66 (Equation 13-6 or 13-7)

P_{FM} = 0.594 using Equation (Exhibit 13-6)

V_{12} = 3259 pc/h

V_3 or V_{av34} 2225 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 3259 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6033	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3808	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 31.2 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.455 (Exibit 13-11)

S_R= 57.3 mph (Exhibit 13-11)

S_0= 63.8 mph (Exhibit 13-11)

S = 59.5 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	E+P Conditions

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 4	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 1400 ft
V_u = veh/h	Deceleration Lane Length L_D: 1000	V_D = 344 veh/h
	Freeway Volume, V_F: 3590	
	Ramp Volume, V_R: 755	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3590	0.92	Level	11	0	0.948	1.00	4117
Ramp	755	0.92	Level	2	0	0.990	1.00	829
UpStream								
DownStream	344	0.92	Level	2	0	0.990	1.00	378

Merge Areas | Diverge Areas

Estimation of v_{12}

Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2263 pc/h

V_3 or V_{av34} 927 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Diverge Areas

	Actual	Capacity		LOS F?
V_F	4117	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3288	Exhibit 13-8	9600	No
V_R	829	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2263	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 14.7 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

D_s = 0.503 (Exhibit 13-12)

S_R = 55.9 mph (Exhibit 13-12)

S_0 = 76.8 mph (Exhibit 13-12)

S = 63.7 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	E+P Conditions

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 1400 ft	Acceleration Lane Length, L_A: 900	L_{down} = ft
V_u = 755 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 2835	
	Ramp Volume, V_R: 344	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	2835	0.92	Level	11	0	0.948	1.00	3251
Ramp	344	0.92	Level	2	0	0.990	1.00	378
UpStream	755	0.92	Level	2	0	0.990	1.00	829
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 604.41 (Equation 13-6 or 13-7)

P_{FM} = 0.603 using Equation (Exhibit 13-6)

V_{12} = 1959 pc/h

V_3 or V_{av34} 1292 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 1959 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	3629	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2337	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 17.9 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

M_S = 0.298 (Exibit 13-11)

S_R= 61.6 mph (Exhibit 13-11)

S_0= 67.1 mph (Exhibit 13-11)

S = 63.5 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	E+P Conditions

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☑ Yes	☑ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☐ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	180	L_{down} =	2000 ft
V_u =	veh/h	Freeway Volume, V_F	3455	V_D =	532 veh/h
		Ramp Volume, V_R	560		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	35.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	$v = V/PHF \times f_{HV} \times f_p$
Freeway	3455	0.92	Level	11	0	0.948	1.00	3962
Ramp	560	0.92	Level	2	0	0.990	1.00	615
UpStream								
DownStream	532	0.92	Level	2	0	0.990	1.00	584

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R= mph (Exhibit 13-11)

S_0= mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 1485 pc/h

V_3 or V_{av34} 1238 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1584 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	3962	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3347	Exhibit 13-8	9600	No
V_R	615	Exhibit 13-10	4000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1485	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 13.7 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.483 (Exhibit 13-12)

S_R= 56.5 mph (Exhibit 13-12)

S_0= 76.1 mph (Exhibit 13-12)

S = 66.8 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	E+P Conditions

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 4	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2000 ft	Acceleration Lane Length, L_A: 1000	L_{down} = ft
V_u = 560 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 2895	
	Ramp Volume, V_R: 532	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	2895	0.92	Level	11	0	0.948	1.00	3320
Ramp	532	0.92	Level	2	0	0.990	1.00	584
UpStream	560	0.92	Level	2	0	0.990	1.00	615
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 707.66 (Equation 13-6 or 13-7)

P_{FM} = 0.145 using Equation (Exhibit 13-6)

V_{12} = 481 pc/h

V_3 or V_{av34} 1419 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 1328 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	3904	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1912	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 13.8 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

M_S = 0.277 (Exibit 13-11)

S_R= 62.2 mph (Exhibit 13-11)

S_0= 68.2 mph (Exhibit 13-11)

S = 65.1 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	E+P Conditions

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 3	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2400 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 699 veh/h
	Freeway Volume, V_F: 4629	
	Ramp Volume, V_R: 789	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4629	0.92	Level	15	0	0.930	1.00	5409
Ramp	789	0.92	Level	2	0	0.990	1.00	866
UpStream								
DownStream	699	0.92	Level	2	0	0.990	1.00	767

Merge Areas | Diverge Areas

Estimation of v_{12}

Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.585 using Equation (Exhibit 13-7)

V_{12} = 3523 pc/h

V_3 or V_{av34} 1886 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Diverge Areas

	Actual	Capacity		LOS F?
V_F	5409	Exhibit 13-8	7200	No
$V_{FO} = V_F - V_R$	4543	Exhibit 13-8	7200	No
V_R	866	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	3523	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 32.9 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

D_s = 0.506 (Exhibit 13-12)

S_R = 55.8 mph (Exhibit 13-12)

S_0 = 73.3 mph (Exhibit 13-12)

S = 60.9 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	E+P Conditions

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	3	Downstream Adj Ramp	
☑ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☐ No	☑ Off	Acceleration Lane Length, L_A	400	☑ No	☐ Off
L_{up} =	2400 ft	Deceleration Lane Length L_D		L_{down} =	ft
V_u =	789 veh/h	Freeway Volume, V_F	3902	V_D =	veh/h
		Ramp Volume, V_R	699		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	35.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3902	0.92	Level	15	0	0.930	1.00	4559
Ramp	699	0.92	Level	2	0	0.990	1.00	767
UpStream	789	0.92	Level	2	0	0.990	1.00	866
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 745.56 (Equation 13-6 or 13-7)

P_{FM} = 0.589 using Equation (Exhibit 13-6)

V_{12} = 2684 pc/h

V_3 or V_{av34} 1875 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 2684 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5326	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3451	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 29.5 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.416 (Exibit 13-11)

S_R= 58.4 mph (Exhibit 13-11)

S_0= 65.1 mph (Exhibit 13-11)

S = 60.5 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	E+P Conditions

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☑ Yes	☑ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☐ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	180	L_{down} =	2900 ft
V_u =	veh/h	Freeway Volume, V_F	6556	V_D =	1002 veh/h
		Ramp Volume, V_R	1025		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	35.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6556	0.92	Level	15	0	0.930	1.00	7661
Ramp	1025	0.92	Level	2	0	0.990	1.00	1125
UpStream								
DownStream	1002	0.92	Level	2	0	0.990	1.00	1100

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R= mph (Exhibit 13-11)

S_0= mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2426 pc/h

V_3 or V_{av34} 1851 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2451 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	6129	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	5004	Exhibit 13-8	9600	No
V_R	1125	Exhibit 13-10	4000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2426	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 13.1 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.529 (Exhibit 13-12)

S_R= 55.2 mph (Exhibit 13-12)

S_0= 73.5 mph (Exhibit 13-12)

S = 64.9 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	E+P Conditions

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2900 ft	Acceleration Lane Length, L_A: 600	L_{down} = ft
V_u = 1025 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 5570	
	Ramp Volume, V_R: 1002	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5570	0.92	Level	15	0	0.930	1.00	6508
Ramp	1002	0.92	Level	2	0	0.990	1.00	1100
UpStream	1025	0.92	Level	2	0	0.990	1.00	1125
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 1322.71 (Equation 13-6 or 13-7)

P_{FM} = 0.594 using Equation (Exhibit 13-6)

V_{12} = 3868 pc/h

V_3 or V_{av34} 2640 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 3868 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	7608	Exhibit 13-8		Yes

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	4968	Exhibit 13-8	4600:All	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 40.0 (pc/mi/ln)

LOS = F (Exhibit 13-2)

Speed Determination

M_S = 0.840 (Exibit 13-11)

S_R= 46.5 mph (Exhibit 13-11)

S_0= 61.4 mph (Exhibit 13-11)

S = 50.8 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	E+P Conditions

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 4	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 1400 ft
V_u = veh/h	Deceleration Lane Length L_D: 1000	V_D = 629 veh/h
	Freeway Volume, V_F: 3831	
	Ramp Volume, V_R: 704	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3831	0.92	Level	11	0	0.948	1.00	4393
Ramp	704	0.92	Level	2	0	0.990	1.00	773
UpStream								
DownStream	629	0.92	Level	2	0	0.990	1.00	691

Merge Areas | Diverge Areas

Estimation of v_{12}

Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2351 pc/h

V_3 or V_{av34} 1021 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Diverge Areas

	Actual	Capacity		LOS F?
V_F	4393	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3620	Exhibit 13-8	9600	No
V_R	773	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2351	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 15.5 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

D_s = 0.498 (Exhibit 13-12)

S_R = 56.1 mph (Exhibit 13-12)

S_0 = 76.7 mph (Exhibit 13-12)

S = 64.1 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	E+P Conditions

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 1400 ft	Acceleration Lane Length, L_A: 900	L_{down} = ft
V_u = 704 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3133	
	Ramp Volume, V_R: 629	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3133	0.92	Level	11	0	0.948	1.00	3593
Ramp	629	0.92	Level	2	0	0.990	1.00	691
UpStream	704	0.92	Level	2	0	0.990	1.00	773
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 744.58 (Equation 13-6 or 13-7)

P_{FM} = 0.603 using Equation (Exhibit 13-6)

V_{12} = 2166 pc/h

V_3 or V_{av34} 1427 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 2166 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4284	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2857	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 21.8 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.326 (Exibit 13-11)

S_R= 60.9 mph (Exhibit 13-11)

S_0= 66.7 mph (Exhibit 13-11)

S = 62.7 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	E+P Conditions

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2000 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 1066 veh/h
	Freeway Volume, V_F: 5653	
	Ramp Volume, V_R: 959	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5653	0.92	Level	11	0	0.948	1.00	6483
Ramp	959	0.92	Level	2	0	0.990	1.00	1053
UpStream								
DownStream	1066	0.92	Level	2	0	0.990	1.00	1170

Merge Areas | Diverge Areas

Estimation of v_{12}

Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2212 pc/h

V_3 or V_{av34} 1649 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Diverge Areas

	Actual	Capacity		LOS F?
V_F	5511	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4458	Exhibit 13-8	9600	No
V_R	1053	Exhibit 13-10	4000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2212	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 19.1 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

D_s = 0.523 (Exhibit 13-12)

S_R = 55.4 mph (Exhibit 13-12)

S_0 = 74.3 mph (Exhibit 13-12)

S = 65.3 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	E+P Conditions

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 4	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2000 ft	Acceleration Lane Length, L_A: 1000	L_{down} = ft
V_u = 959 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 4660	
	Ramp Volume, V_R: 1066	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	$v = V/PHF \times f_{HV} \times f_p$
Freeway	4660	0.92	Level	11	0	0.948	1.00	5344
Ramp	1066	0.92	Level	2	0	0.990	1.00	1170
UpStream	959	0.92	Level	2	0	0.990	1.00	1053
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 1266.20 (Equation 13-6 or 13-7)

P_{FM} = 0.072 using Equation (Exhibit 13-6)

V_{12} = 382 pc/h

V_3 or V_{av34} = 2481 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2137 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6514	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3307	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 24.5 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.357 (Exibit 13-11)

S_R = 60.0 mph (Exhibit 13-11)

S_0 = 66.0 mph (Exhibit 13-11)

S = 62.8 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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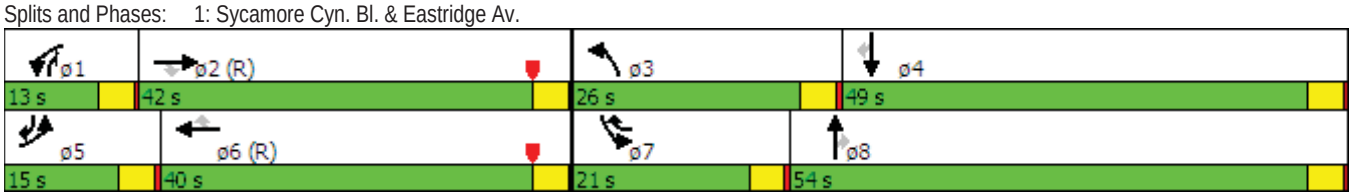
APPENDIX 6.1:

OPENING YEAR WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	207	419	190	112	700	464	413	1132	164	112	191	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		150	310		200	360		320	275		110
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	120			120			120			200		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		910			577			817			952	
Travel Time (s)		15.5			9.8			12.4			14.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	11.0	11.0	20.0	11.0
Total Split (s)	15.0	42.0	42.0	13.0	40.0	21.0	26.0	54.0	13.0	21.0	49.0	15.0
Total Split (%)	11.5%	32.3%	32.3%	10.0%	30.8%	16.2%	20.0%	41.5%	10.0%	16.2%	37.7%	11.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	Max	None	None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Sycamore Cyn. Bl. & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	207	419	190	112	700	464	413	1132	164	112	191	305
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	227	460	0	123	769	510	454	1244	180	123	210	335
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	1671	520	183	1066	561	512	1564	784	183	1225	676
Arrive On Green	0.08	0.33	0.00	0.05	0.30	0.30	0.15	0.44	0.44	0.05	0.35	0.35
Sat Flow, veh/h	3442	5085	1583	3442	3539	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	227	460	0	123	769	510	454	1244	180	123	210	335
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1770	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	8.4	8.7	0.0	4.6	25.2	39.2	16.8	39.3	8.4	4.6	5.4	20.0
Cycle Q Clear(g_c), s	8.4	8.7	0.0	4.6	25.2	39.2	16.8	39.3	8.4	4.6	5.4	20.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	1671	520	183	1066	561	512	1564	784	183	1225	676
V/C Ratio(X)	0.82	0.28	0.00	0.67	0.72	0.91	0.89	0.80	0.23	0.67	0.17	0.50
Avail Cap(c_a), veh/h	291	1671	520	238	1066	561	582	1564	784	450	1225	676
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.8	32.2	0.0	60.4	40.5	40.0	54.2	31.2	18.7	60.4	29.5	27.1
Incr Delay (d2), s/veh	16.0	0.4	0.0	4.7	4.2	21.1	14.0	4.3	0.7	4.2	0.3	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	4.1	0.0	2.3	12.9	20.7	9.0	20.1	3.8	2.3	2.7	9.2
LnGrp Delay(d),s/veh	74.8	32.6	0.0	65.1	44.8	61.1	68.2	35.5	19.4	64.6	29.8	29.7
LnGrp LOS	E	C		E	D	E	E	D	B	E	C	C
Approach Vol, veh/h		687			1402			1878			668	
Approach Delay, s/veh		46.6			52.5			41.9			36.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	46.7	23.4	49.0	14.5	43.2	10.9	61.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	38.0	22.0	45.0	11.0	36.0	17.0	50.0
Max Q Clear Time (g_c+I1), s	6.6	10.7	18.8	22.0	10.4	41.2	6.6	41.3
Green Ext Time (p_c), s	0.1	11.9	0.5	12.7	0.0	0.0	0.2	6.4

Intersection Summary	
HCM 2010 Ctrl Delay	45.0
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	63	590	16	59	1327	526	10	119	51	145	74	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		80	150		0	75		160	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		760			700			315			411	
Travel Time (s)		13.0			11.9			7.2			9.3	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0		11.0	20.0	20.0	11.0	20.0	
Total Split (s)	11.0	80.0	80.0	14.0	83.0		11.0	20.0	20.0	16.0	25.0	
Total Split (%)	8.5%	61.5%	61.5%	10.8%	63.8%		8.5%	15.4%	15.4%	12.3%	19.2%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Box Springs Bl. & Eastridge Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	63	590	16	59	1327	526	10	119	51	145	74	4
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	69	648	18	65	1458	578	11	131	56	159	81	4
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	88	2169	970	86	1547	575	31	229	195	164	679	33
Arrive On Green	0.05	0.61	0.61	0.06	0.81	0.81	0.02	0.12	0.12	0.09	0.20	0.20
Sat Flow, veh/h	1774	3539	1583	1774	2527	939	1774	1863	1583	1774	3434	168
Grp Volume(v), veh/h	69	648	18	65	992	1044	11	131	56	159	41	44
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1697	1774	1863	1583	1774	1770	1833
Q Serve(g_s), s	5.0	11.3	0.6	4.7	53.2	79.6	0.8	8.6	4.2	11.6	2.5	2.5
Cycle Q Clear(g_c), s	5.0	11.3	0.6	4.7	53.2	79.6	0.8	8.6	4.2	11.6	2.5	2.5
Prop In Lane	1.00		1.00	1.00		0.55	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	88	2169	970	86	1083	1039	31	229	195	164	350	362
V/C Ratio(X)	0.79	0.30	0.02	0.75	0.92	1.01	0.35	0.57	0.29	0.97	0.12	0.12
Avail Cap(c_a), veh/h	96	2169	970	136	1083	1039	96	229	195	164	350	362
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.1	11.9	9.9	60.0	9.6	12.1	63.1	53.8	51.8	58.8	42.8	42.9
Incr Delay (d2), s/veh	32.1	0.4	0.0	12.3	13.3	29.2	6.6	10.0	3.7	61.5	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	5.6	0.3	2.6	28.8	44.0	0.4	5.1	2.0	8.5	1.3	1.3
LnGrp Delay(d),s/veh	93.3	12.3	9.9	72.3	23.0	41.3	69.7	63.7	55.5	120.3	43.5	43.5
LnGrp LOS	F	B	A	E	C	F	E	E	E	F	D	D
Approach Vol, veh/h		735			2101			198			244	
Approach Delay, s/veh		19.8			33.6			61.7			93.6	
Approach LOS		B			C			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	83.7	6.3	29.7	10.4	83.6	16.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	76.0	7.0	21.0	7.0	79.0	12.0	16.0
Max Q Clear Time (g_c+I1), s	6.7	13.3	2.8	4.5	7.0	81.6	13.6	10.6
Green Ext Time (p_c), s	0.0	43.3	0.0	1.2	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	36.7
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	620	0	393	1358	0	328	0	0	153	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	275		0	0		0	0		0
Storage Lanes	0		0	0		0	2		0	2		0
Taper Length (ft)	90			190			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		241			359			784			672	
Travel Time (s)		4.1			6.1			15.3			13.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot			Prot		
Protected Phases	5	2		1	6		3			7		
Permitted Phases												
Detector Phase	5	2		1	6		3			7		
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0			7.0		
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0			11.0		
Total Split (s)	19.0	72.0		32.0	85.0		26.0			26.0		
Total Split (%)	14.6%	55.4%		24.6%	65.4%		20.0%			20.0%		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5			3.5		
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5			0.5		
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0			0.0		
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0			4.0		
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		None			None		

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 32 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: I-215 SB/NB Ramps & Eastridge Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	84	620	0	393	1358	0	328	0	0	153	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	0	0	1863	0	0
Adj Flow Rate, veh/h	93	689	0	437	1509	0	364	0	0	170	0	0
Adj No. of Lanes	1	2	0	2	2	0	2	0	0	2	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	0	2	2	0	2	0	0	2	0	0
Cap, veh/h	116	2245	0	513	2540	0	428	0	0	428	0	0
Arrive On Green	0.04	0.42	0.00	0.10	0.48	0.00	0.12	0.00	0.00	0.12	0.00	0.00
Sat Flow, veh/h	1774	3632	0	3442	3632	0	3442	364		3442	170	
Grp Volume(v), veh/h	93	689	0	437	1509	0	364	64.4		170	53.0	
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1721	1770	0	1721	E		1721	D	
Q Serve(g_s), s	6.8	16.7	0.0	16.2	40.3	0.0	13.5			5.9		
Cycle Q Clear(g_c), s	6.8	16.7	0.0	16.2	40.3	0.0	13.5			5.9		
Prop In Lane	1.00		0.00	1.00		0.00	1.00			1.00		
Lane Grp Cap(c), veh/h	116	2245	0	513	2540	0	428			428		
V/C Ratio(X)	0.80	0.31	0.00	0.85	0.59	0.00	0.85			0.40		
Avail Cap(c_a), veh/h	205	2245	0	741	2540	0	582			582		
HCM Platoon Ratio	0.67	0.67	1.00	0.67	0.67	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.96	0.96	0.00	1.00			1.00		
Uniform Delay (d), s/veh	61.3	18.5	0.0	57.1	20.0	0.0	55.7			52.4		
Incr Delay (d2), s/veh	11.7	0.4	0.0	6.3	1.0	0.0	8.7			0.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	3.7	8.3	0.0	8.2	20.0	0.0	6.9			2.8		
LnGrp Delay(d),s/veh	73.0	18.8	0.0	63.5	21.0	0.0	64.4			53.0		
LnGrp LOS	E	B		E	C		E			D		
Approach Vol, veh/h		782			1946							
Approach Delay, s/veh		25.3			30.5							
Approach LOS		C			C							

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3		5	6	7	
Phs Duration (G+Y+Rc), s	23.4	86.4	20.2		12.5	97.3	20.2	
Change Period (Y+Rc), s	4.0	4.0	4.0		4.0	4.0	4.0	
Max Green Setting (Gmax), s	28.0	68.0	22.0		15.0	81.0	22.0	
Max Q Clear Time (g_c+I1), s	18.2	18.7	15.5		8.8	42.3	7.9	
Green Ext Time (p_c), s	1.1	26.6	0.7		0.1	23.3	0.4	

Intersection Summary	
HCM 2010 Ctrl Delay	34.2
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	704	82	0	1686	0	0	0	0	0	0	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		700			241			458			364	
Travel Time (s)		11.9			4.1			8.9			7.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	7.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	704	82	0	1686	0	0	0	0	0	0	226
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	108	25	154	56	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	782	91	0	1873	0	0	0	0	0	0	251

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	1873	0	-	782	0	0	2186	2655	937
Stage 1	-	-	-	-	-	-	1873	1873	-
Stage 2	-	-	-	-	-	-	313	782	-
Critical Hdwy	4.14	-	-	5.34	-	-	6.29	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.04	5.54	-
Follow-up Hdwy	2.22	-	-	3.12	-	-	3.67	4.02	3.32
Pot Cap-1 Maneuver	317	-	0	498	-	-	54	23	266
Stage 1	-	-	0	-	-	-	105	120	-
Stage 2	-	-	0	-	-	-	678	403	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	317	-	-	498	-	-	54	0	266
Mov Cap-2 Maneuver	-	-	-	-	-	-	92	0	-
Stage 1	-	-	-	-	-	-	105	0	-
Stage 2	-	-	-	-	-	-	678	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	82.8
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	317	-	498	-	-	266
HCM Lane V/C Ratio	-	-	-	-	-	0.944
HCM Control Delay (s)	0	-	0	-	-	82.8
HCM Lane LOS	A	-	A	-	-	F
HCM 95th %tile Q(veh)	0	-	0	-	-	8.8

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	0	1686	0	0	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50			0	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	60				60	
Right Turn on Red				Yes		Yes
Link Speed (mph)		40	40		30	
Link Distance (ft)		174	120		486	
Travel Time (s)		3.0	2.0		11.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type			NA			Prot
Protected Phases			6			7
Permitted Phases						
Detector Phase			6			7
Switch Phase						
Minimum Initial (s)			7.0			7.0
Minimum Split (s)			20.0			11.0
Total Split (s)			96.0			34.0
Total Split (%)			73.8%			26.2%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			0.5			0.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.0			4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 31: Eastridge Av. & I-215 SB Ramps (W)

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	0	1686	0	0	226
Number			6	16	7	14
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	0	0	1863
Adj Flow Rate, veh/h			1873	0	0	251
Adj No. of Lanes			2	0	0	1
Peak Hour Factor			0.90	0.90	0.90	0.90
Percent Heavy Veh, %			2	0	0	2
Cap, veh/h			2505	0	0	0
Arrive On Green			0.71	0.00	0.00	0.00
Sat Flow, veh/h			3725	0	0	
Grp Volume(v), veh/h			1873	0	0.0	
Grp Sat Flow(s),veh/h/ln			1770	0		
Q Serve(g_s), s			42.7	0.0		
Cycle Q Clear(g_c), s			42.7	0.0		
Prop In Lane				0.00		
Lane Grp Cap(c), veh/h			2505	0		
V/C Ratio(X)			0.75	0.00		
Avail Cap(c_a), veh/h			2505	0		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	0.00		
Uniform Delay (d), s/veh			11.8	0.0		
Incr Delay (d2), s/veh			2.1	0.0		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			21.3	0.0		
LnGrp Delay(d),s/veh			13.9	0.0		
LnGrp LOS			B			
Approach Vol, veh/h			1873			
Approach Delay, s/veh			13.9			
Approach LOS			B			

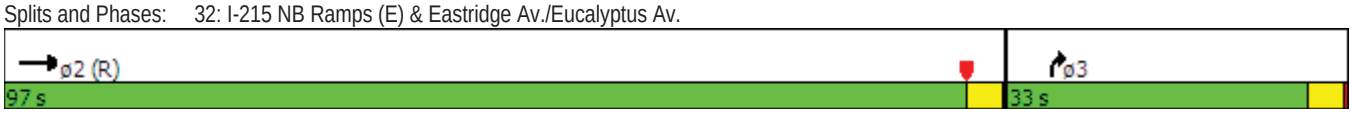
Timer	1	2	3	4	5	6	7	8
Assigned Phs						6		
Phs Duration (G+Y+Rc), s						96.0		
Change Period (Y+Rc), s						4.0		
Max Green Setting (Gmax), s						92.0		
Max Q Clear Time (g_c+I1), s						44.7		
Green Ext Time (p_c), s						23.6		

Intersection Summary	
HCM 2010 Ctrl Delay	13.9
HCM 2010 LOS	B

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	773	0	0	0	0	197
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Right Turn on Red		Yes				Yes
Link Speed (mph)	30			40	30	
Link Distance (ft)	100			131	592	
Travel Time (s)	2.3			2.2	13.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA					Prot
Protected Phases	2					3
Permitted Phases						
Detector Phase	2					3
Switch Phase						
Minimum Initial (s)	7.0					7.0
Minimum Split (s)	20.0					11.0
Total Split (s)	97.0					33.0
Total Split (%)	74.6%					25.4%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	0.5					0.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	4.0					4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max					None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	

Splits and Phases: 32: I-215 NB Ramps (E) & Eastridge Av./Eucalyptus Av.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	773	0	0	0	0	197
Number	2	12			3	18
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)		1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0			0	1863
Adj Flow Rate, veh/h	859	0			0	219
Adj No. of Lanes	2	0			0	2
Peak Hour Factor	0.90	0.90			0.90	0.90
Percent Heavy Veh, %	2	0			0	2
Cap, veh/h	3430	0			0	0
Arrive On Green	0.97	0.00			0.00	0.00
Sat Flow, veh/h	3725	0			0	
Grp Volume(v), veh/h	859	0			0.0	
Grp Sat Flow(s),veh/h/ln	1770	0				
Q Serve(g_s), s	1.3	0.0				
Cycle Q Clear(g_c), s	1.3	0.0				
Prop In Lane		0.00				
Lane Grp Cap(c), veh/h	3430	0				
V/C Ratio(X)	0.25	0.00				
Avail Cap(c_a), veh/h	3430	0				
HCM Platoon Ratio	1.00	1.00				
Upstream Filter(I)	1.00	0.00				
Uniform Delay (d), s/veh	0.1	0.0				
Incr Delay (d2), s/veh	0.2	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile BackOfQ(50%),veh/ln	0.6	0.0				
LnGrp Delay(d),s/veh	0.3	0.0				
LnGrp LOS	A					
Approach Vol, veh/h	859					
Approach Delay, s/veh	0.3					
Approach LOS	A					

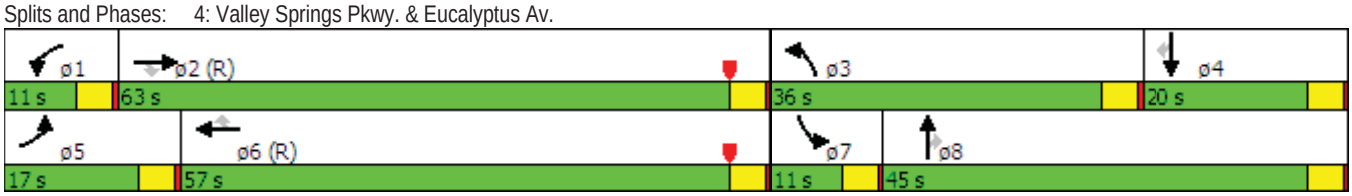
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		130.0						
Change Period (Y+Rc), s		4.0						
Max Green Setting (Gmax), s		93.0						
Max Q Clear Time (g_c+I1), s		3.3						
Green Ext Time (p_c), s		7.7						

Intersection Summary	
HCM 2010 Ctrl Delay	0.3
HCM 2010 LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	298	614	58	23	1305	44	397	381	127	20	35	367
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	1		1	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0
Total Split (s)	17.0	63.0	63.0	11.0	57.0	57.0	36.0	45.0	45.0	11.0	20.0	20.0
Total Split (%)	13.1%	48.5%	48.5%	8.5%	43.8%	43.8%	27.7%	34.6%	34.6%	8.5%	15.4%	15.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	Max	None	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	298	614	58	23	1305	44	397	381	127	20	35	367
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	335	690	65	26	1466	49	446	428	143	22	39	412
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	344	1681	752	58	1443	646	437	1202	538	52	229	343
Arrive On Green	0.07	0.32	0.32	0.03	0.41	0.41	0.25	0.34	0.34	0.03	0.12	0.12
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	1774	3539	1583	1774	1863	2787
Grp Volume(v), veh/h	335	690	65	26	1466	49	446	428	143	22	39	412
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1774	1770	1583	1774	1863	1393
Q Serve(g_s), s	12.6	19.9	3.7	1.9	53.0	2.5	32.0	11.8	8.5	1.6	2.4	16.0
Cycle Q Clear(g_c), s	12.6	19.9	3.7	1.9	53.0	2.5	32.0	11.8	8.5	1.6	2.4	16.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	344	1681	752	58	1443	646	437	1202	538	52	229	343
V/C Ratio(X)	0.97	0.41	0.09	0.45	1.02	0.08	1.02	0.36	0.27	0.42	0.17	1.20
Avail Cap(c_a), veh/h	344	1681	752	96	1443	646	437	1202	538	96	229	343
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	0.49	0.49	0.49	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.5	30.0	24.5	61.7	38.5	23.5	49.0	32.2	31.2	62.0	51.1	57.0
Incr Delay (d2), s/veh	40.3	0.7	0.2	2.6	20.6	0.1	48.6	0.8	1.2	5.3	1.6	115.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	9.9	1.7	1.0	30.0	1.1	21.5	5.9	3.9	0.9	1.4	11.6
LnGrp Delay(d),s/veh	100.8	30.8	24.8	64.3	59.1	23.6	97.6	33.1	32.4	67.3	52.7	172.2
LnGrp LOS	F	C	C	E	F	C	F	C	C	E	D	F
Approach Vol, veh/h		1090			1541			1017			473	
Approach Delay, s/veh		51.9			58.1			61.3			157.5	
Approach LOS		D			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	65.7	36.0	20.0	17.0	57.0	7.8	48.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	59.0	32.0	16.0	13.0	53.0	7.0	41.0
Max Q Clear Time (g_c+I1), s	3.9	21.9	34.0	18.0	14.6	55.0	3.6	13.8
Green Ext Time (p_c), s	0.0	22.8	0.0	0.0	0.0	0.0	0.0	5.7

Intersection Summary	
HCM 2010 Ctrl Delay	68.6
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	298	614	58	23	1305	44	397	381	127	20	35	367
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	2		0	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6						4
Detector Phase	5	2	2	1	6	6	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	20.0	75.0	75.0	11.0	66.0	66.0	24.0	33.0		11.0	20.0	20.0
Total Split (%)	15.4%	57.7%	57.7%	8.5%	50.8%	50.8%	18.5%	25.4%		8.5%	15.4%	15.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max		None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	298	614	58	23	1305	44	397	381	127	20	35	367
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	335	690	65	26	1466	49	446	428	143	22	39	412
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	382	2039	912	58	1762	788	499	623	206	52	229	653
Arrive On Green	0.22	1.00	1.00	0.03	0.50	0.50	0.14	0.24	0.24	0.03	0.12	0.12
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	3442	2614	865	1774	1863	2787
Grp Volume(v), veh/h	335	690	65	26	1466	49	446	288	283	22	39	412
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1721	1770	1710	1774	1863	1393
Q Serve(g_s), s	12.2	0.0	0.0	1.9	46.2	2.1	16.6	19.3	19.6	1.6	2.4	16.0
Cycle Q Clear(g_c), s	12.2	0.0	0.0	1.9	46.2	2.1	16.6	19.3	19.6	1.6	2.4	16.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.51	1.00		1.00
Lane Grp Cap(c), veh/h	382	2039	912	58	1762	788	499	422	408	52	229	653
V/C Ratio(X)	0.88	0.34	0.07	0.45	0.83	0.06	0.89	0.68	0.69	0.42	0.17	0.63
Avail Cap(c_a), veh/h	424	2039	912	96	1762	788	529	422	408	96	229	653
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	0.49	0.49	0.49	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	0.0	0.0	61.7	28.0	16.9	54.6	45.0	45.2	62.0	51.1	44.7
Incr Delay (d2), s/veh	16.5	0.4	0.1	2.6	2.4	0.1	17.0	8.7	9.3	5.3	1.6	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	0.1	0.0	1.0	23.0	0.9	9.0	10.5	10.3	0.9	1.4	7.1
LnGrp Delay(d),s/veh	66.2	0.4	0.1	64.3	30.4	17.0	71.6	53.7	54.5	67.3	52.7	49.3
LnGrp LOS	E	A	A	E	C	B	E	D	D	E	D	D
Approach Vol, veh/h		1090			1541			1017			473	
Approach Delay, s/veh		20.6			30.5			61.8			50.4	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	78.9	22.8	20.0	18.4	68.7	7.8	35.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	71.0	20.0	16.0	16.0	62.0	7.0	29.0
Max Q Clear Time (g_c+I1), s	3.9	2.0	18.6	18.0	14.2	48.2	3.6	21.6
Green Ext Time (p_c), s	0.0	31.0	0.3	0.0	0.2	11.0	0.0	3.2

Intersection Summary	
HCM 2010 Ctrl Delay	37.9
HCM 2010 LOS	D

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	445	239	392	239	129	564
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		175	200	
Storage Lanes	2	1		1	1	
Taper Length (ft)	60				80	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		40			40
Link Distance (ft)	307		957			795
Travel Time (s)	6.0		16.3			13.6
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	35.0	27.0	34.0	35.0	27.0	61.0
Total Split (%)	36.5%	28.1%	35.4%	36.5%	28.1%	63.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 94 (98%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: Day St. & SR-60 WB Ramps

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	445	239	392	239	129	564
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	459	246	404	246	133	581
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	594	891	1106	768	692	2633
Arrive On Green	0.17	0.17	0.63	0.63	0.39	0.74
Sat Flow, veh/h	3442	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	459	246	404	246	133	581
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1770
Q Serve(g_s), s	12.2	0.0	5.3	6.1	4.7	4.8
Cycle Q Clear(g_c), s	12.2	0.0	5.3	6.1	4.7	4.8
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	594	891	1106	768	692	2633
V/C Ratio(X)	0.77	0.28	0.37	0.32	0.19	0.22
Avail Cap(c_a), veh/h	1111	1128	1106	768	692	2633
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.96	0.96	1.00	1.00
Uniform Delay (d), s/veh	37.9	10.9	13.4	7.8	19.3	3.8
Incr Delay (d2), s/veh	2.2	0.2	0.9	1.1	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	3.4	2.7	3.6	2.4	2.4
LnGrp Delay(d),s/veh	40.1	11.0	14.3	8.9	19.5	4.0
LnGrp LOS	D	B	B	A	B	A
Approach Vol, veh/h	705		650			714
Approach Delay, s/veh	29.9		12.2			6.8
Approach LOS	C		B			A

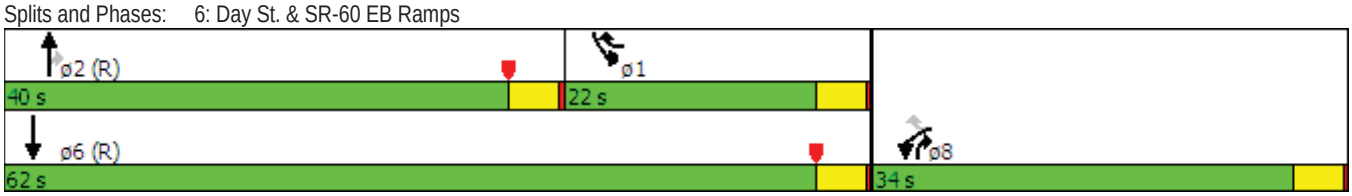
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	41.4	34.0				75.4		20.6
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	23.0	30.0				57.0		31.0
Max Q Clear Time (g_c+I1), s	6.7	8.1				6.8		14.2
Green Ext Time (p_c), s	3.7	3.3				4.5		2.4

Intersection Summary	
HCM 2010 Ctrl Delay	16.4
HCM 2010 LOS	B

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	460	84	547	438	111	897
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	200		0	425	
Storage Lanes	2	0		1	1	
Taper Length (ft)	60				60	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		40			40
Link Distance (ft)	263		524			957
Travel Time (s)	5.1		8.9			16.3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	34.0	22.0	40.0	34.0	22.0	62.0
Total Split (%)	35.4%	22.9%	41.7%	35.4%	22.9%	64.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 90 (94%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Day St. & SR-60 EB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	460	84	547	438	111	897
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	469	86	558	447	113	915
Adj No. of Lanes	2	1	2	1	1	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	586	792	1327	863	585	3795
Arrive On Green	0.17	0.17	0.12	0.12	0.66	1.00
Sat Flow, veh/h	3442	1583	3632	1583	1774	5253
Grp Volume(v), veh/h	469	86	558	447	113	915
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1695
Q Serve(g_s), s	12.6	0.0	14.0	19.1	2.4	0.0
Cycle Q Clear(g_c), s	12.6	0.0	14.0	19.1	2.4	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	586	792	1327	863	585	3795
V/C Ratio(X)	0.80	0.11	0.42	0.52	0.19	0.24
Avail Cap(c_a), veh/h	1076	1017	1327	863	585	3795
HCM Platoon Ratio	1.00	1.00	0.33	0.33	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.93	0.93	0.90	0.90
Uniform Delay (d), s/veh	38.3	12.7	32.4	20.0	11.4	0.0
Incr Delay (d2), s/veh	2.6	0.1	0.9	2.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	1.2	7.0	12.0	1.2	0.0
LnGrp Delay(d),s/veh	40.8	12.7	33.3	22.0	11.5	0.1
LnGrp LOS	D	B	C	C	B	A
Approach Vol, veh/h	555		1005			1028
Approach Delay, s/veh	36.5		28.3			1.4
Approach LOS	D		C			A

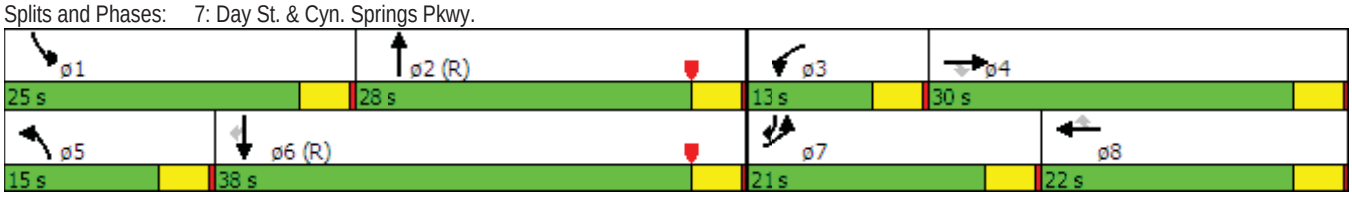
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	35.6	40.0				75.6		20.4
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	18.0	36.0				58.0		30.0
Max Q Clear Time (g_c+I1), s	4.4	21.1				2.0		14.6
Green Ext Time (p_c), s	5.3	4.6				7.8		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	19.4
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	297	32	35	32	34	107	67	581	55	167	808	301
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	145		0	165		0	170		200
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	95			100			120			80		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		1120			404			728			524	
Travel Time (s)		19.1			7.9			12.4			8.9	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												34%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	21.0	30.0	30.0	13.0	22.0	22.0	15.0	28.0		25.0	38.0	21.0
Total Split (%)	21.9%	31.3%	31.3%	13.5%	22.9%	22.9%	15.6%	29.2%		26.0%	39.6%	21.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 51 (53%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Day St. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	297	32	35	32	34	107	67	581	55	167	808	301
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	306	33	36	33	35	110	69	599	57	172	955	229
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	4	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	390	306	260	76	174	148	109	2416	228	205	4210	1074
Arrive On Green	0.11	0.16	0.16	0.04	0.09	0.09	0.02	0.17	0.17	0.23	1.00	1.00
Sat Flow, veh/h	3442	1863	1583	1774	1863	1583	1774	4728	446	1774	7451	1583
Grp Volume(v), veh/h	306	33	36	33	35	110	69	428	228	172	955	229
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1863	1583	1774	1695	1784	1774	1863	1583
Q Serve(g_s), s	8.3	1.4	1.9	1.7	1.7	6.5	3.7	10.5	10.7	8.9	0.0	0.0
Cycle Q Clear(g_c), s	8.3	1.4	1.9	1.7	1.7	6.5	3.7	10.5	10.7	8.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	390	306	260	76	174	148	109	1732	912	205	4210	1074
V/C Ratio(X)	0.78	0.11	0.14	0.44	0.20	0.74	0.63	0.25	0.25	0.84	0.23	0.21
Avail Cap(c_a), veh/h	609	504	429	166	349	297	203	1732	912	388	4210	1074
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.93	0.93	0.93	1.00	1.00	1.00	0.99	0.99	0.99	0.92	0.92	0.92
Uniform Delay (d), s/veh	41.4	34.1	34.3	44.8	40.2	42.4	46.0	23.9	23.9	36.1	0.0	0.0
Incr Delay (d2), s/veh	3.3	0.1	0.2	3.9	0.6	7.1	5.9	0.3	0.7	8.3	0.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.8	0.8	0.9	0.9	3.1	2.0	5.0	5.4	4.8	0.0	0.1
LnGrp Delay(d),s/veh	44.7	34.3	34.5	48.7	40.7	49.5	51.9	24.2	24.6	44.4	0.1	0.4
LnGrp LOS	D	C	C	D	D	D	D	C	C	D	A	A
Approach Vol, veh/h		375			178			725			1356	
Approach Delay, s/veh		42.8			47.6			27.0			5.8	
Approach LOS		D			D			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	53.1	8.1	19.8	9.9	58.2	14.9	13.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	24.0	9.0	26.0	11.0	34.0	17.0	18.0
Max Q Clear Time (g_c+I1), s	10.9	12.7	3.7	3.9	5.7	2.0	10.3	8.5
Green Ext Time (p_c), s	0.3	7.7	0.0	0.7	0.0	14.5	0.6	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	19.7
HCM 2010 LOS	B

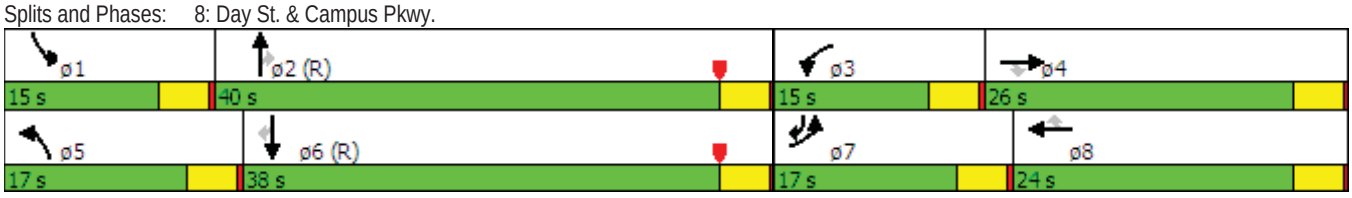
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	48	24	49	20	59	67	116	588	39	63	649	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		50	200		0	130		50	190		0
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	60			120			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		938			519			1025			728	
Travel Time (s)		16.0			10.1			17.5			12.4	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	17.0	26.0	26.0	15.0	24.0	24.0	17.0	40.0	40.0	15.0	38.0	17.0
Total Split (%)	17.7%	27.1%	27.1%	15.6%	25.0%	25.0%	17.7%	41.7%	41.7%	15.6%	39.6%	17.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 8 (8%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Day St. & Campus Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	48	24	49	20	59	67	116	588	39	63	649	116
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	48	24	49	20	60	68	117	594	39	64	656	117
Adj No. of Lanes	2	1	1	1	2	1	2	3	1	2	3	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	181	177	151	53	257	115	240	3297	1026	205	3246	1094
Arrive On Green	0.05	0.10	0.10	0.03	0.07	0.07	0.14	1.00	1.00	0.02	0.21	0.21
Sat Flow, veh/h	3442	1863	1583	1774	3539	1583	3442	5085	1583	3442	5085	1583
Grp Volume(v), veh/h	48	24	49	20	60	68	117	594	39	64	656	117
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1770	1583	1721	1695	1583	1721	1695	1583
Q Serve(g_s), s	1.3	1.1	2.8	1.1	1.5	4.0	3.0	0.0	0.0	1.8	10.2	4.9
Cycle Q Clear(g_c), s	1.3	1.1	2.8	1.1	1.5	4.0	3.0	0.0	0.0	1.8	10.2	4.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	181	177	151	53	257	115	240	3297	1026	205	3246	1094
V/C Ratio(X)	0.26	0.14	0.33	0.37	0.23	0.59	0.49	0.18	0.04	0.31	0.20	0.11
Avail Cap(c_a), veh/h	466	427	363	203	737	330	466	3297	1026	394	3246	1094
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.97	0.97	0.97
Uniform Delay (d), s/veh	43.7	39.8	40.5	45.7	42.0	43.1	39.7	0.0	0.0	45.1	17.7	11.7
Incr Delay (d2), s/veh	0.8	0.3	1.2	4.3	0.5	4.8	1.5	0.1	0.1	0.8	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.6	1.3	0.6	0.8	1.9	1.5	0.0	0.0	0.9	4.8	2.2
LnGrp Delay(d),s/veh	44.5	40.1	41.8	49.9	42.4	47.9	41.2	0.1	0.1	45.9	17.9	11.9
LnGrp LOS	D	D	D	D	D	D	D	A	A	D	B	B
Approach Vol, veh/h		121			148			750			837	
Approach Delay, s/veh		42.5			46.0			6.5			19.2	
Approach LOS		D			D			A			B	

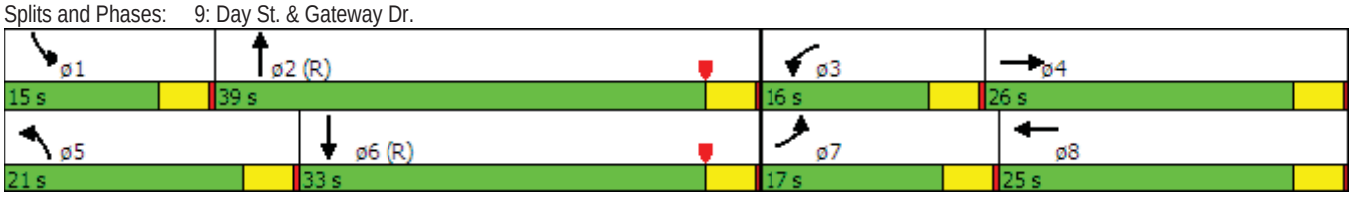
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	66.2	6.9	13.1	10.7	65.3	9.1	11.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	36.0	11.0	22.0	13.0	34.0	13.0	20.0
Max Q Clear Time (g_c+I1), s	3.8	2.0	3.1	4.8	5.0	12.2	3.3	6.0
Green Ext Time (p_c), s	0.1	10.8	0.0	0.7	0.2	9.1	0.1	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	17.7
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	36	32	33	86	103	78	558	49	81	460	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	100		0	190		400	260		0
Storage Lanes	1		0	1		0	1		1	2		0
Taper Length (ft)	0			120			60			165		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		318			585			592			1025	
Travel Time (s)		5.4			11.4			10.1			17.5	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	17.0	26.0		16.0	25.0		21.0	39.0		15.0	33.0	
Total Split (%)	17.7%	27.1%		16.7%	26.0%		21.9%	40.6%		15.6%	34.4%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 15 (16%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

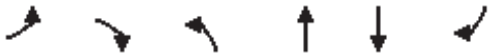
Splits and Phases: 9: Day St. & Gateway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	52	36	32	33	86	103	78	558	49	81	460	76
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	53	36	32	33	87	104	79	564	49	82	465	77
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	98	204	161	76	170	152	114	2946	254	223	2727	442
Arrive On Green	0.06	0.11	0.11	0.04	0.10	0.10	0.06	0.62	0.62	0.09	0.82	0.82
Sat Flow, veh/h	1774	1886	1485	1774	1770	1583	1774	4770	411	3442	4411	715
Grp Volume(v), veh/h	53	33	35	33	87	104	79	399	214	82	355	187
Grp Sat Flow(s),veh/h/ln	1774	1770	1601	1774	1770	1583	1774	1695	1790	1721	1695	1736
Q Serve(g_s), s	2.8	1.7	1.9	1.7	4.5	6.1	4.2	4.9	5.0	2.2	2.1	2.1
Cycle Q Clear(g_c), s	2.8	1.7	1.9	1.7	4.5	6.1	4.2	4.9	5.0	2.2	2.1	2.1
Prop In Lane	1.00		0.93	1.00		1.00	1.00		0.23	1.00		0.41
Lane Grp Cap(c), veh/h	98	192	173	76	170	152	114	2094	1106	223	2096	1074
V/C Ratio(X)	0.54	0.17	0.20	0.44	0.51	0.69	0.70	0.19	0.19	0.37	0.17	0.17
Avail Cap(c_a), veh/h	240	406	367	222	387	346	314	2094	1106	394	2096	1074
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Uniform Delay (d), s/veh	44.2	38.9	39.0	44.8	41.3	42.0	44.0	8.0	8.0	42.0	3.4	3.4
Incr Delay (d2), s/veh	4.6	0.4	0.6	3.9	2.4	5.4	7.4	0.2	0.4	1.0	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.8	0.9	0.9	2.3	2.9	2.3	2.3	2.6	1.0	1.0	1.1
LnGrp Delay(d),s/veh	48.8	39.3	39.6	48.7	43.7	47.4	51.4	8.2	8.4	43.0	3.6	3.8
LnGrp LOS	D	D	D	D	D	D	D	A	A	D	A	A
Approach Vol, veh/h		121			224			692			624	
Approach Delay, s/veh		43.5			46.1			13.2			8.8	
Approach LOS		D			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	63.3	8.1	14.4	10.1	63.4	9.3	13.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	35.0	12.0	22.0	17.0	29.0	13.0	21.0
Max Q Clear Time (g_c+I1), s	4.2	7.0	3.7	3.9	6.2	4.1	4.8	8.1
Green Ext Time (p_c), s	0.1	7.9	0.0	1.3	0.1	7.7	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	18.2
HCM 2010 LOS	B



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	7	9	22	782	528	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	25			0
Storage Lanes	1	0	1			0
Taper Length (ft)	60		25			
Link Speed (mph)	30			40	40	
Link Distance (ft)	264			453	180	
Travel Time (s)	6.0			7.7	3.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	7	9	22	782	528	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	-	25	-	-	-
Veh in Median Storage, #	1	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	10	24	841	568	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1051	299	598	0	-	0
Stage 1	583	-	-	-	-	-
Stage 2	468	-	-	-	-	-
Critical Hdwy	6.29	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	255	595	609	-	-	-
Stage 1	444	-	-	-	-	-
Stage 2	577	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	245	595	609	-	-	-
Mov Cap-2 Maneuver	334	-	-	-	-	-
Stage 1	444	-	-	-	-	-
Stage 2	554	-	-	-	-	-

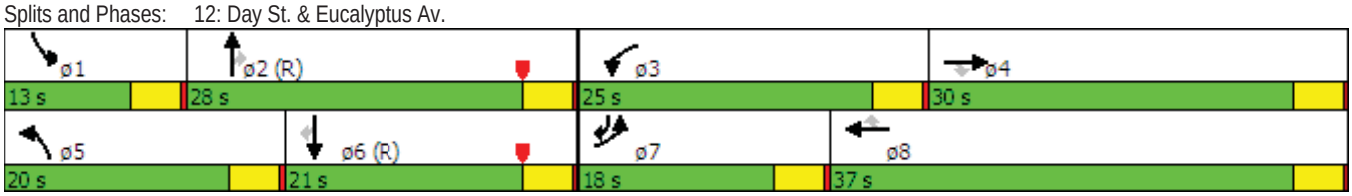
Approach	EB	NB	SB
HCM Control Delay, s	13.5	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	609	-	443	-	-
HCM Lane V/C Ratio	0.039	-	0.039	-	-
HCM Control Delay (s)	11.2	-	13.5	-	-
HCM Lane LOS	B	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	180	575	82	292	1011	108	226	425	222	77	254	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		50	175		0	100		100	200		0
Storage Lanes	1		1	1		1	1		2	1		1
Taper Length (ft)	100			75			80			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			40	
Link Distance (ft)		2104			1174			390			453	
Travel Time (s)		35.9			20.0			7.6			7.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	18.0	30.0	30.0	25.0	37.0	37.0	20.0	28.0	28.0	13.0	21.0	18.0
Total Split (%)	18.8%	31.3%	31.3%	26.0%	38.5%	38.5%	20.8%	29.2%	29.2%	13.5%	21.9%	18.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 13 (14%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Day St. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	575	82	292	1011	108	226	425	222	77	254	169
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	189	605	86	307	1064	114	238	447	234	81	267	178
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	955	427	341	1192	533	271	1085	485	114	772	544
Arrive On Green	0.13	0.27	0.27	0.19	0.34	0.34	0.15	0.31	0.31	0.06	0.22	0.22
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	189	605	86	307	1064	114	238	447	234	81	267	178
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	10.0	14.5	4.0	16.2	27.4	4.9	12.6	9.6	11.5	4.3	6.1	8.0
Cycle Q Clear(g_c), s	10.0	14.5	4.0	16.2	27.4	4.9	12.6	9.6	11.5	4.3	6.1	8.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	222	955	427	341	1192	533	271	1085	485	114	772	544
V/C Ratio(X)	0.85	0.63	0.20	0.90	0.89	0.21	0.88	0.41	0.48	0.71	0.35	0.33
Avail Cap(c_a), veh/h	259	959	429	388	1217	544	296	1085	485	166	772	544
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.1	30.9	27.1	37.8	30.2	22.7	39.8	26.4	27.1	44.0	31.7	23.3
Incr Delay (d2), s/veh	19.3	1.3	0.2	21.4	8.5	0.2	23.2	1.2	3.4	7.8	1.2	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	7.2	1.8	10.0	14.7	2.2	7.9	4.9	5.5	2.4	3.1	3.7
LnGrp Delay(d),s/veh	60.4	32.2	27.3	59.3	38.7	22.9	63.0	27.6	30.5	51.8	33.0	24.9
LnGrp LOS	E	C	C	E	D	C	E	C	C	D	C	C
Approach Vol, veh/h		880			1485			919			526	
Approach Delay, s/veh		37.8			41.8			37.5			33.1	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	33.4	22.5	29.9	18.7	24.9	16.0	36.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	24.0	21.0	26.0	16.0	17.0	14.0	33.0
Max Q Clear Time (g_c+I1), s	6.3	13.5	18.2	16.5	14.6	10.0	12.0	29.4
Green Ext Time (p_c), s	0.0	4.4	0.3	6.9	0.1	3.4	0.1	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	38.6
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	131	61	97	139	217	40	521	120	198	432	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	95		95	80		0	100		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	60			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			25			35	
Link Distance (ft)		861			839			1320			2260	
Travel Time (s)		16.8			16.3			36.0			44.0	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	47.0		18.0	54.0	
Total Split (%)	11.5%	20.8%		11.5%	20.8%	20.8%	11.5%	49.0%		18.8%	56.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Day St. & Cottonwood Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	34	131	61	97	139	217	40	521	120	198	432	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	39	149	69	110	158	247	45	592	136	225	491	28
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	84	174	81	129	317	269	90	691	159	257	987	56
Arrive On Green	0.05	0.14	0.14	0.07	0.17	0.17	0.05	0.47	0.47	0.14	0.57	0.57
Sat Flow, veh/h	1774	1206	558	1774	1863	1583	1774	1466	337	1774	1746	100
Grp Volume(v), veh/h	39	0	218	110	158	247	45	0	728	225	0	519
Grp Sat Flow(s),veh/h/ln	1774	0	1764	1774	1863	1583	1774	0	1803	1774	0	1845
Q Serve(g_s), s	2.1	0.0	11.6	5.9	7.4	14.7	2.4	0.0	34.4	11.9	0.0	16.3
Cycle Q Clear(g_c), s	2.1	0.0	11.6	5.9	7.4	14.7	2.4	0.0	34.4	11.9	0.0	16.3
Prop In Lane	1.00		0.32	1.00		1.00	1.00		0.19	1.00		0.05
Lane Grp Cap(c), veh/h	84	0	255	129	317	269	90	0	850	257	0	1043
V/C Ratio(X)	0.47	0.00	0.86	0.85	0.50	0.92	0.50	0.00	0.86	0.88	0.00	0.50
Avail Cap(c_a), veh/h	129	0	294	129	317	269	129	0	850	259	0	1043
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.6	0.0	40.1	44.0	36.1	39.2	44.4	0.0	22.5	40.2	0.0	12.6
Incr Delay (d2), s/veh	4.0	0.0	19.3	38.5	1.2	33.8	4.2	0.0	10.8	26.7	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	7.0	4.3	3.9	9.0	1.3	0.0	19.5	7.7	0.0	8.7
LnGrp Delay(d),s/veh	48.6	0.0	59.4	82.5	37.3	72.9	48.5	0.0	33.3	66.9	0.0	14.3
LnGrp LOS	D		E	F	D	E	D		C	E		B
Approach Vol, veh/h		257			515			773			744	
Approach Delay, s/veh		57.7			64.1			34.2			30.2	
Approach LOS		E			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.9	49.2	11.0	17.9	8.9	58.3	8.5	20.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	43.0	7.0	16.0	7.0	50.0	7.0	16.0
Max Q Clear Time (g_c+I1), s	13.9	36.4	7.9	13.6	4.4	18.3	4.1	16.7
Green Ext Time (p_c), s	0.0	4.2	0.0	0.3	0.0	11.1	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	42.3
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	131	61	97	139	217	40	521	120	198	432	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	95		95	80		100	100		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	60			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			25			35	
Link Distance (ft)		861			839			711			2260	
Travel Time (s)		16.8			16.3			19.4			44.0	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Detector Phase	7	4		3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	
Total Split (s)	11.0	20.0		13.0	22.0	22.0	11.0	43.0	43.0	20.0	52.0	
Total Split (%)	11.5%	20.8%		13.5%	22.9%	22.9%	11.5%	44.8%	44.8%	20.8%	54.2%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Day St. & Cottonwood Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	34	131	61	97	139	217	40	521	120	198	432	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	39	149	69	110	158	247	45	592	136	225	491	28
Adj No. of Lanes	1	1	0	1	1	1	1	1	1	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	84	180	83	138	335	284	90	858	729	259	970	55
Arrive On Green	0.05	0.15	0.15	0.08	0.18	0.18	0.05	0.46	0.46	0.15	0.56	0.56
Sat Flow, veh/h	1774	1206	558	1774	1863	1583	1774	1863	1583	1774	1746	100
Grp Volume(v), veh/h	39	0	218	110	158	247	45	592	136	225	0	519
Grp Sat Flow(s),veh/h/ln	1774	0	1764	1774	1863	1583	1774	1863	1583	1774	0	1845
Q Serve(g_s), s	2.1	0.0	11.5	5.9	7.3	14.6	2.4	24.1	4.9	11.9	0.0	16.7
Cycle Q Clear(g_c), s	2.1	0.0	11.5	5.9	7.3	14.6	2.4	24.1	4.9	11.9	0.0	16.7
Prop In Lane	1.00		0.32	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	84	0	263	138	335	284	90	858	729	259	0	1025
V/C Ratio(X)	0.47	0.00	0.83	0.80	0.47	0.87	0.50	0.69	0.19	0.87	0.00	0.51
Avail Cap(c_a), veh/h	129	0	294	166	349	297	129	858	729	296	0	1025
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.6	0.0	39.7	43.5	35.3	38.3	44.4	20.5	15.3	40.1	0.0	13.2
Incr Delay (d2), s/veh	4.0	0.0	16.3	19.9	1.0	22.3	4.2	4.5	0.6	21.2	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	6.8	3.6	3.9	8.1	1.3	13.4	2.2	7.3	0.0	9.0
LnGrp Delay(d),s/veh	48.6	0.0	55.9	63.4	36.3	60.6	48.5	25.0	15.8	61.3	0.0	15.0
LnGrp LOS	D		E	E	D	E	D	C	B	E		B
Approach Vol, veh/h		257			515			773			744	
Approach Delay, s/veh		54.8			53.7			24.8			29.0	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	48.2	11.5	18.3	8.9	57.3	8.5	21.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	39.0	9.0	16.0	7.0	48.0	7.0	18.0
Max Q Clear Time (g_c+I1), s	13.9	26.1	7.9	13.5	4.4	18.7	4.1	16.6
Green Ext Time (p_c), s	0.1	6.4	0.0	0.8	0.0	9.5	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	36.0
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	28	17	9	23	49	6	628	1	17	565	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		861			839			634			1320	
Travel Time (s)		19.6			19.1			17.3			36.0	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	53.7
Intersection LOS	F

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	9	28	17	0	9	23	49	0	6	628	1
Peak Hour Factor	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	11	35	21	0	11	29	61	0	7	785	1
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	11.4	11.2	58.4
HCM LOS	B	B	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	1%	24%	0%	28%	0%	3%
Vol Thru, %	99%	76%	0%	72%	0%	96%
Vol Right, %	0%	0%	100%	0%	100%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	635	37	17	32	49	587
LT Vol	6	9	0	9	0	17
Through Vol	628	28	0	23	0	565
RT Vol	1	0	17	0	49	5
Lane Flow Rate	794	46	21	40	61	734
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	1	0.104	0.043	0.089	0.122	1
Departure Headway (Hd)	5.485	8.107	7.286	8.017	7.177	5.433
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	667	441	490	447	499	660
Service Time	3.526	5.872	5.051	5.77	4.93	3.526
HCM Lane V/C Ratio	1.19	0.104	0.043	0.089	0.122	1.112
HCM Control Delay	58.4	11.8	10.4	11.6	10.9	58.4
HCM Lane LOS	F	B	B	B	B	F
HCM 95th-tile Q	15.6	0.3	0.1	0.3	0.4	15.6

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	17	565	5
Peak Hour Factor	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	21	706	6
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	58.4
HCM LOS	F

Lane

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	28	17	9	23	49	6	628	1	17	565	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		861			839			634			609	
Travel Time (s)		19.6			19.1			17.3			16.6	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	19.6
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	9	28	17	0	9	23	49	0	6	628	1
Peak Hour Factor	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	11	35	21	0	11	29	61	0	7	785	1
Number of Lanes	0	0	1	1	0	0	1	1	0	0	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	11.5	11.4	21.3
HCM LOS	B	B	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	2%	0%	24%	0%	28%	0%	6%	0%
Vol Thru, %	98%	100%	76%	0%	72%	0%	94%	98%
Vol Right, %	0%	0%	0%	100%	0%	100%	0%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	320	315	37	17	32	49	300	288
LT Vol	6	0	9	0	9	0	17	0
Through Vol	314	314	28	0	23	0	283	283
RT Vol	0	1	0	17	0	49	0	5
Lane Flow Rate	400	394	46	21	40	61	374	359
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.687	0.675	0.106	0.044	0.091	0.124	0.653	0.623
Departure Headway (Hd)	6.187	6.175	8.249	7.402	8.171	7.306	6.279	6.238
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	580	583	432	481	436	488	573	575
Service Time	3.956	3.944	6.043	5.195	5.961	5.095	4.049	4.007
HCM Lane V/C Ratio	0.69	0.676	0.106	0.044	0.092	0.125	0.653	0.624
HCM Control Delay	21.6	20.9	12	10.5	11.8	11.1	20.2	18.9
HCM Lane LOS	C	C	B	B	B	B	C	C
HCM 95th-tile Q	5.3	5.1	0.4	0.1	0.3	0.4	4.7	4.3

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	17	565	5
Peak Hour Factor	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	21	706	6
Number of Lanes	0	0	2	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	19.6
HCM LOS	C

Lane

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	234	1013	158	163	1591	99	95	284	104	78	371	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	245		0	220		75	50		50	200		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	100			120			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		861			839			831			716	
Travel Time (s)		13.0			12.7			16.2			19.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		
Detector Phase	5	2		1	6	6	8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (s)	16.0	43.0		21.0	48.0	48.0	32.0	32.0	32.0	32.0	32.0	
Total Split (%)	16.7%	44.8%		21.9%	50.0%	50.0%	33.3%	33.3%	33.3%	33.3%	33.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max		None	C-Max	C-Max	Max	Max	Max	Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 42 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 15: Day St. & Alessandro Bl.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	234	1013	158	163	1591	99	95	284	104	78	371	129
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	249	1078	168	173	1693	105	101	302	111	83	395	137
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	2070	322	208	1622	726	75	543	462	225	386	134
Arrive On Green	0.13	0.47	0.47	0.12	0.46	0.46	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1774	4440	691	1774	3539	1583	868	1863	1583	969	1323	459
Grp Volume(v), veh/h	249	823	423	173	1693	105	101	302	111	83	0	532
Grp Sat Flow(s),veh/h/ln	1774	1695	1741	1774	1770	1583	868	1863	1583	969	0	1782
Q Serve(g_s), s	12.0	16.4	16.5	9.2	44.0	3.7	0.0	13.2	5.1	7.6	0.0	28.0
Cycle Q Clear(g_c), s	12.0	16.4	16.5	9.2	44.0	3.7	28.0	13.2	5.1	20.8	0.0	28.0
Prop In Lane	1.00		0.40	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	222	1580	811	208	1622	726	75	543	462	225	0	520
V/C Ratio(X)	1.12	0.52	0.52	0.83	1.04	0.14	1.35	0.56	0.24	0.37	0.00	1.02
Avail Cap(c_a), veh/h	222	1580	811	314	1622	726	75	543	462	225	0	520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.0	18.1	18.1	41.5	26.0	15.1	48.0	28.7	25.9	37.5	0.0	34.0
Incr Delay (d2), s/veh	97.4	1.2	2.4	11.1	34.7	0.4	221.6	4.1	1.2	4.6	0.0	45.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.9	7.9	8.4	5.1	29.2	1.7	6.6	7.3	2.4	2.3	0.0	20.3
LnGrp Delay(d),s/veh	139.4	19.3	20.5	52.5	60.7	15.5	269.6	32.8	27.1	42.1	0.0	79.6
LnGrp LOS	F	B	C	D	F	B	F	C	C	D		F
Approach Vol, veh/h		1495			1971			514			615	
Approach Delay, s/veh		39.6			57.6			78.1			74.6	
Approach LOS		D			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.2	48.8		32.0	16.0	48.0		32.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	17.0	39.0		28.0	12.0	44.0		28.0
Max Q Clear Time (g_c+I1), s	11.2	18.5		30.0	14.0	46.0		30.0
Green Ext Time (p_c), s	0.2	17.9		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	56.3
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	234	1013	158	163	1591	99	95	284	104	78	371	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	245		0	220		75	50		50	200		0
Storage Lanes	2		0	1		0	1		1	0		0
Taper Length (ft)	100			120			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		861			839			831			716	
Travel Time (s)		13.0			12.7			16.2			19.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		
Detector Phase	5	2		1	6	6	8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (s)	11.0	38.0		21.0	48.0	48.0	37.0	37.0	37.0	37.0	37.0	
Total Split (%)	11.5%	39.6%		21.9%	50.0%	50.0%	38.5%	38.5%	38.5%	38.5%	38.5%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max		None	C-Max	C-Max	Max	Max	Max	Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 42 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 15: Day St. & Alessandro Bl.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	234	1013	158	163	1591	99	95	284	104	78	371	129
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	249	1078	168	173	1693	105	101	302	111	83	395	137
Adj No. of Lanes	2	3	0	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	1838	286	208	1622	726	131	640	544	285	455	158
Arrive On Green	0.07	0.41	0.41	0.12	0.46	0.46	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	3442	4440	691	1774	3539	1583	868	1863	1583	969	1323	459
Grp Volume(v), veh/h	249	823	423	173	1693	105	101	302	111	83	0	532
Grp Sat Flow(s),veh/h/ln	1721	1695	1741	1774	1770	1583	868	1863	1583	969	0	1782
Q Serve(g_s), s	6.9	18.0	18.1	9.2	44.0	3.7	6.2	12.2	4.7	7.0	0.0	26.8
Cycle Q Clear(g_c), s	6.9	18.0	18.1	9.2	44.0	3.7	33.0	12.2	4.7	19.2	0.0	26.8
Prop In Lane	1.00		0.40	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	251	1404	721	208	1622	726	131	640	544	285	0	612
V/C Ratio(X)	0.99	0.59	0.59	0.83	1.04	0.14	0.77	0.47	0.20	0.29	0.00	0.87
Avail Cap(c_a), veh/h	251	1404	721	314	1622	726	131	640	544	285	0	612
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.5	21.8	21.8	41.5	26.0	15.1	46.3	24.7	22.2	32.2	0.0	29.5
Incr Delay (d2), s/veh	54.5	1.8	3.5	11.1	34.7	0.4	34.7	2.5	0.8	2.6	0.0	15.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	8.8	9.4	5.1	29.2	1.7	3.9	6.6	2.2	2.1	0.0	15.8
LnGrp Delay(d),s/veh	99.0	23.6	25.3	52.5	60.7	15.5	81.0	27.2	23.1	34.8	0.0	44.9
LnGrp LOS	F	C	C	D	F	B	F	C	C	C		D
Approach Vol, veh/h		1495			1971			514			615	
Approach Delay, s/veh		36.6			57.6			36.9			43.5	
Approach LOS		D			E			D			D	

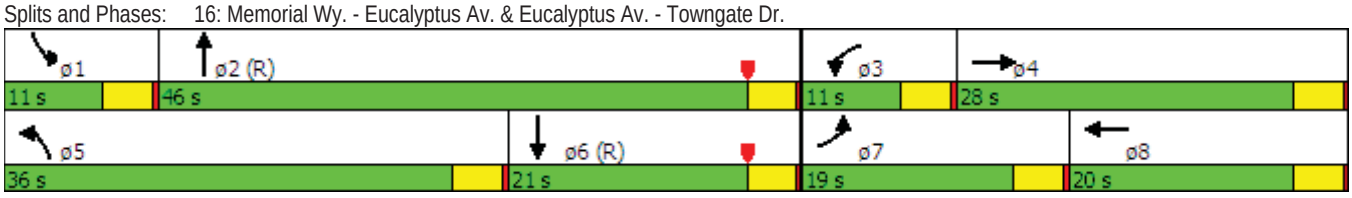
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.2	43.8		37.0	11.0	48.0		37.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	17.0	34.0		33.0	7.0	44.0		33.0
Max Q Clear Time (g_c+I1), s	11.2	20.1		28.8	8.9	46.0		35.0
Green Ext Time (p_c), s	0.2	12.6		2.5	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	46.5
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	221	372	310	9	459	31	506	166	16	15	85	314
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		0	150		0	200		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	19.0	28.0		11.0	20.0		36.0	46.0		11.0	21.0	
Total Split (%)	19.8%	29.2%		11.5%	20.8%		37.5%	47.9%		11.5%	21.9%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	221	372	310	9	459	31	506	166	16	15	85	314
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	240	404	337	10	499	34	550	180	17	16	92	341
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	272	913	426	30	647	44	578	1707	160	45	391	350
Arrive On Green	0.15	0.27	0.27	0.02	0.13	0.13	0.33	0.52	0.52	0.03	0.22	0.22
Sat Flow, veh/h	1774	3390	1583	1774	4866	329	1774	3272	306	1774	1770	1583
Grp Volume(v), veh/h	240	404	337	10	346	187	550	97	100	16	92	341
Grp Sat Flow(s),veh/h/ln	1774	1695	1583	1774	1695	1805	1774	1770	1809	1774	1770	1583
Q Serve(g_s), s	12.7	9.5	19.0	0.5	9.5	9.6	29.1	2.6	2.7	0.9	4.1	20.5
Cycle Q Clear(g_c), s	12.7	9.5	19.0	0.5	9.5	9.6	29.1	2.6	2.7	0.9	4.1	20.5
Prop In Lane	1.00		1.00	1.00		0.18	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	272	913	426	30	451	240	578	923	944	45	391	350
V/C Ratio(X)	0.88	0.44	0.79	0.33	0.77	0.78	0.95	0.10	0.11	0.36	0.24	0.97
Avail Cap(c_a), veh/h	277	913	426	129	565	301	591	923	944	129	391	350
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.8	29.1	32.6	46.6	40.2	40.2	31.6	11.6	11.6	46.0	30.7	37.1
Incr Delay (d2), s/veh	26.3	0.3	9.7	6.2	5.0	9.7	25.2	0.2	0.2	4.7	1.4	42.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	4.5	9.4	0.3	4.7	5.4	18.2	1.3	1.4	0.5	2.1	13.1
LnGrp Delay(d),s/veh	66.1	29.4	42.3	52.8	45.1	49.9	56.8	11.8	11.9	50.7	32.1	79.1
LnGrp LOS	E	C	D	D	D	D	E	B	B	D	C	E
Approach Vol, veh/h		981			543			747			449	
Approach Delay, s/veh		42.8			46.9			44.9			68.5	
Approach LOS		D			D			D			E	

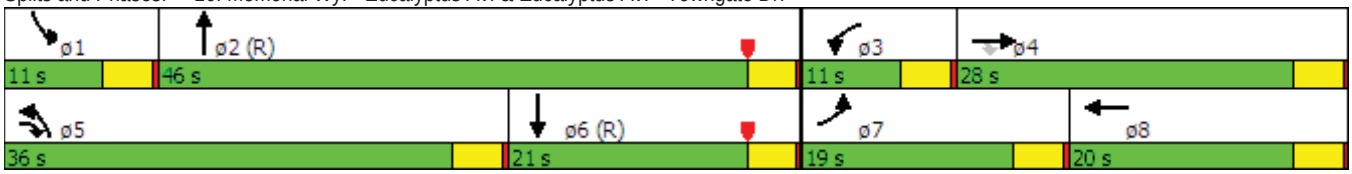
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	54.1	5.6	29.8	35.3	25.2	18.7	16.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	42.0	7.0	24.0	32.0	17.0	15.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	4.7	2.5	21.0	31.1	22.5	14.7	11.6
Green Ext Time (p_c), s	0.0	4.1	0.0	2.0	0.2	0.0	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	48.4
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	221	372	310	9	459	31	506	166	16	15	85	314
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		0	150		0	200		0	200		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4									
Detector Phase	7	4	5	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0	11.0	11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	19.0	28.0	36.0	11.0	20.0		36.0	46.0		11.0	21.0	
Total Split (%)	19.8%	29.2%	37.5%	11.5%	20.8%		37.5%	47.9%		11.5%	21.9%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	221	372	310	9	459	31	506	166	16	15	85	314
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	240	404	337	10	499	34	550	180	17	16	92	341
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	272	950	941	30	643	43	578	1710	160	45	393	351
Arrive On Green	0.15	0.27	0.27	0.02	0.13	0.13	0.33	0.52	0.52	0.03	0.22	0.22
Sat Flow, veh/h	1774	3539	1583	1774	4866	329	1774	3272	306	1774	1770	1583
Grp Volume(v), veh/h	240	404	337	10	346	187	550	97	100	16	92	341
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1695	1805	1774	1770	1809	1774	1770	1583
Q Serve(g_s), s	12.7	9.0	10.5	0.5	9.5	9.6	29.1	2.6	2.7	0.9	4.1	20.5
Cycle Q Clear(g_c), s	12.7	9.0	10.5	0.5	9.5	9.6	29.1	2.6	2.7	0.9	4.1	20.5
Prop In Lane	1.00		1.00	1.00		0.18	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	272	950	941	30	448	239	578	925	945	45	393	351
V/C Ratio(X)	0.88	0.43	0.36	0.33	0.77	0.78	0.95	0.10	0.11	0.36	0.23	0.97
Avail Cap(c_a), veh/h	277	950	941	129	565	301	591	925	945	129	393	351
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.8	29.0	10.0	46.6	40.3	40.3	31.6	11.6	11.6	46.0	30.7	37.0
Incr Delay (d2), s/veh	26.3	0.3	0.2	6.2	5.1	10.0	25.2	0.2	0.2	4.7	1.4	41.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	4.5	4.6	0.3	4.7	5.4	18.2	1.3	1.4	0.5	2.1	13.0
LnGrp Delay(d),s/veh	66.1	29.3	10.3	52.8	45.4	50.3	56.8	11.8	11.8	50.7	32.1	78.2
LnGrp LOS	E	C	B	D	D	D	E	B	B	D	C	E
Approach Vol, veh/h		981			543			747			449	
Approach Delay, s/veh		31.8			47.2			44.9			67.8	
Approach LOS		C			D			D			E	

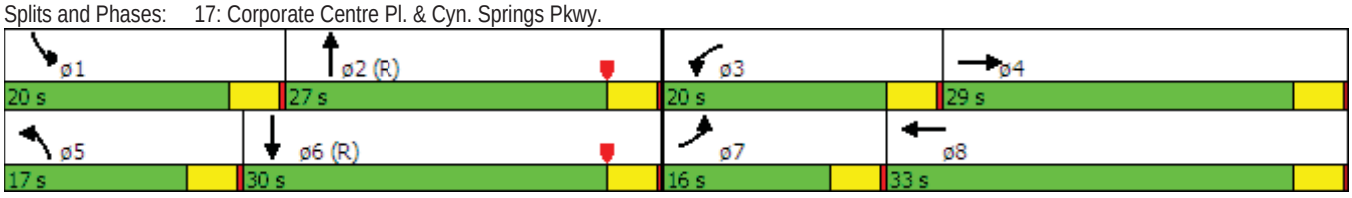
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	54.2	5.6	29.8	35.3	25.3	18.7	16.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	42.0	7.0	24.0	32.0	17.0	15.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	4.7	2.5	12.5	31.1	22.5	14.7	11.6
Green Ext Time (p_c), s	0.0	4.1	0.0	5.3	0.2	0.0	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	44.4
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	207	5	23	291	26	11	11	28	27	12	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	175		0	130		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			90			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		476			1120			987			205	
Travel Time (s)		8.1			19.1			16.8			4.7	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	16.0	29.0		20.0	33.0		17.0	27.0		20.0	30.0	
Total Split (%)	16.7%	30.2%		20.8%	34.4%		17.7%	28.1%		20.8%	31.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 91 (95%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 17: Corporate Centre Pl. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	9	207	5	23	291	26	11	11	28	27	12	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	10	241	6	27	338	30	13	13	33	31	14	13
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	549	14	66	609	53	38	1145	1025	73	594	551
Arrive On Green	0.02	0.11	0.11	0.01	0.04	0.04	0.02	0.65	0.65	0.04	0.67	0.67
Sat Flow, veh/h	1774	5104	126	1774	4763	416	1774	1770	1583	1774	890	827
Grp Volume(v), veh/h	10	160	87	27	239	129	13	13	33	31	0	27
Grp Sat Flow(s),veh/h/ln	1774	1695	1840	1774	1695	1789	1774	1770	1583	1774	0	1717
Q Serve(g_s), s	0.5	4.2	4.3	1.5	6.6	6.8	0.7	0.3	0.7	1.6	0.0	0.5
Cycle Q Clear(g_c), s	0.5	4.2	4.3	1.5	6.6	6.8	0.7	0.3	0.7	1.6	0.0	0.5
Prop In Lane	1.00		0.07	1.00		0.23	1.00		1.00	1.00		0.48
Lane Grp Cap(c), veh/h	30	365	198	66	434	229	38	1145	1025	73	0	1145
V/C Ratio(X)	0.33	0.44	0.44	0.41	0.55	0.56	0.34	0.01	0.03	0.43	0.00	0.02
Avail Cap(c_a), veh/h	222	883	479	296	1024	541	240	1145	1025	296	0	1145
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	46.6	40.1	40.1	46.3	43.3	43.3	46.3	6.0	6.1	44.9	0.0	5.4
Incr Delay (d2), s/veh	6.2	0.8	1.5	3.9	1.1	2.1	5.3	0.0	0.1	3.9	0.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.0	2.2	0.8	3.2	3.5	0.4	0.1	0.3	0.9	0.0	0.3
LnGrp Delay(d),s/veh	52.8	40.9	41.7	50.2	44.3	45.5	51.6	6.0	6.2	48.8	0.0	5.4
LnGrp LOS	D	D	D	D	D	D	D	A	A	D		A
Approach Vol, veh/h		257			395			59			58	
Approach Delay, s/veh		41.7			45.1			16.1			28.6	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	66.1	7.6	14.3	6.1	68.0	5.6	16.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	23.0	16.0	25.0	13.0	26.0	12.0	29.0
Max Q Clear Time (g_c+I1), s	3.6	2.7	3.5	6.3	2.7	2.5	2.5	8.8
Green Ext Time (p_c), s	0.0	0.3	0.0	3.4	0.0	0.3	0.0	3.5

Intersection Summary	
HCM 2010 Ctrl Delay	40.5
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	57	4	23	70	9	15	46	17	5	23	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	170		0	100		0	130		0	135		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			45			60			60		
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		474			710			623			987	
Travel Time (s)		8.1			12.1			10.6			16.8	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	11	57	4	0	23	70	9	0	15	46	17
Peak Hour Factor	0.92	0.85	0.85	0.85	0.92	0.85	0.85	0.85	0.92	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	13	67	5	0	27	82	11	0	18	54	20
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	3
HCM Control Delay	8.2	8.2	8.1
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	47%	0%	100%	83%	0%	100%	72%	0%	100%
Vol Right, %	0%	0%	53%	0%	0%	17%	0%	0%	28%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	15	31	32	11	38	23	23	47	32	5	15
LT Vol	15	0	0	11	0	0	23	0	0	5	0
Through Vol	0	31	15	0	38	19	0	47	23	0	15
RT Vol	0	0	17	0	0	4	0	0	9	0	0
Lane Flow Rate	18	36	38	13	45	27	27	55	38	6	18
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.028	0.052	0.051	0.02	0.064	0.038	0.042	0.078	0.052	0.009	0.026
Departure Headway (Hd)	5.685	5.185	4.817	5.659	5.159	5.037	5.591	5.091	4.896	5.761	5.261
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	631	692	744	634	695	712	642	705	733	622	681
Service Time	3.41	2.91	2.542	3.382	2.882	2.761	3.313	2.813	2.618	3.488	2.988
HCM Lane V/C Ratio	0.029	0.052	0.051	0.021	0.065	0.038	0.042	0.078	0.052	0.01	0.026
HCM Control Delay	8.6	8.2	7.8	8.5	8.2	8	8.6	8.2	7.9	8.5	8.1
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.3	0.2	0	0.1

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	5	23	18
Peak Hour Factor	0.92	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	6	27	21
Number of Lanes	0	1	2	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	7.9
HCM LOS	A

Lane	SBLn3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	9	26	28	17	5	89	366	41	28	319	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		70	140		50	150		0	120		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			40			40			40	
Link Distance (ft)		327			603			402			804	
Travel Time (s)		7.4			10.3			6.9			13.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	13.0	24.0		17.0	28.0	28.0	25.0	38.0		17.0	30.0	
Total Split (%)	13.5%	25.0%		17.7%	29.2%	29.2%	26.0%	39.6%		17.7%	31.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 47 (49%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Valley Springs Pkwy. & Corporate Centre Pl.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	9	9	26	28	17	5	89	366	41	28	319	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	10	10	28	30	18	5	96	394	44	30	343	12
Adj No. of Lanes	1	1	0	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.93	0.93	0.93	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	2	2	2	2	2	2	2
Cap, veh/h	30	27	75	71	301	135	817	3215	353	71	1367	48
Arrive On Green	0.02	0.06	0.06	0.04	0.09	0.09	0.92	1.00	1.00	0.04	0.27	0.27
Sat Flow, veh/h	1774	434	1215	1774	3539	1583	1774	4652	511	1774	5047	175
Grp Volume(v), veh/h	10	0	38	30	18	5	96	285	153	30	230	125
Grp Sat Flow(s),veh/h/ln	1774	0	1648	1774	1770	1583	1774	1695	1773	1774	1695	1832
Q Serve(g_s), s	0.5	0.0	2.1	1.6	0.4	0.3	0.5	0.0	0.0	1.6	5.1	5.1
Cycle Q Clear(g_c), s	0.5	0.0	2.1	1.6	0.4	0.3	0.5	0.0	0.0	1.6	5.1	5.1
Prop In Lane	1.00		0.74	1.00		1.00	1.00		0.29	1.00		0.10
Lane Grp Cap(c), veh/h	30	0	102	71	301	135	817	2343	1225	71	918	496
V/C Ratio(X)	0.33	0.00	0.37	0.42	0.06	0.04	0.12	0.12	0.12	0.42	0.25	0.25
Avail Cap(c_a), veh/h	166	0	343	240	885	396	817	2343	1225	240	918	496
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	0.0	43.2	45.0	40.4	40.3	2.1	0.0	0.0	45.0	27.4	27.4
Incr Delay (d2), s/veh	6.2	0.0	2.2	3.9	0.1	0.1	0.1	0.1	0.2	3.9	0.7	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	1.0	0.9	0.2	0.1	0.2	0.0	0.1	0.9	2.5	2.8
LnGrp Delay(d),s/veh	52.8	0.0	45.5	48.9	40.5	40.4	2.1	0.1	0.2	48.9	28.0	28.6
LnGrp LOS	D		D	D	D	D	A	A	A	D	C	C
Approach Vol, veh/h		48			53			534			385	
Approach Delay, s/veh		47.0			45.2			0.5			29.8	
Approach LOS		D			D			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	70.3	7.9	9.9	48.2	30.0	5.6	12.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	34.0	13.0	20.0	21.0	26.0	9.0	24.0
Max Q Clear Time (g_c+I1), s	3.6	2.0	3.6	4.1	2.5	7.1	2.5	2.4
Green Ext Time (p_c), s	0.0	3.0	0.0	0.2	2.7	1.9	0.0	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	16.1
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	0	10	0	0	0	11	493	0	0	362	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	25		0	75		50
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	60			60			10			80		
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		252			253			418			402	
Travel Time (s)		5.7			5.8			7.1			6.9	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	0	10	0	0	0	11	493	0	0	362	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	0	13	0	0	0	15	657	0	0	483	15

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	782	1177	249				497	0	0	657	0	0
Stage 1	490	490	-				-	-	-	-	-	-
Stage 2	292	687	-				-	-	-	-	-	-
Critical Hdwy	5.74	6.54	7.14				5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	6.64	5.54	-				-	-	-	-	-	-
Critical Hdwy Stg 2	6.04	5.54	-				-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92				3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	399	190	640				679	-	-	571	-	-
Stage 1	490	547	-				-	-	-	-	-	-
Stage 2	671	446	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	385	0	640				679	-	-	571	-	-
Mov Cap-2 Maneuver	385	0	-				-	-	-	-	-	-
Stage 1	490	0	-				-	-	-	-	-	-
Stage 2	648	0	-				-	-	-	-	-	-

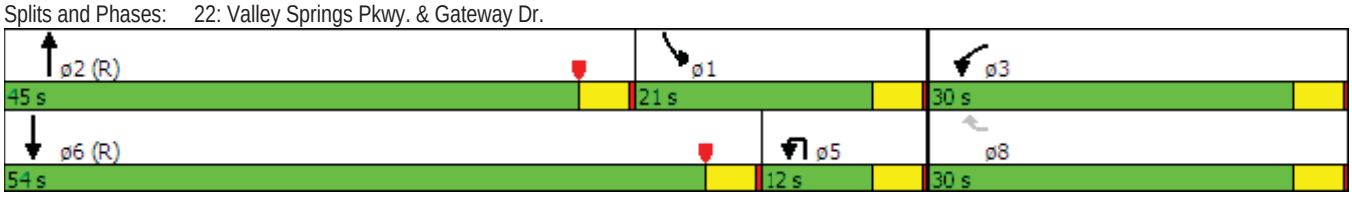
Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	679	-	-	555	571	-	-
HCM Lane V/C Ratio	0.022	-	-	0.031	-	-	-
HCM Control Delay (s)	10.4	0.1	-	11.7	0	-	-
HCM Lane LOS	B	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0	-	-

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (vph)	99	42	0	462	261	48	324
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	180		0	115	
Storage Lanes	1	1	1		0	1	
Taper Length (ft)	60		100			120	
Right Turn on Red		Yes			Yes		
Link Speed (mph)	40			40			40
Link Distance (ft)	609			576			418
Travel Time (s)	10.4			9.8			7.1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)							
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	3		5	2		1	6
Permitted Phases		8					
Detector Phase	3	8	5	2		1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	11.0	20.0	11.0	20.0		11.0	20.0
Total Split (s)	30.0	30.0	12.0	45.0		21.0	54.0
Total Split (%)	31.3%	31.3%	12.5%	46.9%		21.9%	56.3%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lag	Lead		Lag	Lead
Lead-Lag Optimize?			Yes	Yes		Yes	Yes
Recall Mode	None	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 59 (61%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 22: Valley Springs Pkwy. & Gateway Dr.



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	99	42	0	462	261	48	324
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1900	1863	1863
Adj Flow Rate, veh/h	104	44		486	275	51	341
Adj No. of Lanes	1	1		3	0	1	3
Peak Hour Factor	0.95	0.95		0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	142	127		1448	676	652	4254
Arrive On Green	0.08	0.08		0.43	0.43	0.74	1.00
Sat Flow, veh/h	1774	1583		3558	1583	1774	5253
Grp Volume(v), veh/h	104	44		486	275	51	341
Grp Sat Flow(s),veh/h/ln	1774	1583		1695	1583	1774	1695
Q Serve(g_s), s	5.5	2.5		9.2	11.6	0.8	0.0
Cycle Q Clear(g_c), s	5.5	2.5		9.2	11.6	0.8	0.0
Prop In Lane	1.00	1.00			1.00	1.00	
Lane Grp Cap(c), veh/h	142	127		1448	676	652	4254
V/C Ratio(X)	0.73	0.35		0.34	0.41	0.08	0.08
Avail Cap(c_a), veh/h	480	429		1448	676	652	4254
HCM Platoon Ratio	1.00	1.00		1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.1	41.8		18.4	19.1	8.1	0.0
Incr Delay (d2), s/veh	7.1	1.6		0.6	1.8	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	1.2		4.4	5.4	0.4	0.0
LnGrp Delay(d),s/veh	50.2	43.4		19.0	20.9	8.2	0.0
LnGrp LOS	D	D		B	C	A	A
Approach Vol, veh/h	148			761			392
Approach Delay, s/veh	48.2			19.7			1.1
Approach LOS	D			B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	39.3	45.0				84.3		11.7
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	17.0	41.0				50.0		26.0
Max Q Clear Time (g_c+I1), s	2.8	13.6				2.0		7.5
Green Ext Time (p_c), s	0.1	5.2				2.3		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	17.3
HCM 2010 LOS	B

Notes

User approved ignoring U-Turning movement.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	12	191	141	10	2	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	60				60	
Link Speed (mph)		40	40		30	
Link Distance (ft)		609	672		287	
Travel Time (s)		10.4	11.5		6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	12	191	141	10	2	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	100	-	-	-	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	13	208	153	11	2	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	164	0	-	0	289	82
Stage 1	-	-	-	-	159	-
Stage 2	-	-	-	-	130	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1412	-	-	-	678	961
Stage 1	-	-	-	-	853	-
Stage 2	-	-	-	-	882	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1412	-	-	-	672	961
Mov Cap-2 Maneuver	-	-	-	-	701	-
Stage 1	-	-	-	-	853	-
Stage 2	-	-	-	-	874	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1412	-	-	-	701
HCM Lane V/C Ratio	0.009	-	-	-	0.003
HCM Control Delay (s)	7.6	-	-	-	10.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	70	124	109	29	21	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125			0	150	0
Storage Lanes	1			0	0	1
Taper Length (ft)	60				60	
Link Speed (mph)		40	40		40	
Link Distance (ft)		672	394		405	
Travel Time (s)		11.5	6.7		6.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	70	124	109	29	21	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	73	129	114	30	22	45

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	144	0	-	0	339	72
Stage 1	-	-	-	-	129	-
Stage 2	-	-	-	-	210	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1436	-	-	-	631	975
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	805	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1436	-	-	-	599	975
Mov Cap-2 Maneuver	-	-	-	-	642	-
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	764	-

Approach	EB	WB	SB
HCM Control Delay, s	2.8	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1436	-	-	-	642	975
HCM Lane V/C Ratio	0.051	-	-	-	0.034	0.046
HCM Control Delay (s)	7.6	-	-	-	10.8	8.9
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.1	0.1

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	95	18	97	144	1	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	25		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			0		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	226			318	265	
Travel Time (s)	3.9			5.4	6.0	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	95	18	97	144	1	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	25	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	107	20	109	162	1	29

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	127	0	416	63
Stage 1	-	-	-	-	117	-
Stage 2	-	-	-	-	299	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1457	-	565	988
Stage 1	-	-	-	-	895	-
Stage 2	-	-	-	-	726	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1457	-	523	988
Mov Cap-2 Maneuver	-	-	-	-	574	-
Stage 1	-	-	-	-	895	-
Stage 2	-	-	-	-	672	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.1	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	962	-	-	1457	-
HCM Lane V/C Ratio	0.032	-	-	0.075	-
HCM Control Delay (s)	8.9	-	-	7.7	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	57	18	42	85	24	11	16	29	14	24	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		50	110		100	100		50	0		50
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		710			938			620			207	
Travel Time (s)		12.1			16.0			10.6			4.7	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	5	57	18	0	42	85	24	0	11	16	29
Peak Hour Factor	0.92	0.84	0.84	0.84	0.92	0.84	0.84	0.84	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	6	68	21	0	50	101	29	0	13	19	35
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	2	3
HCM Control Delay	8.1	8.3	8.1
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	37%	0%
Vol Thru, %	0%	100%	16%	0%	100%	51%	0%	100%	54%	63%	0%
Vol Right, %	0%	0%	84%	0%	0%	49%	0%	0%	46%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	11	34	5	38	37	42	57	52	38	5
LT Vol	11	0	0	5	0	0	42	0	0	14	0
Through Vol	0	11	5	0	38	19	0	57	28	24	0
RT Vol	0	0	29	0	0	18	0	0	24	0	5
Lane Flow Rate	13	13	41	6	45	44	50	67	62	45	6
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.021	0.019	0.054	0.009	0.066	0.06	0.077	0.095	0.082	0.07	0.008
Departure Headway (Hd)	5.849	5.349	4.759	5.717	5.216	4.875	5.556	5.055	4.733	5.556	4.672
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	612	669	752	626	687	734	646	709	757	645	765
Service Time	3.583	3.084	2.493	3.45	2.949	2.608	3.285	2.784	2.462	3.29	2.405
HCM Lane V/C Ratio	0.021	0.019	0.055	0.01	0.066	0.06	0.077	0.094	0.082	0.07	0.008
HCM Control Delay	8.7	8.2	7.8	8.5	8.3	7.9	8.8	8.3	7.9	8.7	7.4
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0.2	0	0.2	0.2	0.2	0.3	0.3	0.2	0

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	14	24	5
Peak Hour Factor	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	17	29	6
Number of Lanes	0	0	1	1

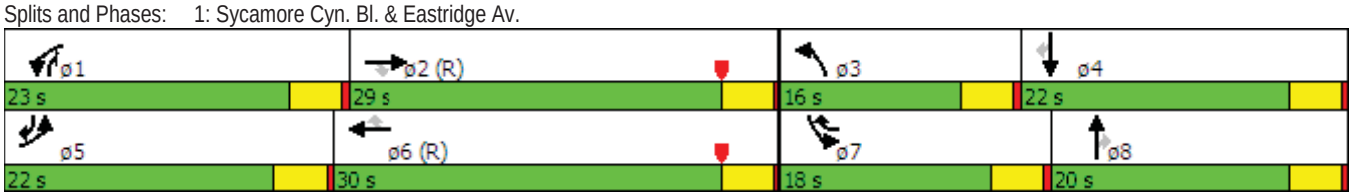
Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	8.5
HCM LOS	A

Lane

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	408	818	393	476	524	255	255	274	134	350	390	244
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		150	310		200	360		320	275		110
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	120			120			120			200		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		910			577			817			952	
Travel Time (s)		15.5			9.8			12.4			14.4	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	11.0	11.0	20.0	11.0
Total Split (s)	22.0	29.0	29.0	23.0	30.0	18.0	16.0	20.0	23.0	18.0	22.0	22.0
Total Split (%)	24.4%	32.2%	32.2%	25.6%	33.3%	20.0%	17.8%	22.2%	25.6%	20.0%	24.4%	24.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	Max	None	None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 26 (29%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Sycamore Cyn. Bl. & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	408	818	393	476	524	255	255	274	134	350	390	244
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	458	919	0	535	589	287	287	308	151	393	438	274
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	2	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	548	1661	517	623	1233	768	366	629	568	471	737	582
Arrive On Green	0.16	0.33	0.00	0.18	0.35	0.35	0.11	0.18	0.18	0.14	0.21	0.21
Sat Flow, veh/h	3442	5085	1583	3442	3539	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	458	919	0	535	589	287	287	308	151	393	438	274
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1770	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	11.6	13.4	0.0	13.6	11.7	10.3	7.3	7.1	6.1	10.0	10.1	11.9
Cycle Q Clear(g_c), s	11.6	13.4	0.0	13.6	11.7	10.3	7.3	7.1	6.1	10.0	10.1	11.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	548	1661	517	623	1233	768	366	629	568	471	737	582
V/C Ratio(X)	0.84	0.55	0.00	0.86	0.48	0.37	0.78	0.49	0.27	0.83	0.59	0.47
Avail Cap(c_a), veh/h	688	1661	517	727	1233	768	459	629	568	535	737	582
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	24.9	0.0	35.7	22.9	14.6	39.2	33.3	20.5	37.8	32.2	21.8
Incr Delay (d2), s/veh	7.2	1.3	0.0	9.0	1.3	1.4	6.9	2.7	1.1	9.9	3.5	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	6.4	0.0	7.2	6.0	4.8	3.8	3.7	2.8	5.4	5.3	5.6
LnGrp Delay(d),s/veh	43.9	26.2	0.0	44.8	24.3	16.0	46.1	36.0	21.6	47.8	35.7	24.5
LnGrp LOS	D	C		D	C	B	D	D	C	D	D	C
Approach Vol, veh/h		1377			1411			746			1105	
Approach Delay, s/veh		32.1			30.4			37.0			37.2	
Approach LOS		C			C			D			D	

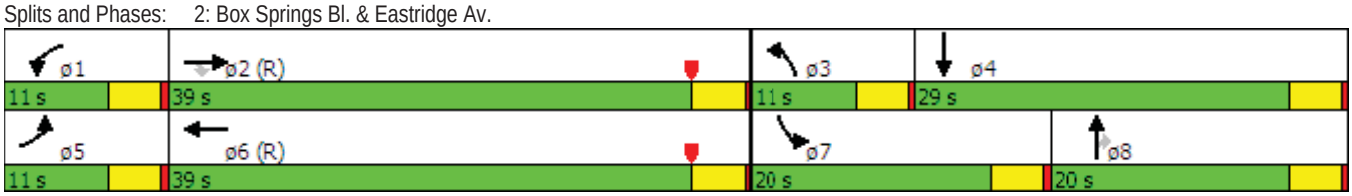
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.3	33.4	13.6	22.7	18.3	35.4	16.3	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	25.0	12.0	18.0	18.0	26.0	14.0	16.0
Max Q Clear Time (g_c+I1), s	15.6	15.4	9.3	13.9	13.6	13.7	12.0	9.1
Green Ext Time (p_c), s	0.7	6.7	0.3	2.2	0.7	8.0	0.3	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	33.6
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	1308	3	31	1218	194	19	91	32	303	134	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		80	150		0	75		160	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		760			700			315			411	
Travel Time (s)		13.0			11.9			7.2			9.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0		11.0	20.0	20.0	11.0	20.0	
Total Split (s)	11.0	39.0	39.0	11.0	39.0		11.0	20.0	20.0	20.0	29.0	
Total Split (%)	12.2%	43.3%	43.3%	12.2%	43.3%		12.2%	22.2%	22.2%	22.2%	32.2%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Box Springs Bl. & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	1308	3	31	1218	194	19	91	32	303	134	38
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	12	1348	3	32	1256	200	20	94	33	312	138	39
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	36	1500	671	76	1367	216	54	331	281	315	893	245
Arrive On Green	0.02	0.42	0.42	0.06	0.59	0.59	0.03	0.18	0.18	0.18	0.32	0.32
Sat Flow, veh/h	1774	3539	1583	1774	3062	484	1774	1863	1583	1774	2747	752
Grp Volume(v), veh/h	12	1348	3	32	722	734	20	94	33	312	87	90
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1777	1774	1863	1583	1774	1770	1730
Q Serve(g_s), s	0.6	31.9	0.1	1.6	32.6	33.5	1.0	3.9	1.6	15.8	3.2	3.3
Cycle Q Clear(g_c), s	0.6	31.9	0.1	1.6	32.6	33.5	1.0	3.9	1.6	15.8	3.2	3.3
Prop In Lane	1.00		1.00	1.00		0.27	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	36	1500	671	76	790	794	54	331	281	315	575	562
V/C Ratio(X)	0.34	0.90	0.00	0.42	0.91	0.92	0.37	0.28	0.12	0.99	0.15	0.16
Avail Cap(c_a), veh/h	138	1500	671	138	790	794	138	331	281	315	575	562
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.5	24.1	15.0	41.4	16.7	16.9	42.8	32.0	31.1	36.9	21.6	21.6
Incr Delay (d2), s/veh	5.4	8.9	0.0	3.7	16.9	18.1	4.1	2.1	0.8	47.6	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	17.4	0.0	0.8	19.3	20.2	0.6	2.2	0.8	11.9	1.6	1.7
LnGrp Delay(d),s/veh	48.9	33.0	15.0	45.0	33.6	35.0	46.9	34.2	31.9	84.5	22.1	22.2
LnGrp LOS	D	C	B	D	C	D	D	C	C	F	C	C
Approach Vol, veh/h		1363			1488			147			489	
Approach Delay, s/veh		33.1			34.6			35.4			62.0	
Approach LOS		C			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	42.1	6.8	33.2	5.8	44.2	20.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	35.0	7.0	25.0	7.0	35.0	16.0	16.0
Max Q Clear Time (g_c+I1), s	3.6	33.9	3.0	5.3	2.6	35.5	17.8	5.9
Green Ext Time (p_c), s	0.0	1.1	0.0	1.5	0.0	0.0	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	37.9
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	179	1293	0	638	967	0	154	0	0	663	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	275		0	0		0	0		0
Storage Lanes	0		0	0		0	2		0	2		0
Taper Length (ft)	90			190			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		241			359			784			672	
Travel Time (s)		4.1			6.1			15.3			13.1	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot			Prot		
Protected Phases	5	2		1	6		3			7		
Permitted Phases												
Detector Phase	5	2		1	6		3			7		
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0			7.0		
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0			11.0		
Total Split (s)	21.0	43.0		23.0	45.0		24.0			24.0		
Total Split (%)	23.3%	47.8%		25.6%	50.0%		26.7%			26.7%		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5			3.5		
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5			0.5		
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0			0.0		
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0			4.0		
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		None			None		

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 59 (66%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: I-215 SB/NB Ramps & Eastridge Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	179	1293	0	638	967	0	154	0	0	663	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	0	0	1863	0	0
Adj Flow Rate, veh/h	185	1333	0	658	997	0	159	0	0	684	0	0
Adj No. of Lanes	1	2	0	2	2	0	2	0	0	2	0	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0	2	2	0	2	0	0	2	0	0
Cap, veh/h	225	1565	0	710	1846	0	751	0	0	751	0	0
Arrive On Green	0.04	0.15	0.00	0.41	1.00	0.00	0.22	0.00	0.00	0.22	0.00	0.00
Sat Flow, veh/h	1774	3632	0	3442	3632	0	3442	159		3442	684	
Grp Volume(v), veh/h	185	1333	0	658	997	0	159	29.0		684	49.2	
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1721	1770	0	1721	C		1721	D	
Q Serve(g_s), s	9.3	33.1	0.0	16.4	0.0	0.0	3.4			17.5		
Cycle Q Clear(g_c), s	9.3	33.1	0.0	16.4	0.0	0.0	3.4			17.5		
Prop In Lane	1.00		0.00	1.00		0.00	1.00			1.00		
Lane Grp Cap(c), veh/h	225	1565	0	710	1846	0	751			751		
V/C Ratio(X)	0.82	0.85	0.00	0.93	0.54	0.00	0.21			0.91		
Avail Cap(c_a), veh/h	335	1565	0	727	1846	0	765			765		
HCM Platoon Ratio	0.33	0.33	1.00	2.00	2.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.98	0.98	0.00	1.00			1.00		
Uniform Delay (d), s/veh	42.1	35.6	0.0	25.8	0.0	0.0	28.8			34.3		
Incr Delay (d2), s/veh	9.8	6.1	0.0	17.4	1.1	0.0	0.1			14.9		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	5.2	17.6	0.0	9.4	0.3	0.0	1.6			9.8		
LnGrp Delay(d),s/veh	51.9	41.6	0.0	43.2	1.1	0.0	29.0			49.2		
LnGrp LOS	D	D		D	A		C			D		
Approach Vol, veh/h		1518			1655							
Approach Delay, s/veh		42.9			17.9							
Approach LOS		D			B							

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3		5	6	7	
Phs Duration (G+Y+Rc), s	22.6	43.8	23.6		15.4	50.9	23.6	
Change Period (Y+Rc), s	4.0	4.0	4.0		4.0	4.0	4.0	
Max Green Setting (Gmax), s	19.0	39.0	20.0		17.0	41.0	20.0	
Max Q Clear Time (g_c+I1), s	18.4	35.1	5.4		11.3	2.0	19.5	
Green Ext Time (p_c), s	0.2	3.6	0.4		0.2	24.7	0.2	

Intersection Summary	
HCM 2010 Ctrl Delay	33.1
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1472	171	0	1121	0	0	0	0	0	0	323
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		700			241			458			364	
Travel Time (s)		11.9			4.1			8.9			7.1	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	1472	171	0	1121	0	0	0	0	0	0	323
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	108	25	154	56	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1518	176	0	1156	0	0	0	0	0	0	333

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	1156	0	-	1518	0	0	1763	2674	578
Stage 1	-	-	-	-	-	-	1156	1156	-
Stage 2	-	-	-	-	-	-	607	1518	-
Critical Hdwy	4.14	-	-	5.34	-	-	6.29	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.04	5.54	-
Follow-up Hdwy	2.22	-	-	3.12	-	-	3.67	4.02	3.32
Pot Cap-1 Maneuver	600	-	0	218	-	-	97	22	459
Stage 1	-	-	0	-	-	-	256	269	-
Stage 2	-	-	0	-	-	-	475	180	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	600	-	-	218	-	-	97	0	459
Mov Cap-2 Maneuver	-	-	-	-	-	-	191	0	-
Stage 1	-	-	-	-	-	-	256	0	-
Stage 2	-	-	-	-	-	-	475	0	-

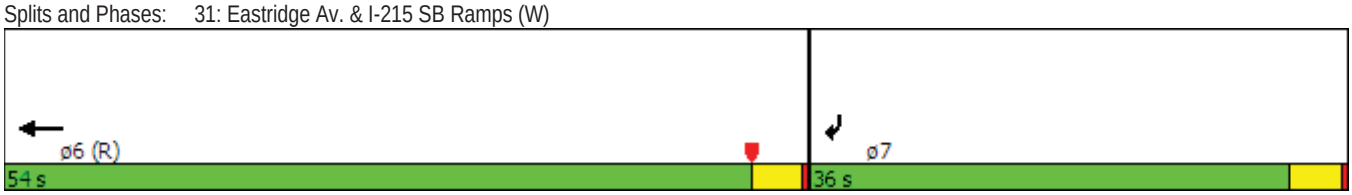
Approach	EB	WB	SB
HCM Control Delay, s	0	0	30.9
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	600	-	218	-	-	459
HCM Lane V/C Ratio	-	-	-	-	-	0.725
HCM Control Delay (s)	0	-	0	-	-	30.9
HCM Lane LOS	A	-	A	-	-	D
HCM 95th %tile Q(veh)	0	-	0	-	-	5.8

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	0	1121	0	0	323
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50			0	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	60				60	
Right Turn on Red				Yes		Yes
Link Speed (mph)		40	40		30	
Link Distance (ft)		174	120		486	
Travel Time (s)		3.0	2.0		11.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type			NA			Prot
Protected Phases			6			7
Permitted Phases						
Detector Phase			6			7
Switch Phase						
Minimum Initial (s)			7.0			7.0
Minimum Split (s)			20.0			11.0
Total Split (s)			54.0			36.0
Total Split (%)			60.0%			40.0%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			0.5			0.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.0			4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	

Splits and Phases: 31: Eastridge Av. & I-215 SB Ramps (W)



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	0	1121	0	0	323
Number			6	16	7	14
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	0	0	1863
Adj Flow Rate, veh/h			1156	0	0	333
Adj No. of Lanes			2	0	0	1
Peak Hour Factor			0.97	0.97	0.97	0.97
Percent Heavy Veh, %			2	0	0	2
Cap, veh/h			1966	0	0	0
Arrive On Green			0.56	0.00	0.00	0.00
Sat Flow, veh/h			3725	0	0	
Grp Volume(v), veh/h			1156	0	0.0	
Grp Sat Flow(s),veh/h/ln			1770	0		
Q Serve(g_s), s			19.4	0.0		
Cycle Q Clear(g_c), s			19.4	0.0		
Prop In Lane				0.00		
Lane Grp Cap(c), veh/h			1966	0		
V/C Ratio(X)			0.59	0.00		
Avail Cap(c_a), veh/h			1966	0		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	0.00		
Uniform Delay (d), s/veh			13.2	0.0		
Incr Delay (d2), s/veh			1.3	0.0		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			9.7	0.0		
LnGrp Delay(d),s/veh			14.5	0.0		
LnGrp LOS			B			
Approach Vol, veh/h			1156			
Approach Delay, s/veh			14.5			
Approach LOS			B			

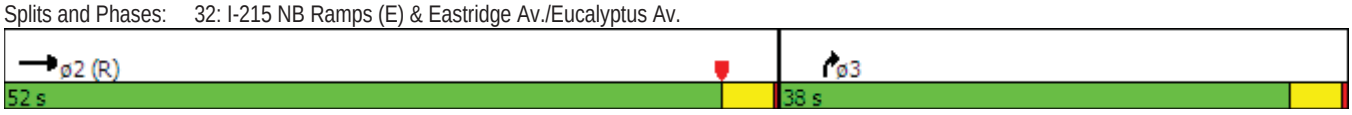
Timer	1	2	3	4	5	6	7	8
Assigned Phs						6		
Phs Duration (G+Y+Rc), s						54.0		
Change Period (Y+Rc), s						4.0		
Max Green Setting (Gmax), s						50.0		
Max Q Clear Time (g_c+I1), s						21.4		
Green Ext Time (p_c), s						9.3		

Intersection Summary	
HCM 2010 Ctrl Delay	14.5
HCM 2010 LOS	B

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1956	0	0	0	0	573
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Right Turn on Red		Yes				Yes
Link Speed (mph)	30			40	30	
Link Distance (ft)	100			131	592	
Travel Time (s)	2.3			2.2	13.5	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA					Prot
Protected Phases	2					3
Permitted Phases						
Detector Phase	2					3
Switch Phase						
Minimum Initial (s)	7.0					7.0
Minimum Split (s)	20.0					11.0
Total Split (s)	52.0					38.0
Total Split (%)	57.8%					42.2%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	0.5					0.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	4.0					4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max					None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 32: I-215 NB Ramps (E) & Eastridge Av./Eucalyptus Av.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	1956	0	0	0	0	573
Number	2	12			3	18
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)		1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0			0	1863
Adj Flow Rate, veh/h	2016	0			0	591
Adj No. of Lanes	2	0			0	2
Peak Hour Factor	0.97	0.97			0.97	0.97
Percent Heavy Veh, %	2	0			0	2
Cap, veh/h	3382	0			0	0
Arrive On Green	0.96	0.00			0.00	0.00
Sat Flow, veh/h	3725	0			0	
Grp Volume(v), veh/h	2016	0			0.0	
Grp Sat Flow(s),veh/h/ln	1770	0				
Q Serve(g_s), s	5.3	0.0				
Cycle Q Clear(g_c), s	5.3	0.0				
Prop In Lane		0.00				
Lane Grp Cap(c), veh/h	3382	0				
V/C Ratio(X)	0.60	0.00				
Avail Cap(c_a), veh/h	3382	0				
HCM Platoon Ratio	1.00	1.00				
Upstream Filter(I)	1.00	0.00				
Uniform Delay (d), s/veh	0.2	0.0				
Incr Delay (d2), s/veh	0.8	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile BackOfQ(50%),veh/ln	2.3	0.0				
LnGrp Delay(d),s/veh	1.0	0.0				
LnGrp LOS	A					
Approach Vol, veh/h	2016					
Approach Delay, s/veh	1.0					
Approach LOS	A					

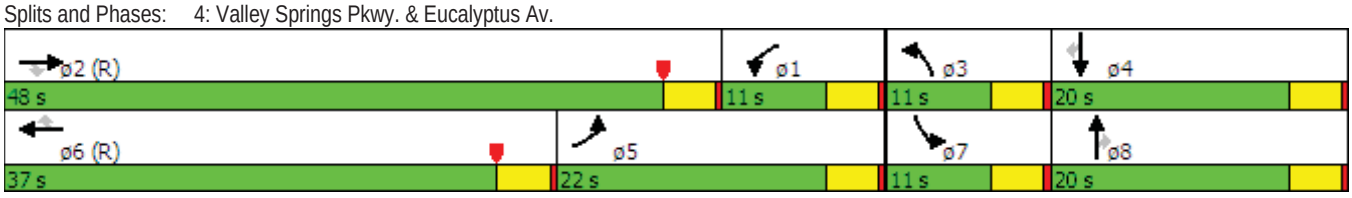
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		90.0						
Change Period (Y+Rc), s		4.0						
Max Green Setting (Gmax), s		48.0						
Max Q Clear Time (g_c+I1), s		7.3						
Green Ext Time (p_c), s		26.3						

Intersection Summary	
HCM 2010 Ctrl Delay	1.0
HCM 2010 LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	656	1589	284	38	1019	56	102	149	49	70	191	830
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	1		1	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0
Total Split (s)	22.0	48.0	48.0	11.0	37.0	37.0	11.0	20.0	20.0	11.0	20.0	20.0
Total Split (%)	24.4%	53.3%	53.3%	12.2%	41.1%	41.1%	12.2%	22.2%	22.2%	12.2%	22.2%	22.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	Max	None	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	656	1589	284	38	1019	56	102	149	49	70	191	830
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	683	1655	296	40	1061	58	106	155	51	73	199	865
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	697	1730	774	142	1298	581	134	665	297	116	331	495
Arrive On Green	0.41	0.98	0.98	0.16	0.73	0.73	0.08	0.19	0.19	0.02	0.06	0.06
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	1774	3539	1583	1774	1863	2787
Grp Volume(v), veh/h	683	1655	296	40	1061	58	106	155	51	73	199	865
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1774	1770	1583	1774	1863	1393
Q Serve(g_s), s	17.6	14.4	0.4	1.8	18.0	0.7	5.3	3.3	1.9	3.7	9.4	10.3
Cycle Q Clear(g_c), s	17.6	14.4	0.4	1.8	18.0	0.7	5.3	3.3	1.9	3.7	9.4	10.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	697	1730	774	142	1298	581	134	665	297	116	331	495
V/C Ratio(X)	0.98	0.96	0.38	0.28	0.82	0.10	0.79	0.23	0.17	0.63	0.60	1.75
Avail Cap(c_a), veh/h	697	1730	774	142	1298	581	138	665	297	138	331	495
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.41	0.41	0.41	0.77	0.77	0.77	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	0.7	0.2	35.5	10.0	4.4	40.9	31.0	19.2	43.0	39.2	17.7
Incr Delay (d2), s/veh	17.2	6.9	0.6	0.8	4.6	0.3	25.8	0.8	1.2	6.7	7.8	344.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	2.1	0.2	0.9	9.1	0.3	3.5	1.7	0.9	2.0	5.6	27.7
LnGrp Delay(d),s/veh	43.8	7.6	0.8	36.3	14.6	4.7	66.8	31.9	20.5	49.6	47.1	361.7
LnGrp LOS	D	A	A	D	B	A	E	C	C	D	D	F
Approach Vol, veh/h		2634			1159			312			1137	
Approach Delay, s/veh		16.2			14.8			41.9			286.6	
Approach LOS		B			B			D			F	

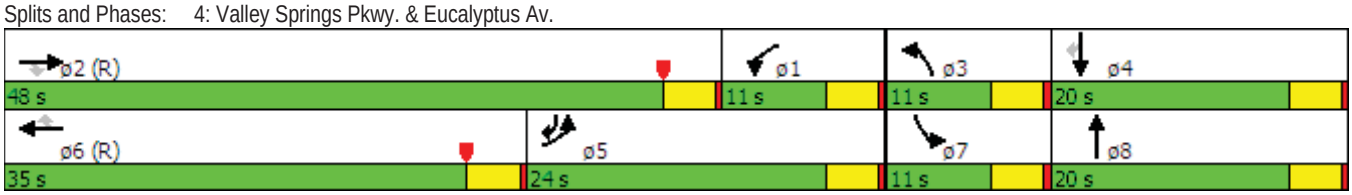
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	48.0	10.8	20.0	22.2	37.0	9.9	20.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	44.0	7.0	16.0	18.0	33.0	7.0	16.0
Max Q Clear Time (g_c+I1), s	3.8	16.4	7.3	12.3	19.6	20.0	5.7	5.3
Green Ext Time (p_c), s	1.0	16.3	0.0	2.1	0.0	6.0	0.0	4.6

Intersection Summary	
HCM 2010 Ctrl Delay	76.1
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	656	1589	284	38	1019	56	102	149	49	70	191	830
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	2		0	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6						4
Detector Phase	5	2	2	1	6	6	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	24.0	48.0	48.0	11.0	35.0	35.0	11.0	20.0		11.0	20.0	24.0
Total Split (%)	26.7%	53.3%	53.3%	12.2%	38.9%	38.9%	12.2%	22.2%		12.2%	22.2%	26.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max		None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	656	1589	284	38	1019	56	102	149	49	70	191	830
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	683	1655	296	40	1061	58	106	155	51	73	199	865
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	784	1730	774	148	1219	545	249	489	155	116	331	1130
Arrive On Green	0.46	0.98	0.98	0.17	0.69	0.69	0.07	0.18	0.18	0.02	0.06	0.06
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	3442	2643	841	1774	1863	2787
Grp Volume(v), veh/h	683	1655	296	40	1061	58	106	102	104	73	199	865
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1721	1770	1714	1774	1863	1393
Q Serve(g_s), s	16.1	14.4	0.4	1.8	21.0	0.8	2.7	4.5	4.7	3.7	9.4	4.2
Cycle Q Clear(g_c), s	16.1	14.4	0.4	1.8	21.0	0.8	2.7	4.5	4.7	3.7	9.4	4.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.49	1.00		1.00
Lane Grp Cap(c), veh/h	784	1730	774	148	1219	545	249	327	317	116	331	1130
V/C Ratio(X)	0.87	0.96	0.38	0.27	0.87	0.11	0.43	0.31	0.33	0.63	0.60	0.77
Avail Cap(c_a), veh/h	784	1730	774	148	1219	545	268	327	317	138	331	1130
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.41	0.41	0.41	0.77	0.77	0.77	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.3	0.7	0.2	35.1	12.4	5.5	40.0	31.7	31.8	43.0	39.2	13.1
Incr Delay (d2), s/veh	4.7	6.9	0.6	0.8	6.9	0.3	1.2	2.5	2.7	6.7	7.8	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	2.1	0.2	0.9	10.9	0.4	1.3	2.4	2.5	2.0	5.6	8.1
LnGrp Delay(d),s/veh	28.0	7.6	0.8	35.9	19.3	5.8	41.1	34.2	34.6	49.6	47.1	18.0
LnGrp LOS	C	A	A	D	B	A	D	C	C	D	D	B
Approach Vol, veh/h		2634			1159			312			1137	
Approach Delay, s/veh		12.1			19.2			36.7			25.1	
Approach LOS		B			B			D			C	

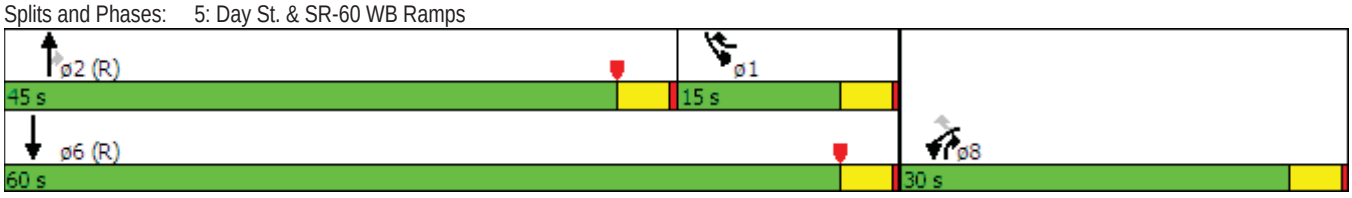
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	48.0	10.5	20.0	24.5	35.0	9.9	20.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	44.0	7.0	16.0	20.0	31.0	7.0	16.0
Max Q Clear Time (g_c+I1), s	3.8	16.4	4.7	11.4	18.1	23.0	5.7	6.7
Green Ext Time (p_c), s	1.0	16.3	0.1	2.5	0.6	4.3	0.0	4.2

Intersection Summary	
HCM 2010 Ctrl Delay	18.0
HCM 2010 LOS	B

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	550	148	888	523	78	693
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		175	200	
Storage Lanes	2	1		1	1	
Taper Length (ft)	60				80	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	30		40			40
Link Distance (ft)	307		957			795
Travel Time (s)	7.0		16.3			13.6
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	30.0	15.0	45.0	30.0	15.0	60.0
Total Split (%)	33.3%	16.7%	50.0%	33.3%	16.7%	66.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 14 (16%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: Day St. & SR-60 WB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	550	148	888	523	78	693
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	567	153	915	539	80	714
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	696	651	1612	1041	371	2509
Arrive On Green	0.20	0.20	0.91	0.91	0.21	0.71
Sat Flow, veh/h	3442	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	567	153	915	539	80	714
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1770
Q Serve(g_s), s	14.2	0.0	4.3	5.4	3.4	6.6
Cycle Q Clear(g_c), s	14.2	0.0	4.3	5.4	3.4	6.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	696	651	1612	1041	371	2509
V/C Ratio(X)	0.81	0.24	0.57	0.52	0.22	0.28
Avail Cap(c_a), veh/h	994	788	1612	1041	371	2509
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.71	0.71	1.00	1.00
Uniform Delay (d), s/veh	34.3	17.3	2.4	1.0	29.5	4.8
Incr Delay (d2), s/veh	3.6	0.2	1.0	1.3	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	2.5	2.0	3.4	1.7	3.3
LnGrp Delay(d),s/veh	37.9	17.5	3.4	2.3	29.8	5.1
LnGrp LOS	D	B	A	A	C	A
Approach Vol, veh/h	720		1454			794
Approach Delay, s/veh	33.5		3.0			7.6
Approach LOS	C		A			A

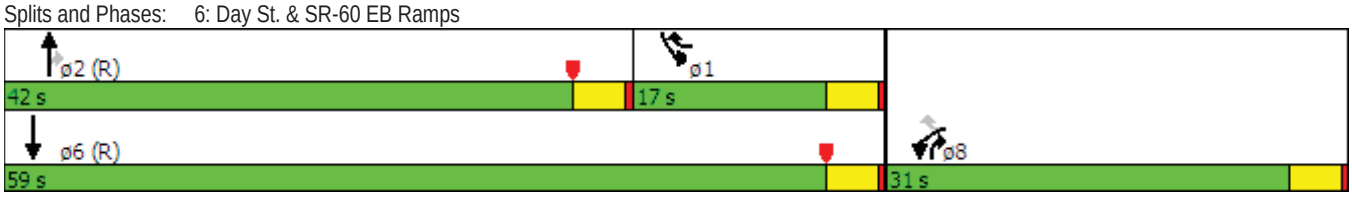
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	22.8	45.0				67.8		22.2
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	11.0	41.0				56.0		26.0
Max Q Clear Time (g_c+I1), s	5.4	7.4				8.6		16.2
Green Ext Time (p_c), s	2.3	10.0				5.6		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	11.6
HCM 2010 LOS	B

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	693	300	1111	816	161	1081
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	200		0	425	
Storage Lanes	2	0		1	1	
Taper Length (ft)	60				60	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		40			40
Link Distance (ft)	263		524			957
Travel Time (s)	5.1		8.9			16.3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	31.0	17.0	42.0	31.0	17.0	59.0
Total Split (%)	34.4%	18.9%	46.7%	34.4%	18.9%	65.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 88 (98%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Day St. & SR-60 EB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	693	300	1111	816	161	1081
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	707	306	1134	833	164	1103
Adj No. of Lanes	2	1	2	1	1	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	843	704	1494	1056	354	3387
Arrive On Green	0.24	0.24	0.56	0.56	0.40	1.00
Sat Flow, veh/h	3442	1583	3632	1583	1774	5253
Grp Volume(v), veh/h	707	306	1134	833	164	1103
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1695
Q Serve(g_s), s	17.6	0.0	22.0	38.0	6.1	0.0
Cycle Q Clear(g_c), s	17.6	0.0	22.0	38.0	6.1	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	843	704	1494	1056	354	3387
V/C Ratio(X)	0.84	0.43	0.76	0.79	0.46	0.33
Avail Cap(c_a), veh/h	1032	791	1494	1056	354	3387
HCM Platoon Ratio	1.00	1.00	1.33	1.33	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.58	0.58	0.88	0.88
Uniform Delay (d), s/veh	32.3	17.2	16.2	8.6	23.5	0.0
Incr Delay (d2), s/veh	5.2	0.4	2.2	3.6	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	5.2	11.1	21.6	3.1	0.1
LnGrp Delay(d),s/veh	37.5	17.6	18.4	12.1	24.3	0.2
LnGrp LOS	D	B	B	B	C	A
Approach Vol, veh/h	1013		1967			1267
Approach Delay, s/veh	31.5		15.7			3.3
Approach LOS	C		B			A

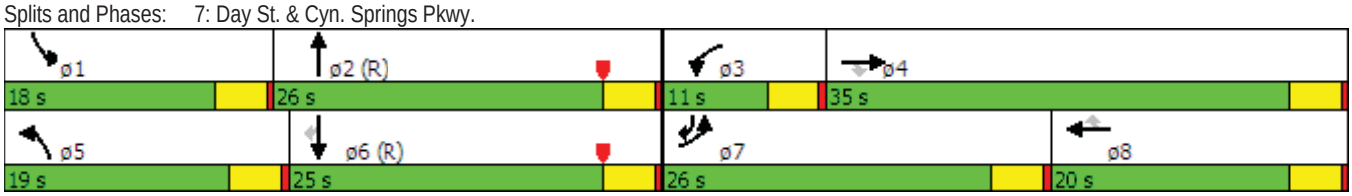
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	22.0	42.0				64.0		26.0
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	13.0	38.0				55.0		27.0
Max Q Clear Time (g_c+I1), s	8.1	40.0				2.0		19.6
Green Ext Time (p_c), s	3.0	0.0				10.3		2.5

Intersection Summary	
HCM 2010 Ctrl Delay	15.8
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	687	126	167	49	75	233	217	1006	61	212	868	532
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	145		0	165		0	170		200
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	95			100			120			80		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		1120			404			728			524	
Travel Time (s)		19.1			7.9			12.4			8.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												50%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	26.0	35.0	35.0	11.0	20.0	20.0	19.0	26.0		18.0	25.0	26.0
Total Split (%)	28.9%	38.9%	38.9%	12.2%	22.2%	22.2%	21.1%	28.9%		20.0%	27.8%	28.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Day St. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	687	126	167	49	75	233	217	1006	61	212	868	532
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	701	129	170	50	77	238	221	1027	62	216	886	543
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	783	640	544	98	320	272	255	1378	83	252	1561	1605
Arrive On Green	0.23	0.34	0.34	0.06	0.17	0.17	0.19	0.37	0.37	0.10	0.19	0.19
Sat Flow, veh/h	3442	1863	1583	1774	1863	1583	1774	4905	296	1774	5588	3167
Grp Volume(v), veh/h	701	129	170	50	77	238	221	709	380	216	886	543
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1863	1583	1774	1695	1811	1774	1863	1583
Q Serve(g_s), s	17.8	4.4	7.1	2.5	3.2	13.2	10.9	16.3	16.4	10.8	13.0	9.7
Cycle Q Clear(g_c), s	17.8	4.4	7.1	2.5	3.2	13.2	10.9	16.3	16.4	10.8	13.0	9.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	783	640	544	98	320	272	255	952	509	252	1561	1605
V/C Ratio(X)	0.90	0.20	0.31	0.51	0.24	0.88	0.87	0.75	0.75	0.86	0.57	0.34
Avail Cap(c_a), veh/h	841	642	545	138	331	281	296	952	509	276	1561	1605
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	0.67	0.67	0.67
Upstream Filter(I)	0.81	0.81	0.81	1.00	1.00	1.00	0.89	0.89	0.89	0.86	0.86	0.86
Uniform Delay (d), s/veh	33.7	20.8	21.7	41.3	32.2	36.3	35.6	25.4	25.4	39.8	31.6	15.0
Incr Delay (d2), s/veh	9.8	0.1	0.3	4.0	0.4	24.6	18.8	4.7	8.6	18.6	1.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.5	2.3	3.1	1.3	1.7	7.6	6.6	8.2	9.3	6.6	6.9	4.3
LnGrp Delay(d),s/veh	43.5	21.0	22.0	45.3	32.6	61.0	54.3	30.1	34.0	58.4	32.9	15.5
LnGrp LOS	D	C	C	D	C	E	D	C	C	E	C	B
Approach Vol, veh/h		1000			365			1310			1645	
Approach Delay, s/veh		37.0			52.8			35.3			30.5	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.8	29.3	9.0	34.9	16.9	29.1	24.5	19.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	22.0	7.0	31.0	15.0	21.0	22.0	16.0
Max Q Clear Time (g_c+I1), s	12.8	18.4	4.5	9.1	12.9	15.0	19.8	15.2
Green Ext Time (p_c), s	0.1	3.3	0.0	2.4	0.1	5.3	0.7	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	35.4
HCM 2010 LOS	D

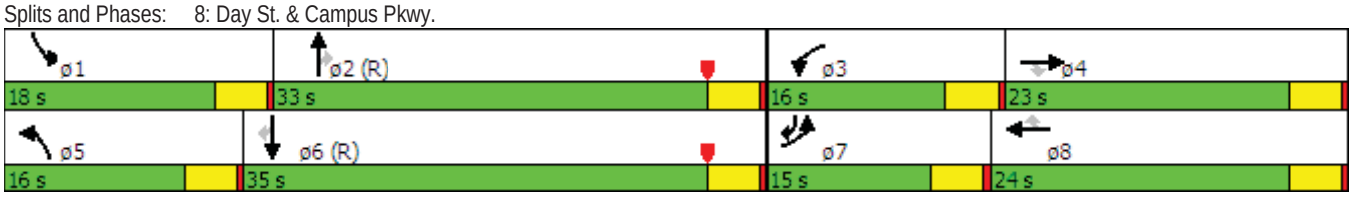
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	191	89	175	87	192	254	193	839	96	262	776	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		50	200		0	130		50	190		0
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	60			120			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		938			519			1025			728	
Travel Time (s)		16.0			10.1			17.5			12.4	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	15.0	23.0	23.0	16.0	24.0	24.0	16.0	33.0	33.0	18.0	35.0	15.0
Total Split (%)	16.7%	25.6%	25.6%	17.8%	26.7%	26.7%	17.8%	36.7%	36.7%	20.0%	38.9%	16.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 77 (86%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Day St. & Campus Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	191	89	175	87	192	254	193	839	96	262	776	51
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	199	93	182	91	200	265	201	874	100	273	808	53
Adj No. of Lanes	2	1	1	1	2	1	2	3	1	2	3	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	387	329	124	696	312	284	2253	702	351	2352	860
Arrive On Green	0.08	0.21	0.21	0.07	0.20	0.20	0.03	0.15	0.15	0.20	0.92	0.92
Sat Flow, veh/h	3442	1863	1583	1774	3539	1583	3442	5085	1583	3442	5085	1583
Grp Volume(v), veh/h	199	93	182	91	200	265	201	874	100	273	808	53
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1770	1583	1721	1695	1583	1721	1695	1583
Q Serve(g_s), s	5.1	3.7	9.3	4.5	4.3	14.5	5.2	14.0	5.0	6.8	1.6	0.2
Cycle Q Clear(g_c), s	5.1	3.7	9.3	4.5	4.3	14.5	5.2	14.0	5.0	6.8	1.6	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	387	329	124	696	312	284	2253	702	351	2352	860
V/C Ratio(X)	0.72	0.24	0.55	0.74	0.29	0.85	0.71	0.39	0.14	0.78	0.34	0.06
Avail Cap(c_a), veh/h	421	393	334	237	786	352	459	2253	702	535	2352	860
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.94	0.94	0.94	0.79	0.79	0.79
Uniform Delay (d), s/veh	40.4	29.7	31.9	41.0	30.8	34.9	42.7	27.4	23.5	34.9	1.9	1.3
Incr Delay (d2), s/veh	3.5	0.3	1.9	8.2	0.2	16.2	3.1	0.5	0.4	3.2	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	2.0	4.2	2.5	2.1	7.8	2.6	6.7	2.2	3.3	0.7	0.1
LnGrp Delay(d),s/veh	43.9	30.1	33.9	49.2	31.0	51.1	45.8	27.8	23.9	38.1	2.2	1.4
LnGrp LOS	D	C	C	D	C	D	D	C	C	D	A	A
Approach Vol, veh/h		474			556			1175			1134	
Approach Delay, s/veh		37.3			43.6			30.6			10.8	
Approach LOS		D			D			C			B	

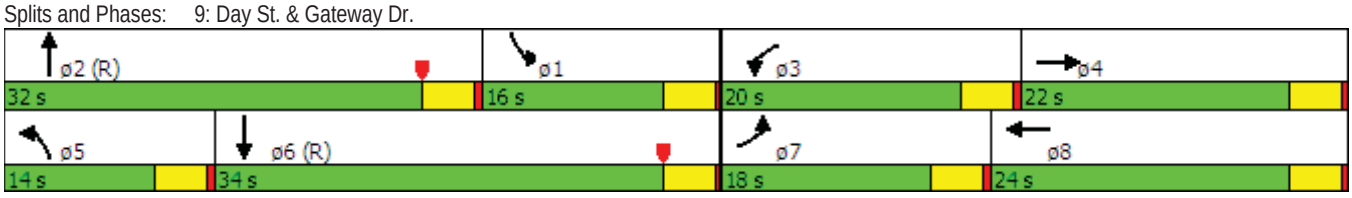
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	43.9	10.3	22.7	11.4	45.6	11.2	21.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	29.0	12.0	19.0	12.0	31.0	11.0	20.0
Max Q Clear Time (g_c+I1), s	8.8	16.0	6.5	11.3	7.2	3.6	7.1	16.5
Green Ext Time (p_c), s	0.4	8.7	0.1	2.1	0.3	14.1	0.2	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	27.0
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	93	110	70	121	104	188	59	668	121	210	672	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	100		0	190		400	260		0
Storage Lanes	1		0	1		0	1		1	2		0
Taper Length (ft)	0			120			60			165		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		318			585			592			1025	
Travel Time (s)		5.4			11.4			10.1			17.5	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	18.0	22.0		20.0	24.0		14.0	32.0		16.0	34.0	
Total Split (%)	20.0%	24.4%		22.2%	26.7%		15.6%	35.6%		17.8%	37.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

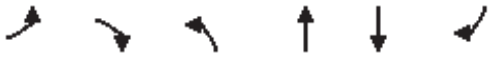
Splits and Phases: 9: Day St. & Gateway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	93	110	70	121	104	188	59	668	121	210	672	36
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	95	112	71	123	106	192	60	682	123	214	686	37
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	125	299	177	156	278	249	107	1351	241	976	2640	142
Arrive On Green	0.07	0.14	0.14	0.09	0.16	0.16	0.06	0.31	0.31	0.19	0.36	0.36
Sat Flow, veh/h	1774	2140	1268	1774	1770	1583	1774	4342	774	3442	4941	265
Grp Volume(v), veh/h	95	91	92	123	106	192	60	531	274	214	470	253
Grp Sat Flow(s),veh/h/ln	1774	1770	1639	1774	1770	1583	1774	1695	1726	1721	1695	1816
Q Serve(g_s), s	4.7	4.2	4.6	6.1	4.8	10.5	3.0	11.5	11.7	4.7	8.8	8.9
Cycle Q Clear(g_c), s	4.7	4.2	4.6	6.1	4.8	10.5	3.0	11.5	11.7	4.7	8.8	8.9
Prop In Lane	1.00		0.77	1.00		1.00	1.00		0.45	1.00		0.15
Lane Grp Cap(c), veh/h	125	247	229	156	278	249	107	1055	537	976	1811	970
V/C Ratio(X)	0.76	0.37	0.40	0.79	0.38	0.77	0.56	0.50	0.51	0.22	0.26	0.26
Avail Cap(c_a), veh/h	276	354	328	315	393	352	197	1055	537	976	1811	970
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.94	0.94	0.94
Uniform Delay (d), s/veh	41.1	35.1	35.3	40.2	34.0	36.4	41.1	25.3	25.4	28.0	16.3	16.3
Incr Delay (d2), s/veh	9.0	0.9	1.1	8.6	0.9	6.6	4.5	1.7	3.4	0.1	0.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	2.1	2.2	3.4	2.4	5.0	1.6	5.6	6.1	2.3	4.2	4.6
LnGrp Delay(d),s/veh	50.1	36.0	36.4	48.9	34.9	43.0	45.6	27.0	28.8	28.1	16.6	16.9
LnGrp LOS	D	D	D	D	C	D	D	C	C	C	B	B
Approach Vol, veh/h		278			421			865			937	
Approach Delay, s/veh		41.0			42.7			28.9			19.3	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.5	32.0	11.9	16.6	9.4	52.1	10.3	18.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	28.0	16.0	18.0	10.0	30.0	14.0	20.0
Max Q Clear Time (g_c+I1), s	6.7	13.7	8.1	6.6	5.0	10.9	6.7	12.5
Green Ext Time (p_c), s	1.1	4.3	0.2	2.1	0.0	5.0	0.1	1.7

Intersection Summary	
HCM 2010 Ctrl Delay	29.0
HCM 2010 LOS	C



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	12	9	2	1035	899	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	25			0
Storage Lanes	1	0	1			0
Taper Length (ft)	60		25			
Link Speed (mph)	30			40	40	
Link Distance (ft)	264			453	180	
Travel Time (s)	6.0			7.7	3.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	12	9	2	1035	899	1
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	-	25	-	-	-
Veh in Median Storage, #	1	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	10	2	1113	967	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1528	484	968	0	-	0
Stage 1	967	-	-	-	-	-
Stage 2	561	-	-	-	-	-
Critical Hdwy	6.29	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	134	452	406	-	-	-
Stage 1	259	-	-	-	-	-
Stage 2	518	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	133	452	406	-	-	-
Mov Cap-2 Maneuver	208	-	-	-	-	-
Stage 1	259	-	-	-	-	-
Stage 2	515	-	-	-	-	-

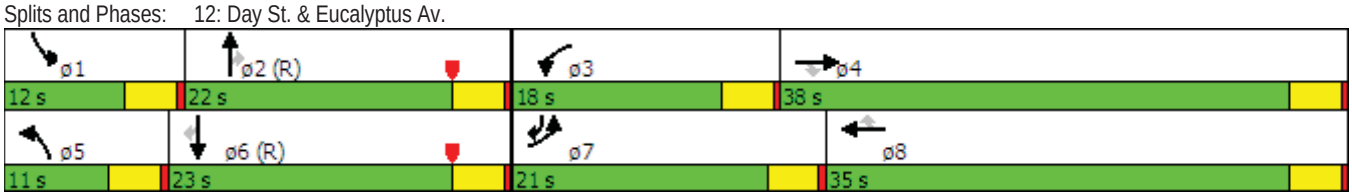
Approach	EB	NB	SB
HCM Control Delay, s	19.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	406	-	271	-	-
HCM Lane V/C Ratio	0.005	-	0.083	-	-
HCM Control Delay (s)	13.9	-	19.5	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	249	1223	185	253	791	141	89	473	366	142	482	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		50	175		0	100		100	200		0
Storage Lanes	1		1	1		1	1		2	1		1
Taper Length (ft)	100			75			80			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			40	
Link Distance (ft)		2104			1174			390			453	
Travel Time (s)		35.9			20.0			7.6			7.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	21.0	38.0	38.0	18.0	35.0	35.0	11.0	22.0	22.0	12.0	23.0	21.0
Total Split (%)	23.3%	42.2%	42.2%	20.0%	38.9%	38.9%	12.2%	24.4%	24.4%	13.3%	25.6%	23.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Day St. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	249	1223	185	253	791	141	89	473	366	142	482	245
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	262	1287	195	266	833	148	94	498	385	149	507	258
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	302	1337	598	276	1286	575	125	708	317	158	773	615
Arrive On Green	0.06	0.12	0.12	0.16	0.36	0.36	0.07	0.20	0.20	0.09	0.22	0.22
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	262	1287	195	266	833	148	94	498	385	149	507	258
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	13.2	32.6	10.1	13.4	17.6	5.9	4.7	11.8	18.0	7.5	11.8	10.7
Cycle Q Clear(g_c), s	13.2	32.6	10.1	13.4	17.6	5.9	4.7	11.8	18.0	7.5	11.8	10.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	302	1337	598	276	1286	575	125	708	317	158	773	615
V/C Ratio(X)	0.87	0.96	0.33	0.96	0.65	0.26	0.75	0.70	1.22	0.94	0.66	0.42
Avail Cap(c_a), veh/h	335	1337	598	276	1286	575	138	708	317	158	773	615
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.44	0.44	0.44	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	38.8	28.9	37.7	23.9	20.1	41.1	33.5	36.0	40.8	32.1	20.1
Incr Delay (d2), s/veh	9.8	9.3	0.1	44.2	1.1	0.2	18.8	5.8	122.5	55.3	4.3	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	17.7	4.5	10.0	8.8	2.6	3.0	6.3	18.6	6.1	6.2	5.0
LnGrp Delay(d),s/veh	51.2	48.0	29.1	81.9	25.0	20.4	59.9	39.3	158.5	96.1	36.4	22.2
LnGrp LOS	D	D	C	F	C	C	E	D	F	F	D	C
Approach Vol, veh/h		1744			1247			977			914	
Approach Delay, s/veh		46.4			36.6			88.2			42.1	
Approach LOS		D			D			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	22.0	18.0	38.0	10.3	23.7	19.3	36.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	18.0	14.0	34.0	7.0	19.0	17.0	31.0
Max Q Clear Time (g_c+I1), s	9.5	20.0	15.4	34.6	6.7	13.8	15.2	19.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	3.6	0.1	9.5

Intersection Summary	
HCM 2010 Ctrl Delay	51.5
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	133	54	145	149	251	78	605	108	249	511	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	95		95	80		0	100		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	60			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			25			35	
Link Distance (ft)		861			839			1320			2260	
Travel Time (s)		16.8			16.3			36.0			44.0	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	11.0	20.0		12.0	21.0	21.0	12.0	40.0		18.0	46.0	
Total Split (%)	12.2%	22.2%		13.3%	23.3%	23.3%	13.3%	44.4%		20.0%	51.1%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Day St. & Cottonwood Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	24	133	54	145	149	251	78	605	108	249	511	22
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	27	151	61	165	169	285	89	688	123	283	581	25
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	68	180	73	158	360	306	123	670	120	276	924	40
Arrive On Green	0.04	0.14	0.14	0.09	0.19	0.19	0.07	0.44	0.44	0.16	0.52	0.52
Sat Flow, veh/h	1774	1263	510	1774	1863	1583	1774	1539	275	1774	1773	76
Grp Volume(v), veh/h	27	0	212	165	169	285	89	0	811	283	0	606
Grp Sat Flow(s),veh/h/ln	1774	0	1773	1774	1863	1583	1774	0	1814	1774	0	1849
Q Serve(g_s), s	1.3	0.0	10.5	8.0	7.2	15.9	4.4	0.0	39.2	14.0	0.0	21.0
Cycle Q Clear(g_c), s	1.3	0.0	10.5	8.0	7.2	15.9	4.4	0.0	39.2	14.0	0.0	21.0
Prop In Lane	1.00		0.29	1.00		1.00	1.00		0.15	1.00		0.04
Lane Grp Cap(c), veh/h	68	0	253	158	360	306	123	0	789	276	0	964
V/C Ratio(X)	0.40	0.00	0.84	1.05	0.47	0.93	0.72	0.00	1.03	1.03	0.00	0.63
Avail Cap(c_a), veh/h	138	0	315	158	360	306	158	0	789	276	0	964
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.3	0.0	37.6	41.0	32.2	35.7	41.0	0.0	25.4	38.0	0.0	15.3
Incr Delay (d2), s/veh	3.8	0.0	14.9	84.5	1.0	33.8	11.1	0.0	39.2	60.9	0.0	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	6.2	7.6	3.8	9.8	2.6	0.0	28.1	11.5	0.0	11.4
LnGrp Delay(d),s/veh	46.0	0.0	52.5	125.6	33.1	69.5	52.2	0.0	64.6	99.0	0.0	18.4
LnGrp LOS	D		D	F	C	E	D		F	F		B
Approach Vol, veh/h		239			619			900			889	
Approach Delay, s/veh		51.7			74.5			63.4			44.1	
Approach LOS		D			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	43.2	12.0	16.8	10.2	50.9	7.4	21.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	36.0	8.0	16.0	8.0	42.0	7.0	17.0
Max Q Clear Time (g_c+I1), s	16.0	41.2	10.0	12.5	6.4	23.0	3.3	17.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.4	0.0	10.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	58.5
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	133	54	145	149	251	78	605	108	249	511	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	95		95	80		100	100		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	60			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			25			35	
Link Distance (ft)		861			839			811			2260	
Travel Time (s)		16.8			16.3			22.1			44.0	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Detector Phase	7	4		3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	
Total Split (s)	11.0	20.0		13.0	22.0	22.0	11.0	38.0	38.0	19.0	46.0	
Total Split (%)	12.2%	22.2%		14.4%	24.4%	24.4%	12.2%	42.2%	42.2%	21.1%	51.1%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 13: Day St. & Cottonwood Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	24	133	54	145	149	251	78	605	108	249	511	22
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	27	151	61	165	169	285	89	688	123	283	581	25
Adj No. of Lanes	1	1	0	1	1	1	1	1	1	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	68	180	73	177	381	324	123	769	654	296	905	39
Arrive On Green	0.04	0.14	0.14	0.10	0.20	0.20	0.07	0.41	0.41	0.17	0.51	0.51
Sat Flow, veh/h	1774	1263	510	1774	1863	1583	1774	1863	1583	1774	1773	76
Grp Volume(v), veh/h	27	0	212	165	169	285	89	688	123	283	0	606
Grp Sat Flow(s),veh/h/ln	1774	0	1773	1774	1863	1583	1774	1863	1583	1774	0	1849
Q Serve(g_s), s	1.3	0.0	10.5	8.3	7.1	15.7	4.4	30.9	4.5	14.2	0.0	21.5
Cycle Q Clear(g_c), s	1.3	0.0	10.5	8.3	7.1	15.7	4.4	30.9	4.5	14.2	0.0	21.5
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	68	0	253	177	381	324	123	769	654	296	0	943
V/C Ratio(X)	0.40	0.00	0.84	0.93	0.44	0.88	0.72	0.89	0.19	0.96	0.00	0.64
Avail Cap(c_a), veh/h	138	0	315	177	381	324	138	769	654	296	0	943
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.3	0.0	37.6	40.2	31.3	34.7	41.0	24.6	16.8	37.2	0.0	16.1
Incr Delay (d2), s/veh	3.8	0.0	14.9	47.7	0.8	23.2	15.1	15.1	0.6	40.7	0.0	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	6.2	6.4	3.7	8.9	2.7	19.1	2.1	10.3	0.0	11.8
LnGrp Delay(d),s/veh	46.0	0.0	52.5	87.9	32.1	57.9	56.1	39.7	17.5	77.9	0.0	19.4
LnGrp LOS	D		D	F	C	E	E	D	B	E		B
Approach Vol, veh/h		239			619			900			889	
Approach Delay, s/veh		51.7			58.9			38.3			38.0	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	41.2	13.0	16.8	10.2	49.9	7.4	22.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	34.0	9.0	16.0	7.0	42.0	7.0	18.0
Max Q Clear Time (g_c+I1), s	16.2	32.9	10.3	12.5	6.4	23.5	3.3	17.7
Green Ext Time (p_c), s	0.0	0.8	0.0	0.4	0.0	9.3	0.0	0.1

Intersection Summary	
HCM 2010 Ctrl Delay	44.2
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	43	14	9	23	19	12	753	6	20	695	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		861			839			634			1320	
Travel Time (s)		19.6			19.1			17.3			36.0	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	54.1
Intersection LOS	F

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	8	43	14	0	9	23	19	0	12	753	6
Peak Hour Factor	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	9	47	15	0	10	25	21	0	13	827	7
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	11.4	11.1	57.4
HCM LOS	B	B	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	2%	16%	0%	28%	0%	3%
Vol Thru, %	98%	84%	0%	72%	0%	96%
Vol Right, %	1%	0%	100%	0%	100%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	771	51	14	32	19	721
LT Vol	12	8	0	9	0	20
Through Vol	753	43	0	23	0	695
RT Vol	6	0	14	0	19	6
Lane Flow Rate	847	56	15	35	21	792
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	1	0.123	0.031	0.079	0.042	1
Departure Headway (Hd)	5.286	7.93	7.152	8.056	7.216	5.288
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	686	453	502	446	497	681
Service Time	3.348	5.656	4.878	5.786	4.946	3.35
HCM Lane V/C Ratio	1.235	0.124	0.03	0.078	0.042	1.163
HCM Control Delay	57.4	11.8	10.1	11.5	10.3	57.4
HCM Lane LOS	F	B	B	B	B	F
HCM 95th-tile Q	15.9	0.4	0.1	0.3	0.1	15.9

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	20	695	6
Peak Hour Factor	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	22	764	7
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	57.4
HCM LOS	F

Lane

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	43	14	9	23	19	12	753	6	20	695	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		861			839			634			509	
Travel Time (s)		19.6			19.1			17.3			13.9	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	21.3
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	8	43	14	0	9	23	19	0	12	753	6
Peak Hour Factor	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	9	47	15	0	10	25	21	0	13	827	7
Number of Lanes	0	0	1	1	0	0	1	1	0	0	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	11.8	11.4	23
HCM LOS	B	B	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	3%	0%	16%	0%	28%	0%	5%	0%
Vol Thru, %	97%	98%	84%	0%	72%	0%	95%	98%
Vol Right, %	0%	2%	0%	100%	0%	100%	0%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	389	383	51	14	32	19	368	354
LT Vol	12	0	8	0	9	0	20	0
Through Vol	377	377	43	0	23	0	348	348
RT Vol	0	6	0	14	0	19	0	6
Lane Flow Rate	427	420	56	15	35	21	404	388
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.724	0.71	0.128	0.032	0.081	0.043	0.694	0.663
Departure Headway (Hd)	6.106	6.08	8.198	7.396	8.317	7.45	6.185	6.146
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	589	593	435	481	429	478	582	587
Service Time	3.87	3.843	5.984	5.181	6.107	5.24	3.95	3.91
HCM Lane V/C Ratio	0.725	0.708	0.129	0.031	0.082	0.044	0.694	0.661
HCM Control Delay	23.4	22.5	12.2	10.4	11.8	10.6	21.9	20.3
HCM Lane LOS	C	C	B	B	B	B	C	C
HCM 95th-tile Q	6.1	5.8	0.4	0.1	0.3	0.1	5.5	4.9

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	20	695	6
Peak Hour Factor	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	22	764	7
Number of Lanes	0	0	2	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	21.1
HCM LOS	C

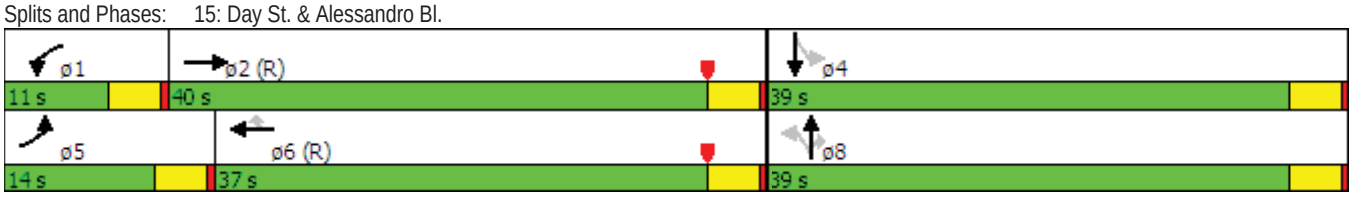
Lane

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	204	1814	100	102	1261	128	155	441	158	186	323	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	245		0	220		75	50		50	200		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	100			120			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		861			839			831			716	
Travel Time (s)		13.0			12.7			16.2			19.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		
Detector Phase	5	2		1	6	6	8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (s)	14.0	40.0		11.0	37.0	37.0	39.0	39.0	39.0	39.0	39.0	
Total Split (%)	15.6%	44.4%		12.2%	41.1%	41.1%	43.3%	43.3%	43.3%	43.3%	43.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max		None	C-Max	C-Max	Max	Max	Max	Max	Max	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 15: Day St. & Alessandro Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	204	1814	100	102	1261	128	155	441	158	186	323	186
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	217	1930	106	109	1341	136	165	469	168	198	344	198
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	1977	108	137	1298	581	179	724	616	224	432	249
Arrive On Green	0.11	0.40	0.40	0.08	0.37	0.37	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1774	4935	270	1774	3539	1583	860	1863	1583	788	1111	639
Grp Volume(v), veh/h	217	1324	712	109	1341	136	165	469	168	198	0	542
Grp Sat Flow(s),veh/h/ln	1774	1695	1815	1774	1770	1583	860	1863	1583	788	0	1750
Q Serve(g_s), s	10.0	34.6	34.8	5.4	33.0	5.4	10.3	18.5	6.5	16.5	0.0	24.7
Cycle Q Clear(g_c), s	10.0	34.6	34.8	5.4	33.0	5.4	35.0	18.5	6.5	35.0	0.0	24.7
Prop In Lane	1.00		0.15	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	197	1358	727	137	1298	581	179	724	616	224	0	681
V/C Ratio(X)	1.10	0.98	0.98	0.80	1.03	0.23	0.92	0.65	0.27	0.88	0.00	0.80
Avail Cap(c_a), veh/h	197	1358	727	138	1298	581	179	724	616	224	0	681
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.0	26.5	26.6	40.8	28.5	19.7	41.9	22.5	18.8	39.0	0.0	24.3
Incr Delay (d2), s/veh	93.7	19.2	28.6	26.6	34.0	0.9	49.7	4.4	1.1	35.9	0.0	9.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.0	19.6	23.2	3.7	22.2	2.5	6.5	10.4	3.0	7.1	0.0	13.7
LnGrp Delay(d),s/veh	133.7	45.7	55.2	67.4	62.5	20.7	91.7	26.9	19.9	74.9	0.0	33.7
LnGrp LOS	F	D	E	E	F	C	F	C	B	E		C
Approach Vol, veh/h		2253			1586			802			740	
Approach Delay, s/veh		57.2			59.2			38.8			44.7	
Approach LOS		E			E			D			D	

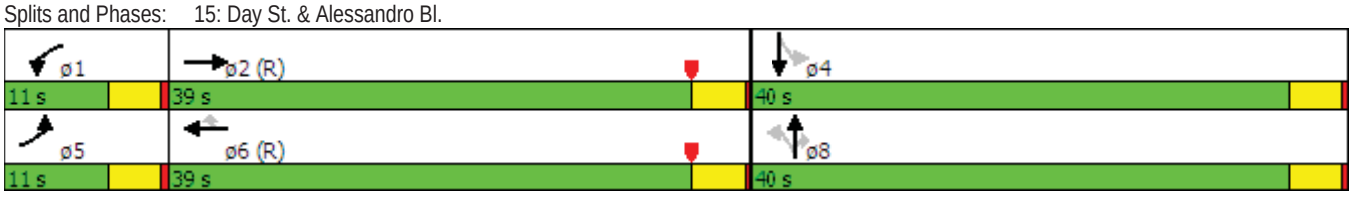
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.9	40.1		39.0	14.0	37.0		39.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	36.0		35.0	10.0	33.0		35.0
Max Q Clear Time (g_c+I1), s	7.4	36.8		37.0	12.0	35.0		37.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	53.3
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	204	1814	100	102	1261	128	155	441	158	186	323	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	245		0	220		75	50		50	200		0
Storage Lanes	2		0	1		0	1		1	0		0
Taper Length (ft)	100			120			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		861			839			831			716	
Travel Time (s)		13.0			12.7			16.2			19.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		
Detector Phase	5	2		1	6	6	8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (s)	11.0	39.0		11.0	39.0	39.0	40.0	40.0	40.0	40.0	40.0	
Total Split (%)	12.2%	43.3%		12.2%	43.3%	43.3%	44.4%	44.4%	44.4%	44.4%	44.4%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max		None	C-Max	C-Max	Max	Max	Max	Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 15: Day St. & Alessandro Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	204	1814	100	102	1261	128	155	441	158	186	323	186
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	217	1930	106	109	1341	136	165	469	168	198	344	198
Adj No. of Lanes	2	3	0	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	268	1922	105	137	1376	616	193	745	633	236	444	256
Arrive On Green	0.08	0.39	0.39	0.08	0.39	0.39	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	3442	4935	270	1774	3539	1583	860	1863	1583	788	1111	639
Grp Volume(v), veh/h	217	1324	712	109	1341	136	165	469	168	198	0	542
Grp Sat Flow(s),veh/h/ln	1721	1695	1815	1774	1770	1583	860	1863	1583	788	0	1750
Q Serve(g_s), s	5.6	35.1	35.1	5.4	33.6	5.2	11.8	18.2	6.4	17.8	0.0	24.2
Cycle Q Clear(g_c), s	5.6	35.1	35.1	5.4	33.6	5.2	36.0	18.2	6.4	36.0	0.0	24.2
Prop In Lane	1.00		0.15	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	268	1320	707	137	1376	616	193	745	633	236	0	700
V/C Ratio(X)	0.81	1.00	1.01	0.80	0.97	0.22	0.86	0.63	0.27	0.84	0.00	0.77
Avail Cap(c_a), veh/h	268	1320	707	138	1376	616	193	745	633	236	0	700
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.8	27.5	27.5	40.8	27.1	18.4	41.0	21.7	18.1	38.0	0.0	23.5
Incr Delay (d2), s/veh	16.9	25.5	35.6	26.6	18.9	0.8	36.0	4.0	1.0	28.5	0.0	8.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	21.0	24.5	3.7	19.8	2.4	6.0	10.1	3.0	6.8	0.0	13.2
LnGrp Delay(d),s/veh	57.7	53.0	63.1	67.4	45.9	19.2	76.9	25.7	19.1	66.4	0.0	31.6
LnGrp LOS	E	F	F	E	D	B	E	C	B	E		C
Approach Vol, veh/h		2253			1586			802			740	
Approach Delay, s/veh		56.6			45.1			34.8			40.9	
Approach LOS		E			D			C			D	

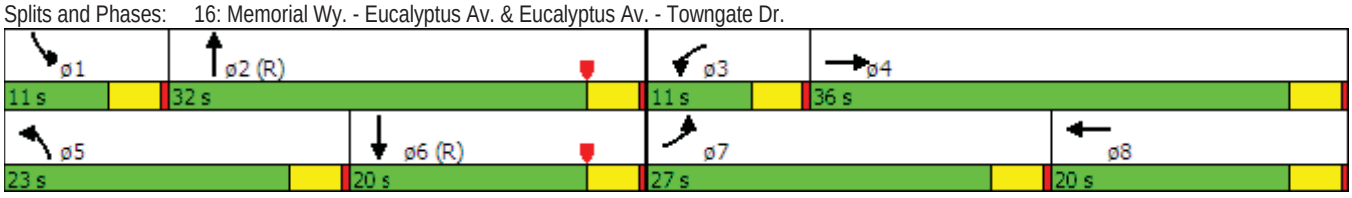
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.9	39.1		40.0	11.0	39.0		40.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	35.0		36.0	7.0	35.0		36.0
Max Q Clear Time (g_c+I1), s	7.4	37.1		38.0	7.6	35.6		38.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	47.8
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	450	609	559	27	476	63	382	276	21	55	282	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		0	150		0	200		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	27.0	36.0		11.0	20.0		23.0	32.0		11.0	20.0	
Total Split (%)	30.0%	40.0%		12.2%	22.2%		25.6%	35.6%		12.2%	22.2%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	450	609	559	27	476	63	382	276	21	55	282	304
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	479	648	595	29	506	67	406	294	22	59	300	323
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	453	1235	577	71	678	88	375	1195	89	106	366	327
Arrive On Green	0.26	0.36	0.36	0.04	0.15	0.15	0.21	0.36	0.36	0.06	0.21	0.21
Sat Flow, veh/h	1774	3390	1583	1774	4554	594	1774	3340	249	1774	1770	1583
Grp Volume(v), veh/h	479	648	595	29	375	198	406	155	161	59	300	323
Grp Sat Flow(s),veh/h/ln	1774	1695	1583	1774	1695	1758	1774	1770	1819	1774	1770	1583
Q Serve(g_s), s	23.0	13.5	32.8	1.4	9.5	9.7	19.0	5.5	5.6	2.9	14.6	18.3
Cycle Q Clear(g_c), s	23.0	13.5	32.8	1.4	9.5	9.7	19.0	5.5	5.6	2.9	14.6	18.3
Prop In Lane	1.00		1.00	1.00		0.34	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	453	1235	577	71	504	262	375	633	651	106	366	327
V/C Ratio(X)	1.06	0.52	1.03	0.41	0.74	0.76	1.08	0.24	0.25	0.55	0.82	0.99
Avail Cap(c_a), veh/h	453	1235	577	138	603	313	375	633	651	138	366	327
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	22.5	28.6	42.2	36.7	36.8	35.5	20.3	20.4	41.1	34.1	35.6
Incr Delay (d2), s/veh	58.0	0.4	45.9	3.7	4.0	8.6	70.9	0.9	0.9	4.4	18.3	46.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.5	6.4	21.6	0.8	4.8	5.4	16.6	2.9	3.0	1.6	8.9	12.2
LnGrp Delay(d),s/veh	91.5	22.9	74.5	45.9	40.7	45.3	106.4	21.3	21.3	45.6	52.4	82.0
LnGrp LOS	F	C	F	D	D	D	F	C	C	D	D	F
Approach Vol, veh/h		1722			602			722			682	
Approach Delay, s/veh		59.8			42.5			69.1			65.8	
Approach LOS		E			D			E			E	

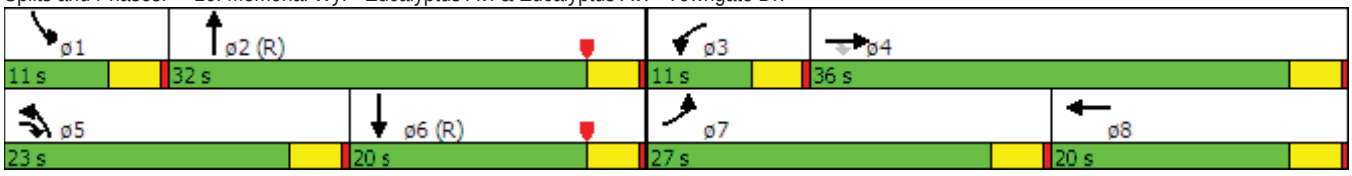
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	36.2	7.6	36.8	23.0	22.6	27.0	17.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	28.0	7.0	32.0	19.0	16.0	23.0	16.0
Max Q Clear Time (g_c+I1), s	4.9	7.6	3.4	34.8	21.0	20.3	25.0	11.7
Green Ext Time (p_c), s	0.0	5.5	0.0	0.0	0.0	0.0	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	59.9
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	450	609	559	27	476	63	382	276	21	55	282	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		0	150		0	200		0	200		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4									
Detector Phase	7	4	5	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0	11.0	11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	27.0	36.0	23.0	11.0	20.0		23.0	32.0		11.0	20.0	
Total Split (%)	30.0%	40.0%	25.6%	12.2%	22.2%		25.6%	35.6%		12.2%	22.2%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	450	609	559	27	476	63	382	276	21	55	282	304
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	479	648	595	29	506	67	406	294	22	59	300	323
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	453	1287	910	71	674	88	375	1198	89	106	367	329
Arrive On Green	0.26	0.36	0.36	0.04	0.15	0.15	0.21	0.36	0.36	0.06	0.21	0.21
Sat Flow, veh/h	1774	3539	1583	1774	4554	594	1774	3340	249	1774	1770	1583
Grp Volume(v), veh/h	479	648	595	29	375	198	406	155	161	59	300	323
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1695	1758	1774	1770	1819	1774	1770	1583
Q Serve(g_s), s	23.0	12.8	23.0	1.4	9.5	9.8	19.0	5.5	5.6	2.9	14.6	18.3
Cycle Q Clear(g_c), s	23.0	12.8	23.0	1.4	9.5	9.8	19.0	5.5	5.6	2.9	14.6	18.3
Prop In Lane	1.00		1.00	1.00		0.34	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	453	1287	910	71	502	260	375	635	652	106	367	329
V/C Ratio(X)	1.06	0.50	0.65	0.41	0.75	0.76	1.08	0.24	0.25	0.55	0.82	0.98
Avail Cap(c_a), veh/h	453	1287	910	138	603	313	375	635	652	138	367	329
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	22.3	13.0	42.2	36.7	36.8	35.5	20.3	20.3	41.1	34.0	35.5
Incr Delay (d2), s/veh	58.0	0.3	1.7	3.7	4.1	8.8	70.9	0.9	0.9	4.4	18.0	45.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.5	6.3	10.4	0.8	4.8	5.4	16.6	2.9	3.0	1.6	8.9	12.1
LnGrp Delay(d),s/veh	91.5	22.6	14.7	45.9	40.9	45.6	106.4	21.2	21.2	45.6	52.0	81.1
LnGrp LOS	F	C	B	D	D	D	F	C	C	D	D	F
Approach Vol, veh/h		1722			602			722			682	
Approach Delay, s/veh		39.1			42.7			69.1			65.2	
Approach LOS		D			D			E			E	

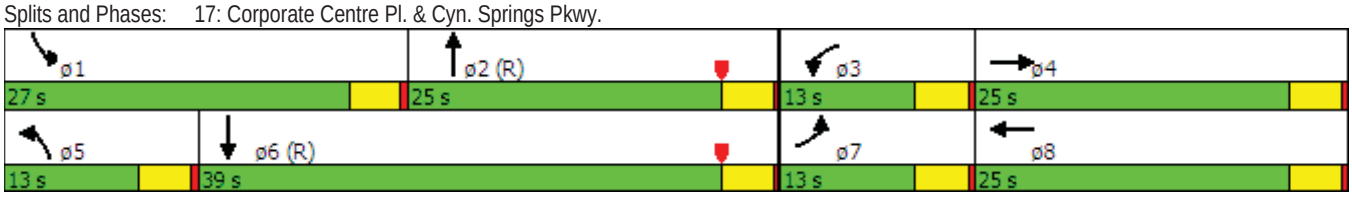
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	36.3	7.6	36.7	23.0	22.7	27.0	17.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	28.0	7.0	32.0	19.0	16.0	23.0	16.0
Max Q Clear Time (g_c+I1), s	4.9	7.6	3.4	25.0	21.0	20.3	25.0	11.8
Green Ext Time (p_c), s	0.0	5.5	0.0	4.9	0.0	0.0	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	50.2
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	418	32	43	470	102	27	47	54	172	58	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	175		0	130		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			90			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		476			1120			987			205	
Travel Time (s)		8.1			19.1			16.8			4.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	13.0	25.0		13.0	25.0		13.0	25.0		27.0	39.0	
Total Split (%)	14.4%	27.8%		14.4%	27.8%		14.4%	27.8%		30.0%	43.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 38 (42%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 17: Corporate Centre Pl. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	46	418	32	43	470	102	27	47	54	172	58	37
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	48	440	34	45	495	107	28	49	57	181	61	39
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	900	69	93	778	164	69	812	726	221	578	370
Arrive On Green	0.05	0.19	0.19	0.02	0.06	0.06	0.04	0.46	0.46	0.12	0.54	0.54
Sat Flow, veh/h	1774	4820	368	1774	4208	888	1774	1770	1583	1774	1063	680
Grp Volume(v), veh/h	48	308	166	45	397	205	28	49	57	181	0	100
Grp Sat Flow(s),veh/h/ln	1774	1695	1798	1774	1695	1706	1774	1770	1583	1774	0	1743
Q Serve(g_s), s	2.4	7.3	7.4	2.3	10.3	10.6	1.4	1.4	1.8	9.0	0.0	2.5
Cycle Q Clear(g_c), s	2.4	7.3	7.4	2.3	10.3	10.6	1.4	1.4	1.8	9.0	0.0	2.5
Prop In Lane	1.00		0.20	1.00		0.52	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	96	633	336	93	627	315	69	812	726	221	0	948
V/C Ratio(X)	0.50	0.49	0.49	0.48	0.63	0.65	0.40	0.06	0.08	0.82	0.00	0.11
Avail Cap(c_a), veh/h	177	791	419	177	791	398	177	812	726	453	0	948
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.87	0.87	0.87	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.4	32.7	32.8	43.0	39.3	39.4	42.2	13.6	13.7	38.4	0.0	9.9
Incr Delay (d2), s/veh	3.9	0.6	1.1	3.4	0.9	2.2	3.7	0.1	0.2	7.3	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	3.5	3.8	1.2	4.9	5.2	0.7	0.7	0.8	4.8	0.0	1.3
LnGrp Delay(d),s/veh	45.3	33.3	33.9	46.4	40.2	41.6	45.9	13.7	13.9	45.8	0.0	10.2
LnGrp LOS	D	C	C	D	D	D	D	B	B	D		B
Approach Vol, veh/h		522			647			134			281	
Approach Delay, s/veh		34.6			41.1			20.5			33.1	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	45.3	8.7	20.8	7.5	53.0	8.9	20.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	21.0	9.0	21.0	9.0	35.0	9.0	21.0
Max Q Clear Time (g_c+I1), s	11.0	3.8	4.3	9.4	3.4	4.5	4.4	12.6
Green Ext Time (p_c), s	0.4	1.0	0.0	5.0	0.0	1.2	0.0	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.8
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	171	20	65	137	48	9	75	66	40	86	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	170		0	100		0	130		0	135		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			45			60			60		
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		474			710			623			987	
Travel Time (s)		8.1			12.1			10.6			16.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	9.9
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	23	171	20	0	65	137	48	0	9	75	66
Peak Hour Factor	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	25	184	22	0	70	147	52	0	10	81	71
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	3
HCM Control Delay	10.1	9.9	9.7
HCM LOS	B	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	27%	0%	100%	74%	0%	100%	49%	0%	100%
Vol Right, %	0%	0%	73%	0%	0%	26%	0%	0%	51%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	9	50	91	23	114	77	65	91	94	40	57
LT Vol	9	0	0	23	0	0	65	0	0	40	0
Through Vol	0	50	25	0	114	57	0	91	46	0	57
RT Vol	0	0	66	0	0	20	0	0	48	0	0
Lane Flow Rate	10	54	98	25	123	83	70	98	101	43	62
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.018	0.095	0.16	0.046	0.209	0.137	0.128	0.166	0.16	0.082	0.109
Departure Headway (Hd)	6.88	6.38	5.872	6.647	6.147	5.966	6.576	6.076	5.717	6.855	6.355
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	520	562	611	539	583	601	546	590	627	523	564
Service Time	4.619	4.119	3.611	4.384	3.884	3.703	4.311	3.811	3.452	4.595	4.095
HCM Lane V/C Ratio	0.019	0.096	0.16	0.046	0.211	0.138	0.128	0.166	0.161	0.082	0.11
HCM Control Delay	9.7	9.8	9.7	9.7	10.5	9.7	10.3	10	9.5	10.2	9.9
HCM Lane LOS	A	A	A	A	B	A	B	A	A	B	A
HCM 95th-tile Q	0.1	0.3	0.6	0.1	0.8	0.5	0.4	0.6	0.6	0.3	0.4

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	40	86	29
Peak Hour Factor	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	43	92	31
Number of Lanes	0	1	2	0

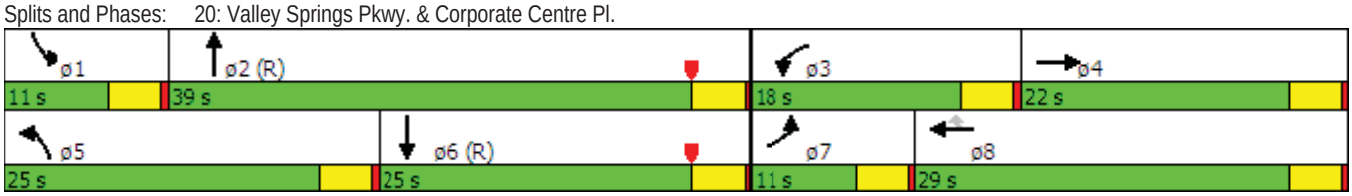
Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	9.8
HCM LOS	A

Lane	SBLn3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	44	109	106	60	5	179	573	66	42	549	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		70	140		50	150		0	120		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			40			40			40	
Link Distance (ft)		327			603			402			804	
Travel Time (s)		7.4			10.3			6.9			13.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	11.0	22.0		18.0	29.0	29.0	25.0	39.0		11.0	25.0	
Total Split (%)	12.2%	24.4%		20.0%	32.2%	32.2%	27.8%	43.3%		12.2%	27.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Valley Springs Pkwy. & Corporate Centre Pl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	34	44	109	106	60	5	179	573	66	42	549	32
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	35	45	112	109	62	5	185	591	68	43	566	33
Adj No. of Lanes	1	1	0	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	80	58	144	139	549	245	220	2644	301	91	2449	142
Arrive On Green	0.05	0.12	0.12	0.08	0.15	0.15	0.25	1.00	1.00	0.05	0.50	0.50
Sat Flow, veh/h	1774	474	1180	1774	3539	1583	1774	4633	527	1774	4918	285
Grp Volume(v), veh/h	35	0	157	109	62	5	185	431	228	43	389	210
Grp Sat Flow(s),veh/h/ln	1774	0	1654	1774	1770	1583	1774	1695	1770	1774	1695	1812
Q Serve(g_s), s	1.7	0.0	8.3	5.4	1.4	0.2	8.9	0.0	0.0	2.1	5.9	5.9
Cycle Q Clear(g_c), s	1.7	0.0	8.3	5.4	1.4	0.2	8.9	0.0	0.0	2.1	5.9	5.9
Prop In Lane	1.00		0.71	1.00		1.00	1.00		0.30	1.00		0.16
Lane Grp Cap(c), veh/h	80	0	202	139	549	245	220	1935	1010	91	1689	903
V/C Ratio(X)	0.43	0.00	0.78	0.78	0.11	0.02	0.84	0.22	0.23	0.47	0.23	0.23
Avail Cap(c_a), veh/h	138	0	331	276	983	440	414	1935	1010	138	1689	903
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.8	0.0	38.3	40.7	32.7	32.2	33.0	0.0	0.0	41.5	12.8	12.8
Incr Delay (d2), s/veh	3.7	0.0	6.3	9.3	0.1	0.0	8.5	0.3	0.5	3.8	0.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	4.1	3.0	0.7	0.1	4.8	0.1	0.1	1.1	2.8	3.1
LnGrp Delay(d),s/veh	45.5	0.0	44.7	50.0	32.8	32.3	41.5	0.3	0.5	45.3	13.1	13.4
LnGrp LOS	D		D	D	C	C	D	A	A	D	B	B
Approach Vol, veh/h		192			176			844			642	
Approach Delay, s/veh		44.8			43.4			9.4			15.4	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	55.4	11.1	15.0	15.1	48.8	8.1	17.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	35.0	14.0	18.0	21.0	21.0	7.0	25.0
Max Q Clear Time (g_c+I1), s	4.1	2.0	7.4	10.3	10.9	7.9	3.7	3.4
Green Ext Time (p_c), s	0.0	9.2	0.1	0.7	0.3	6.2	0.0	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	18.4
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	0	32	0	0	0	19	806	0	0	748	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	25		0	75		50
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	60			60			10			80		
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		252			253			418			402	
Travel Time (s)		5.7			5.8			7.1			6.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	11	0	32	0	0	0	19	806	0	0	748	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	0	33	0	0	0	19	822	0	0	763	16

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	1139	1632	390				780	0	0	822	0	0
Stage 1	771	771	-				-	-	-	-	-	-
Stage 2	368	861	-				-	-	-	-	-	-
Critical Hdwy	5.74	6.54	7.14				5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	6.64	5.54	-				-	-	-	-	-	-
Critical Hdwy Stg 2	6.04	5.54	-				-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92				3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	264	100	520				499	-	-	477	-	-
Stage 1	333	408	-				-	-	-	-	-	-
Stage 2	614	371	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	246	0	520				499	-	-	477	-	-
Mov Cap-2 Maneuver	246	0	-				-	-	-	-	-	-
Stage 1	333	0	-				-	-	-	-	-	-
Stage 2	571	0	-				-	-	-	-	-	-

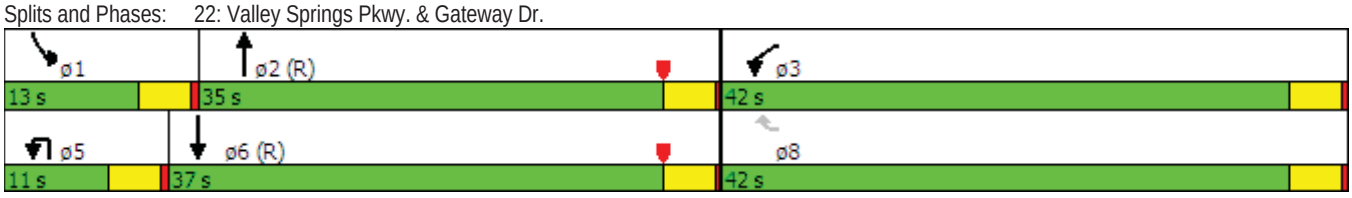
Approach	EB	NB	SB
HCM Control Delay, s	15	0.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	499	-	-	405	477	-	-
HCM Lane V/C Ratio	0.039	-	-	0.108	-	-	-
HCM Control Delay (s)	12.5	0.3	-	15	0	-	-
HCM Lane LOS	B	A	-	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0	-	-

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (vph)	352	76	0	749	111	41	740
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	180		0	115	
Storage Lanes	1	1	1		0	1	
Taper Length (ft)	60		100			120	
Right Turn on Red		Yes			Yes		
Link Speed (mph)	40			40			40
Link Distance (ft)	609			576			418
Travel Time (s)	10.4			9.8			7.1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Shared Lane Traffic (%)							
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	3		5	2		1	6
Permitted Phases		8					
Detector Phase	3	8	5	2		1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	11.0	20.0	11.0	20.0		11.0	20.0
Total Split (s)	42.0	42.0	11.0	35.0		13.0	37.0
Total Split (%)	46.7%	46.7%	12.2%	38.9%		14.4%	41.1%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead	Lag		Lead	Lag
Lead-Lag Optimize?			Yes	Yes		Yes	Yes
Recall Mode	None	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 22: Valley Springs Pkwy. & Gateway Dr.



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	352	76	0	749	111	41	740
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1900	1863	1863
Adj Flow Rate, veh/h	400	86		851	126	47	841
Adj No. of Lanes	1	1		3	0	1	3
Peak Hour Factor	0.88	0.88		0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	451	403		2500	368	95	3339
Arrive On Green	0.25	0.25		1.00	1.00	0.11	1.00
Sat Flow, veh/h	1774	1583		4645	659	1774	5253
Grp Volume(v), veh/h	400	86		643	334	47	841
Grp Sat Flow(s),veh/h/ln	1774	1583		1695	1746	1774	1695
Q Serve(g_s), s	19.5	3.9		0.0	0.0	2.2	0.0
Cycle Q Clear(g_c), s	19.5	3.9		0.0	0.0	2.2	0.0
Prop In Lane	1.00	1.00			0.38	1.00	
Lane Grp Cap(c), veh/h	451	403		1893	975	95	3339
V/C Ratio(X)	0.89	0.21		0.34	0.34	0.49	0.25
Avail Cap(c_a), veh/h	749	669		1893	975	177	3339
HCM Platoon Ratio	1.00	1.00		2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.3	26.4		0.0	0.0	39.0	0.0
Incr Delay (d2), s/veh	7.3	0.3		0.5	1.0	3.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	1.7		0.1	0.3	1.2	0.1
LnGrp Delay(d),s/veh	39.6	26.7		0.5	1.0	42.9	0.2
LnGrp LOS	D	C		A	A	D	A
Approach Vol, veh/h	486			977			888
Approach Delay, s/veh	37.3			0.6			2.4
Approach LOS	D			A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.8	54.3				63.1		26.9
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	9.0	31.0				33.0		38.0
Max Q Clear Time (g_c+I1), s	4.2	2.0				2.0		21.5
Green Ext Time (p_c), s	0.0	14.6				15.1		1.4

Intersection Summary	
HCM 2010 Ctrl Delay	8.9
HCM 2010 LOS	A

Notes

User approved ignoring U-Turning movement.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	10	167	320	16	15	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	60				60	
Link Speed (mph)		40	40		30	
Link Distance (ft)		609	672		287	
Travel Time (s)		10.4	11.5		6.5	
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	10	167	320	16	15	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	226	432	22	20	30

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	454	0	-	0	583	227
Stage 1	-	-	-	-	443	-
Stage 2	-	-	-	-	140	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1103	-	-	-	443	776
Stage 1	-	-	-	-	614	-
Stage 2	-	-	-	-	872	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1103	-	-	-	437	776
Mov Cap-2 Maneuver	-	-	-	-	513	-
Stage 1	-	-	-	-	614	-
Stage 2	-	-	-	-	861	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1103	-	-	-	642
HCM Lane V/C Ratio	0.012	-	-	-	0.078
HCM Control Delay (s)	8.3	-	-	-	11.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	33	149	182	45	46	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125			0	150	0
Storage Lanes	1			0	0	1
Taper Length (ft)	60				60	
Link Speed (mph)		40	40		40	
Link Distance (ft)		672	394		405	
Travel Time (s)		11.5	6.7		6.9	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	33	149	182	45	46	155
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	180	219	54	55	187

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	273	0	-	0	415	137
Stage 1	-	-	-	-	246	-
Stage 2	-	-	-	-	169	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1287	-	-	-	566	886
Stage 1	-	-	-	-	772	-
Stage 2	-	-	-	-	843	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1287	-	-	-	548	886
Mov Cap-2 Maneuver	-	-	-	-	612	-
Stage 1	-	-	-	-	772	-
Stage 2	-	-	-	-	817	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1287	-	-	-	612	886
HCM Lane V/C Ratio	0.031	-	-	-	0.091	0.211
HCM Control Delay (s)	7.9	-	-	-	11.5	10.1
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3	0.8

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	223	5	17	183	5	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	25		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			0		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	226			318	265	
Travel Time (s)	3.9			5.4	6.0	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	223	5	17	183	5	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	25	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	232	5	18	191	5	52

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	238	0	366	119
Stage 1	-	-	-	-	235	-
Stage 2	-	-	-	-	131	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1326	-	607	910
Stage 1	-	-	-	-	782	-
Stage 2	-	-	-	-	881	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1326	-	599	910
Mov Cap-2 Maneuver	-	-	-	-	646	-
Stage 1	-	-	-	-	782	-
Stage 2	-	-	-	-	869	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	9.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	877	-	-	1326	-
HCM Lane V/C Ratio	0.065	-	-	0.013	-
HCM Control Delay (s)	9.4	-	-	7.8	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	230	31	86	211	46	24	28	30	35	33	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		50	110		100	100		50	0		50
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		710			938			620			207	
Travel Time (s)		12.1			16.0			10.6			4.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	16	230	31	0	86	211	46	0	24	28	30
Peak Hour Factor	0.92	0.98	0.98	0.98	0.92	0.98	0.98	0.98	0.92	0.98	0.98	0.98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	16	235	32	0	88	215	47	0	24	29	31
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	2	3
HCM Control Delay	10.1	9.9	9.5
HCM LOS	B	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	51%	0%
Vol Thru, %	0%	100%	24%	0%	100%	71%	0%	100%	60%	49%	0%
Vol Right, %	0%	0%	76%	0%	0%	29%	0%	0%	40%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	24	19	39	16	153	108	86	141	116	68	16
LT Vol	24	0	0	16	0	0	86	0	0	35	0
Through Vol	0	19	9	0	153	77	0	141	70	33	0
RT Vol	0	0	30	0	0	31	0	0	46	0	16
Lane Flow Rate	24	19	40	16	156	110	88	144	119	69	16
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.048	0.034	0.066	0.029	0.256	0.173	0.153	0.23	0.181	0.129	0.026
Departure Headway (Hd)	6.998	6.497	5.963	6.388	5.886	5.684	6.265	5.763	5.485	6.71	5.753
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	512	551	601	562	612	633	574	624	655	535	622
Service Time	4.734	4.233	3.699	4.113	3.611	3.408	3.987	3.485	3.207	4.443	3.486
HCM Lane V/C Ratio	0.047	0.034	0.067	0.028	0.255	0.174	0.153	0.231	0.182	0.129	0.026
HCM Control Delay	10.1	9.5	9.1	9.3	10.6	9.6	10.1	10.2	9.4	10.4	8.6
HCM Lane LOS	B	A	A	A	B	A	B	B	A	B	A
HCM 95th-tile Q	0.2	0.1	0.2	0.1	1	0.6	0.5	0.9	0.7	0.4	0.1

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	35	33	16
Peak Hour Factor	0.92	0.98	0.98	0.98
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	36	34	16
Number of Lanes	0	0	1	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	10.1
HCM LOS	B

Lane

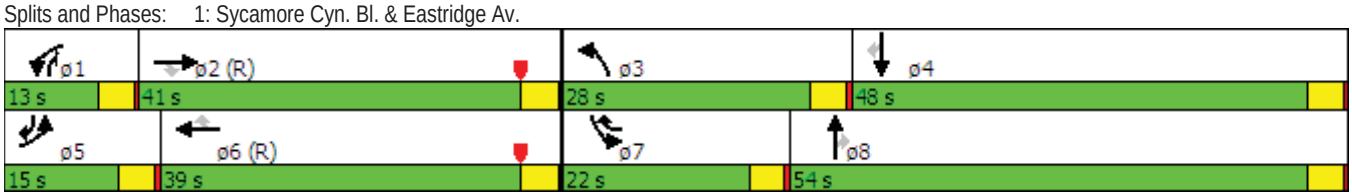
APPENDIX 6.2:

OPENING YEAR WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS AND PROGRESSION ANALYSIS WORKSHEETS

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	207	429	190	115	703	474	413	1132	174	142	191	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		150	310		200	360		320	275		110
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	120			120			120			200		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		910			577			817			952	
Travel Time (s)		15.5			9.8			12.4			14.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	11.0	11.0	20.0	11.0
Total Split (s)	15.0	41.0	41.0	13.0	39.0	22.0	28.0	54.0	13.0	22.0	48.0	15.0
Total Split (%)	11.5%	31.5%	31.5%	10.0%	30.0%	16.9%	21.5%	41.5%	10.0%	16.9%	36.9%	11.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	Max	None	None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Sycamore Cyn. Bl. & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	207	429	190	115	703	474	413	1132	174	142	191	305
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	227	471	0	126	773	521	454	1244	191	156	210	335
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	1702	530	183	1088	585	518	1511	760	214	1198	664
Arrive On Green	0.08	0.33	0.00	0.05	0.31	0.31	0.15	0.43	0.43	0.06	0.34	0.34
Sat Flow, veh/h	3442	5085	1583	3442	3539	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	227	471	0	126	773	521	454	1244	191	156	210	335
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1770	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	8.4	8.8	0.0	4.7	25.2	39.9	16.8	40.4	9.3	5.8	5.4	20.3
Cycle Q Clear(g_c), s	8.4	8.8	0.0	4.7	25.2	39.9	16.8	40.4	9.3	5.8	5.4	20.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	1702	530	183	1088	585	518	1511	760	214	1198	664
V/C Ratio(X)	0.82	0.28	0.00	0.69	0.71	0.89	0.88	0.82	0.25	0.73	0.18	0.50
Avail Cap(c_a), veh/h	291	1702	530	238	1088	585	635	1511	760	477	1198	664
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.8	31.7	0.0	60.5	39.9	38.5	54.0	32.9	20.0	59.9	30.2	27.8
Incr Delay (d2), s/veh	16.0	0.4	0.0	5.4	3.9	18.3	11.3	5.2	0.8	4.7	0.3	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	4.2	0.0	2.4	12.8	20.5	8.8	20.8	4.2	2.9	2.7	9.3
LnGrp Delay(d),s/veh	74.8	32.1	0.0	65.9	43.9	56.8	65.3	38.1	20.8	64.6	30.6	30.6
LnGrp LOS	E	C		E	D	E	E	D	C	E	C	C
Approach Vol, veh/h		698			1420			1889			701	
Approach Delay, s/veh		46.0			50.6			42.9			38.1	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	47.5	23.6	48.0	14.5	43.9	12.1	59.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	37.0	24.0	44.0	11.0	35.0	18.0	50.0
Max Q Clear Time (g_c+I1), s	6.7	10.8	18.8	22.3	10.4	41.9	7.8	42.4
Green Ext Time (p_c), s	0.1	11.9	0.8	12.3	0.0	0.0	0.3	5.7

Intersection Summary	
HCM 2010 Ctrl Delay	45.0
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	63	641	16	62	1344	529	10	119	61	155	74	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		80	150		0	75		160	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		760			700			315			411	
Travel Time (s)		13.0			11.9			7.2			9.3	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0		11.0	20.0	20.0	11.0	20.0	
Total Split (s)	11.0	79.0	79.0	14.0	82.0		11.0	20.0	20.0	17.0	26.0	
Total Split (%)	8.5%	60.8%	60.8%	10.8%	63.1%		8.5%	15.4%	15.4%	13.1%	20.0%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 18 (14%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Box Springs Bl. & Eastridge Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	63	641	16	62	1344	529	10	119	61	155	74	4
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	69	704	18	68	1477	581	11	131	67	170	81	4
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	88	2140	957	87	1531	565	31	229	195	177	705	35
Arrive On Green	0.05	0.60	0.60	0.07	0.80	0.80	0.02	0.12	0.12	0.10	0.21	0.21
Sat Flow, veh/h	1774	3539	1583	1774	2533	935	1774	1863	1583	1774	3434	168
Grp Volume(v), veh/h	69	704	18	68	1003	1055	11	131	67	170	41	44
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1698	1774	1863	1583	1774	1770	1833
Q Serve(g_s), s	5.0	12.8	0.6	4.9	58.6	78.6	0.8	8.6	5.0	12.4	2.5	2.5
Cycle Q Clear(g_c), s	5.0	12.8	0.6	4.9	58.6	78.6	0.8	8.6	5.0	12.4	2.5	2.5
Prop In Lane	1.00		1.00	1.00		0.55	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	88	2140	957	87	1070	1026	31	229	195	177	364	377
V/C Ratio(X)	0.79	0.33	0.02	0.78	0.94	1.03	0.35	0.57	0.34	0.96	0.11	0.12
Avail Cap(c_a), veh/h	96	2140	957	136	1070	1026	96	229	195	177	364	377
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.1	12.7	10.3	60.0	10.8	12.7	63.1	53.8	52.2	58.2	42.0	42.0
Incr Delay (d2), s/veh	32.1	0.4	0.0	13.8	16.0	35.6	6.6	10.0	4.8	55.2	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	6.3	0.3	2.7	32.4	45.7	0.4	5.1	2.5	8.8	1.3	1.3
LnGrp Delay(d),s/veh	93.3	13.1	10.3	73.8	26.8	48.3	69.7	63.7	57.0	113.5	42.7	42.7
LnGrp LOS	F	B	B	E	C	F	E	E	E	F	D	D
Approach Vol, veh/h		791			2126			209			255	
Approach Delay, s/veh		20.0			39.0			61.9			89.9	
Approach LOS		C			D			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	82.6	6.3	30.7	10.4	82.6	17.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	75.0	7.0	22.0	7.0	78.0	13.0	16.0
Max Q Clear Time (g_c+I1), s	6.9	14.8	2.8	4.5	7.0	80.6	14.4	10.6
Green Ext Time (p_c), s	0.0	43.6	0.0	1.3	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	39.8
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	690	0	463	1381	0	328	0	0	319	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	275		0	0		0	0		0
Storage Lanes	0		0	0		0	2		0	2		0
Taper Length (ft)	90			190			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		241			359			784			672	
Travel Time (s)		4.1			6.1			15.3			13.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot			Prot		
Protected Phases	5	2		1	6		3			7		
Permitted Phases												
Detector Phase	5	2		1	6		3			7		
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0			7.0		
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0			11.0		
Total Split (s)	18.0	65.0		35.0	82.0		30.0			30.0		
Total Split (%)	13.8%	50.0%		26.9%	63.1%		23.1%			23.1%		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5			3.5		
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5			0.5		
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0			0.0		
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0			4.0		
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		None			None		

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 45 (35%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: I-215 SB/NB Ramps & Eastridge Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	84	690	0	463	1381	0	328	0	0	319	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	0	0	1863	0	0
Adj Flow Rate, veh/h	93	767	0	514	1534	0	364	0	0	354	0	0
Adj No. of Lanes	1	2	0	2	2	0	2	0	0	2	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	0	2	2	0	2	0	0	2	0	0
Cap, veh/h	116	2155	0	594	2534	0	434	0	0	434	0	0
Arrive On Green	0.04	0.41	0.00	0.12	0.48	0.00	0.13	0.00	0.00	0.13	0.00	0.00
Sat Flow, veh/h	1774	3632	0	3442	3632	0	3442	364		3442	354	
Grp Volume(v), veh/h	93	767	0	514	1534	0	364	60.8		354	59.5	
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1721	1770	0	1721	E		1721	E	
Q Serve(g_s), s	6.8	19.5	0.0	19.1	41.3	0.0	13.4			13.0		
Cycle Q Clear(g_c), s	6.8	19.5	0.0	19.1	41.3	0.0	13.4			13.0		
Prop In Lane	1.00		0.00	1.00		0.00	1.00			1.00		
Lane Grp Cap(c), veh/h	116	2155	0	594	2534	0	434			434		
V/C Ratio(X)	0.80	0.36	0.00	0.86	0.61	0.00	0.84			0.82		
Avail Cap(c_a), veh/h	191	2155	0	821	2534	0	688			688		
HCM Platoon Ratio	0.67	0.67	1.00	0.67	0.67	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.96	0.96	0.00	1.00			1.00		
Uniform Delay (d), s/veh	61.3	20.8	0.0	56.0	20.3	0.0	55.5			55.3		
Incr Delay (d2), s/veh	11.8	0.5	0.0	6.9	1.0	0.0	5.3			4.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	3.7	9.7	0.0	9.7	20.5	0.0	6.7			6.4		
LnGrp Delay(d),s/veh	73.1	21.3	0.0	62.9	21.4	0.0	60.8			59.5		
LnGrp LOS	E	C		E	C		E			E		
Approach Vol, veh/h		860			2048							
Approach Delay, s/veh		26.9			31.8							
Approach LOS		C			C							

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3		5	6	7	
Phs Duration (G+Y+Rc), s	26.5	83.2	20.4		12.5	97.1	20.4	
Change Period (Y+Rc), s	4.0	4.0	4.0		4.0	4.0	4.0	
Max Green Setting (Gmax), s	31.0	61.0	26.0		14.0	78.0	26.0	
Max Q Clear Time (g_c+I1), s	21.1	21.5	15.4		8.8	43.3	15.0	
Green Ext Time (p_c), s	1.4	24.9	1.0		0.1	22.9	0.9	

Intersection Summary	
HCM 2010 Ctrl Delay	36.2
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	774	82	0	1709	0	0	0	0	0	0	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		700			241			458			364	
Travel Time (s)		11.9			4.1			8.9			7.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	774	82	0	1709	0	0	0	0	0	0	226
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	1082515456		-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	860	91	0	1899	0	0	0	0	0	0	251

Major/Minor	Major1			Major2						Minor2		
Conflicting Flow All	1899	0	-	860	0	0				2243	2759	949
Stage 1	-	-	-	-	-	-				1899	1899	-
Stage 2	-	-	-	-	-	-				344	860	-
Critical Hdwy	4.14	-	-	5.34	-	-				6.29	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-				5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-				6.04	5.54	-
Follow-up Hdwy	2.22	-	-	3.12	-	-				3.67	4.02	3.32
Pot Cap-1 Maneuver	310	-	0	457	-	-				50	19	261
Stage 1	-	-	0	-	-	-				102	116	-
Stage 2	-	-	0	-	-	-				653	371	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	310	-	-	457	-	-				50	0	261
Mov Cap-2 Maneuver	-	-	-	-	-	-				89	0	-
Stage 1	-	-	-	-	-	-				102	0	-
Stage 2	-	-	-	-	-	-				653	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	88
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	310	-	457	-	-	261
HCM Lane V/C Ratio	-	-	-	-	-	0.962
HCM Control Delay (s)	0	-	0	-	-	88
HCM Lane LOS	A	-	A	-	-	F
HCM 95th %tile Q(veh)	0	-	0	-	-	9.1

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	0	1709	0	0	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50			0	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	60				60	
Right Turn on Red				Yes		Yes
Link Speed (mph)		40	40		30	
Link Distance (ft)		174	120		486	
Travel Time (s)		3.0	2.0		11.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type			NA			Prot
Protected Phases			6			7
Permitted Phases						
Detector Phase			6			7
Switch Phase						
Minimum Initial (s)			7.0			7.0
Minimum Split (s)			20.0			11.0
Total Split (s)			96.0			34.0
Total Split (%)			73.8%			26.2%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			0.5			0.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.0			4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 108 (83%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 31: Eastridge Av. & I-215 SB Ramps (W)

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	0	1709	0	0	226
Number			6	16	7	14
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	0	0	1863
Adj Flow Rate, veh/h			1899	0	0	251
Adj No. of Lanes			2	0	0	1
Peak Hour Factor			0.90	0.90	0.90	0.90
Percent Heavy Veh, %			2	0	0	2
Cap, veh/h			2505	0	0	0
Arrive On Green			0.71	0.00	0.00	0.00
Sat Flow, veh/h			3725	0	0	
Grp Volume(v), veh/h			1899	0	0.0	
Grp Sat Flow(s),veh/h/ln			1770	0		
Q Serve(g_s), s			44.0	0.0		
Cycle Q Clear(g_c), s			44.0	0.0		
Prop In Lane				0.00		
Lane Grp Cap(c), veh/h			2505	0		
V/C Ratio(X)			0.76	0.00		
Avail Cap(c_a), veh/h			2505	0		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	0.00		
Uniform Delay (d), s/veh			12.0	0.0		
Incr Delay (d2), s/veh			2.2	0.0		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			21.9	0.0		
LnGrp Delay(d),s/veh			14.2	0.0		
LnGrp LOS			B			
Approach Vol, veh/h			1899			
Approach Delay, s/veh			14.2			
Approach LOS			B			

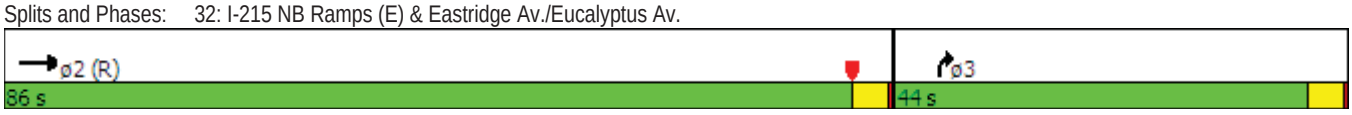
Timer	1	2	3	4	5	6	7	8
Assigned Phs						6		
Phs Duration (G+Y+Rc), s						96.0		
Change Period (Y+Rc), s						4.0		
Max Green Setting (Gmax), s						92.0		
Max Q Clear Time (g_c+I1), s						46.0		
Green Ext Time (p_c), s						23.8		

Intersection Summary	
HCM 2010 Ctrl Delay	14.2
HCM 2010 LOS	B

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1009	0	0	0	0	409
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Right Turn on Red		Yes				Yes
Link Speed (mph)	30			40	30	
Link Distance (ft)	100			131	592	
Travel Time (s)	2.3			2.2	13.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA					Prot
Protected Phases	2					3
Permitted Phases						
Detector Phase	2					3
Switch Phase						
Minimum Initial (s)	7.0					7.0
Minimum Split (s)	20.0					11.0
Total Split (s)	86.0					44.0
Total Split (%)	66.2%					33.8%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	0.5					0.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	4.0					4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max					None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	

Splits and Phases: 32: I-215 NB Ramps (E) & Eastridge Av./Eucalyptus Av.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	1009	0	0	0	0	409
Number	2	12			3	18
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)		1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0			0	1863
Adj Flow Rate, veh/h	1121	0			0	454
Adj No. of Lanes	2	0			0	2
Peak Hour Factor	0.90	0.90			0.90	0.90
Percent Heavy Veh, %	2	0			0	2
Cap, veh/h	3430	0			0	0
Arrive On Green	0.97	0.00			0.00	0.00
Sat Flow, veh/h	3725	0			0	
Grp Volume(v), veh/h	1121	0			0.0	
Grp Sat Flow(s),veh/h/ln	1770	0				
Q Serve(g_s), s	1.9	0.0				
Cycle Q Clear(g_c), s	1.9	0.0				
Prop In Lane		0.00				
Lane Grp Cap(c), veh/h	3430	0				
V/C Ratio(X)	0.33	0.00				
Avail Cap(c_a), veh/h	3430	0				
HCM Platoon Ratio	1.00	1.00				
Upstream Filter(I)	1.00	0.00				
Uniform Delay (d), s/veh	0.1	0.0				
Incr Delay (d2), s/veh	0.3	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile BackOfQ(50%),veh/ln	0.9	0.0				
LnGrp Delay(d),s/veh	0.3	0.0				
LnGrp LOS	A					
Approach Vol, veh/h	1121					
Approach Delay, s/veh	0.3					
Approach LOS	A					

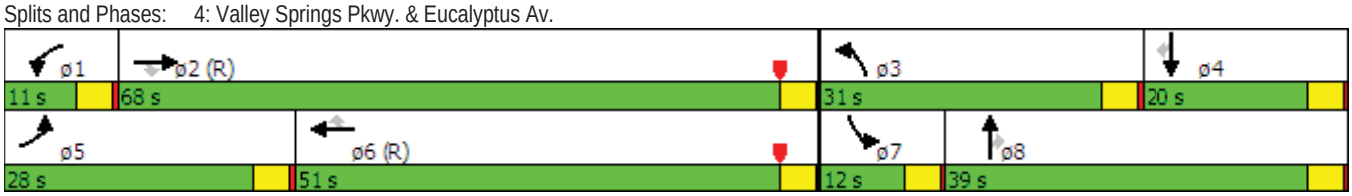
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		130.0						
Change Period (Y+Rc), s		4.0						
Max Green Setting (Gmax), s		82.0						
Max Q Clear Time (g_c+I1), s		3.9						
Green Ext Time (p_c), s		11.6						

Intersection Summary	
HCM 2010 Ctrl Delay	0.3
HCM 2010 LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	691	670	58	23	1322	98	397	426	128	38	50	497
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	1		1	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0
Total Split (s)	28.0	68.0	68.0	11.0	51.0	51.0	31.0	39.0	39.0	12.0	20.0	20.0
Total Split (%)	21.5%	52.3%	52.3%	8.5%	39.2%	39.2%	23.8%	30.0%	30.0%	9.2%	15.4%	15.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	Max	None	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	691	670	58	23	1322	98	397	426	128	38	50	497
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	776	753	65	26	1485	110	446	479	144	43	56	558
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	635	1817	813	58	1280	572	368	1020	457	75	229	343
Arrive On Green	0.31	0.86	0.86	0.03	0.36	0.36	0.21	0.29	0.29	0.04	0.12	0.12
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	1774	3539	1583	1774	1863	2787
Grp Volume(v), veh/h	776	753	65	26	1485	110	446	479	144	43	56	558
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1774	1770	1583	1774	1863	1393
Q Serve(g_s), s	24.0	6.1	0.8	1.9	47.0	6.2	27.0	14.5	9.3	3.1	3.5	16.0
Cycle Q Clear(g_c), s	24.0	6.1	0.8	1.9	47.0	6.2	27.0	14.5	9.3	3.1	3.5	16.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	635	1817	813	58	1280	572	368	1020	457	75	229	343
V/C Ratio(X)	1.22	0.41	0.08	0.45	1.16	0.19	1.21	0.47	0.32	0.57	0.24	1.63
Avail Cap(c_a), veh/h	635	1817	813	96	1280	572	368	1020	457	109	229	343
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	0.42	0.42	0.42	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	45.0	4.9	4.6	61.7	41.5	28.5	51.5	38.1	36.2	61.1	51.5	57.0
Incr Delay (d2), s/veh	111.7	0.6	0.2	2.2	76.3	0.3	117.4	1.6	1.8	6.5	2.5	294.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.2	2.9	0.4	1.0	36.5	2.8	25.2	7.3	4.3	1.7	2.0	20.2
LnGrp Delay(d),s/veh	156.6	5.6	4.7	63.9	117.8	28.8	168.9	39.6	38.0	67.6	54.0	351.9
LnGrp LOS	F	A	A	E	F	C	F	D	D	E	D	F
Approach Vol, veh/h		1594			1621			1069			657	
Approach Delay, s/veh		79.1			110.9			93.3			307.9	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	70.7	31.0	20.0	28.0	51.0	9.5	41.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	64.0	27.0	16.0	24.0	47.0	8.0	35.0
Max Q Clear Time (g_c+I1), s	3.9	8.1	29.0	18.0	26.0	49.0	5.1	16.5
Green Ext Time (p_c), s	0.0	30.6	0.0	0.0	0.0	0.0	0.0	6.3

Intersection Summary	
HCM 2010 Ctrl Delay	123.0
HCM 2010 LOS	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	691	670	58	23	1322	98	397	426	128	38	50	497
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	2		0	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6						4
Detector Phase	5	2	2	1	6	6	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	11.0	11.0
Total Split (s)	34.0	82.0	82.0	11.0	59.0	59.0	23.0	26.0		11.0	14.0	34.0
Total Split (%)	26.2%	63.1%	63.1%	8.5%	45.4%	45.4%	17.7%	20.0%		8.5%	10.8%	26.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max		None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	691	670	58	23	1322	98	397	426	128	38	50	497
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	776	753	65	26	1485	110	446	479	144	43	56	558
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	794	2207	987	58	1506	674	494	455	136	91	143	857
Arrive On Green	0.39	1.00	1.00	0.03	0.43	0.43	0.14	0.17	0.17	0.05	0.08	0.08
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	3442	2688	803	1774	1863	2787
Grp Volume(v), veh/h	776	753	65	26	1485	110	446	314	309	43	56	558
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1721	1770	1721	1774	1863	1393
Q Serve(g_s), s	28.9	0.0	0.0	1.9	54.0	4.5	16.6	22.0	22.0	3.1	3.7	10.0
Cycle Q Clear(g_c), s	28.9	0.0	0.0	1.9	54.0	4.5	16.6	22.0	22.0	3.1	3.7	10.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.47	1.00		1.00
Lane Grp Cap(c), veh/h	794	2207	987	58	1506	674	494	299	291	91	143	857
V/C Ratio(X)	0.98	0.34	0.07	0.45	0.99	0.16	0.90	1.05	1.06	0.47	0.39	0.65
Avail Cap(c_a), veh/h	794	2207	987	96	1506	674	503	299	291	96	143	857
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	0.42	0.42	0.42	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	39.6	0.0	0.0	61.7	36.9	14.9	54.8	54.0	54.0	60.0	57.1	23.6
Incr Delay (d2), s/veh	24.2	0.4	0.1	2.2	12.0	0.2	19.2	65.6	69.4	3.7	7.7	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.3	0.1	0.0	1.0	28.7	2.0	9.2	16.2	16.1	1.6	2.2	8.3
LnGrp Delay(d),s/veh	63.8	0.4	0.1	63.9	49.0	15.1	74.0	119.6	123.4	63.7	64.8	27.4
LnGrp LOS	E	A	A	E	D	B	E	F	F	E	E	C
Approach Vol, veh/h		1594			1621			1069			657	
Approach Delay, s/veh		31.2			46.9			101.7			33.0	
Approach LOS		C			D			F			C	

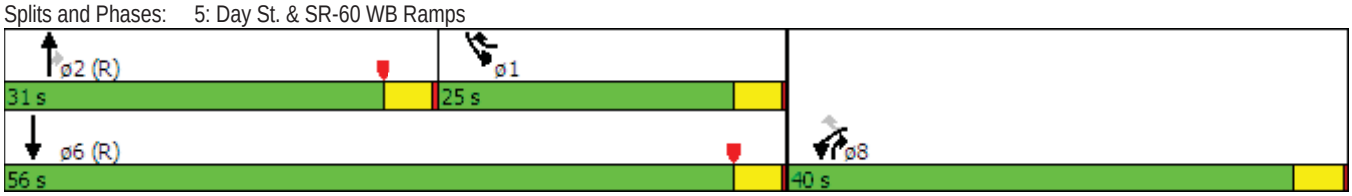
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	85.1	22.7	14.0	34.0	59.3	10.7	26.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	78.0	19.0	10.0	30.0	55.0	7.0	22.0
Max Q Clear Time (g_c+I1), s	3.9	2.0	18.6	12.0	30.9	56.0	5.1	24.0
Green Ext Time (p_c), s	0.0	35.1	0.1	0.0	0.0	0.0	0.4	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	51.8
HCM 2010 LOS	D

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	607	239	398	272	129	584
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		175	200	
Storage Lanes	2	1		1	1	
Taper Length (ft)	60				80	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		40			40
Link Distance (ft)	307		957			795
Travel Time (s)	6.0		16.3			13.6
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	40.0	25.0	31.0	40.0	25.0	56.0
Total Split (%)	41.7%	26.0%	32.3%	41.7%	26.0%	58.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 94 (98%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: Day St. & SR-60 WB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	607	239	398	272	129	584
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	626	246	410	280	133	602
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	774	940	995	802	654	2448
Arrive On Green	0.22	0.22	0.37	0.37	0.37	0.69
Sat Flow, veh/h	3442	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	626	246	410	280	133	602
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1770
Q Serve(g_s), s	16.5	0.0	8.2	9.5	4.9	6.1
Cycle Q Clear(g_c), s	16.5	0.0	8.2	9.5	4.9	6.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	774	940	995	802	654	2448
V/C Ratio(X)	0.81	0.26	0.41	0.35	0.20	0.25
Avail Cap(c_a), veh/h	1291	1178	995	802	654	2448
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.94	0.94	1.00	1.00
Uniform Delay (d), s/veh	35.2	9.4	24.2	12.2	20.7	5.5
Incr Delay (d2), s/veh	2.1	0.1	1.2	1.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	3.1	4.2	6.3	2.4	3.0
LnGrp Delay(d),s/veh	37.3	9.5	25.4	13.4	20.8	5.7
LnGrp LOS	D	A	C	B	C	A
Approach Vol, veh/h	872		690			735
Approach Delay, s/veh	29.5		20.5			8.5
Approach LOS	C		C			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	39.4	31.0				70.4		25.6
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	21.0	27.0				52.0		36.0
Max Q Clear Time (g_c+I1), s	6.9	11.5				8.1		18.5
Green Ext Time (p_c), s	3.6	3.1				4.7		3.1

Intersection Summary	
HCM 2010 Ctrl Delay	20.1
HCM 2010 LOS	C

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	557	84	586	492	111	1079
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	200		0	425	
Storage Lanes	2	0		1	1	
Taper Length (ft)	60				60	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		40			40
Link Distance (ft)	263		524			957
Travel Time (s)	5.1		8.9			16.3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	37.0	24.0	35.0	37.0	24.0	59.0
Total Split (%)	38.5%	25.0%	36.5%	38.5%	25.0%	61.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 24 (25%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Day St. & SR-60 EB Ramps

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	557	84	586	492	111	1079
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	568	86	598	502	113	1101
Adj No. of Lanes	2	1	2	1	1	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	693	874	1143	830	622	3637
Arrive On Green	0.20	0.20	0.11	0.11	0.70	1.00
Sat Flow, veh/h	3442	1583	3632	1583	1774	5253
Grp Volume(v), veh/h	568	86	598	502	113	1101
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1695
Q Serve(g_s), s	15.2	0.0	15.3	21.3	2.1	0.0
Cycle Q Clear(g_c), s	15.2	0.0	15.3	21.3	2.1	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	693	874	1143	830	622	3637
V/C Ratio(X)	0.82	0.10	0.52	0.60	0.18	0.30
Avail Cap(c_a), veh/h	1183	1100	1143	830	622	3637
HCM Platoon Ratio	1.00	1.00	0.33	0.33	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.90	0.90	0.86	0.86
Uniform Delay (d), s/veh	36.7	10.2	35.9	21.0	9.6	0.0
Incr Delay (d2), s/veh	2.5	0.0	1.5	2.9	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	1.1	7.8	14.0	1.0	0.1
LnGrp Delay(d),s/veh	39.1	10.2	37.4	24.0	9.7	0.2
LnGrp LOS	D	B	D	C	A	A
Approach Vol, veh/h	654		1100			1214
Approach Delay, s/veh	35.3		31.3			1.1
Approach LOS	D		C			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	37.7	35.0				72.7		23.3
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	20.0	31.0				55.0		33.0
Max Q Clear Time (g_c+I1), s	4.1	23.3				2.0		17.2
Green Ext Time (p_c), s	6.9	3.4				10.0		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	19.8
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	300	32	36	32	34	107	67	671	55	167	1085	303
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	145		0	165		0	170		200
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	95			100			120			80		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		1120			404			728			524	
Travel Time (s)		19.1			7.9			12.4			8.9	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												19%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	20.0	30.0	30.0	11.0	21.0	21.0	15.0	31.0		24.0	40.0	20.0
Total Split (%)	20.8%	31.3%	31.3%	11.5%	21.9%	21.9%	15.6%	32.3%		25.0%	41.7%	20.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead		Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 65 (68%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Day St. & Cyn. Springs Pkwy.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	300	32	36	32	34	107	67	671	55	167	1085	303
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	309	33	37	33	35	110	69	692	57	172	1158	286
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	4	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	391	268	228	76	136	115	109	1348	110	649	4363	1107
Arrive On Green	0.11	0.14	0.14	0.04	0.07	0.07	0.02	0.09	0.09	0.73	1.00	1.00
Sat Flow, veh/h	3442	1863	1583	1774	1863	1583	1774	4792	392	1774	7451	1583
Grp Volume(v), veh/h	309	33	37	33	35	110	69	488	261	172	1158	286
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1863	1583	1774	1695	1794	1774	1863	1583
Q Serve(g_s), s	8.4	1.5	2.0	1.7	1.7	3.4	3.7	13.2	13.3	3.1	0.0	0.0
Cycle Q Clear(g_c), s	8.4	1.5	2.0	1.7	1.7	3.4	3.7	13.2	13.3	3.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	391	268	228	76	136	115	109	953	504	649	4363	1107
V/C Ratio(X)	0.79	0.12	0.16	0.44	0.26	0.95	0.63	0.51	0.52	0.27	0.27	0.26
Avail Cap(c_a), veh/h	574	504	429	129	330	280	203	953	504	649	4363	1107
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.92	0.92	0.92	1.00	1.00	1.00	0.98	0.98	0.98	0.89	0.89	0.89
Uniform Delay (d), s/veh	41.4	35.8	36.0	44.8	42.1	11.8	46.0	37.3	37.3	8.6	0.0	0.0
Incr Delay (d2), s/veh	4.2	0.2	0.3	3.9	1.0	29.1	5.9	1.9	3.7	0.2	0.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.8	0.9	0.9	0.9	2.4	2.0	6.5	7.1	1.5	0.0	0.2
LnGrp Delay(d),s/veh	45.6	36.0	36.3	48.7	43.0	40.9	51.8	39.2	41.0	8.8	0.1	0.5
LnGrp LOS	D	D	D	D	D	D	D	D	D	A	A	A
Approach Vol, veh/h		379			178			818			1616	
Approach Delay, s/veh		43.9			42.8			40.9			1.1	
Approach LOS		D			D			D			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	39.1	31.0	8.1	17.8	9.9	60.2	14.9	11.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	27.0	7.0	26.0	11.0	36.0	16.0	17.0
Max Q Clear Time (g_c+I1), s	5.1	15.3	3.7	4.0	5.7	2.0	10.4	5.4
Green Ext Time (p_c), s	8.1	3.5	0.0	0.7	0.0	11.9	0.5	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	19.9
HCM 2010 LOS	B

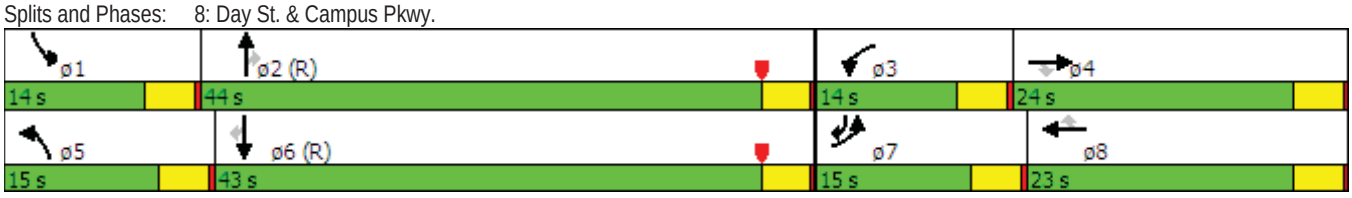
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	56	28	53	21	69	67	120	669	39	63	918	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		50	200		0	130		50	190		0
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	60			120			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		938			519			1025			728	
Travel Time (s)		16.0			10.1			17.5			12.4	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	15.0	24.0	24.0	14.0	23.0	23.0	15.0	44.0	44.0	14.0	43.0	15.0
Total Split (%)	15.6%	25.0%	25.0%	14.6%	24.0%	24.0%	15.6%	45.8%	45.8%	14.6%	44.8%	15.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 22 (23%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Day St. & Campus Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	56	28	53	21	69	67	120	669	39	63	918	124
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	57	28	54	21	70	68	121	676	39	64	927	125
Adj No. of Lanes	2	1	1	1	2	1	2	3	1	2	3	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	196	183	156	55	258	115	241	3274	1019	205	3222	1093
Arrive On Green	0.06	0.10	0.10	0.03	0.07	0.07	0.14	1.00	1.00	0.02	0.21	0.21
Sat Flow, veh/h	3442	1863	1583	1774	3539	1583	3442	5085	1583	3442	5085	1583
Grp Volume(v), veh/h	57	28	54	21	70	68	121	676	39	64	927	125
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1770	1583	1721	1695	1583	1721	1695	1583
Q Serve(g_s), s	1.5	1.3	3.1	1.1	1.8	4.0	3.1	0.0	0.0	1.8	14.7	5.2
Cycle Q Clear(g_c), s	1.5	1.3	3.1	1.1	1.8	4.0	3.1	0.0	0.0	1.8	14.7	5.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	196	183	156	55	258	115	241	3274	1019	205	3222	1093
V/C Ratio(X)	0.29	0.15	0.35	0.38	0.27	0.59	0.50	0.21	0.04	0.31	0.29	0.11
Avail Cap(c_a), veh/h	394	388	330	185	700	313	394	3274	1019	359	3222	1093
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.94	0.94	0.94
Uniform Delay (d), s/veh	43.4	39.6	40.4	45.6	42.1	43.1	39.7	0.0	0.0	45.1	19.7	11.7
Incr Delay (d2), s/veh	0.8	0.4	1.3	4.2	0.6	4.7	1.6	0.1	0.1	0.8	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.7	1.4	0.6	0.9	1.9	1.5	0.0	0.0	0.9	7.0	2.3
LnGrp Delay(d),s/veh	44.2	40.0	41.7	49.8	42.7	47.9	41.3	0.1	0.1	45.9	19.9	11.9
LnGrp LOS	D	D	D	D	D	D	D	A	A	D	B	B
Approach Vol, veh/h		139			159			836			1116	
Approach Delay, s/veh		42.4			45.8			6.1			20.5	
Approach LOS		D			D			A			C	

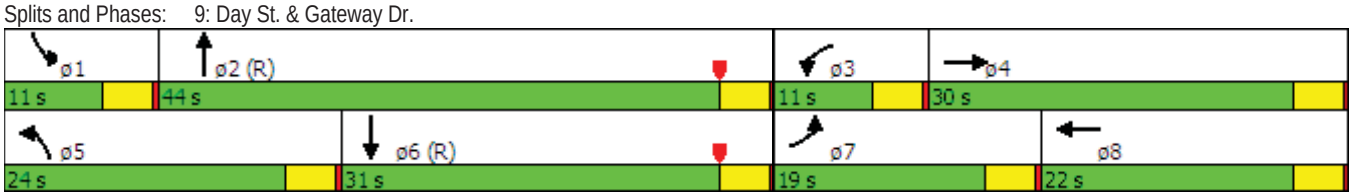
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	65.8	7.0	13.5	10.7	64.8	9.5	11.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	40.0	10.0	20.0	11.0	39.0	11.0	19.0
Max Q Clear Time (g_c+I1), s	3.8	2.0	3.1	5.1	5.1	16.7	3.5	6.0
Green Ext Time (p_c), s	0.1	15.4	0.0	0.7	0.1	12.0	0.1	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	18.3
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	127	42	63	35	105	103	169	569	49	81	490	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	100		0	190		400	260		0
Storage Lanes	1		0	1		0	1		1	2		0
Taper Length (ft)	0			120			60			165		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		318			585			592			1025	
Travel Time (s)		5.4			11.4			10.1			17.5	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	19.0	30.0		11.0	22.0		24.0	44.0		11.0	31.0	
Total Split (%)	19.8%	31.3%		11.5%	22.9%		25.0%	45.8%		11.5%	32.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

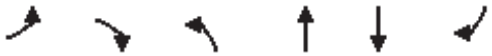
Splits and Phases: 9: Day St. & Gateway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	127	42	63	35	105	103	169	569	49	81	490	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	128	42	64	35	106	104	171	575	49	82	495	323
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	253	226	78	172	153	210	2779	235	223	1791	836
Arrive On Green	0.09	0.14	0.14	0.04	0.10	0.10	0.04	0.19	0.19	0.13	1.00	1.00
Sat Flow, veh/h	1774	1770	1583	1774	1773	1580	1774	4778	404	3442	3390	1583
Grp Volume(v), veh/h	128	42	64	35	106	104	171	406	218	82	495	323
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1584	1774	1695	1792	1721	1695	1583
Q Serve(g_s), s	6.8	2.0	3.5	1.8	5.5	6.1	9.2	9.7	9.8	2.1	0.0	0.0
Cycle Q Clear(g_c), s	6.8	2.0	3.5	1.8	5.5	6.1	9.2	9.7	9.8	2.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	160	253	226	78	172	154	210	1972	1042	223	1791	836
V/C Ratio(X)	0.80	0.17	0.28	0.45	0.62	0.68	0.82	0.21	0.21	0.37	0.28	0.39
Avail Cap(c_a), veh/h	277	479	429	129	332	297	370	1972	1042	251	1791	836
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97
Uniform Delay (d), s/veh	42.8	36.1	36.8	44.7	41.6	41.9	45.1	20.1	20.2	40.0	0.0	0.0
Incr Delay (d2), s/veh	9.0	0.3	0.7	3.9	3.6	5.2	7.5	0.2	0.5	1.0	0.4	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	1.0	1.6	1.0	2.9	2.9	5.0	4.6	5.0	1.0	0.1	0.3
LnGrp Delay(d),s/veh	51.8	36.4	37.4	48.7	45.2	47.1	52.6	20.4	20.6	41.0	0.4	1.3
LnGrp LOS	D	D	D	D	D	D	D	C	C	D	A	A
Approach Vol, veh/h		234			245			795			900	
Approach Delay, s/veh		45.1			46.5			27.4			4.4	
Approach LOS		D			D			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	59.8	8.2	17.7	15.3	54.7	12.6	13.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	40.0	7.0	26.0	20.0	27.0	15.0	18.0
Max Q Clear Time (g_c+I1), s	4.1	11.8	3.8	5.5	11.2	2.0	8.8	8.1
Green Ext Time (p_c), s	0.0	10.7	0.0	1.7	0.3	10.2	0.1	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	21.9
HCM 2010 LOS	C



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	8	7	46	883	596	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	80			0
Storage Lanes	1	0	1			0
Taper Length (ft)	60		30			
Link Speed (mph)	30			40	40	
Link Distance (ft)	364			180	592	
Travel Time (s)	8.3			3.1	10.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

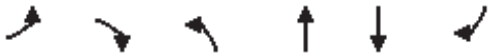
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	8	7	46	883	596	23
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	-	80	-	-	-
Veh in Median Storage, #	1	-	-	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	9	8	50	960	648	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1240	336	673	0	-	0
Stage 1	660	-	-	-	-	-
Stage 2	580	-	-	-	-	-
Critical Hdwy	6.29	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	198	563	561	-	-	-
Stage 1	399	-	-	-	-	-
Stage 2	507	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	180	563	561	-	-	-
Mov Cap-2 Maneuver	277	-	-	-	-	-
Stage 1	399	-	-	-	-	-
Stage 2	462	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.4	0.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	561	-	363	-	-
HCM Lane V/C Ratio	0.089	-	0.045	-	-
HCM Control Delay (s)	12	-	15.4	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.3	-	0.1	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	7	14	22	922	568	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	25			0
Storage Lanes	1	0	1			0
Taper Length (ft)	60		25			
Link Speed (mph)	30			40	40	
Link Distance (ft)	364			453	180	
Travel Time (s)	8.3			7.7	3.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	7	14	22	922	568	36
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	-	25	-	-	-
Veh in Median Storage, #	1	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	15	24	991	611	39

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1173	325	649	0	-	0
Stage 1	630	-	-	-	-	-
Stage 2	543	-	-	-	-	-
Critical Hdwy	6.29	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	217	572	576	-	-	-
Stage 1	416	-	-	-	-	-
Stage 2	529	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	208	572	576	-	-	-
Mov Cap-2 Maneuver	302	-	-	-	-	-
Stage 1	416	-	-	-	-	-
Stage 2	507	-	-	-	-	-

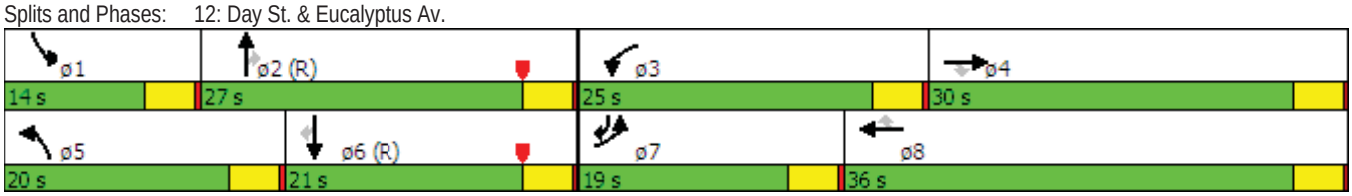
Approach	EB	NB	SB
HCM Control Delay, s	13.6	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	576	-	441	-	-
HCM Lane V/C Ratio	0.041	-	0.051	-	-
HCM Control Delay (s)	11.5	-	13.6	-	-
HCM Lane LOS	B	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	237	588	87	292	1048	134	244	482	222	85	273	187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		50	175		0	100		100	200		0
Storage Lanes	1		1	1		1	1		2	1		1
Taper Length (ft)	100			75			80			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			40	
Link Distance (ft)		2104			1174			390			453	
Travel Time (s)		35.9			20.0			7.6			7.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	19.0	30.0	30.0	25.0	36.0	36.0	20.0	27.0	27.0	14.0	21.0	19.0
Total Split (%)	19.8%	31.3%	31.3%	26.0%	37.5%	37.5%	20.8%	28.1%	28.1%	14.6%	21.9%	19.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 13 (14%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Day St. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	237	588	87	292	1048	134	244	482	222	85	273	187
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	249	619	92	307	1103	141	257	507	234	89	287	197
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	1038	464	341	1166	522	289	996	446	117	654	540
Arrive On Green	0.16	0.29	0.29	0.19	0.33	0.33	0.16	0.28	0.28	0.07	0.18	0.18
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	249	619	92	307	1103	141	257	507	234	89	287	197
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	13.2	14.4	4.2	16.2	29.1	6.3	13.6	11.5	12.0	4.7	6.9	9.0
Cycle Q Clear(g_c), s	13.2	14.4	4.2	16.2	29.1	6.3	13.6	11.5	12.0	4.7	6.9	9.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	1038	464	341	1166	522	289	996	446	117	654	540
V/C Ratio(X)	0.90	0.60	0.20	0.90	0.95	0.27	0.89	0.51	0.53	0.76	0.44	0.36
Avail Cap(c_a), veh/h	277	1038	464	388	1180	528	296	996	446	185	654	540
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.8	29.1	25.5	37.8	31.4	23.7	39.3	28.9	29.1	44.1	34.7	23.8
Incr Delay (d2), s/veh	27.9	0.9	0.2	21.4	15.0	0.3	26.2	1.9	4.4	9.6	2.1	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	7.2	1.9	10.0	16.7	2.8	8.7	5.9	5.7	2.6	3.6	4.2
LnGrp Delay(d),s/veh	67.6	29.9	25.6	59.3	46.3	24.0	65.5	30.8	33.5	53.7	36.9	25.7
LnGrp LOS	E	C	C	E	D	C	E	C	C	D	D	C
Approach Vol, veh/h		960			1551			998			573	
Approach Delay, s/veh		39.3			46.9			40.4			35.6	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	31.0	22.5	32.2	19.6	21.7	19.0	35.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	23.0	21.0	26.0	16.0	17.0	15.0	32.0
Max Q Clear Time (g_c+I1), s	6.7	14.0	18.2	16.4	15.6	11.0	15.2	31.1
Green Ext Time (p_c), s	0.0	4.3	0.3	7.2	0.0	3.2	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	41.9
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	35	131	61	97	139	228	40	583	120	202	452	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	95		95	80		0	100		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	60			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			25			35	
Link Distance (ft)		861			839			1320			2260	
Travel Time (s)		16.8			16.3			36.0			44.0	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	48.0		17.0	54.0	
Total Split (%)	11.5%	20.8%		11.5%	20.8%	20.8%	11.5%	50.0%		17.7%	56.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Day St. & Cottonwood Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	35	131	61	97	139	228	40	583	120	202	452	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	40	149	69	110	158	259	45	662	136	230	514	28
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	174	81	129	316	268	90	721	148	240	989	54
Arrive On Green	0.05	0.14	0.14	0.07	0.17	0.17	0.05	0.48	0.48	0.14	0.57	0.57
Sat Flow, veh/h	1774	1206	558	1774	1863	1583	1774	1500	308	1774	1751	95
Grp Volume(v), veh/h	40	0	218	110	158	259	45	0	798	230	0	542
Grp Sat Flow(s),veh/h/ln	1774	0	1764	1774	1863	1583	1774	0	1808	1774	0	1846
Q Serve(g_s), s	2.1	0.0	11.6	5.9	7.4	15.6	2.4	0.0	39.4	12.4	0.0	17.4
Cycle Q Clear(g_c), s	2.1	0.0	11.6	5.9	7.4	15.6	2.4	0.0	39.4	12.4	0.0	17.4
Prop In Lane	1.00		0.32	1.00		1.00	1.00		0.17	1.00		0.05
Lane Grp Cap(c), veh/h	85	0	255	129	316	268	90	0	869	240	0	1043
V/C Ratio(X)	0.47	0.00	0.86	0.85	0.50	0.97	0.50	0.00	0.92	0.96	0.00	0.52
Avail Cap(c_a), veh/h	129	0	294	129	316	268	129	0	869	240	0	1043
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.5	0.0	40.1	44.0	36.2	39.6	44.4	0.0	23.2	41.2	0.0	12.9
Incr Delay (d2), s/veh	4.0	0.0	19.2	38.5	1.2	45.3	4.2	0.0	16.1	46.1	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	7.0	4.3	3.9	10.2	1.3	0.0	23.4	9.1	0.0	9.3
LnGrp Delay(d),s/veh	48.5	0.0	59.3	82.5	37.4	84.8	48.5	0.0	39.3	87.4	0.0	14.7
LnGrp LOS	D		E	F	D	F	D		D	F		B
Approach Vol, veh/h		258			527			843			772	
Approach Delay, s/veh		57.7			70.1			39.8			36.3	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	50.1	11.0	17.9	8.9	58.2	8.6	20.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	44.0	7.0	16.0	7.0	50.0	7.0	16.0
Max Q Clear Time (g_c+I1), s	14.4	41.4	7.9	13.6	4.4	19.4	4.1	17.6
Green Ext Time (p_c), s	0.0	2.0	0.0	0.3	0.0	12.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	47.3
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	35	131	61	97	139	228	40	583	120	202	452	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	95		95	80		100	100		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	60			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			25			35	
Link Distance (ft)		861			839			811			2260	
Travel Time (s)		16.8			16.3			22.1			44.0	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Detector Phase	7	4		3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	
Total Split (s)	11.0	20.0		12.0	21.0	21.0	11.0	45.0	45.0	19.0	53.0	
Total Split (%)	11.5%	20.8%		12.5%	21.9%	21.9%	11.5%	46.9%	46.9%	19.8%	55.2%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Day St. & Cottonwood Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	35	131	61	97	139	228	40	583	120	202	452	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	40	149	69	110	158	259	45	662	136	230	514	28
Adj No. of Lanes	1	1	0	1	1	1	1	1	1	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	179	83	137	331	281	90	856	728	263	975	53
Arrive On Green	0.05	0.15	0.15	0.08	0.18	0.18	0.05	0.46	0.46	0.15	0.56	0.56
Sat Flow, veh/h	1774	1206	558	1774	1863	1583	1774	1863	1583	1774	1751	95
Grp Volume(v), veh/h	40	0	218	110	158	259	45	662	136	230	0	542
Grp Sat Flow(s),veh/h/ln	1774	0	1764	1774	1863	1583	1774	1863	1583	1774	0	1846
Q Serve(g_s), s	2.1	0.0	11.5	5.9	7.3	15.4	2.4	28.6	4.9	12.2	0.0	17.7
Cycle Q Clear(g_c), s	2.1	0.0	11.5	5.9	7.3	15.4	2.4	28.6	4.9	12.2	0.0	17.7
Prop In Lane	1.00		0.32	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	85	0	261	137	331	281	90	856	728	263	0	1028
V/C Ratio(X)	0.47	0.00	0.83	0.80	0.48	0.92	0.50	0.77	0.19	0.88	0.00	0.53
Avail Cap(c_a), veh/h	129	0	294	148	331	281	129	856	728	277	0	1028
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.5	0.0	39.7	43.5	35.5	38.8	44.4	21.7	15.3	40.0	0.0	13.3
Incr Delay (d2), s/veh	4.0	0.0	16.8	24.6	1.1	33.4	4.2	6.7	0.6	24.6	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	6.9	3.8	3.9	9.4	1.3	16.1	2.2	7.7	0.0	9.4
LnGrp Delay(d),s/veh	48.5	0.0	56.6	68.2	36.5	72.2	48.5	28.5	15.9	64.6	0.0	15.3
LnGrp LOS	D		E	E	D	E	D	C	B	E		B
Approach Vol, veh/h		258			527			843			772	
Approach Delay, s/veh		55.3			60.7			27.5			30.0	
Approach LOS		E			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.2	48.1	11.4	18.2	8.9	57.5	8.6	21.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	41.0	8.0	16.0	7.0	49.0	7.0	17.0
Max Q Clear Time (g_c+I1), s	14.2	30.6	7.9	13.5	4.4	19.7	4.1	17.4
Green Ext Time (p_c), s	0.1	6.0	0.0	0.7	0.0	10.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	38.6
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	28	17	9	23	60	6	670	1	21	579	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		861			839			634			1320	
Travel Time (s)		19.6			19.1			17.3			36.0	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	54
Intersection LOS	F

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	19	28	17	0	9	23	60	0	6	670	1
Peak Hour Factor	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	24	35	21	0	11	29	75	0	7	837	1
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	11.8	11.4	59.1
HCM LOS	B	B	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	1%	40%	0%	28%	0%	3%
Vol Thru, %	99%	60%	0%	72%	0%	95%
Vol Right, %	0%	0%	100%	0%	100%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	677	47	17	32	60	608
LT Vol	6	19	0	9	0	21
Through Vol	670	28	0	23	0	579
RT Vol	1	0	17	0	60	8
Lane Flow Rate	846	59	21	40	75	760
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	1	0.135	0.043	0.09	0.151	1
Departure Headway (Hd)	5.563	8.261	7.359	8.095	7.255	5.561
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	652	434	486	443	495	646
Service Time	3.66	6.009	5.108	5.832	4.992	3.658
HCM Lane V/C Ratio	1.298	0.136	0.043	0.09	0.152	1.176
HCM Control Delay	59.1	12.3	10.4	11.6	11.3	59.1
HCM Lane LOS	F	B	B	B	B	F
HCM 95th-tile Q	15.4	0.5	0.1	0.3	0.5	15.4

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	21	579	8
Peak Hour Factor	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	26	724	10
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	59.1
HCM LOS	F

Lane

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	28	17	9	23	60	6	670	1	21	579	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		861			839			634			509	
Travel Time (s)		19.6			19.1			17.3			13.9	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	23.1
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	19	28	17	0	9	23	60	0	6	670	1
Peak Hour Factor	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	24	35	21	0	11	29	75	0	7	837	1
Number of Lanes	0	0	1	1	0	0	1	1	0	0	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	12.3	11.9	26.2
HCM LOS	B	B	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	2%	0%	40%	0%	28%	0%	7%	0%
Vol Thru, %	98%	100%	60%	0%	72%	0%	93%	97%
Vol Right, %	0%	0%	0%	100%	0%	100%	0%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	341	336	47	17	32	60	311	298
LT Vol	6	0	19	0	9	0	21	0
Through Vol	335	335	28	0	23	0	290	290
RT Vol	0	1	0	17	0	60	0	8
Lane Flow Rate	426	420	59	21	40	75	388	372
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.757	0.745	0.142	0.046	0.095	0.159	0.703	0.668
Departure Headway (Hd)	6.394	6.383	8.675	7.742	8.513	7.644	6.627	6.573
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	563	563	415	465	423	472	547	554
Service Time	4.192	4.181	6.381	5.448	6.217	5.349	4.327	4.273
HCM Lane V/C Ratio	0.757	0.746	0.142	0.045	0.095	0.159	0.709	0.671
HCM Control Delay	26.6	25.7	12.8	10.8	12.1	11.8	23.5	21.5
HCM Lane LOS	D	D	B	B	B	B	C	C
HCM 95th-tile Q	6.7	6.4	0.5	0.1	0.3	0.6	5.6	5

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	21	579	8
Peak Hour Factor	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	26	724	10
Number of Lanes	0	0	2	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	22.5
HCM LOS	C

Lane

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	245	1013	158	163	1591	119	95	294	104	85	374	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	245		0	220		75	50		50	200		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	100			120			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		861			839			831			716	
Travel Time (s)		13.0			12.7			16.2			19.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		
Detector Phase	5	2		1	6	6	8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (s)	16.0	43.0		21.0	48.0	48.0	32.0	32.0	32.0	32.0	32.0	
Total Split (%)	16.7%	44.8%		21.9%	50.0%	50.0%	33.3%	33.3%	33.3%	33.3%	33.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max		None	C-Max	C-Max	Max	Max	Max	Max	Max	

Intersection Summary

Area Type: Other
Cycle Length: 96
Actuated Cycle Length: 96
Offset: 42 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 15: Day St. & Alessandro Bl.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	245	1013	158	163	1591	119	95	294	104	85	374	133
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	261	1078	168	173	1693	127	101	313	111	90	398	141
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	2070	322	208	1622	726	75	543	462	218	383	136
Arrive On Green	0.13	0.47	0.47	0.12	0.46	0.46	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1774	4440	691	1774	3539	1583	863	1863	1583	959	1315	466
Grp Volume(v), veh/h	261	823	423	173	1693	127	101	313	111	90	0	539
Grp Sat Flow(s),veh/h/ln	1774	1695	1741	1774	1770	1583	863	1863	1583	959	0	1781
Q Serve(g_s), s	12.0	16.4	16.5	9.2	44.0	4.5	0.0	13.7	5.1	8.5	0.0	28.0
Cycle Q Clear(g_c), s	12.0	16.4	16.5	9.2	44.0	4.5	28.0	13.7	5.1	22.2	0.0	28.0
Prop In Lane	1.00		0.40	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	222	1580	811	208	1622	726	75	543	462	218	0	519
V/C Ratio(X)	1.18	0.52	0.52	0.83	1.04	0.18	1.35	0.58	0.24	0.41	0.00	1.04
Avail Cap(c_a), veh/h	222	1580	811	314	1622	726	75	543	462	218	0	519
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.0	18.1	18.1	41.5	26.0	15.3	48.0	28.9	25.9	38.4	0.0	34.0
Incr Delay (d2), s/veh	116.5	1.2	2.4	11.1	34.7	0.5	221.6	4.4	1.2	5.7	0.0	49.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.0	7.9	8.4	5.1	29.2	2.1	6.6	7.7	2.4	2.6	0.0	20.9
LnGrp Delay(d),s/veh	158.5	19.3	20.5	52.5	60.7	15.8	269.6	33.3	27.1	44.1	0.0	83.7
LnGrp LOS	F	B	C	D	F	B	F	C	C	D		F
Approach Vol, veh/h		1507			1993			525			629	
Approach Delay, s/veh		43.7			57.1			77.5			78.0	
Approach LOS		D			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.2	48.8		32.0	16.0	48.0		32.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	17.0	39.0		28.0	12.0	44.0		28.0
Max Q Clear Time (g_c+I1), s	11.2	18.5		30.0	14.0	46.0		30.0
Green Ext Time (p_c), s	0.2	18.0		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	57.9
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	245	1013	158	163	1591	119	95	294	104	85	374	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	245		0	220		75	50		50	200		100
Storage Lanes	2		0	1		0	1		1	0		0
Taper Length (ft)	100			120			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		861			839			831			716	
Travel Time (s)		13.0			12.7			16.2			19.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		
Detector Phase	5	2		1	6	6	8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (s)	11.0	38.0		21.0	48.0	48.0	37.0	37.0	37.0	37.0	37.0	
Total Split (%)	11.5%	39.6%		21.9%	50.0%	50.0%	38.5%	38.5%	38.5%	38.5%	38.5%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max		None	C-Max	C-Max	Max	Max	Max	Max	Max	

Intersection Summary

Area Type: Other
Cycle Length: 96
Actuated Cycle Length: 96
Offset: 42 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 15: Day St. & Alessandro Bl.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	245	1013	158	163	1591	119	95	294	104	85	374	133
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	261	1078	168	173	1693	127	101	313	111	90	398	141
Adj No. of Lanes	2	3	0	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	1838	286	208	1622	726	126	640	544	278	452	160
Arrive On Green	0.07	0.41	0.41	0.12	0.46	0.46	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	3442	4440	691	1774	3539	1583	863	1863	1583	959	1315	466
Grp Volume(v), veh/h	261	823	423	173	1693	127	101	313	111	90	0	539
Grp Sat Flow(s),veh/h/ln	1721	1695	1741	1774	1770	1583	863	1863	1583	959	0	1781
Q Serve(g_s), s	7.0	18.0	18.1	9.2	44.0	4.5	5.6	12.7	4.7	7.8	0.0	27.4
Cycle Q Clear(g_c), s	7.0	18.0	18.1	9.2	44.0	4.5	33.0	12.7	4.7	20.6	0.0	27.4
Prop In Lane	1.00		0.40	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	251	1404	721	208	1622	726	126	640	544	278	0	612
V/C Ratio(X)	1.04	0.59	0.59	0.83	1.04	0.18	0.80	0.49	0.20	0.32	0.00	0.88
Avail Cap(c_a), veh/h	251	1404	721	314	1622	726	126	640	544	278	0	612
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.5	21.8	21.8	41.5	26.0	15.3	46.6	24.8	22.2	33.0	0.0	29.6
Incr Delay (d2), s/veh	67.6	1.8	3.5	11.1	34.7	0.5	40.2	2.7	0.8	3.1	0.0	16.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	8.8	9.4	5.1	29.2	2.1	4.1	7.0	2.2	2.3	0.0	16.1
LnGrp Delay(d),s/veh	112.1	23.6	25.3	52.5	60.7	15.8	86.7	27.5	23.1	36.0	0.0	46.2
LnGrp LOS	F	C	C	D	F	B	F	C	C	D		D
Approach Vol, veh/h		1507			1993			525			629	
Approach Delay, s/veh		39.4			57.1			38.0			44.8	
Approach LOS		D			E			D			D	

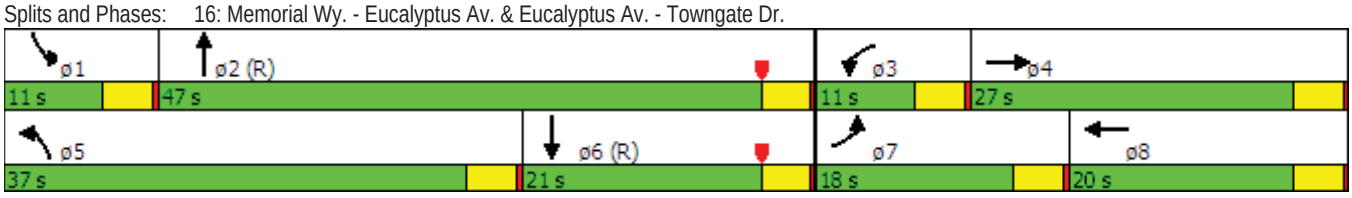
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.2	43.8		37.0	11.0	48.0		37.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	17.0	34.0		33.0	7.0	44.0		33.0
Max Q Clear Time (g_c+I1), s	11.2	20.1		29.4	9.0	46.0		35.0
Green Ext Time (p_c), s	0.2	12.6		2.2	0.0	0.0		0.0

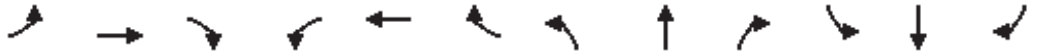
Intersection Summary	
HCM 2010 Ctrl Delay	47.5
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	221	382	321	9	490	31	538	166	16	15	85	314
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		0	150		0	200		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	18.0	27.0		11.0	20.0		37.0	47.0		11.0	21.0	
Total Split (%)	18.8%	28.1%		11.5%	20.8%		38.5%	49.0%		11.5%	21.9%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	221	382	321	9	490	31	538	166	16	15	85	314
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	240	415	349	10	533	34	585	180	17	16	92	341
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	906	423	30	677	43	610	1714	160	45	363	325
Arrive On Green	0.15	0.27	0.27	0.02	0.14	0.14	0.34	0.52	0.52	0.03	0.21	0.21
Sat Flow, veh/h	1774	3390	1583	1774	4889	309	1774	3272	306	1774	1770	1583
Grp Volume(v), veh/h	240	415	349	10	368	199	585	97	100	16	92	341
Grp Sat Flow(s),veh/h/ln	1774	1695	1583	1774	1695	1808	1774	1770	1809	1774	1770	1583
Q Serve(g_s), s	12.8	9.8	19.9	0.5	10.1	10.2	31.0	2.6	2.7	0.9	4.2	19.7
Cycle Q Clear(g_c), s	12.8	9.8	19.9	0.5	10.1	10.2	31.0	2.6	2.7	0.9	4.2	19.7
Prop In Lane	1.00		1.00	1.00		0.17	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	259	906	423	30	469	250	610	927	947	45	363	325
V/C Ratio(X)	0.93	0.46	0.83	0.33	0.79	0.79	0.96	0.10	0.11	0.36	0.25	1.05
Avail Cap(c_a), veh/h	259	906	423	129	565	301	610	927	947	129	363	325
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.5	29.4	33.1	46.6	40.0	40.0	30.8	11.5	11.5	46.0	32.0	38.1
Incr Delay (d2), s/veh	37.0	0.4	12.6	6.2	6.0	11.5	26.6	0.2	0.2	4.7	1.7	63.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	4.7	10.2	0.3	5.1	5.9	19.6	1.3	1.4	0.5	2.2	14.3
LnGrp Delay(d),s/veh	77.5	29.7	45.6	52.8	46.0	51.5	57.4	11.7	11.8	50.7	33.6	101.3
LnGrp LOS	E	C	D	D	D	D	E	B	B	D	C	F
Approach Vol, veh/h		1004			577			782			449	
Approach Delay, s/veh		46.7			48.0			45.9			85.7	
Approach LOS		D			D			D			F	

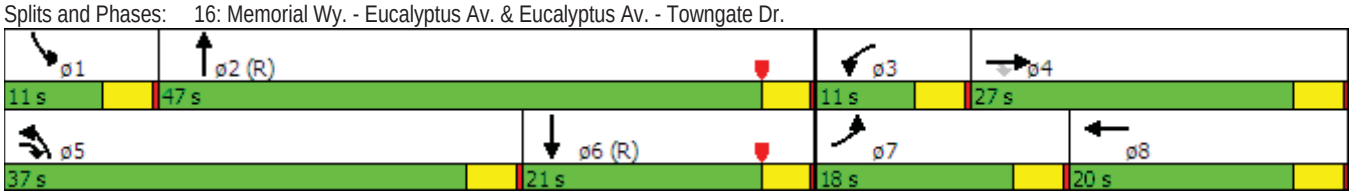
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	54.3	5.6	29.6	37.0	23.7	18.0	17.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	43.0	7.0	23.0	33.0	17.0	14.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	4.7	2.5	21.9	33.0	21.7	14.8	12.2
Green Ext Time (p_c), s	0.0	4.1	0.0	0.8	0.0	0.0	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	53.0
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	221	382	321	9	490	31	538	166	16	15	85	314
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		0	150		0	200		0	200		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4									
Detector Phase	7	4	5	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0	11.0	11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	18.0	27.0	37.0	11.0	20.0		37.0	47.0		11.0	21.0	
Total Split (%)	18.8%	28.1%	38.5%	11.5%	20.8%		38.5%	49.0%		11.5%	21.9%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	221	382	321	9	490	31	538	166	16	15	85	314
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	240	415	349	10	533	34	585	180	17	16	92	341
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	943	966	30	673	43	610	1716	160	45	365	326
Arrive On Green	0.15	0.27	0.27	0.02	0.14	0.14	0.34	0.52	0.52	0.03	0.21	0.21
Sat Flow, veh/h	1774	3539	1583	1774	4889	309	1774	3272	306	1774	1770	1583
Grp Volume(v), veh/h	240	415	349	10	368	199	585	97	100	16	92	341
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1695	1808	1774	1770	1809	1774	1770	1583
Q Serve(g_s), s	12.8	9.4	10.6	0.5	10.1	10.2	31.0	2.6	2.7	0.9	4.2	19.8
Cycle Q Clear(g_c), s	12.8	9.4	10.6	0.5	10.1	10.2	31.0	2.6	2.7	0.9	4.2	19.8
Prop In Lane	1.00		1.00	1.00		0.17	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	259	943	966	30	467	249	610	928	949	45	365	326
V/C Ratio(X)	0.93	0.44	0.36	0.33	0.79	0.80	0.96	0.10	0.11	0.36	0.25	1.05
Avail Cap(c_a), veh/h	259	943	966	129	565	301	610	928	949	129	365	326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.5	29.3	9.4	46.6	40.0	40.1	30.8	11.5	11.5	46.0	31.9	38.1
Incr Delay (d2), s/veh	37.0	0.3	0.2	6.2	6.1	11.8	26.6	0.2	0.2	4.7	1.7	62.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	4.6	4.7	0.3	5.1	5.9	19.6	1.3	1.4	0.5	2.2	14.2
LnGrp Delay(d),s/veh	77.5	29.6	9.6	52.8	46.2	51.8	57.4	11.7	11.7	50.7	33.6	100.2
LnGrp LOS	E	C	A	D	D	D	E	B	B	D	C	F
Approach Vol, veh/h		1004			577			782			449	
Approach Delay, s/veh		34.1			48.3			45.9			84.8	
Approach LOS		C			D			D			F	

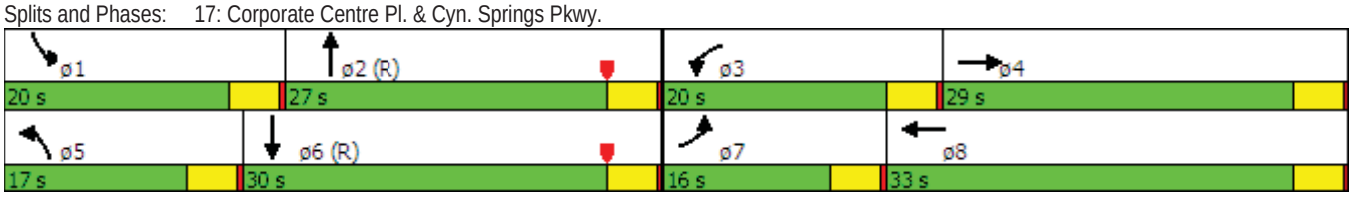
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	54.3	5.6	29.6	37.0	23.8	18.0	17.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	43.0	7.0	23.0	33.0	17.0	14.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	4.7	2.5	12.6	33.0	21.8	14.8	12.2
Green Ext Time (p_c), s	0.0	4.1	0.0	5.2	0.0	0.0	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	48.4
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	207	5	25	291	26	11	11	31	27	12	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	175		0	130		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			90			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		476			1120			987			205	
Travel Time (s)		8.1			19.1			16.8			4.7	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	16.0	29.0		20.0	33.0		17.0	27.0		20.0	30.0	
Total Split (%)	16.7%	30.2%		20.8%	34.4%		17.7%	28.1%		20.8%	31.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 15 (16%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 17: Corporate Centre Pl. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	9	207	5	25	291	26	11	11	31	27	12	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	10	241	6	29	338	30	13	13	36	31	14	13
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	540	13	70	609	53	38	1145	1025	73	594	551
Arrive On Green	0.02	0.11	0.11	0.01	0.04	0.04	0.02	0.65	0.65	0.04	0.67	0.67
Sat Flow, veh/h	1774	5104	126	1774	4763	416	1774	1770	1583	1774	890	827
Grp Volume(v), veh/h	10	160	87	29	239	129	13	13	36	31	0	27
Grp Sat Flow(s),veh/h/ln	1774	1695	1840	1774	1695	1789	1774	1770	1583	1774	0	1717
Q Serve(g_s), s	0.5	4.2	4.3	1.6	6.6	6.8	0.7	0.3	0.8	1.6	0.0	0.5
Cycle Q Clear(g_c), s	0.5	4.2	4.3	1.6	6.6	6.8	0.7	0.3	0.8	1.6	0.0	0.5
Prop In Lane	1.00		0.07	1.00		0.23	1.00		1.00	1.00		0.48
Lane Grp Cap(c), veh/h	30	359	195	70	434	229	38	1145	1025	73	0	1145
V/C Ratio(X)	0.33	0.45	0.45	0.42	0.55	0.56	0.34	0.01	0.04	0.43	0.00	0.02
Avail Cap(c_a), veh/h	222	883	479	296	1024	541	240	1145	1025	296	0	1145
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	46.6	40.3	40.3	46.3	43.3	43.3	46.3	6.0	6.1	44.9	0.0	5.4
Incr Delay (d2), s/veh	6.2	0.9	1.6	3.8	1.1	2.1	5.3	0.0	0.1	3.9	0.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.0	2.3	0.8	3.2	3.5	0.4	0.1	0.4	0.9	0.0	0.3
LnGrp Delay(d),s/veh	52.8	41.1	41.9	50.1	44.3	45.4	51.6	6.0	6.2	48.8	0.0	5.4
LnGrp LOS	D	D	D	D	D	D	D	A	A	D		A
Approach Vol, veh/h		257			397			62			58	
Approach Delay, s/veh		41.9			45.1			15.7			28.6	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	66.1	7.8	14.2	6.1	68.0	5.6	16.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	23.0	16.0	25.0	13.0	26.0	12.0	29.0
Max Q Clear Time (g_c+I1), s	3.6	2.8	3.6	6.3	2.7	2.5	2.5	8.8
Green Ext Time (p_c), s	0.0	0.3	0.0	3.4	0.0	0.3	0.0	3.5

Intersection Summary	
HCM 2010 Ctrl Delay	40.4
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	67	4	28	73	12	15	49	26	14	25	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	170		0	100		0	130		0	135		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			45			60			60		
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		474			710			623			987	
Travel Time (s)		8.1			12.1			10.6			16.8	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	11	67	4	0	28	73	12	0	15	49	26
Peak Hour Factor	0.92	0.85	0.85	0.85	0.92	0.85	0.85	0.85	0.92	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	13	79	5	0	33	86	14	0	18	58	31
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	3
HCM Control Delay	8.3	8.3	8.2
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	39%	0%	100%	85%	0%	100%	67%	0%	100%
Vol Right, %	0%	0%	61%	0%	0%	15%	0%	0%	33%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	15	33	42	11	45	26	28	49	36	14	17
LT Vol	15	0	0	11	0	0	28	0	0	14	0
Through Vol	0	33	16	0	45	22	0	49	24	0	17
RT Vol	0	0	26	0	0	4	0	0	12	0	0
Lane Flow Rate	18	38	50	13	53	31	33	57	43	16	20
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.028	0.056	0.067	0.021	0.077	0.044	0.052	0.083	0.059	0.027	0.029
Departure Headway (Hd)	5.782	5.282	4.852	5.759	5.259	5.153	5.691	5.191	4.96	5.854	5.354
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	619	678	737	622	681	695	630	690	722	611	668
Service Time	3.518	3.018	2.588	3.492	2.992	2.886	3.421	2.921	2.69	3.591	3.091
HCM Lane V/C Ratio	0.029	0.056	0.068	0.021	0.078	0.045	0.052	0.083	0.06	0.026	0.03
HCM Control Delay	8.7	8.3	7.9	8.6	8.4	8.1	8.7	8.4	8	8.8	8.3
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.2	0.1	0.2	0.1	0.2	0.3	0.2	0.1	0.1

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	14	25	18
Peak Hour Factor	0.92	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	16	29	21
Number of Lanes	0	1	2	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	8.2
HCM LOS	A

Lane	SBLn3

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	81	0	0	57	3	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	50		0	0
Storage Lanes		0	0		1	1
Taper Length (ft)			40		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	135			597	203	
Travel Time (s)	2.3			10.2	4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	81	0	0	57	3	9
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	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	88	0	0	62	3	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	88	0	119	44
Stage 1	-	-	-	-	88	-
Stage 2	-	-	-	-	31	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1506	-	864	1017
Stage 1	-	-	-	-	925	-
Stage 2	-	-	-	-	987	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1506	-	864	1017
Mov Cap-2 Maneuver	-	-	-	-	826	-
Stage 1	-	-	-	-	925	-
Stage 2	-	-	-	-	987	-

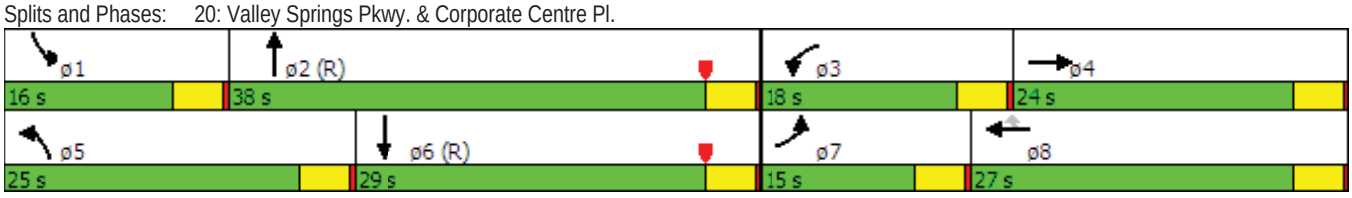
Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	826	1017	-	-	1506	-
HCM Lane V/C Ratio	0.004	0.01	-	-	-	-
HCM Control Delay (s)	9.4	8.6	-	-	0	-
HCM Lane LOS	A	A	-	-	A	-
HCM 95th %tile Q(veh)	0	0	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	9	35	32	17	5	92	372	46	28	339	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		70	140		50	150		0	120		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			40			40			40	
Link Distance (ft)		327			603			402			804	
Travel Time (s)		7.4			10.3			6.9			13.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	15.0	24.0		18.0	27.0	27.0	25.0	38.0		16.0	29.0	
Total Split (%)	15.6%	25.0%		18.8%	28.1%	28.1%	26.0%	39.6%		16.7%	30.2%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 16 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Valley Springs Pkwy. & Corporate Centre Pl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	9	9	35	32	17	5	92	372	46	28	339	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	10	10	38	34	18	5	99	400	49	30	365	12
Adj No. of Lanes	1	1	0	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.93	0.93	0.93	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	2	2	2	2	2	2	2
Cap, veh/h	30	22	83	77	322	144	128	3153	379	71	3304	108
Arrive On Green	0.02	0.06	0.06	0.04	0.09	0.09	0.05	0.46	0.46	0.04	0.65	0.65
Sat Flow, veh/h	1774	341	1294	1774	3539	1583	1774	4602	553	1774	5058	165
Grp Volume(v), veh/h	10	0	48	34	18	5	99	293	156	30	244	133
Grp Sat Flow(s),veh/h/ln	1774	0	1634	1774	1770	1583	1774	1695	1765	1774	1695	1834
Q Serve(g_s), s	0.5	0.0	2.7	1.8	0.4	0.3	5.3	4.8	4.9	1.6	2.6	2.6
Cycle Q Clear(g_c), s	0.5	0.0	2.7	1.8	0.4	0.3	5.3	4.8	4.9	1.6	2.6	2.6
Prop In Lane	1.00		0.79	1.00		1.00	1.00		0.31	1.00		0.09
Lane Grp Cap(c), veh/h	30	0	105	77	322	144	128	2323	1209	71	2214	1198
V/C Ratio(X)	0.33	0.00	0.46	0.44	0.06	0.03	0.77	0.13	0.13	0.42	0.11	0.11
Avail Cap(c_a), veh/h	203	0	341	259	848	379	388	2323	1209	222	2214	1198
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	0.0	43.3	44.8	39.9	39.8	44.9	9.5	9.5	45.0	6.2	6.2
Incr Delay (d2), s/veh	6.2	0.0	3.0	3.9	0.1	0.1	9.5	0.1	0.2	3.9	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	1.3	1.0	0.2	0.1	2.9	2.3	2.5	0.9	1.2	1.4
LnGrp Delay(d),s/veh	52.8	0.0	46.3	48.7	39.9	39.9	54.4	9.6	9.7	48.9	6.3	6.4
LnGrp LOS	D		D	D	D	D	D	A	A	D	A	A
Approach Vol, veh/h		58			57			548			407	
Approach Delay, s/veh		47.4			45.2			17.7			9.5	
Approach LOS		D			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	69.8	8.2	10.2	10.9	66.7	5.6	12.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	34.0	14.0	20.0	21.0	25.0	11.0	23.0
Max Q Clear Time (g_c+I1), s	3.6	6.9	3.8	4.7	7.3	4.6	2.5	2.4
Green Ext Time (p_c), s	0.0	5.3	0.0	0.2	0.2	4.9	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	17.7
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	0	10	14	0	4	11	503	7	2	393	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	25		0	75		50
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	60			60			10			80		
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		252			253			418			402	
Travel Time (s)		5.7			5.8			7.1			6.9	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	0	10	14	0	4	11	503	7	2	393	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	0	13	19	0	5	15	671	9	3	524	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	835	1246	269	920	1249	340	539	0	0	680	0	0
Stage 1	537	537	-	705	705	-	-	-	-	-	-	-
Stage 2	298	709	-	215	544	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	319	172	621	285	172	560	649	-	-	557	-	-
Stage 1	414	521	-	318	437	-	-	-	-	-	-	-
Stage 2	629	435	-	705	517	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	306	165	621	270	165	560	649	-	-	557	-	-
Mov Cap-2 Maneuver	306	165	-	270	165	-	-	-	-	-	-	-
Stage 1	399	518	-	306	421	-	-	-	-	-	-	-
Stage 2	600	419	-	686	514	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.4	17.8	0.3	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	649	-	-	502	305	557	-	-
HCM Lane V/C Ratio	0.023	-	-	0.035	0.079	0.005	-	-
HCM Control Delay (s)	10.7	0.1	-	12.4	17.8	11.5	-	-
HCM Lane LOS	B	A	-	B	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.3	0	-	-

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (vph)	166	46	0	476	398	60	357
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	180		0	115	
Storage Lanes	1	1	1		0	1	
Taper Length (ft)	60		100			120	
Right Turn on Red		Yes			Yes		
Link Speed (mph)	40			40			40
Link Distance (ft)	609			576			418
Travel Time (s)	10.4			9.8			7.1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)							
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	3		5	2		1	6
Permitted Phases		8					
Detector Phase	3	8	5	2		1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	11.0	20.0	11.0	20.0		11.0	20.0
Total Split (s)	32.0	32.0	11.0	44.0		20.0	53.0
Total Split (%)	33.3%	33.3%	11.5%	45.8%		20.8%	55.2%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead	Lag		Lead	Lag
Lead-Lag Optimize?			Yes	Yes		Yes	Yes
Recall Mode	None	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 20 (21%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 22: Valley Springs Pkwy. & Gateway Dr.

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	166	46	0	476	398	60	357
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1900	1863	1863
Adj Flow Rate, veh/h	175	48		501	419	63	376
Adj No. of Lanes	1	1		3	0	1	3
Peak Hour Factor	0.95	0.95		0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	217	194		2351	1098	105	4040
Arrive On Green	0.12	0.12		0.23	0.23	0.12	1.00
Sat Flow, veh/h	1774	1583		3558	1583	1774	5253
Grp Volume(v), veh/h	175	48		501	419	63	376
Grp Sat Flow(s),veh/h/ln	1774	1583		1695	1583	1774	1695
Q Serve(g_s), s	9.2	2.6		11.5	21.5	3.2	0.0
Cycle Q Clear(g_c), s	9.2	2.6		11.5	21.5	3.2	0.0
Prop In Lane	1.00	1.00			1.00	1.00	
Lane Grp Cap(c), veh/h	217	194		2351	1098	105	4040
V/C Ratio(X)	0.81	0.25		0.21	0.38	0.60	0.09
Avail Cap(c_a), veh/h	517	462		2351	1098	296	4040
HCM Platoon Ratio	1.00	1.00		0.33	0.33	2.00	2.00
Upstream Filter(I)	1.00	1.00		0.94	0.94	1.00	1.00
Uniform Delay (d), s/veh	41.0	38.1		15.8	19.6	41.2	0.0
Incr Delay (d2), s/veh	6.9	0.7		0.2	0.9	5.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	1.2		5.5	9.7	1.7	0.0
LnGrp Delay(d),s/veh	48.0	38.8		16.0	20.6	46.6	0.0
LnGrp LOS	D	D		B	C	D	A
Approach Vol, veh/h	223			920			439
Approach Delay, s/veh	46.0			18.1			6.7
Approach LOS	D			B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.7	70.6				80.3		15.7
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	16.0	40.0				49.0		28.0
Max Q Clear Time (g_c+I1), s	5.2	23.5				2.0		11.2
Green Ext Time (p_c), s	0.1	7.7				11.1		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	18.9
HCM 2010 LOS	B

Notes

User approved ignoring U-Turning movement.

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (vph)	108	14	0	859	356	45	477
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	195		100	150	
Storage Lanes	1	1	1		0	1	
Taper Length (ft)	60		100			80	
Right Turn on Red		Yes			Yes		
Link Speed (mph)	30			40			40
Link Distance (ft)	400			560			576
Travel Time (s)	9.1			9.5			9.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)							
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	8		5	2		1	6
Permitted Phases		8					
Detector Phase	8	8	5	2		1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	20.0	20.0	11.0	20.0		11.0	20.0
Total Split (s)	27.0	27.0	11.0	54.0		15.0	58.0
Total Split (%)	28.1%	28.1%	11.5%	56.3%		15.6%	60.4%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead	Lag		Lead	Lag
Lead-Lag Optimize?			Yes	Yes		Yes	Yes
Recall Mode	None	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 23: Valley Springs Pkwy. & Dwy. 5

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	108	14	0	859	356	45	477
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1900	1863	1863
Adj Flow Rate, veh/h	117	15		934	387	49	518
Adj No. of Lanes	1	1		3	0	1	3
Peak Hour Factor	0.92	0.92		0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	152	136		2601	1076	94	4226
Arrive On Green	0.09	0.09		0.74	0.74	0.11	1.00
Sat Flow, veh/h	1774	1583		3700	1462	1774	5253
Grp Volume(v), veh/h	117	15		896	425	49	518
Grp Sat Flow(s),veh/h/ln	1774	1583		1695	1605	1774	1695
Q Serve(g_s), s	6.2	0.8		9.1	9.1	2.5	0.0
Cycle Q Clear(g_c), s	6.2	0.8		9.1	9.1	2.5	0.0
Prop In Lane	1.00	1.00			0.91	1.00	
Lane Grp Cap(c), veh/h	152	136		2496	1181	94	4226
V/C Ratio(X)	0.77	0.11		0.36	0.36	0.52	0.12
Avail Cap(c_a), veh/h	425	379		2496	1181	203	4226
HCM Platoon Ratio	1.00	1.00		1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00		0.36	0.36	0.97	0.97
Uniform Delay (d), s/veh	43.0	40.5		4.5	4.5	41.7	0.0
Incr Delay (d2), s/veh	8.0	0.4		0.1	0.3	4.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.4		4.3	4.1	1.3	0.0
LnGrp Delay(d),s/veh	50.9	40.9		4.7	4.9	46.0	0.1
LnGrp LOS	D	D		A	A	D	A
Approach Vol, veh/h	132			1321			567
Approach Delay, s/veh	49.8			4.7			4.0
Approach LOS	D			A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.1	74.7				83.8		12.2
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	11.0	50.0				54.0		23.0
Max Q Clear Time (g_c+I1), s	4.5	11.1				2.0		8.2
Green Ext Time (p_c), s	0.0	17.4				19.3		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	7.5
HCM 2010 LOS	A

Notes

User approved ignoring U-Turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	332	7	5	209	12	2	1	2	11	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		609			244			257			287	
Travel Time (s)		10.4			4.2			5.8			6.5	
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
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	12	332	7	5	209	12	2	1	2	11	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	361	8	5	227	13	2	1	2	12	1	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	240	0	0	368	0	0	516	642	184	452	640	120
Stage 1	-	-	-	-	-	-	391	391	-	245	245	-
Stage 2	-	-	-	-	-	-	125	251	-	207	395	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1324	-	-	1187	-	-	442	391	827	491	392	909
Stage 1	-	-	-	-	-	-	605	606	-	737	702	-
Stage 2	-	-	-	-	-	-	866	698	-	776	603	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1324	-	-	1187	-	-	436	386	827	483	387	909
Mov Cap-2 Maneuver	-	-	-	-	-	-	436	386	-	483	387	-
Stage 1	-	-	-	-	-	-	599	600	-	730	699	-
Stage 2	-	-	-	-	-	-	861	695	-	765	597	-

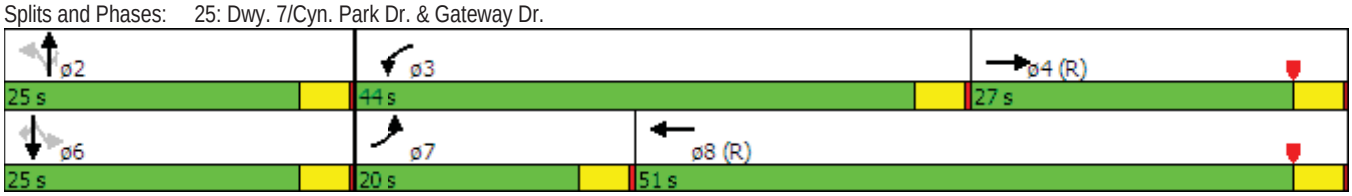
Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.2	12	12.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	521	1324	-	-	1187	-	-	473
HCM Lane V/C Ratio	0.01	0.01	-	-	0.005	-	-	0.028
HCM Control Delay (s)	12	7.7	-	-	8	-	-	12.8
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	73	181	18	169	281	29	5	12	51	21	36	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	150		0	100		0	150		0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		428			394			265			189	
Travel Time (s)		7.3			6.7			6.0			3.2	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0		11.0	20.0		20.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	20.0	27.0		44.0	51.0		25.0	25.0	25.0	25.0	25.0	25.0
Total Split (%)	20.8%	28.1%		45.8%	53.1%		26.0%	26.0%	26.0%	26.0%	26.0%	26.0%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		Max	Max	Max	Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 25: Dwy. 7/Cyn. Park Dr. & Gateway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	73	181	18	169	281	29	5	12	51	21	36	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	76	189	19	176	293	30	5	12	53	22	38	46
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	112	1739	173	215	1924	195	340	407	346	359	407	346
Arrive On Green	0.06	0.53	0.53	0.12	0.59	0.59	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1774	3252	324	1774	3244	330	1308	1863	1583	1331	1863	1583
Grp Volume(v), veh/h	76	102	106	176	159	164	5	12	53	22	38	46
Grp Sat Flow(s),veh/h/ln	1774	1770	1806	1774	1770	1805	1308	1863	1583	1331	1863	1583
Q Serve(g_s), s	4.0	2.7	2.8	9.3	3.9	3.9	0.3	0.5	2.6	1.3	1.6	2.2
Cycle Q Clear(g_c), s	4.0	2.7	2.8	9.3	3.9	3.9	1.9	0.5	2.6	1.8	1.6	2.2
Prop In Lane	1.00		0.18	1.00		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	112	947	966	215	1049	1070	340	407	346	359	407	346
V/C Ratio(X)	0.68	0.11	0.11	0.82	0.15	0.15	0.01	0.03	0.15	0.06	0.09	0.13
Avail Cap(c_a), veh/h	296	947	966	739	1049	1070	340	407	346	359	407	346
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.0	11.0	11.0	41.1	8.7	8.7	30.6	29.5	30.3	30.2	29.9	30.2
Incr Delay (d2), s/veh	6.9	0.2	0.2	7.4	0.3	0.3	0.1	0.1	0.9	0.3	0.5	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	1.4	1.4	5.0	1.9	2.0	0.1	0.3	1.2	0.5	0.9	1.1
LnGrp Delay(d),s/veh	50.9	11.2	11.3	48.6	9.0	9.1	30.7	29.6	31.2	30.5	30.4	31.0
LnGrp LOS	D	B	B	D	A	A	C	C	C	C	C	C
Approach Vol, veh/h		284			499			70			106	
Approach Delay, s/veh		21.9			23.0			30.9			30.7	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		25.0	15.7	55.3		25.0	10.1	60.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		21.0	40.0	23.0		21.0	16.0	47.0
Max Q Clear Time (g_c+I1), s		4.6	11.3	4.8		4.2	6.0	5.9
Green Ext Time (p_c), s		0.5	0.5	2.7		0.5	0.1	3.1

Intersection Summary	
HCM 2010 Ctrl Delay	24.1
HCM 2010 LOS	C

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	1	220	485	1	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	25			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	0				60	
Link Speed (mph)		40	40		30	
Link Distance (ft)		394	226		243	
Travel Time (s)		6.7	3.9		5.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	1	220	485	1	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	25	-	-	-	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	1	239	527	1	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	528	0	-	0	650	264
Stage 1	-	-	-	-	528	-
Stage 2	-	-	-	-	122	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1035	-	-	-	402	734
Stage 1	-	-	-	-	556	-
Stage 2	-	-	-	-	890	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1035	-	-	-	402	734
Mov Cap-2 Maneuver	-	-	-	-	474	-
Stage 1	-	-	-	-	556	-
Stage 2	-	-	-	-	889	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1035	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	-	-
HCM Control Delay (s)	8.5	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	201	18	97	484	13	1	0	26	7	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	25		0	25		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	1			0			60			60		
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		226			318			265			243	
Travel Time (s)		3.9			5.4			6.0			5.5	
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
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	201	18	97	484	13	1	0	26	7	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	226	20	109	544	15	1	0	29	8	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	558	0	0	246	0	0	733	1019	123	889	1022	279
Stage 1	-	-	-	-	-	-	243	243	-	769	769	-
Stage 2	-	-	-	-	-	-	490	776	-	120	253	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1009	-	-	1317	-	-	309	236	905	238	235	718
Stage 1	-	-	-	-	-	-	739	703	-	360	409	-
Stage 2	-	-	-	-	-	-	529	406	-	872	696	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1009	-	-	1317	-	-	288	216	905	215	215	718
Mov Cap-2 Maneuver	-	-	-	-	-	-	288	216	-	215	215	-
Stage 1	-	-	-	-	-	-	737	701	-	359	375	-
Stage 2	-	-	-	-	-	-	484	372	-	841	694	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.3	9.5	20.9
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	838	1009	-	-	1317	-	-	236
HCM Lane V/C Ratio	0.036	0.003	-	-	0.083	-	-	0.038
HCM Control Delay (s)	9.5	8.6	-	-	8	-	-	20.9
HCM Lane LOS	A	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0.3	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	66	37	61	90	24	17	19	37	14	33	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		50	110		100	100		50	0		50
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		710			938			284			207	
Travel Time (s)		12.1			16.0			4.8			4.7	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	5	66	37	0	61	90	24	0	17	19	37
Peak Hour Factor	0.92	0.84	0.84	0.84	0.92	0.84	0.84	0.84	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	6	79	44	0	73	107	29	0	20	23	44
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	2	3
HCM Control Delay	8.4	8.7	8.4
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	30%	0%
Vol Thru, %	0%	100%	15%	0%	100%	37%	0%	100%	56%	70%	0%
Vol Right, %	0%	0%	85%	0%	0%	63%	0%	0%	44%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	17	13	43	5	44	59	61	60	54	47	5
LT Vol	17	0	0	5	0	0	61	0	0	14	0
Through Vol	0	13	6	0	44	22	0	60	30	33	0
RT Vol	0	0	37	0	0	37	0	0	24	0	5
Lane Flow Rate	20	15	52	6	52	70	73	71	64	56	6
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.034	0.023	0.071	0.01	0.078	0.096	0.115	0.103	0.088	0.089	0.008
Departure Headway (Hd)	6.035	5.536	4.938	5.877	5.376	4.936	5.715	5.214	4.902	5.723	4.874
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	592	644	722	608	664	723	626	686	728	624	731
Service Time	3.789	3.289	2.692	3.626	3.125	2.685	3.46	2.959	2.647	3.476	2.627
HCM Lane V/C Ratio	0.034	0.023	0.072	0.01	0.078	0.097	0.117	0.103	0.088	0.09	0.008
HCM Control Delay	9	8.4	8.1	8.7	8.6	8.2	9.2	8.6	8.1	9	7.7
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0.2	0	0.3	0.3	0.4	0.3	0.3	0.3	0

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	14	33	5
Peak Hour Factor	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	17	39	6
Number of Lanes	0	0	1	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	8.9
HCM LOS	A

Lane

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	1	2	112	0	0	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	50	
Storage Lanes	1	0		0	0	
Taper Length (ft)	60				25	
Link Speed (mph)	30		40			40
Link Distance (ft)	223		216			336
Travel Time (s)	5.1		3.7			5.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	1	2	112	0	0	103
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	1	2	122	0	0	112

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	178	61	0	0	122	0
Stage 1	122	-	-	-	-	-
Stage 2	56	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	795	991	-	-	1463	-
Stage 1	890	-	-	-	-	-
Stage 2	960	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	795	991	-	-	1463	-
Mov Cap-2 Maneuver	781	-	-	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	960	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	909	1463	-
HCM Lane V/C Ratio	-	-	0.004	-	-
HCM Control Delay (s)	-	-	9	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	1	4	112	2	8	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	25	
Storage Lanes	1	0		0	1	
Taper Length (ft)	60				60	
Link Speed (mph)	30		40			40
Link Distance (ft)	223		336			284
Travel Time (s)	5.1		5.7			4.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	1	4	112	2	8	102
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	-	-	-	25	-
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	1	4	122	2	9	111

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	196	62	0	0	124	0
Stage 1	123	-	-	-	-	-
Stage 2	73	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	774	990	-	-	1461	-
Stage 1	889	-	-	-	-	-
Stage 2	941	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	769	990	-	-	1461	-
Mov Cap-2 Maneuver	766	-	-	-	-	-
Stage 1	889	-	-	-	-	-
Stage 2	935	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	0.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	935	1461	-
HCM Lane V/C Ratio	-	-	0.006	0.006	-
HCM Control Delay (s)	-	-	8.9	7.5	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	0	0	112	2	3	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	25	
Storage Lanes	1	0		0	1	
Taper Length (ft)	60				25	
Link Speed (mph)	30		40			40
Link Distance (ft)	219		189			216
Travel Time (s)	5.0		3.2			3.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	0	112	2	3	101
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	-	-	-	25	-
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	122	2	3	110

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	184	62	0	0	124	0
Stage 1	123	-	-	-	-	-
Stage 2	61	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	788	990	-	-	1461	-
Stage 1	889	-	-	-	-	-
Stage 2	954	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	786	990	-	-	1461	-
Mov Cap-2 Maneuver	775	-	-	-	-	-
Stage 1	889	-	-	-	-	-
Stage 2	952	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1461	-
HCM Lane V/C Ratio	-	-	-	0.002	-
HCM Control Delay (s)	-	-	0	7.5	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	230	116	137	193	34	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	50		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			60		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	244			428	257	
Travel Time (s)	4.2			7.3	5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	230	116	137	193	34	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	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	250	126	149	210	37	45

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	376	0	716	188
Stage 1	-	-	-	-	313	-
Stage 2	-	-	-	-	403	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1179	-	365	822
Stage 1	-	-	-	-	715	-
Stage 2	-	-	-	-	644	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1179	-	319	822
Mov Cap-2 Maneuver	-	-	-	-	429	-
Stage 1	-	-	-	-	715	-
Stage 2	-	-	-	-	563	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.5	12.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	581	-	-	1179	-
HCM Lane V/C Ratio	0.14	-	-	0.126	-
HCM Control Delay (s)	12.2	-	-	8.5	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	0.4	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	81	2	5	55	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	25		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	493			135	181	
Travel Time (s)	8.4			2.3	4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	81	2	5	55	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	-	-	25	-	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	88	2	5	60	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	90	0	130	45
Stage 1	-	-	-	-	89	-
Stage 2	-	-	-	-	41	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1503	-	851	1015
Stage 1	-	-	-	-	924	-
Stage 2	-	-	-	-	976	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1503	-	848	1015
Mov Cap-2 Maneuver	-	-	-	-	817	-
Stage 1	-	-	-	-	924	-
Stage 2	-	-	-	-	973	-

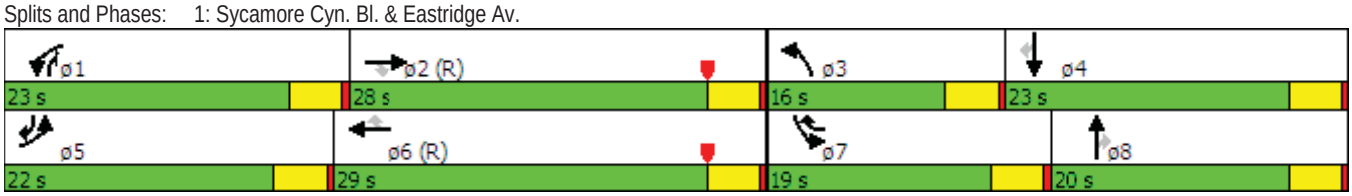
Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1503	-
HCM Lane V/C Ratio	-	-	-	0.004	-
HCM Control Delay (s)	0	-	-	7.4	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	408	824	393	489	537	293	255	274	140	367	390	244
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		150	310		200	360		320	275		110
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	120			120			120			200		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		910			577			817			952	
Travel Time (s)		15.5			9.8			12.4			14.4	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	11.0	11.0	20.0	11.0
Total Split (s)	22.0	28.0	28.0	23.0	29.0	19.0	16.0	20.0	23.0	19.0	23.0	22.0
Total Split (%)	24.4%	31.1%	31.1%	25.6%	32.2%	21.1%	17.8%	22.2%	25.6%	21.1%	25.6%	24.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	Max	None	None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 26 (29%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Sycamore Cyn. Bl. & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	408	824	393	489	537	293	255	274	140	367	390	244
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	458	926	0	549	603	329	287	308	157	412	438	274
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	2	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	548	1611	502	635	1211	768	366	629	574	493	760	592
Arrive On Green	0.16	0.32	0.00	0.18	0.34	0.34	0.11	0.18	0.18	0.14	0.21	0.21
Sat Flow, veh/h	3442	5085	1583	3442	3539	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	458	926	0	549	603	329	287	308	157	412	438	274
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1770	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	11.6	13.7	0.0	13.9	12.2	12.2	7.3	7.1	6.3	10.5	10.0	11.8
Cycle Q Clear(g_c), s	11.6	13.7	0.0	13.9	12.2	12.2	7.3	7.1	6.3	10.5	10.0	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	548	1611	502	635	1211	768	366	629	574	493	760	592
V/C Ratio(X)	0.84	0.57	0.00	0.86	0.50	0.43	0.78	0.49	0.27	0.84	0.58	0.46
Avail Cap(c_a), veh/h	688	1611	502	727	1211	768	459	629	574	574	760	592
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	25.7	0.0	35.6	23.5	15.1	39.2	33.3	20.3	37.5	31.7	21.3
Incr Delay (d2), s/veh	7.2	1.5	0.0	9.6	1.5	1.7	6.9	2.7	1.2	9.3	3.2	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	6.6	0.0	7.5	6.2	5.6	3.8	3.7	3.0	5.6	5.2	5.6
LnGrp Delay(d),s/veh	43.9	27.2	0.0	45.2	24.9	16.8	46.1	36.0	21.5	46.8	34.9	23.9
LnGrp LOS	D	C		D	C	B	D	D	C	D	C	C
Approach Vol, veh/h		1384			1481			752			1124	
Approach Delay, s/veh		32.7			30.7			36.8			36.6	
Approach LOS		C			C			D			D	

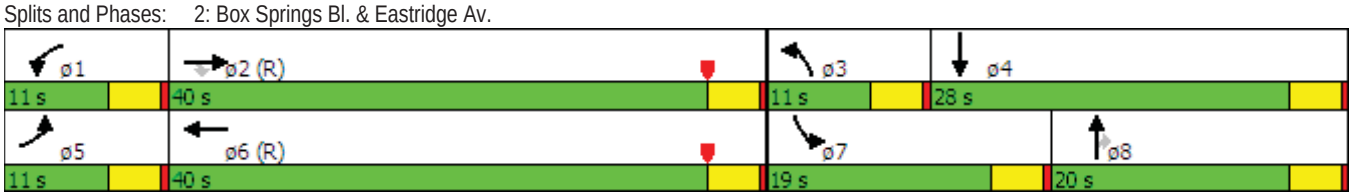
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.6	32.5	13.6	23.3	18.3	34.8	16.9	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	24.0	12.0	19.0	18.0	25.0	15.0	16.0
Max Q Clear Time (g_c+I1), s	15.9	15.7	9.3	13.8	13.6	14.2	12.5	9.1
Green Ext Time (p_c), s	0.7	6.0	0.3	2.7	0.7	7.5	0.4	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	33.6
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	1337	3	43	1282	206	19	91	37	308	134	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		80	150		0	75		160	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		760			700			315			411	
Travel Time (s)		13.0			11.9			7.2			9.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0		11.0	20.0	20.0	11.0	20.0	
Total Split (s)	11.0	40.0	40.0	11.0	40.0		11.0	20.0	20.0	19.0	28.0	
Total Split (%)	12.2%	44.4%	44.4%	12.2%	44.4%		12.2%	22.2%	22.2%	21.1%	31.1%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Box Springs Bl. & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	1337	3	43	1282	206	19	91	37	308	134	38
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	12	1378	3	44	1322	212	20	94	38	318	138	39
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	36	1507	674	92	1400	223	54	331	281	296	862	236
Arrive On Green	0.02	0.43	0.43	0.07	0.61	0.61	0.03	0.18	0.18	0.17	0.31	0.31
Sat Flow, veh/h	1774	3539	1583	1774	3060	486	1774	1863	1583	1774	2747	752
Grp Volume(v), veh/h	12	1378	3	44	760	774	20	94	38	318	87	90
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1777	1774	1863	1583	1774	1770	1730
Q Serve(g_s), s	0.6	32.9	0.1	2.1	35.2	36.5	1.0	3.9	1.8	15.0	3.2	3.4
Cycle Q Clear(g_c), s	0.6	32.9	0.1	2.1	35.2	36.5	1.0	3.9	1.8	15.0	3.2	3.4
Prop In Lane	1.00		1.00	1.00		0.27	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	36	1507	674	92	810	813	54	331	281	296	555	543
V/C Ratio(X)	0.34	0.91	0.00	0.48	0.94	0.95	0.37	0.28	0.13	1.08	0.16	0.17
Avail Cap(c_a), veh/h	138	1507	674	138	810	813	138	331	281	296	555	543
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.5	24.3	14.9	40.7	16.4	16.7	42.8	32.0	31.2	37.5	22.3	22.3
Incr Delay (d2), s/veh	5.4	10.1	0.0	3.8	19.7	21.9	4.1	2.1	1.0	73.9	0.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	18.2	0.0	1.1	21.2	22.6	0.6	2.2	0.9	13.4	1.6	1.7
LnGrp Delay(d),s/veh	48.9	34.4	14.9	44.5	36.1	38.6	46.9	34.2	32.2	111.4	22.9	23.0
LnGrp LOS	D	C	B	D	D	D	D	C	C	F	C	C
Approach Vol, veh/h		1393			1578			152			495	
Approach Delay, s/veh		34.5			37.6			35.3			79.7	
Approach LOS		C			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	42.3	6.8	32.2	5.8	45.2	19.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	36.0	7.0	24.0	7.0	36.0	15.0	16.0
Max Q Clear Time (g_c+I1), s	4.1	34.9	3.0	5.4	2.6	38.5	17.0	5.9
Green Ext Time (p_c), s	0.0	1.0	0.0	1.5	0.0	0.0	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	42.1
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	179	1332	0	907	1056	0	154	0	0	755	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	275		0	0		0	0		0
Storage Lanes	0		0	0		0	2		0	2		0
Taper Length (ft)	90			190			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		241			359			784			672	
Travel Time (s)		4.1			6.1			15.3			13.1	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot			Prot		
Protected Phases	5	2		1	6		3			7		
Permitted Phases												
Detector Phase	5	2		1	6		3			7		
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0			7.0		
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0			11.0		
Total Split (s)	21.0	38.0		28.0	45.0		24.0			24.0		
Total Split (%)	23.3%	42.2%		31.1%	50.0%		26.7%			26.7%		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5			3.5		
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5			0.5		
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0			0.0		
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0			4.0		
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		None			None		

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 13 (14%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: I-215 SB/NB Ramps & Eastridge Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	179	1332	0	907	1056	0	154	0	0	755	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	0	0	1863	0	0
Adj Flow Rate, veh/h	185	1373	0	935	1089	0	159	0	0	778	0	0
Adj No. of Lanes	1	2	0	2	2	0	2	0	0	2	0	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0	2	2	0	2	0	0	2	0	0
Cap, veh/h	218	1337	0	918	1846	0	765	0	0	765	0	0
Arrive On Green	0.25	0.76	0.00	0.27	0.52	0.00	0.22	0.00	0.00	0.22	0.00	0.00
Sat Flow, veh/h	1774	3632	0	3442	3632	0	3442	159		3442	778	
Grp Volume(v), veh/h	185	1373	0	935	1089	0	159	28.7		778	71.9	
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1721	1770	0	1721	C		1721	E	
Q Serve(g_s), s	8.9	34.0	0.0	24.0	19.1	0.0	3.4			20.0		
Cycle Q Clear(g_c), s	8.9	34.0	0.0	24.0	19.1	0.0	3.4			20.0		
Prop In Lane	1.00		0.00	1.00		0.00	1.00			1.00		
Lane Grp Cap(c), veh/h	218	1337	0	918	1846	0	765			765		
V/C Ratio(X)	0.85	1.03	0.00	1.02	0.59	0.00	0.21			1.02		
Avail Cap(c_a), veh/h	335	1337	0	918	1846	0	765			765		
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.96	0.96	0.00	1.00			1.00		
Uniform Delay (d), s/veh	33.1	11.0	0.0	33.0	14.9	0.0	28.5			35.0		
Incr Delay (d2), s/veh	11.7	31.7	0.0	33.9	1.3	0.0	0.1			36.9		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	5.0	21.1	0.0	15.7	9.6	0.0	1.6			13.4		
LnGrp Delay(d),s/veh	44.8	42.7	0.0	66.9	16.2	0.0	28.7			71.9		
LnGrp LOS	D	F		F	B		C			F		
Approach Vol, veh/h		1558			2024							
Approach Delay, s/veh		43.0			39.6							
Approach LOS		D			D							

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3		5	6	7	
Phs Duration (G+Y+Rc), s	28.0	38.0	24.0		15.1	50.9	24.0	
Change Period (Y+Rc), s	4.0	4.0	4.0		4.0	4.0	4.0	
Max Green Setting (Gmax), s	24.0	34.0	20.0		17.0	41.0	20.0	
Max Q Clear Time (g_c+I1), s	26.0	36.0	5.4		10.9	21.1	22.0	
Green Ext Time (p_c), s	0.0	0.0	0.4		0.2	15.8	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	46.0
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1511	171	0	1210	0	0	0	0	0	0	323
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		700			241			458			364	
Travel Time (s)		11.9			4.1			8.9			7.1	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	1511	171	0	1210	0	0	0	0	0	0	323
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	1082	515	456	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1558	176	0	1247	0	0	0	0	0	0	333

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	1247	0	-	1558	0	0	1870	2805	624
Stage 1	-	-	-	-	-	-	1247	1247	-
Stage 2	-	-	-	-	-	-	623	1558	-
Critical Hdwy	4.14	-	-	5.34	-	-	6.29	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.04	5.54	-
Follow-up Hdwy	2.22	-	-	3.12	-	-	3.67	4.02	3.32
Pot Cap-1 Maneuver	554	-	0	209	-	-	84	18	428
Stage 1	-	-	0	-	-	-	229	244	-
Stage 2	-	-	0	-	-	-	466	172	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	554	-	-	209	-	-	84	0	428
Mov Cap-2 Maneuver	-	-	-	-	-	-	173	0	-
Stage 1	-	-	-	-	-	-	229	0	-
Stage 2	-	-	-	-	-	-	466	0	-

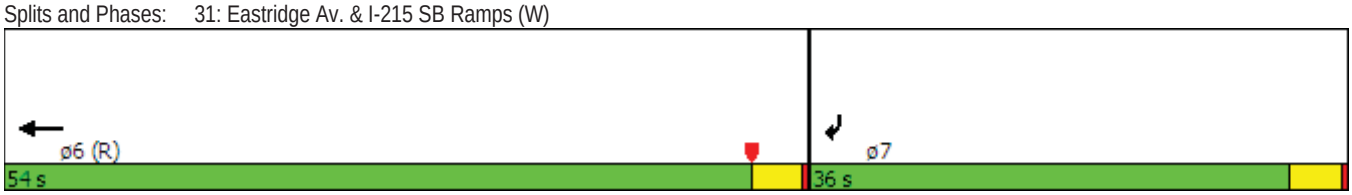
Approach	EB	WB	SB
HCM Control Delay, s	0	0	37.2
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	554	-	209	-	-	428
HCM Lane V/C Ratio	-	-	-	-	-	0.778
HCM Control Delay (s)	0	-	0	-	-	37.2
HCM Lane LOS	A	-	A	-	-	E
HCM 95th %tile Q(veh)	0	-	0	-	-	6.7

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	0	1210	0	0	323
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50			0	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	60				60	
Right Turn on Red				Yes		Yes
Link Speed (mph)		40	40		30	
Link Distance (ft)		174	120		486	
Travel Time (s)		3.0	2.0		11.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type			NA			Prot
Protected Phases			6			7
Permitted Phases						
Detector Phase			6			7
Switch Phase						
Minimum Initial (s)			7.0			7.0
Minimum Split (s)			20.0			11.0
Total Split (s)			54.0			36.0
Total Split (%)			60.0%			40.0%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			0.5			0.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.0			4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	

Splits and Phases: 31: Eastridge Av. & I-215 SB Ramps (W)



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	0	1210	0	0	323
Number			6	16	7	14
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	0	0	1863
Adj Flow Rate, veh/h			1247	0	0	333
Adj No. of Lanes			2	0	0	1
Peak Hour Factor			0.97	0.97	0.97	0.97
Percent Heavy Veh, %			2	0	0	2
Cap, veh/h			1966	0	0	0
Arrive On Green			0.56	0.00	0.00	0.00
Sat Flow, veh/h			3725	0	0	
Grp Volume(v), veh/h			1247	0	0.0	
Grp Sat Flow(s),veh/h/ln			1770	0		
Q Serve(g_s), s			21.8	0.0		
Cycle Q Clear(g_c), s			21.8	0.0		
Prop In Lane				0.00		
Lane Grp Cap(c), veh/h			1966	0		
V/C Ratio(X)			0.63	0.00		
Avail Cap(c_a), veh/h			1966	0		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	0.00		
Uniform Delay (d), s/veh			13.7	0.0		
Incr Delay (d2), s/veh			1.6	0.0		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			11.0	0.0		
LnGrp Delay(d),s/veh			15.3	0.0		
LnGrp LOS			B			
Approach Vol, veh/h			1247			
Approach Delay, s/veh			15.3			
Approach LOS			B			

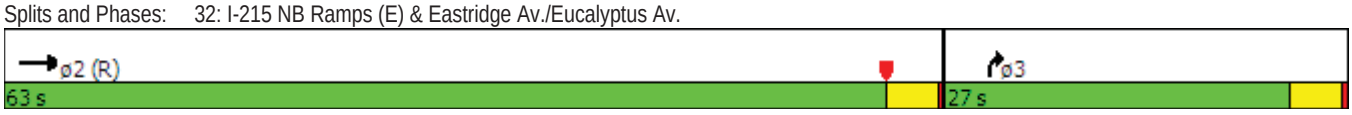
Timer	1	2	3	4	5	6	7	8
Assigned Phs						6		
Phs Duration (G+Y+Rc), s						54.0		
Change Period (Y+Rc), s						4.0		
Max Green Setting (Gmax), s						50.0		
Max Q Clear Time (g_c+I1), s						23.8		
Green Ext Time (p_c), s						10.0		

Intersection Summary	
HCM 2010 Ctrl Delay	15.3
HCM 2010 LOS	B

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	2087	0	0	0	0	692
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Right Turn on Red		Yes				Yes
Link Speed (mph)	30			40	30	
Link Distance (ft)	100			131	592	
Travel Time (s)	2.3			2.2	13.5	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA					Prot
Protected Phases	2					3
Permitted Phases						
Detector Phase	2					3
Switch Phase						
Minimum Initial (s)	7.0					7.0
Minimum Split (s)	20.0					11.0
Total Split (s)	63.0					27.0
Total Split (%)	70.0%					30.0%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	0.5					0.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	4.0					4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max					None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 32: I-215 NB Ramps (E) & Eastridge Av./Eucalyptus Av.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	2087	0	0	0	0	692
Number	2	12			3	18
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)		1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0			0	1863
Adj Flow Rate, veh/h	2152	0			0	713
Adj No. of Lanes	2	0			0	2
Peak Hour Factor	0.97	0.97			0.97	0.97
Percent Heavy Veh, %	2	0			0	2
Cap, veh/h	3382	0			0	0
Arrive On Green	0.96	0.00			0.00	0.00
Sat Flow, veh/h	3725	0			0	
Grp Volume(v), veh/h	2152	0			0.0	
Grp Sat Flow(s),veh/h/ln	1770	0				
Q Serve(g_s), s	6.2	0.0				
Cycle Q Clear(g_c), s	6.2	0.0				
Prop In Lane		0.00				
Lane Grp Cap(c), veh/h	3382	0				
V/C Ratio(X)	0.64	0.00				
Avail Cap(c_a), veh/h	3382	0				
HCM Platoon Ratio	1.00	1.00				
Upstream Filter(I)	1.00	0.00				
Uniform Delay (d), s/veh	0.2	0.0				
Incr Delay (d2), s/veh	0.9	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile BackOfQ(50%),veh/ln	2.8	0.0				
LnGrp Delay(d),s/veh	1.2	0.0				
LnGrp LOS	A					
Approach Vol, veh/h	2152					
Approach Delay, s/veh	1.2					
Approach LOS	A					

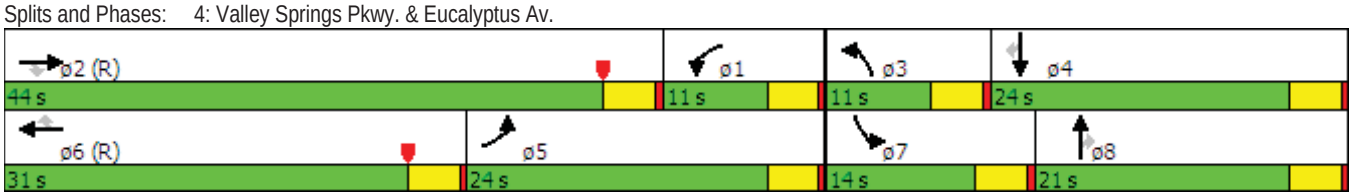
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		90.0						
Change Period (Y+Rc), s		4.0						
Max Green Setting (Gmax), s		59.0						
Max Q Clear Time (g_c+I1), s		8.2						
Green Ext Time (p_c), s		33.4						

Intersection Summary	
HCM 2010 Ctrl Delay	1.2
HCM 2010 LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	872	1624	284	39	1092	86	102	173	49	139	248	1325
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	1		1	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0
Total Split (s)	24.0	44.0	44.0	11.0	31.0	31.0	11.0	21.0	21.0	14.0	24.0	24.0
Total Split (%)	26.7%	48.9%	48.9%	12.2%	34.4%	34.4%	12.2%	23.3%	23.3%	15.6%	26.7%	26.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	Max	None	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	872	1624	284	39	1092	86	102	173	49	139	248	1325
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	908	1692	296	41	1138	90	106	180	51	145	258	1380
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	773	1573	704	142	1062	475	134	696	311	179	414	619
Arrive On Green	0.45	0.89	0.89	0.16	0.60	0.60	0.08	0.20	0.20	0.03	0.07	0.07
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	1774	3539	1583	1774	1863	2787
Grp Volume(v), veh/h	908	1692	296	41	1138	90	106	180	51	145	258	1380
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1774	1770	1583	1774	1863	1393
Q Serve(g_s), s	20.2	40.0	2.1	1.8	27.0	1.7	5.3	3.9	1.9	7.3	12.1	11.9
Cycle Q Clear(g_c), s	20.2	40.0	2.1	1.8	27.0	1.7	5.3	3.9	1.9	7.3	12.1	11.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	773	1573	704	142	1062	475	134	696	311	179	414	619
V/C Ratio(X)	1.17	1.08	0.42	0.29	1.07	0.19	0.79	0.26	0.16	0.81	0.62	2.23
Avail Cap(c_a), veh/h	773	1573	704	142	1062	475	138	696	311	197	414	619
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.23	0.23	0.23	0.69	0.69	0.69	1.00	1.00	1.00	0.79	0.79	0.79
Uniform Delay (d), s/veh	24.8	5.0	1.5	35.5	18.0	6.9	40.9	30.6	18.7	42.6	38.0	14.9
Incr Delay (d2), s/veh	81.7	37.4	0.4	0.8	44.9	0.6	25.8	0.9	1.1	16.5	5.5	556.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.2	24.3	0.8	0.9	19.3	0.8	3.5	2.0	0.9	4.4	6.9	52.5
LnGrp Delay(d),s/veh	106.5	42.4	1.9	36.3	62.9	7.6	66.8	31.5	19.8	59.2	43.5	571.8
LnGrp LOS	F	F	A	D	F	A	E	C	B	E	D	F
Approach Vol, veh/h		2896			1269			337			1783	
Approach Delay, s/veh		58.4			58.1			40.8			453.7	
Approach LOS		E			E			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	44.0	10.8	24.0	24.2	31.0	13.1	21.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	40.0	7.0	20.0	20.0	27.0	10.0	17.0
Max Q Clear Time (g_c+I1), s	3.8	42.0	7.3	14.1	22.2	29.0	9.3	5.9
Green Ext Time (p_c), s	1.3	0.0	0.0	4.2	0.0	0.0	0.0	6.8

Intersection Summary	
HCM 2010 Ctrl Delay	169.5
HCM 2010 LOS	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	872	1624	284	39	1092	86	102	173	49	139	248	1325
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	2		1	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	26.0	48.0	48.0	11.0	33.0	33.0	11.0	20.0	20.0	11.0	20.0	26.0
Total Split (%)	28.9%	53.3%	53.3%	12.2%	36.7%	36.7%	12.2%	22.2%	22.2%	12.2%	22.2%	28.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	Max	None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	872	1624	284	39	1092	86	102	173	49	139	248	1325
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	908	1692	296	41	1138	90	106	180	51	145	258	1380
Adj No. of Lanes	2	2	1	1	2	1	2	2	1	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	841	1829	818	88	1140	510	249	629	281	138	341	1192
Arrive On Green	0.49	1.00	1.00	0.10	0.64	0.64	0.07	0.18	0.18	0.03	0.06	0.06
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	3442	3539	1583	1774	1863	2787
Grp Volume(v), veh/h	908	1692	296	41	1138	90	106	180	51	145	258	1380
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1721	1770	1583	1774	1863	1393
Q Serve(g_s), s	22.0	0.0	0.0	2.0	28.8	2.1	2.7	4.0	2.5	7.0	12.3	16.5
Cycle Q Clear(g_c), s	22.0	0.0	0.0	2.0	28.8	2.1	2.7	4.0	2.5	7.0	12.3	16.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	841	1829	818	88	1140	510	249	629	281	138	341	1192
V/C Ratio(X)	1.08	0.93	0.36	0.46	1.00	0.18	0.43	0.29	0.18	1.05	0.76	1.16
Avail Cap(c_a), veh/h	841	1829	818	138	1140	510	268	629	281	138	341	1192
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.23	0.23	0.23	0.69	0.69	0.69	1.00	1.00	1.00	0.79	0.79	0.79
Uniform Delay (d), s/veh	23.0	0.0	0.0	39.4	16.0	11.2	40.0	32.1	31.4	43.8	40.3	28.0
Incr Delay (d2), s/veh	41.4	2.6	0.3	2.6	21.7	0.5	1.2	1.1	1.4	82.0	11.6	78.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.1	0.7	0.1	1.0	17.0	0.9	1.3	2.0	1.2	6.6	7.4	27.7
LnGrp Delay(d),s/veh	64.4	2.6	0.3	42.0	37.6	11.7	41.1	33.2	32.8	126.1	51.9	106.8
LnGrp LOS	F	A	A	D	D	B	D	C	C	F	D	F
Approach Vol, veh/h		2896			1269			337			1783	
Approach Delay, s/veh		21.7			35.9			35.6			100.4	
Approach LOS		C			D			D			F	

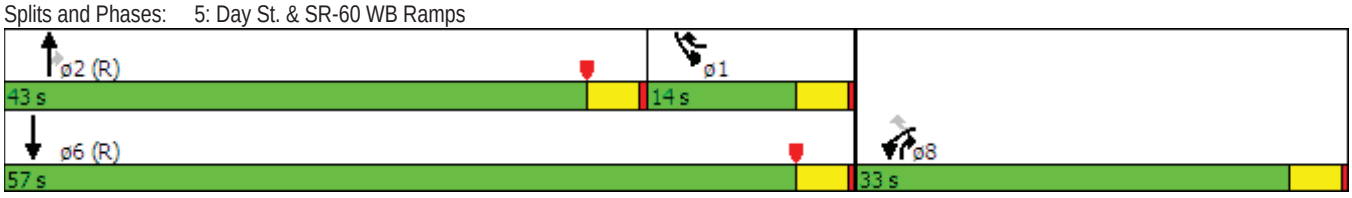
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	50.5	10.5	20.5	26.0	33.0	11.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	44.0	7.0	16.0	22.0	29.0	7.0	16.0
Max Q Clear Time (g_c+I1), s	4.0	2.0	4.7	18.5	24.0	30.8	9.0	6.0
Green Ext Time (p_c), s	0.0	34.4	0.1	0.0	0.0	0.0	0.0	6.4

Intersection Summary	
HCM 2010 Ctrl Delay	47.7
HCM 2010 LOS	D

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	642	148	913	646	78	704
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		175	200	
Storage Lanes	2	1		1	1	
Taper Length (ft)	60				80	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	30		40			40
Link Distance (ft)	307		957			795
Travel Time (s)	7.0		16.3			13.6
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	33.0	14.0	43.0	33.0	14.0	57.0
Total Split (%)	36.7%	15.6%	47.8%	36.7%	15.6%	63.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 14 (16%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: Day St. & SR-60 WB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	642	148	913	646	78	704
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	662	153	941	666	80	726
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	799	686	1534	1054	357	2403
Arrive On Green	0.23	0.23	0.87	0.87	0.20	0.68
Sat Flow, veh/h	3442	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	662	153	941	666	80	726
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1770
Q Serve(g_s), s	16.5	0.0	6.8	18.8	3.4	7.5
Cycle Q Clear(g_c), s	16.5	0.0	6.8	18.8	3.4	7.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	799	686	1534	1054	357	2403
V/C Ratio(X)	0.83	0.22	0.61	0.63	0.22	0.30
Avail Cap(c_a), veh/h	1109	829	1534	1054	357	2403
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.62	0.62	1.00	1.00
Uniform Delay (d), s/veh	32.9	16.0	3.9	1.9	30.1	5.8
Incr Delay (d2), s/veh	3.8	0.2	1.1	1.8	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	2.4	3.1	12.4	1.7	3.7
LnGrp Delay(d),s/veh	36.7	16.2	5.0	3.7	30.4	6.2
LnGrp LOS	D	B	A	A	C	A
Approach Vol, veh/h	815		1607			806
Approach Delay, s/veh	32.8		4.5			8.6
Approach LOS	C		A			A

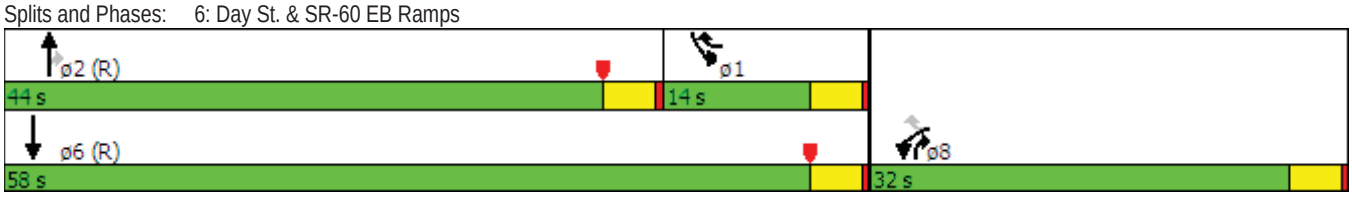
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	22.1	43.0				65.1		24.9
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	10.0	39.0				53.0		29.0
Max Q Clear Time (g_c+I1), s	5.4	20.8				9.5		18.5
Green Ext Time (p_c), s	2.0	8.8				5.6		2.4

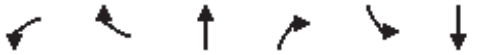
Intersection Summary	
HCM 2010 Ctrl Delay	12.7
HCM 2010 LOS	B

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	749	300	1259	1021	161	1183
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	200		0	425	
Storage Lanes	2	0		1	1	
Taper Length (ft)	60				60	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		40			40
Link Distance (ft)	263		524			957
Travel Time (s)	5.1		8.9			16.3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	32.0	14.0	44.0	32.0	14.0	58.0
Total Split (%)	35.6%	15.6%	48.9%	35.6%	15.6%	64.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 88 (98%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Day St. & SR-60 EB Ramps





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	749	300	1259	1021	161	1183
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	764	306	1285	1042	164	1207
Adj No. of Lanes	2	1	2	1	1	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	899	669	1573	1117	286	3305
Arrive On Green	0.26	0.26	0.59	0.59	0.32	1.00
Sat Flow, veh/h	3442	1583	3632	1583	1774	5253
Grp Volume(v), veh/h	764	306	1285	1042	164	1207
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1695
Q Serve(g_s), s	19.0	0.0	25.8	40.0	6.9	0.0
Cycle Q Clear(g_c), s	19.0	0.0	25.8	40.0	6.9	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	899	669	1573	1117	286	3305
V/C Ratio(X)	0.85	0.46	0.82	0.93	0.57	0.37
Avail Cap(c_a), veh/h	1071	747	1573	1117	286	3305
HCM Platoon Ratio	1.00	1.00	1.33	1.33	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.36	0.36	0.85	0.85
Uniform Delay (d), s/veh	31.6	18.6	15.5	7.2	27.9	0.0
Incr Delay (d2), s/veh	5.7	0.5	1.8	6.7	2.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.7	5.4	12.7	27.7	3.6	0.1
LnGrp Delay(d),s/veh	37.3	19.1	17.3	13.9	30.3	0.3
LnGrp LOS	D	B	B	B	C	A
Approach Vol, veh/h	1070		2327			1371
Approach Delay, s/veh	32.1		15.8			3.9
Approach LOS	C		B			A

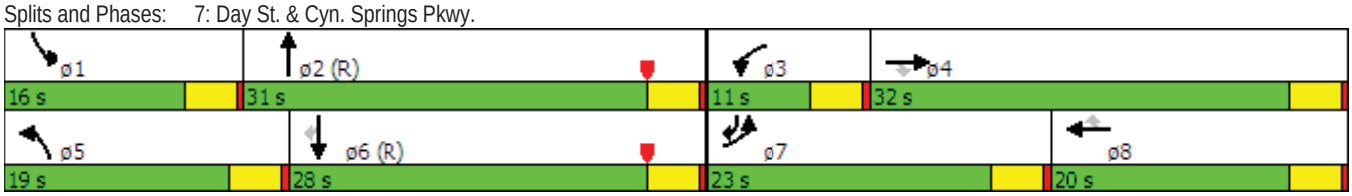
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	18.5	44.0				62.5		27.5
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	10.0	40.0				54.0		28.0
Max Q Clear Time (g_c+I1), s	8.9	42.0				2.0		21.0
Green Ext Time (p_c), s	0.8	0.0				11.7		2.5

Intersection Summary	
HCM 2010 Ctrl Delay	16.0
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	690	126	167	49	75	233	218	1356	61	212	1023	535
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	145		0	165		0	170		200
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	95			100			120			80		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		1120			404			728			524	
Travel Time (s)		19.1			7.9			12.4			8.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												47%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	23.0	32.0	32.0	11.0	20.0	20.0	19.0	31.0		16.0	28.0	23.0
Total Split (%)	25.6%	35.6%	35.6%	12.2%	22.2%	22.2%	21.1%	34.4%		17.8%	31.1%	25.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Day St. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	690	126	167	49	75	233	218	1356	61	212	1023	535
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	704	129	170	50	77	238	222	1384	62	216	1011	568
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	727	607	516	98	317	270	256	1534	69	237	1656	1607
Arrive On Green	0.21	0.33	0.33	0.06	0.17	0.17	0.19	0.41	0.41	0.13	0.30	0.30
Sat Flow, veh/h	3442	1863	1583	1774	1863	1583	1774	4990	224	1774	5588	3167
Grp Volume(v), veh/h	704	129	170	50	77	238	222	940	506	216	1011	568
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1863	1583	1774	1695	1823	1774	1863	1583
Q Serve(g_s), s	18.3	4.5	7.3	2.5	3.2	13.2	10.9	23.4	23.4	10.8	14.0	9.7
Cycle Q Clear(g_c), s	18.3	4.5	7.3	2.5	3.2	13.2	10.9	23.4	23.4	10.8	14.0	9.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	727	607	516	98	317	270	256	1042	560	237	1656	1607
V/C Ratio(X)	0.97	0.21	0.33	0.51	0.24	0.88	0.87	0.90	0.90	0.91	0.61	0.35
Avail Cap(c_a), veh/h	727	607	516	138	331	281	296	1042	560	237	1656	1607
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.81	0.81	1.00	1.00	1.00	0.81	0.81	0.81	0.84	0.84	0.84
Uniform Delay (d), s/veh	35.2	22.0	22.9	41.3	32.3	36.5	35.5	25.3	25.3	38.5	27.2	13.3
Incr Delay (d2), s/veh	22.7	0.1	0.3	4.0	0.4	25.5	17.5	10.5	17.3	31.9	1.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.0	2.4	3.2	1.3	1.7	7.7	6.5	12.4	14.4	7.4	7.4	4.3
LnGrp Delay(d),s/veh	57.9	22.1	23.2	45.3	32.7	62.0	53.1	35.8	42.6	70.4	28.6	13.8
LnGrp LOS	E	C	C	D	C	E	D	D	D	E	C	B
Approach Vol, veh/h		1003			365			1668			1795	
Approach Delay, s/veh		47.4			53.5			40.2			29.0	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	31.7	9.0	33.3	17.0	30.7	23.0	19.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	27.0	7.0	28.0	15.0	24.0	19.0	16.0
Max Q Clear Time (g_c+I1), s	12.8	25.4	4.5	9.3	12.9	16.0	20.3	15.2
Green Ext Time (p_c), s	0.0	1.6	0.0	2.3	0.1	7.4	0.0	0.1

Intersection Summary	
HCM 2010 Ctrl Delay	38.5
HCM 2010 LOS	D

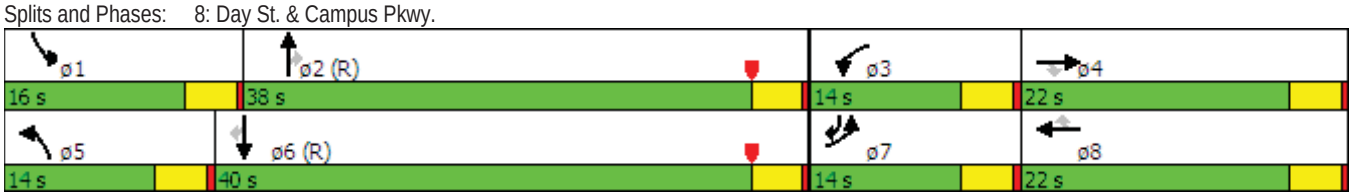
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	203	102	181	87	199	254	200	1179	97	262	919	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		50	200		0	130		50	190		0
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	60			120			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		938			519			1025			728	
Travel Time (s)		16.0			10.1			17.5			12.4	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	14.0	22.0	22.0	14.0	22.0	22.0	14.0	38.0	38.0	16.0	40.0	14.0
Total Split (%)	15.6%	24.4%	24.4%	15.6%	24.4%	24.4%	15.6%	42.2%	42.2%	17.8%	44.4%	15.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 77 (86%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Day St. & Campus Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	203	102	181	87	199	254	200	1179	97	262	919	64
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	211	106	189	91	207	265	208	1228	101	273	957	67
Adj No. of Lanes	2	1	1	1	2	1	2	3	1	2	3	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	287	378	321	124	670	300	287	2283	711	346	2369	870
Arrive On Green	0.08	0.20	0.20	0.07	0.19	0.19	0.03	0.15	0.15	0.20	0.93	0.93
Sat Flow, veh/h	3442	1863	1583	1774	3539	1583	3442	5085	1583	3442	5085	1583
Grp Volume(v), veh/h	211	106	189	91	207	265	208	1228	101	273	957	67
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1770	1583	1721	1695	1583	1721	1695	1583
Q Serve(g_s), s	5.4	4.3	9.7	4.5	4.5	14.7	5.4	20.1	5.0	6.8	1.9	0.2
Cycle Q Clear(g_c), s	5.4	4.3	9.7	4.5	4.5	14.7	5.4	20.1	5.0	6.8	1.9	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	287	378	321	124	670	300	287	2283	711	346	2369	870
V/C Ratio(X)	0.73	0.28	0.59	0.74	0.31	0.88	0.72	0.54	0.14	0.79	0.40	0.08
Avail Cap(c_a), veh/h	382	378	321	197	708	317	382	2283	711	459	2369	870
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.75	0.75	0.75	0.76	0.76	0.76
Uniform Delay (d), s/veh	40.3	30.3	32.5	41.0	31.4	35.5	42.7	29.7	23.3	35.0	1.7	1.2
Incr Delay (d2), s/veh	4.9	0.4	2.8	8.2	0.3	23.5	3.4	0.7	0.3	5.1	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	2.3	4.5	2.5	2.2	8.4	2.7	9.6	2.3	3.4	0.8	0.1
LnGrp Delay(d),s/veh	45.2	30.7	35.3	49.2	31.7	59.1	46.1	30.4	23.6	40.1	2.1	1.3
LnGrp LOS	D	C	D	D	C	E	D	C	C	D	A	A
Approach Vol, veh/h		506			563			1537			1297	
Approach Delay, s/veh		38.5			47.4			32.1			10.1	
Approach LOS		D			D			C			B	

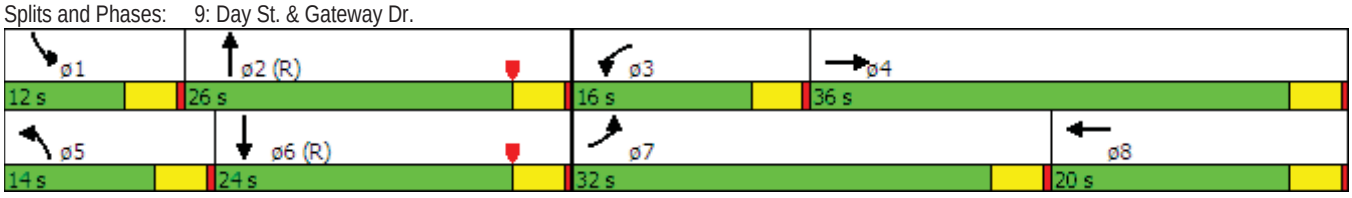
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.1	44.4	10.3	22.3	11.5	45.9	11.5	21.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	34.0	10.0	18.0	10.0	36.0	10.0	18.0
Max Q Clear Time (g_c+I1), s	8.8	22.1	6.5	11.7	7.4	3.9	7.4	16.7
Green Ext Time (p_c), s	0.3	9.7	0.1	1.9	0.2	20.7	0.2	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	27.8
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	399	134	183	122	115	188	116	710	123	210	691	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	100		0	190		400	260		0
Storage Lanes	1		0	1		0	1		1	2		0
Taper Length (ft)	0			120			60			165		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		318			585			592			1025	
Travel Time (s)		5.4			11.4			10.1			17.5	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	32.0	36.0		16.0	20.0		14.0	26.0		12.0	24.0	
Total Split (%)	35.6%	40.0%		17.8%	22.2%		15.6%	28.9%		13.3%	26.7%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 22 (24%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

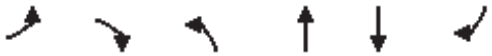
Splits and Phases: 9: Day St. & Gateway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	399	134	183	122	115	188	116	710	123	210	691	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	407	137	187	124	117	192	118	724	126	214	705	169
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	455	570	510	156	271	242	146	1436	247	289	1357	321
Arrive On Green	0.08	0.11	0.11	0.09	0.15	0.15	0.16	0.66	0.66	0.03	0.11	0.11
Sat Flow, veh/h	1774	1770	1583	1774	1770	1583	1774	4367	753	3442	4108	973
Grp Volume(v), veh/h	407	137	187	124	117	192	118	560	290	214	580	294
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1695	1730	1721	1695	1691
Q Serve(g_s), s	20.4	6.4	9.9	6.2	5.4	10.5	5.8	7.6	7.8	5.6	14.5	14.8
Cycle Q Clear(g_c), s	20.4	6.4	9.9	6.2	5.4	10.5	5.8	7.6	7.8	5.6	14.5	14.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.44	1.00		0.58
Lane Grp Cap(c), veh/h	455	570	510	156	271	242	146	1114	569	289	1120	559
V/C Ratio(X)	0.89	0.24	0.37	0.80	0.43	0.79	0.81	0.50	0.51	0.74	0.52	0.53
Avail Cap(c_a), veh/h	552	629	563	237	315	281	197	1114	569	306	1120	559
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Uniform Delay (d), s/veh	40.0	30.1	31.7	40.3	34.6	36.7	36.9	11.7	11.7	42.8	33.3	33.4
Incr Delay (d2), s/veh	14.9	0.2	0.4	10.4	1.1	12.6	16.2	1.6	3.2	8.1	1.6	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.9	3.2	4.4	3.5	2.7	5.4	3.5	3.7	4.0	3.0	7.1	7.4
LnGrp Delay(d),s/veh	54.9	30.3	32.1	50.7	35.7	49.3	53.1	13.3	14.9	50.9	34.9	36.7
LnGrp LOS	D	C	C	D	D	D	D	B	B	D	C	D
Approach Vol, veh/h		731			433			968			1088	
Approach Delay, s/veh		44.5			46.0			18.6			38.5	
Approach LOS		D			D			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	33.6	11.9	33.0	11.4	33.7	27.1	17.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	22.0	12.0	32.0	10.0	20.0	28.0	16.0
Max Q Clear Time (g_c+I1), s	7.6	9.8	8.2	11.9	7.8	16.8	22.4	12.5
Green Ext Time (p_c), s	0.0	7.9	0.1	3.7	0.1	2.6	0.7	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	34.9
HCM 2010 LOS	C



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	41	36	24	1108	1021	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	80			0
Storage Lanes	1	0	1			0
Taper Length (ft)	60		30			
Link Speed (mph)	30			40	40	
Link Distance (ft)	364			180	592	
Travel Time (s)	8.3			3.1	10.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

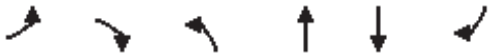
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	41	36	24	1108	1021	12
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	-	80	-	-	-
Veh in Median Storage, #	1	-	-	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	45	39	26	1204	1110	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1770	561	1123	0	-	0
Stage 1	1116	-	-	-	-	-
Stage 2	654	-	-	-	-	-
Critical Hdwy	6.29	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	96	403	341	-	-	-
Stage 1	210	-	-	-	-	-
Stage 2	465	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	89	403	341	-	-	-
Mov Cap-2 Maneuver	163	-	-	-	-	-
Stage 1	210	-	-	-	-	-
Stage 2	430	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	30	0.3	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	341	-	226	-	-
HCM Lane V/C Ratio	0.077	-	0.37	-	-
HCM Control Delay (s)	16.4	-	30	-	-
HCM Lane LOS	C	-	D	-	-
HCM 95th %tile Q(veh)	0.2	-	1.6	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	12	35	2	1119	1052	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	25			0
Storage Lanes	1	0	1			0
Taper Length (ft)	60		25			
Link Speed (mph)	30			40	40	
Link Distance (ft)	364			453	180	
Travel Time (s)	8.3			7.7	3.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	12	35	2	1119	1052	5
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	-	25	-	-	-
Veh in Median Storage, #	1	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	38	2	1203	1131	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1740	568	1137	0	-	0
Stage 1	1134	-	-	-	-	-
Stage 2	606	-	-	-	-	-
Critical Hdwy	6.29	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	100	399	336	-	-	-
Stage 1	204	-	-	-	-	-
Stage 2	492	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	99	399	336	-	-	-
Mov Cap-2 Maneuver	166	-	-	-	-	-
Stage 1	204	-	-	-	-	-
Stage 2	489	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.8	0	0
HCM LOS	C		

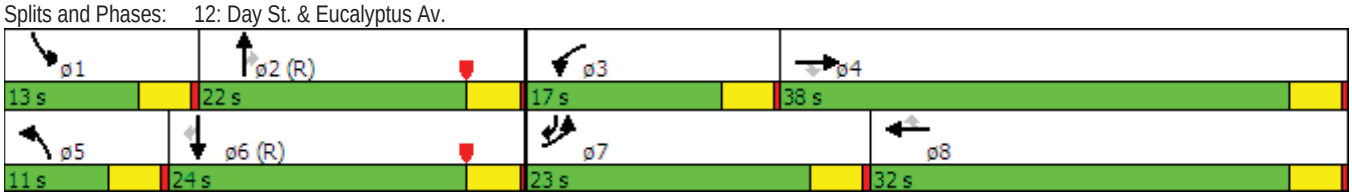
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	336	-	294	-	-
HCM Lane V/C Ratio	0.006	-	0.172	-	-
HCM Control Delay (s)	15.8	-	19.8	-	-
HCM Lane LOS	C	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.6	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	285	1269	207	253	812	156	98	506	366	175	554	319
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		50	175		0	100		100	200		0
Storage Lanes	1		1	1		1	1		2	1		1
Taper Length (ft)	100			75			80			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			40	
Link Distance (ft)		2104			1174			390			453	
Travel Time (s)		35.9			20.0			7.6			7.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	23.0	38.0	38.0	17.0	32.0	32.0	11.0	22.0	22.0	13.0	24.0	23.0
Total Split (%)	25.6%	42.2%	42.2%	18.9%	35.6%	35.6%	12.2%	24.4%	24.4%	14.4%	26.7%	25.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 12: Day St. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	285	1269	207	253	812	156	98	506	366	175	554	319
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	300	1336	218	266	855	164	103	533	385	184	583	336
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	340	1337	598	256	1169	523	130	708	317	177	802	663
Arrive On Green	0.06	0.12	0.12	0.14	0.33	0.33	0.07	0.20	0.20	0.10	0.23	0.23
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	300	1336	218	266	855	164	103	533	385	184	583	336
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	15.1	34.0	11.4	13.0	19.2	7.0	5.1	12.8	18.0	9.0	13.7	14.1
Cycle Q Clear(g_c), s	15.1	34.0	11.4	13.0	19.2	7.0	5.1	12.8	18.0	9.0	13.7	14.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	340	1337	598	256	1169	523	130	708	317	177	802	663
V/C Ratio(X)	0.88	1.00	0.36	1.04	0.73	0.31	0.79	0.75	1.22	1.04	0.73	0.51
Avail Cap(c_a), veh/h	375	1337	598	256	1169	523	138	708	317	177	802	663
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.25	0.25	0.25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.1	39.4	29.5	38.5	26.6	22.5	41.0	33.9	36.0	40.5	32.2	19.3
Incr Delay (d2), s/veh	6.0	12.1	0.1	66.5	2.4	0.3	25.1	7.3	122.5	77.7	5.7	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	18.9	5.0	11.1	9.8	3.1	3.4	6.9	18.6	8.2	7.4	6.6
LnGrp Delay(d),s/veh	47.2	51.5	29.6	105.0	29.0	22.9	66.1	41.2	158.5	118.3	37.9	22.1
LnGrp LOS	D	D	C	F	C	C	E	D	F	F	D	C
Approach Vol, veh/h		1854			1285			1021			1103	
Approach Delay, s/veh		48.2			43.9			87.9			46.5	
Approach LOS		D			D			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	22.0	17.0	38.0	10.6	24.4	21.3	33.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	18.0	13.0	34.0	7.0	20.0	19.0	28.0
Max Q Clear Time (g_c+I1), s	11.0	20.0	15.0	36.0	7.1	16.1	17.1	21.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	3.0	0.2	6.1

Intersection Summary	
HCM 2010 Ctrl Delay	54.5
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	133	54	145	149	258	78	640	108	263	590	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	95		95	80		0	100		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	60			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			25			35	
Link Distance (ft)		861			839			1320			2260	
Travel Time (s)		16.8			16.3			36.0			44.0	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	42.0		17.0	48.0	
Total Split (%)	12.2%	22.2%		12.2%	22.2%	22.2%	12.2%	46.7%		18.9%	53.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Day St. & Cottonwood Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	25	133	54	145	149	258	78	640	108	263	590	23
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	28	151	61	165	169	293	89	727	123	299	670	26
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	181	73	138	338	288	123	710	120	256	948	37
Arrive On Green	0.04	0.14	0.14	0.08	0.18	0.18	0.07	0.46	0.46	0.14	0.53	0.53
Sat Flow, veh/h	1774	1263	510	1774	1863	1583	1774	1554	263	1774	1781	69
Grp Volume(v), veh/h	28	0	212	165	169	293	89	0	850	299	0	696
Grp Sat Flow(s),veh/h/ln	1774	0	1773	1774	1863	1583	1774	0	1816	1774	0	1851
Q Serve(g_s), s	1.4	0.0	10.5	7.0	7.3	16.3	4.4	0.0	41.1	13.0	0.0	25.4
Cycle Q Clear(g_c), s	1.4	0.0	10.5	7.0	7.3	16.3	4.4	0.0	41.1	13.0	0.0	25.4
Prop In Lane	1.00		0.29	1.00		1.00	1.00		0.14	1.00		0.04
Lane Grp Cap(c), veh/h	69	0	253	138	338	288	123	0	830	256	0	985
V/C Ratio(X)	0.40	0.00	0.84	1.20	0.50	1.02	0.72	0.00	1.02	1.17	0.00	0.71
Avail Cap(c_a), veh/h	138	0	315	138	338	288	138	0	830	256	0	985
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.2	0.0	37.5	41.5	33.1	36.8	41.0	0.0	24.4	38.5	0.0	15.8
Incr Delay (d2), s/veh	3.7	0.0	14.7	138.7	1.1	58.0	15.1	0.0	37.5	108.9	0.0	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	6.2	8.7	3.9	11.8	2.7	0.0	29.2	14.1	0.0	14.1
LnGrp Delay(d),s/veh	45.9	0.0	52.3	180.2	34.3	94.9	56.1	0.0	61.9	147.4	0.0	20.1
LnGrp LOS	D		D	F	C	F	E		F	F		C
Approach Vol, veh/h		240			627			939			995	
Approach Delay, s/veh		51.5			101.0			61.3			58.3	
Approach LOS		D			F			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	45.1	11.0	16.9	10.2	51.9	7.5	20.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	38.0	7.0	16.0	7.0	44.0	7.0	16.0
Max Q Clear Time (g_c+I1), s	15.0	43.1	9.0	12.5	6.4	27.4	3.4	18.3
Green Ext Time (p_c), s	0.0	0.0	0.0	0.4	0.0	10.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	68.3
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	133	54	145	149	258	78	640	108	263	590	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	95		95	80		100	100		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	60			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			25			35	
Link Distance (ft)		861			839			811			2260	
Travel Time (s)		16.8			16.3			22.1			44.0	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Detector Phase	7	4		3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	
Total Split (s)	11.0	20.0		13.0	22.0	22.0	11.0	38.0	38.0	19.0	46.0	
Total Split (%)	12.2%	22.2%		14.4%	24.4%	24.4%	12.2%	42.2%	42.2%	21.1%	51.1%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 13: Day St. & Cottonwood Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	25	133	54	145	149	258	78	640	108	263	590	23
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	28	151	61	165	169	293	89	727	123	299	670	26
Adj No. of Lanes	1	1	0	1	1	1	1	1	1	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	181	73	177	380	323	123	769	653	296	908	35
Arrive On Green	0.04	0.14	0.14	0.10	0.20	0.20	0.07	0.41	0.41	0.17	0.51	0.51
Sat Flow, veh/h	1774	1263	510	1774	1863	1583	1774	1863	1583	1774	1781	69
Grp Volume(v), veh/h	28	0	212	165	169	293	89	727	123	299	0	696
Grp Sat Flow(s),veh/h/ln	1774	0	1773	1774	1863	1583	1774	1863	1583	1774	0	1851
Q Serve(g_s), s	1.4	0.0	10.5	8.3	7.1	16.3	4.4	33.8	4.5	15.0	0.0	26.6
Cycle Q Clear(g_c), s	1.4	0.0	10.5	8.3	7.1	16.3	4.4	33.8	4.5	15.0	0.0	26.6
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	69	0	253	177	380	323	123	769	653	296	0	944
V/C Ratio(X)	0.40	0.00	0.84	0.93	0.45	0.91	0.72	0.95	0.19	1.01	0.00	0.74
Avail Cap(c_a), veh/h	138	0	315	177	380	323	138	769	653	296	0	944
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.2	0.0	37.5	40.2	31.4	35.0	41.0	25.5	16.8	37.5	0.0	17.3
Incr Delay (d2), s/veh	3.7	0.0	14.7	47.7	0.8	28.0	15.1	21.7	0.6	55.2	0.0	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	6.2	6.4	3.7	9.6	2.7	22.0	2.1	11.8	0.0	14.9
LnGrp Delay(d),s/veh	45.9	0.0	52.3	87.9	32.2	63.0	56.1	47.1	17.5	92.8	0.0	22.5
LnGrp LOS	D		D	F	C	E	E	D	B	F		C
Approach Vol, veh/h		240			627			939			995	
Approach Delay, s/veh		51.5			61.3			44.1			43.6	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	41.1	13.0	16.9	10.2	49.9	7.5	22.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	34.0	9.0	16.0	7.0	42.0	7.0	18.0
Max Q Clear Time (g_c+I1), s	17.0	35.8	10.3	12.5	6.4	28.6	3.4	18.3
Green Ext Time (p_c), s	0.0	0.0	0.0	0.4	0.0	8.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	48.4
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	43	14	9	23	25	12	777	6	34	748	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		861			839			634			1320	
Travel Time (s)		19.6			19.1			17.3			36.0	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	54.3
Intersection LOS	F

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	13	43	14	0	9	23	25	0	12	777	6
Peak Hour Factor	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	14	47	15	0	10	25	27	0	13	854	7
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	11.6	11	57.7
HCM LOS	B	B	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	2%	23%	0%	28%	0%	4%
Vol Thru, %	98%	77%	0%	72%	0%	94%
Vol Right, %	1%	0%	100%	0%	100%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	795	56	14	32	25	800
LT Vol	12	13	0	9	0	34
Through Vol	777	43	0	23	0	748
RT Vol	6	0	14	0	25	18
Lane Flow Rate	874	62	15	35	27	879
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	1	0.137	0.031	0.079	0.055	1
Departure Headway (Hd)	5.355	7.997	7.181	8.089	7.249	5.351
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	681	450	500	444	495	677
Service Time	3.408	5.719	4.903	5.815	4.974	3.404
HCM Lane V/C Ratio	1.283	0.138	0.03	0.079	0.055	1.298
HCM Control Delay	57.7	12	10.1	11.5	10.4	57.7
HCM Lane LOS	F	B	B	B	B	F
HCM 95th-tile Q	15.8	0.5	0.1	0.3	0.2	15.8

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	34	748	18
Peak Hour Factor	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	37	822	20
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	57.7
HCM LOS	F

Lane

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	43	14	9	23	25	12	777	6	34	748	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		861			839			634			509	
Travel Time (s)		19.6			19.1			17.3			13.9	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	26.1
Intersection LOS	D

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	13	43	14	0	9	23	25	0	12	777	6
Peak Hour Factor	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	14	47	15	0	10	25	27	0	13	854	7
Number of Lanes	0	0	1	1	0	0	1	1	0	0	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	12.4	11.7	27
HCM LOS	B	B	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	3%	0%	23%	0%	28%	0%	8%	0%
Vol Thru, %	97%	98%	77%	0%	72%	0%	92%	95%
Vol Right, %	0%	2%	0%	100%	0%	100%	0%	5%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	401	395	56	14	32	25	408	392
LT Vol	12	0	13	0	9	0	34	0
Through Vol	389	389	43	0	23	0	374	374
RT Vol	0	6	0	14	0	25	0	18
Lane Flow Rate	440	434	62	15	35	27	448	431
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.773	0.758	0.147	0.033	0.085	0.06	0.79	0.75
Departure Headway (Hd)	6.324	6.298	8.585	7.742	8.667	7.798	6.343	6.268
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	568	568	420	465	416	462	565	573
Service Time	4.114	4.088	6.288	5.445	6.371	5.502	4.133	4.058
HCM Lane V/C Ratio	0.775	0.764	0.148	0.032	0.084	0.058	0.793	0.752
HCM Control Delay	27.6	26.4	12.8	10.7	12.2	11	29.1	25.7
HCM Lane LOS	D	D	B	B	B	B	D	D
HCM 95th-tile Q	7.1	6.7	0.5	0.1	0.3	0.2	7.5	6.6

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	34	748	18
Peak Hour Factor	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	37	822	20
Number of Lanes	0	0	2	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	27.4
HCM LOS	D

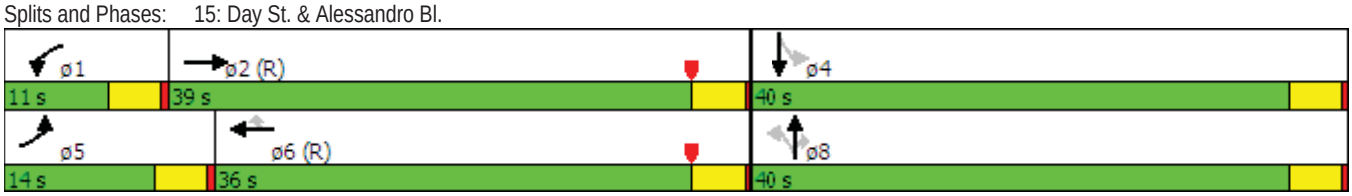
Lane

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	211	1814	100	102	1261	139	155	447	158	212	336	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	245		0	220		75	50		50	200		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	100			120			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		861			839			831			716	
Travel Time (s)		13.0			12.7			16.2			19.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		
Detector Phase	5	2		1	6	6	8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (s)	14.0	39.0		11.0	36.0	36.0	40.0	40.0	40.0	40.0	40.0	
Total Split (%)	15.6%	43.3%		12.2%	40.0%	40.0%	44.4%	44.4%	44.4%	44.4%	44.4%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max		None	C-Max	C-Max	Max	Max	Max	Max	Max	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 15: Day St. & Alessandro Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	211	1814	100	102	1261	139	155	447	158	212	336	200
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	224	1930	106	109	1341	148	165	476	168	226	357	213
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	1922	105	137	1258	563	172	745	633	232	438	261
Arrive On Green	0.11	0.39	0.39	0.08	0.36	0.36	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1774	4935	270	1774	3539	1583	838	1863	1583	783	1094	653
Grp Volume(v), veh/h	224	1324	712	109	1341	148	165	476	168	226	0	570
Grp Sat Flow(s),veh/h/ln	1774	1695	1815	1774	1770	1583	838	1863	1583	783	0	1748
Q Serve(g_s), s	10.0	35.1	35.1	5.4	32.0	6.0	9.9	18.5	6.4	17.5	0.0	26.1
Cycle Q Clear(g_c), s	10.0	35.1	35.1	5.4	32.0	6.0	36.0	18.5	6.4	36.0	0.0	26.1
Prop In Lane	1.00		0.15	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	197	1320	707	137	1258	563	172	745	633	232	0	699
V/C Ratio(X)	1.14	1.00	1.01	0.80	1.07	0.26	0.96	0.64	0.27	0.97	0.00	0.82
Avail Cap(c_a), veh/h	197	1320	707	138	1258	563	172	745	633	232	0	699
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.0	27.5	27.5	40.8	29.0	20.6	42.3	21.8	18.1	39.1	0.0	24.0
Incr Delay (d2), s/veh	105.6	25.5	35.6	26.6	44.8	1.1	58.9	4.2	1.0	52.9	0.0	10.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	21.0	24.5	3.7	23.4	2.8	6.9	10.4	3.0	9.0	0.0	14.5
LnGrp Delay(d),s/veh	145.6	53.0	63.1	67.4	73.8	21.8	101.2	25.9	19.1	92.0	0.0	34.2
LnGrp LOS	F	F	F	E	F	C	F	C	B	F		C
Approach Vol, veh/h		2260			1598			809			796	
Approach Delay, s/veh		65.3			68.6			39.9			50.6	
Approach LOS		E			E			D			D	

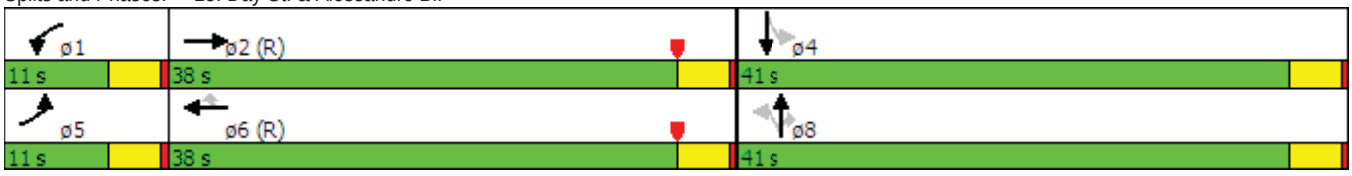
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.9	39.1		40.0	14.0	36.0		40.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	35.0		36.0	10.0	32.0		36.0
Max Q Clear Time (g_c+I1), s	7.4	37.1		38.0	12.0	34.0		38.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	60.4
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	211	1814	100	102	1261	139	155	447	158	212	336	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	245		0	220		75	50		50	200		0
Storage Lanes	2		0	1		0	1		1	0		0
Taper Length (ft)	100			120			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		861			839			831			716	
Travel Time (s)		13.0			12.7			16.2			19.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		
Detector Phase	5	2		1	6	6	8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (s)	11.0	38.0		11.0	38.0	38.0	41.0	41.0	41.0	41.0	41.0	
Total Split (%)	12.2%	42.2%		12.2%	42.2%	42.2%	45.6%	45.6%	45.6%	45.6%	45.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max		None	C-Max	C-Max	Max	Max	Max	Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

Splits and Phases: 15: Day St. & Alessandro Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	211	1814	100	102	1261	139	155	447	158	212	336	200
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	224	1930	106	109	1341	148	165	476	168	226	357	213
Adj No. of Lanes	2	3	0	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	268	1867	102	137	1337	598	186	766	651	244	450	268
Arrive On Green	0.08	0.38	0.38	0.08	0.38	0.38	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	3442	4935	270	1774	3539	1583	838	1863	1583	783	1094	653
Grp Volume(v), veh/h	224	1324	712	109	1341	148	165	476	168	226	0	570
Grp Sat Flow(s),veh/h/ln	1721	1695	1815	1774	1770	1583	838	1863	1583	783	0	1748
Q Serve(g_s), s	5.8	34.1	34.1	5.4	34.0	5.8	11.3	18.2	6.3	18.8	0.0	25.7
Cycle Q Clear(g_c), s	5.8	34.1	34.1	5.4	34.0	5.8	37.0	18.2	6.3	37.0	0.0	25.7
Prop In Lane	1.00		0.15	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	268	1283	687	137	1337	598	186	766	651	244	0	718
V/C Ratio(X)	0.84	1.03	1.04	0.80	1.00	0.25	0.89	0.62	0.26	0.93	0.00	0.79
Avail Cap(c_a), veh/h	268	1283	687	138	1337	598	186	766	651	244	0	718
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.9	28.0	28.0	40.8	28.0	19.2	41.4	21.0	17.5	38.2	0.0	23.2
Incr Delay (d2), s/veh	20.1	33.8	44.1	26.6	25.3	1.0	42.1	3.8	1.0	41.6	0.0	8.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	21.9	25.4	3.7	21.2	2.7	6.2	10.1	2.9	8.4	0.0	14.1
LnGrp Delay(d),s/veh	61.1	61.8	72.1	67.4	53.3	20.2	83.4	24.7	18.4	79.8	0.0	32.0
LnGrp LOS	E	F	F	E	F	C	F	C	B	E		C
Approach Vol, veh/h		2260			1598			809			796	
Approach Delay, s/veh		65.0			51.2			35.4			45.5	
Approach LOS		E			D			D			D	

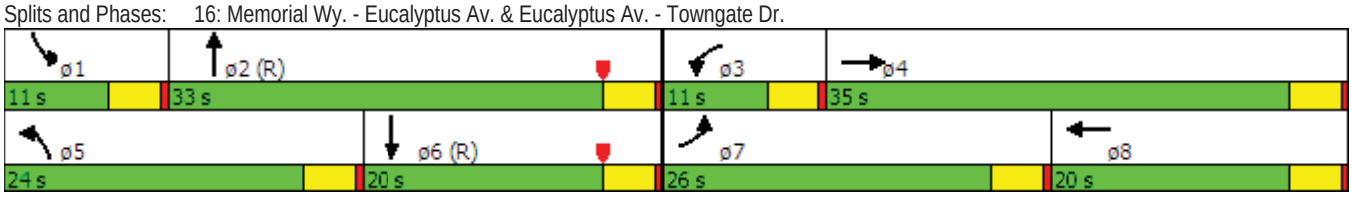
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.9	38.1		41.0	11.0	38.0		41.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	34.0		37.0	7.0	34.0		37.0
Max Q Clear Time (g_c+I1), s	7.4	36.1		39.0	7.8	36.0		39.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	53.7
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	450	648	599	27	494	63	400	276	21	55	282	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		0	150		0	200		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	26.0	35.0		11.0	20.0		24.0	33.0		11.0	20.0	
Total Split (%)	28.9%	38.9%		12.2%	22.2%		26.7%	36.7%		12.2%	22.2%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	450	648	599	27	494	63	400	276	21	55	282	304
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	479	689	637	29	526	67	426	294	22	59	300	323
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	434	1198	560	71	683	86	394	1231	92	106	365	327
Arrive On Green	0.24	0.35	0.35	0.04	0.15	0.15	0.22	0.37	0.37	0.06	0.21	0.21
Sat Flow, veh/h	1774	3390	1583	1774	4577	575	1774	3340	249	1774	1770	1583
Grp Volume(v), veh/h	479	689	637	29	388	205	426	155	161	59	300	323
Grp Sat Flow(s),veh/h/ln	1774	1695	1583	1774	1695	1761	1774	1770	1819	1774	1770	1583
Q Serve(g_s), s	22.0	14.8	31.8	1.4	9.9	10.1	20.0	5.5	5.5	2.9	14.6	18.3
Cycle Q Clear(g_c), s	22.0	14.8	31.8	1.4	9.9	10.1	20.0	5.5	5.5	2.9	14.6	18.3
Prop In Lane	1.00		1.00	1.00		0.33	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	434	1198	560	71	506	263	394	652	671	106	365	327
V/C Ratio(X)	1.10	0.57	1.14	0.41	0.77	0.78	1.08	0.24	0.24	0.55	0.82	0.99
Avail Cap(c_a), veh/h	434	1198	560	138	603	313	394	652	671	138	365	327
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	23.6	29.1	42.2	36.8	36.9	35.0	19.7	19.7	41.1	34.1	35.6
Incr Delay (d2), s/veh	74.7	0.7	82.2	3.7	4.9	10.2	68.6	0.9	0.8	4.4	18.4	46.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.7	7.0	26.6	0.8	5.0	5.7	17.3	2.8	2.9	1.6	9.0	12.2
LnGrp Delay(d),s/veh	108.7	24.3	111.3	45.9	41.7	47.1	103.6	20.5	20.5	45.6	52.6	82.5
LnGrp LOS	F	C	F	D	D	D	F	C	C	D	D	F
Approach Vol, veh/h		1805			622			742			682	
Approach Delay, s/veh		77.4			43.7			68.2			66.1	
Approach LOS		E			D			E			E	

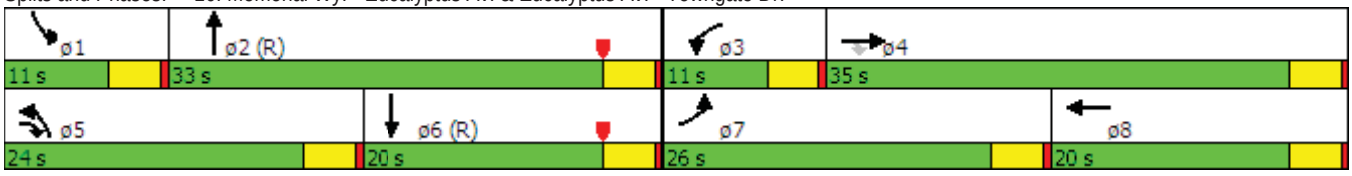
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	37.2	7.6	35.8	24.0	22.6	26.0	17.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	29.0	7.0	31.0	20.0	16.0	22.0	16.0
Max Q Clear Time (g_c+I1), s	4.9	7.5	3.4	33.8	22.0	20.3	24.0	12.1
Green Ext Time (p_c), s	0.0	5.6	0.0	0.0	0.0	0.0	0.0	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	68.2
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	450	648	599	27	494	63	400	276	21	55	282	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		0	150		0	200		0	200		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4									
Detector Phase	7	4	5	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0	11.0	11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	26.0	35.0	24.0	11.0	20.0		24.0	33.0		11.0	20.0	
Total Split (%)	28.9%	38.9%	26.7%	12.2%	22.2%		26.7%	36.7%		12.2%	22.2%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	450	648	599	27	494	63	400	276	21	55	282	304
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	479	689	637	29	526	67	426	294	22	59	300	323
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	434	1249	911	71	680	85	394	1233	92	106	366	328
Arrive On Green	0.24	0.35	0.35	0.04	0.15	0.15	0.22	0.37	0.37	0.06	0.21	0.21
Sat Flow, veh/h	1774	3539	1583	1774	4577	575	1774	3340	249	1774	1770	1583
Grp Volume(v), veh/h	479	689	637	29	388	205	426	155	161	59	300	323
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1695	1761	1774	1770	1819	1774	1770	1583
Q Serve(g_s), s	22.0	14.1	25.7	1.4	9.9	10.1	20.0	5.4	5.5	2.9	14.6	18.3
Cycle Q Clear(g_c), s	22.0	14.1	25.7	1.4	9.9	10.1	20.0	5.4	5.5	2.9	14.6	18.3
Prop In Lane	1.00		1.00	1.00		0.33	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	434	1249	911	71	504	262	394	653	672	106	366	328
V/C Ratio(X)	1.10	0.55	0.70	0.41	0.77	0.78	1.08	0.24	0.24	0.55	0.82	0.99
Avail Cap(c_a), veh/h	434	1249	911	138	603	313	394	653	672	138	366	328
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	23.4	13.6	42.2	36.8	36.9	35.0	19.6	19.6	41.1	34.1	35.5
Incr Delay (d2), s/veh	74.7	0.5	2.4	3.7	5.0	10.4	68.6	0.9	0.8	4.4	18.2	46.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.7	7.0	11.8	0.8	5.0	5.7	17.3	2.8	2.9	1.6	8.9	12.2
LnGrp Delay(d),s/veh	108.7	23.9	16.0	45.9	41.9	47.4	103.6	20.5	20.5	45.6	52.2	81.7
LnGrp LOS	F	C	B	D	D	D	F	C	C	D	D	F
Approach Vol, veh/h		1805			622			742			682	
Approach Delay, s/veh		43.6			43.9			68.2			65.6	
Approach LOS		D			D			E			E	

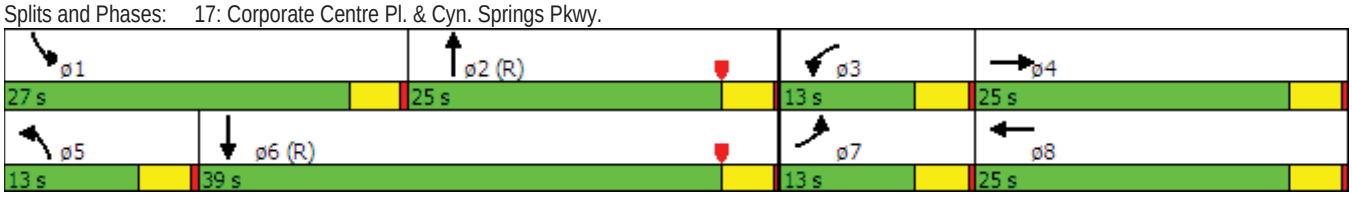
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	37.2	7.6	35.8	24.0	22.6	26.0	17.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	29.0	7.0	31.0	20.0	16.0	22.0	16.0
Max Q Clear Time (g_c+I1), s	4.9	7.5	3.4	27.7	22.0	20.3	24.0	12.1
Green Ext Time (p_c), s	0.0	5.6	0.0	2.6	0.0	0.0	0.0	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	52.3
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	418	32	46	470	102	27	47	57	172	58	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	175		0	130		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			90			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		476			1120			987			205	
Travel Time (s)		8.1			19.1			16.8			4.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	13.0	25.0		13.0	25.0		13.0	25.0		27.0	39.0	
Total Split (%)	14.4%	27.8%		14.4%	27.8%		14.4%	27.8%		30.0%	43.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 64 (71%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 17: Corporate Centre Pl. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	46	418	32	46	470	102	27	47	57	172	58	37
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	48	440	34	48	495	107	28	49	60	181	61	39
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	891	68	96	778	164	69	812	726	221	578	370
Arrive On Green	0.05	0.18	0.18	0.02	0.06	0.06	0.04	0.46	0.46	0.12	0.54	0.54
Sat Flow, veh/h	1774	4820	368	1774	4208	888	1774	1770	1583	1774	1063	680
Grp Volume(v), veh/h	48	308	166	48	397	205	28	49	60	181	0	100
Grp Sat Flow(s),veh/h/ln	1774	1695	1798	1774	1695	1706	1774	1770	1583	1774	0	1743
Q Serve(g_s), s	2.4	7.3	7.5	2.4	10.3	10.6	1.4	1.4	1.9	9.0	0.0	2.5
Cycle Q Clear(g_c), s	2.4	7.3	7.5	2.4	10.3	10.6	1.4	1.4	1.9	9.0	0.0	2.5
Prop In Lane	1.00		0.20	1.00		0.52	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	96	627	332	96	627	315	69	812	726	221	0	948
V/C Ratio(X)	0.50	0.49	0.50	0.50	0.63	0.65	0.40	0.06	0.08	0.82	0.00	0.11
Avail Cap(c_a), veh/h	177	791	419	177	791	398	177	812	726	453	0	948
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.87	0.87	0.87	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.4	32.9	32.9	43.0	39.3	39.4	42.2	13.6	13.7	38.4	0.0	9.9
Incr Delay (d2), s/veh	3.9	0.6	1.2	3.4	0.9	2.2	3.7	0.1	0.2	7.3	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	3.5	3.8	1.3	4.9	5.2	0.7	0.7	0.9	4.8	0.0	1.3
LnGrp Delay(d),s/veh	45.3	33.5	34.1	46.4	40.2	41.6	45.9	13.7	13.9	45.8	0.0	10.2
LnGrp LOS	D	C	C	D	D	D	D	B	B	D		B
Approach Vol, veh/h		522			650			137			281	
Approach Delay, s/veh		34.8			41.1			20.4			33.1	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	45.3	8.9	20.6	7.5	53.0	8.9	20.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	21.0	9.0	21.0	9.0	35.0	9.0	21.0
Max Q Clear Time (g_c+I1), s	11.0	3.9	4.4	9.5	3.4	4.5	4.4	12.6
Green Ext Time (p_c), s	0.4	1.0	0.0	5.0	0.0	1.2	0.0	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.8
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	177	20	74	150	60	9	78	75	45	89	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	170		0	100		0	130		0	135		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			45			60			60		
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		474			710			623			987	
Travel Time (s)		8.1			12.1			10.6			16.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	23	177	20	0	74	150	60	0	9	78	75
Peak Hour Factor	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	25	190	22	0	80	161	65	0	10	84	81
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	3
HCM Control Delay	10.4	10.2	10.1
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	26%	0%	100%	75%	0%	100%	45%	0%	100%
Vol Right, %	0%	0%	74%	0%	0%	25%	0%	0%	55%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	9	52	101	23	118	79	74	100	110	45	59
LT Vol	9	0	0	23	0	0	74	0	0	45	0
Through Vol	0	52	26	0	118	59	0	100	50	0	59
RT Vol	0	0	75	0	0	20	0	0	60	0	0
Lane Flow Rate	10	56	109	25	127	85	80	108	118	48	64
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.019	0.102	0.182	0.047	0.222	0.145	0.148	0.185	0.191	0.094	0.116
Departure Headway (Hd)	7.036	6.536	6.017	6.81	6.31	6.133	6.683	6.183	5.801	7.019	6.519
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	508	547	595	525	568	584	536	580	617	510	549
Service Time	4.786	4.286	3.767	4.559	4.059	3.882	4.428	3.928	3.546	4.771	4.271
HCM Lane V/C Ratio	0.02	0.102	0.183	0.048	0.224	0.146	0.149	0.186	0.191	0.094	0.117
HCM Control Delay	9.9	10	10.1	9.9	10.9	9.9	10.6	10.3	9.9	10.5	10.1
HCM Lane LOS	A	A	B	A	B	A	B	B	A	B	B
HCM 95th-tile Q	0.1	0.3	0.7	0.1	0.8	0.5	0.5	0.7	0.7	0.3	0.4

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	45	89	29
Peak Hour Factor	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	48	96	31
Number of Lanes	0	1	2	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	10.1
HCM LOS	B

Lane	SBLn3

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	155	0	0	185	3	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	50		0	0
Storage Lanes		0	0		1	1
Taper Length (ft)			40		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	135			597	203	
Travel Time (s)	2.3			10.2	4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	155	0	0	185	3	8
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	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	168	0	0	201	3	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	168	0	269	84
Stage 1	-	-	-	-	168	-
Stage 2	-	-	-	-	101	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1407	-	698	958
Stage 1	-	-	-	-	844	-
Stage 2	-	-	-	-	912	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1407	-	698	958
Mov Cap-2 Maneuver	-	-	-	-	716	-
Stage 1	-	-	-	-	844	-
Stage 2	-	-	-	-	912	-

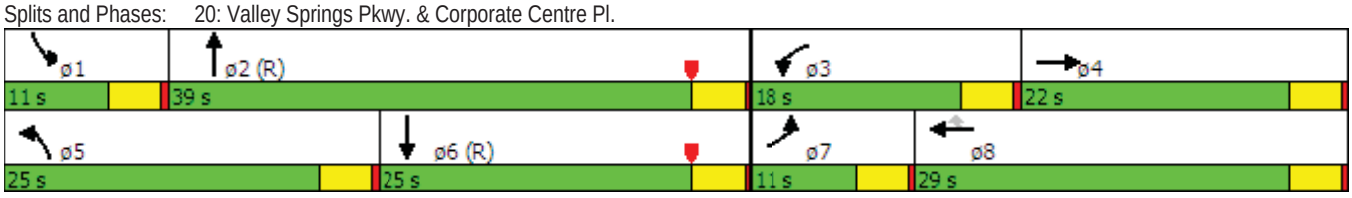
Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	716	958	-	-	1407	-
HCM Lane V/C Ratio	0.005	0.009	-	-	-	-
HCM Control Delay (s)	10.1	8.8	-	-	0	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0	0	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	44	114	112	60	5	191	598	72	42	560	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		70	140		50	150		0	120		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			40			40			40	
Link Distance (ft)		327			603			402			804	
Travel Time (s)		7.4			10.3			6.9			13.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	11.0	22.0		18.0	29.0	29.0	25.0	39.0		11.0	25.0	
Total Split (%)	12.2%	24.4%		20.0%	32.2%	32.2%	27.8%	43.3%		12.2%	27.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 11 (12%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Valley Springs Pkwy. & Corporate Centre Pl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	34	44	114	112	60	5	191	598	72	42	560	32
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	35	45	118	115	62	5	197	616	74	43	577	33
Adj No. of Lanes	1	1	0	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	80	57	150	146	576	258	240	2595	308	91	2359	134
Arrive On Green	0.05	0.13	0.13	0.08	0.16	0.16	0.04	0.19	0.19	0.05	0.48	0.48
Sat Flow, veh/h	1774	456	1196	1774	3539	1583	1774	4609	548	1774	4924	280
Grp Volume(v), veh/h	35	0	163	115	62	5	197	451	239	43	396	214
Grp Sat Flow(s),veh/h/ln	1774	0	1652	1774	1770	1583	1774	1695	1766	1774	1695	1813
Q Serve(g_s), s	1.7	0.0	8.6	5.7	1.3	0.2	9.9	10.2	10.4	2.1	6.2	6.3
Cycle Q Clear(g_c), s	1.7	0.0	8.6	5.7	1.3	0.2	9.9	10.2	10.4	2.1	6.2	6.3
Prop In Lane	1.00		0.72	1.00		1.00	1.00		0.31	1.00		0.15
Lane Grp Cap(c), veh/h	80	0	208	146	576	258	240	1909	994	91	1624	869
V/C Ratio(X)	0.43	0.00	0.78	0.79	0.11	0.02	0.82	0.24	0.24	0.47	0.24	0.25
Avail Cap(c_a), veh/h	138	0	330	276	983	440	414	1909	994	138	1624	869
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.8	0.0	38.2	40.5	32.1	31.7	41.9	20.2	20.2	41.5	13.8	13.8
Incr Delay (d2), s/veh	3.7	0.0	6.4	9.0	0.1	0.0	6.9	0.3	0.6	3.8	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	4.3	3.2	0.7	0.1	5.3	4.9	5.2	1.1	2.9	3.3
LnGrp Delay(d),s/veh	45.5	0.0	44.6	49.6	32.2	31.7	48.8	20.5	20.8	45.3	14.2	14.5
LnGrp LOS	D		D	D	C	C	D	C	C	D	B	B
Approach Vol, veh/h		198			182			887			653	
Approach Delay, s/veh		44.7			43.2			26.8			16.3	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	54.7	11.4	15.3	16.2	47.1	8.1	18.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	35.0	14.0	18.0	21.0	21.0	7.0	25.0
Max Q Clear Time (g_c+I1), s	4.1	12.4	7.7	10.6	11.9	8.3	3.7	3.3
Green Ext Time (p_c), s	0.0	8.5	0.1	0.7	0.3	6.3	0.0	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	26.7
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	0	32	13	0	4	19	845	14	4	766	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	25		0	75		50
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	60			60			10			80		
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		252			253			418			402	
Travel Time (s)		5.7			5.8			7.1			6.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	11	0	32	13	0	4	19	845	14	4	766	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	0	33	13	0	4	19	862	14	4	782	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1182	1713	399	1229	1714	438	798	0	0	877	0	0
Stage 1	798	798	-	908	908	-	-	-	-	-	-	-
Stage 2	384	915	-	321	806	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	200	89	513	187	89	484	489	-	-	449	-	-
Stage 1	275	396	-	231	352	-	-	-	-	-	-	-
Stage 2	559	350	-	610	393	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	186	82	513	164	82	484	489	-	-	449	-	-
Mov Cap-2 Maneuver	186	82	-	164	82	-	-	-	-	-	-	-
Stage 1	254	392	-	213	325	-	-	-	-	-	-	-
Stage 2	512	323	-	566	389	-	-	-	-	-	-	-

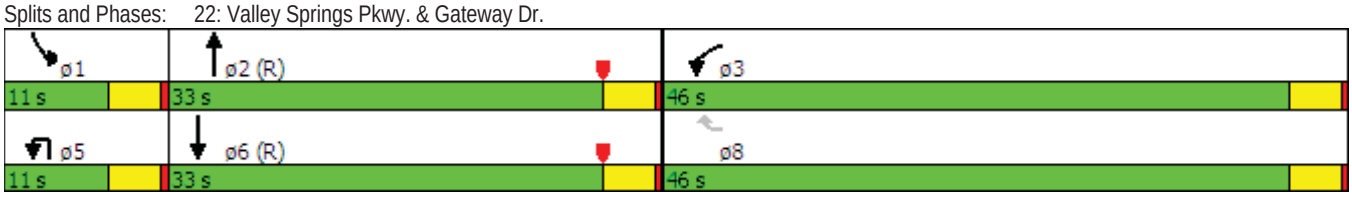
Approach	EB	WB	NB	SB
HCM Control Delay, s	16.6	25.4	0.6	0.1
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	489	-	-	354	194	449	-	-
HCM Lane V/C Ratio	0.04	-	-	0.124	0.089	0.009	-	-
HCM Control Delay (s)	12.7	0.3	-	16.6	25.4	13.1	-	-
HCM Lane LOS	B	A	-	C	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.3	0	-	-

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (vph)	527	91	0	787	215	48	764
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	180		0	115	
Storage Lanes	1	1	1		0	1	
Taper Length (ft)	60		100			120	
Right Turn on Red		Yes			Yes		
Link Speed (mph)	40			40			40
Link Distance (ft)	609			576			418
Travel Time (s)	10.4			9.8			7.1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Shared Lane Traffic (%)							
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	3		5	2		1	6
Permitted Phases		8					
Detector Phase	3	8	5	2		1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	11.0	20.0	11.0	20.0		11.0	20.0
Total Split (s)	46.0	46.0	11.0	33.0		11.0	33.0
Total Split (%)	51.1%	51.1%	12.2%	36.7%		12.2%	36.7%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead	Lag		Lead	Lag
Lead-Lag Optimize?			Yes	Yes		Yes	Yes
Recall Mode	None	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 66 (73%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 22: Valley Springs Pkwy. & Gateway Dr.



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	527	91	0	787	215	48	764
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1900	1863	1863
Adj Flow Rate, veh/h	599	103		894	244	55	868
Adj No. of Lanes	1	1		3	0	1	3
Peak Hour Factor	0.88	0.88		0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	650	580		1760	478	103	2771
Arrive On Green	0.37	0.37		0.30	0.30	0.08	0.72
Sat Flow, veh/h	1774	1583		4148	1082	1774	5253
Grp Volume(v), veh/h	599	103		761	377	55	868
Grp Sat Flow(s),veh/h/ln	1774	1583		1695	1672	1774	1695
Q Serve(g_s), s	29.1	4.0		16.7	16.8	2.7	5.5
Cycle Q Clear(g_c), s	29.1	4.0		16.7	16.8	2.7	5.5
Prop In Lane	1.00	1.00			0.65	1.00	
Lane Grp Cap(c), veh/h	650	580		1499	739	103	2771
V/C Ratio(X)	0.92	0.18		0.51	0.51	0.53	0.31
Avail Cap(c_a), veh/h	828	739		1499	739	138	2771
HCM Platoon Ratio	1.00	1.00		0.67	0.67	1.33	1.33
Upstream Filter(I)	1.00	1.00		0.89	0.89	1.00	1.00
Uniform Delay (d), s/veh	27.3	19.3		23.5	23.6	40.3	6.4
Incr Delay (d2), s/veh	13.4	0.1		1.1	2.2	4.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.6	1.7		8.0	8.2	1.4	2.6
LnGrp Delay(d),s/veh	40.7	19.5		24.6	25.8	44.6	6.7
LnGrp LOS	D	B		C	C	D	A
Approach Vol, veh/h	702			1138			923
Approach Delay, s/veh	37.6			25.0			8.9
Approach LOS	D			C			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.2	43.8				53.0		37.0
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	7.0	29.0				29.0		42.0
Max Q Clear Time (g_c+I1), s	4.7	18.8				7.5		31.1
Green Ext Time (p_c), s	0.0	7.8				13.7		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	22.8
HCM 2010 LOS	C

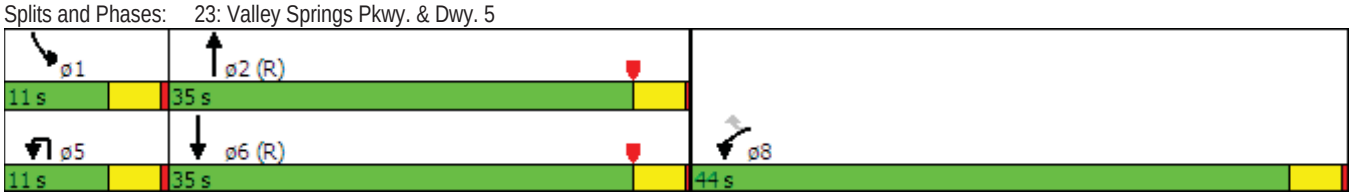
Notes

User approved ignoring U-Turning movement.

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (vph)	446	57	0	945	185	24	1266
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	195		100	150	
Storage Lanes	1	1	1		0	1	
Taper Length (ft)	60		100			80	
Right Turn on Red		Yes			Yes		
Link Speed (mph)	30			40			40
Link Distance (ft)	400			560			576
Travel Time (s)	9.1			9.5			9.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)							
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	8		5	2		1	6
Permitted Phases		8					
Detector Phase	8	8	5	2		1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	20.0	20.0	11.0	20.0		11.0	20.0
Total Split (s)	44.0	44.0	11.0	35.0		11.0	35.0
Total Split (%)	48.9%	48.9%	12.2%	38.9%		12.2%	38.9%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead	Lag		Lead	Lag
Lead-Lag Optimize?			Yes	Yes		Yes	Yes
Recall Mode	None	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 5 (6%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 23: Valley Springs Pkwy. & Dwy. 5



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	446	57	0	945	185	24	1266
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1900	1863	1863
Adj Flow Rate, veh/h	485	62		1027	201	26	1376
Adj No. of Lanes	1	1		3	0	1	3
Peak Hour Factor	0.92	0.92		0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	537	479		2251	440	66	3095
Arrive On Green	0.30	0.30		0.53	0.53	0.04	0.61
Sat Flow, veh/h	1774	1583		4439	835	1774	5253
Grp Volume(v), veh/h	485	62		815	413	26	1376
Grp Sat Flow(s),veh/h/ln	1774	1583		1695	1715	1774	1695
Q Serve(g_s), s	23.6	2.6		13.5	13.5	1.3	13.1
Cycle Q Clear(g_c), s	23.6	2.6		13.5	13.5	1.3	13.1
Prop In Lane	1.00	1.00			0.49	1.00	
Lane Grp Cap(c), veh/h	537	479		1787	904	66	3095
V/C Ratio(X)	0.90	0.13		0.46	0.46	0.39	0.44
Avail Cap(c_a), veh/h	788	704		1787	904	138	3095
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		0.16	0.16	0.82	0.82
Uniform Delay (d), s/veh	30.1	22.8		13.3	13.3	42.3	9.4
Incr Delay (d2), s/veh	10.1	0.1		0.1	0.3	3.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.1	1.1		6.3	6.4	0.7	6.2
LnGrp Delay(d),s/veh	40.3	22.9		13.4	13.5	45.5	9.8
LnGrp LOS	D	C		B	B	D	A
Approach Vol, veh/h	547			1228			1402
Approach Delay, s/veh	38.3			13.4			10.5
Approach LOS	D			B			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.3	51.4				58.8		31.2
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	7.0	31.0				31.0		40.0
Max Q Clear Time (g_c+I1), s	3.3	15.5				15.1		25.6
Green Ext Time (p_c), s	0.0	13.0				13.3		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	16.4
HCM 2010 LOS	B

Notes

User approved ignoring U-Turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	274	4	3	500	27	9	1	7	20	1	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		609			244			257			287	
Travel Time (s)		10.4			4.2			5.8			6.5	
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	10	274	4	3	500	27	9	1	7	20	1	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	74	74	74	74	74	74	74	74	74	74	74	74
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	370	5	4	676	36	12	1	9	27	1	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	712	0	0	376	0	0	747	1120	188	915	1105	356
Stage 1	-	-	-	-	-	-	400	400	-	702	702	-
Stage 2	-	-	-	-	-	-	347	720	-	213	403	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	884	-	-	1179	-	-	301	205	822	228	209	640
Stage 1	-	-	-	-	-	-	597	600	-	395	439	-
Stage 2	-	-	-	-	-	-	642	430	-	769	598	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	884	-	-	1179	-	-	281	201	822	221	205	640
Mov Cap-2 Maneuver	-	-	-	-	-	-	281	201	-	221	205	-
Stage 1	-	-	-	-	-	-	588	590	-	389	438	-
Stage 2	-	-	-	-	-	-	608	429	-	746	589	-

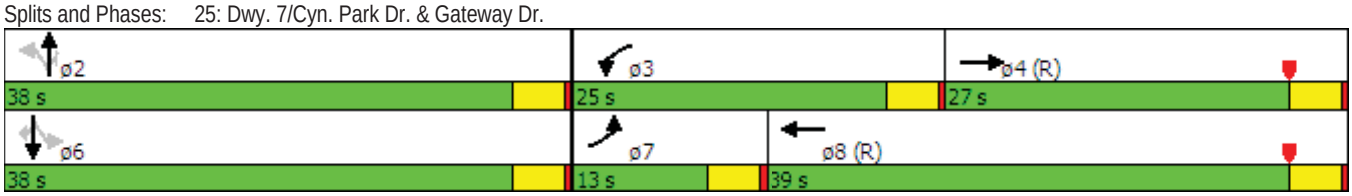
Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0	15.3	18.2
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	373	884	-	-	1179	-	-	331
HCM Lane V/C Ratio	0.062	0.015	-	-	0.003	-	-	0.176
HCM Control Delay (s)	15.3	9.1	-	-	8.1	-	-	18.2
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	367	9	88	277	45	23	46	212	46	20	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	150		0	100		0	150		0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		428			394			265			189	
Travel Time (s)		7.3			6.7			6.0			3.2	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0		11.0	20.0		20.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	13.0	27.0		25.0	39.0		38.0	38.0	38.0	38.0	38.0	38.0
Total Split (%)	14.4%	30.0%		27.8%	43.3%		42.2%	42.2%	42.2%	42.2%	42.2%	42.2%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		Max	Max	Max	Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 25: Dwy. 7/Cyn. Park Dr. & Gateway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	36	367	9	88	277	45	23	46	212	46	20	158
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	43	442	11	106	334	54	28	55	255	55	24	190
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	91	1453	36	137	1338	214	510	704	598	462	704	598
Arrive On Green	0.05	0.41	0.41	0.08	0.44	0.44	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1774	3529	88	1774	3057	489	1163	1863	1583	1065	1863	1583
Grp Volume(v), veh/h	43	221	232	106	192	196	28	55	255	55	24	190
Grp Sat Flow(s),veh/h/ln	1774	1770	1847	1774	1770	1776	1163	1863	1583	1065	1863	1583
Q Serve(g_s), s	2.1	7.6	7.6	5.3	6.2	6.3	1.4	1.7	10.8	3.1	0.7	7.6
Cycle Q Clear(g_c), s	2.1	7.6	7.6	5.3	6.2	6.3	2.1	1.7	10.8	4.8	0.7	7.6
Prop In Lane	1.00		0.05	1.00		0.28	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	91	729	761	137	774	777	510	704	598	462	704	598
V/C Ratio(X)	0.47	0.30	0.30	0.78	0.25	0.25	0.05	0.08	0.43	0.12	0.03	0.32
Avail Cap(c_a), veh/h	177	729	761	414	774	777	510	704	598	462	704	598
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	17.8	17.8	40.8	16.0	16.0	18.3	18.0	20.8	19.5	17.6	19.8
Incr Delay (d2), s/veh	3.8	1.1	1.0	9.0	0.8	0.8	0.2	0.2	2.2	0.5	0.1	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.9	4.1	2.9	3.2	3.2	0.5	0.9	5.0	1.0	0.4	3.6
LnGrp Delay(d),s/veh	45.3	18.9	18.8	49.8	16.7	16.8	18.5	18.2	23.0	20.0	17.7	21.2
LnGrp LOS	D	B	B	D	B	B	B	B	C	C	B	C
Approach Vol, veh/h		496			494			338			269	
Approach Delay, s/veh		21.1			23.8			21.8			20.6	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		38.0	10.9	41.1		38.0	8.6	43.4
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		34.0	21.0	23.0		34.0	9.0	35.0
Max Q Clear Time (g_c+I1), s		12.8	7.3	9.6		9.6	4.1	8.3
Green Ext Time (p_c), s		2.2	0.2	3.9		2.3	0.0	5.0

Intersection Summary	
HCM 2010 Ctrl Delay	22.0
HCM 2010 LOS	C

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	1	657	371	1	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	25			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	0				60	
Link Speed (mph)		40	40		30	
Link Distance (ft)		394	226		243	
Travel Time (s)		6.7	3.9		5.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	1	657	371	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	25	-	-	-	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	1	714	403	1	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	404	0	-	0	763	202
Stage 1	-	-	-	-	404	-
Stage 2	-	-	-	-	359	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1151	-	-	-	341	805
Stage 1	-	-	-	-	643	-
Stage 2	-	-	-	-	677	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1151	-	-	-	341	805
Mov Cap-2 Maneuver	-	-	-	-	456	-
Stage 1	-	-	-	-	643	-
Stage 2	-	-	-	-	676	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1151	-	-	-	582
HCM Lane V/C Ratio	0.001	-	-	-	0.004
HCM Control Delay (s)	8.1	-	-	-	11.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	650	5	17	364	17	5	0	50	16	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	25		0	25		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	1			0			60			60		
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		226			318			265			243	
Travel Time (s)		3.9			5.4			6.0			5.5	
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
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	650	5	17	364	17	5	0	50	16	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	677	5	18	379	18	5	0	52	17	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	397	0	0	682	0	0	911	1118	341	768	1112	198
Stage 1	-	-	-	-	-	-	686	686	-	423	423	-
Stage 2	-	-	-	-	-	-	225	432	-	345	689	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1158	-	-	907	-	-	229	206	655	291	207	810
Stage 1	-	-	-	-	-	-	404	446	-	579	586	-
Stage 2	-	-	-	-	-	-	757	581	-	644	445	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1158	-	-	907	-	-	224	201	655	263	202	810
Mov Cap-2 Maneuver	-	-	-	-	-	-	224	201	-	263	202	-
Stage 1	-	-	-	-	-	-	403	445	-	578	574	-
Stage 2	-	-	-	-	-	-	739	569	-	591	444	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	12.2	18.1
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	557	1158	-	-	907	-	-	294
HCM Lane V/C Ratio	0.103	0.003	-	-	0.02	-	-	0.067
HCM Control Delay (s)	12.2	8.1	-	-	9	-	-	18.1
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	238	42	103	220	46	48	40	52	35	38	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		50	110		100	100		50	0		50
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		710			938			284			207	
Travel Time (s)		12.1			16.0			4.8			4.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.6
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	16	238	42	0	103	220	46	0	48	40	52
Peak Hour Factor	0.92	0.98	0.98	0.98	0.92	0.98	0.98	0.98	0.92	0.98	0.98	0.98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	16	243	43	0	105	224	47	0	49	41	53
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	2	3
HCM Control Delay	10.9	10.6	10.1
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	48%	0%
Vol Thru, %	0%	100%	20%	0%	100%	65%	0%	100%	61%	52%	0%
Vol Right, %	0%	0%	80%	0%	0%	35%	0%	0%	39%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	48	27	65	16	159	121	103	147	119	73	16
LT Vol	48	0	0	16	0	0	103	0	0	35	0
Through Vol	0	27	13	0	159	79	0	147	73	38	0
RT Vol	0	0	52	0	0	42	0	0	46	0	16
Lane Flow Rate	49	27	67	16	162	124	105	150	122	74	16
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.098	0.051	0.114	0.03	0.279	0.205	0.192	0.252	0.196	0.145	0.028
Departure Headway (Hd)	7.204	6.703	6.145	6.71	6.207	5.963	6.567	6.064	5.792	7.012	6.073
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	497	533	582	533	578	600	547	591	619	510	588
Service Time	4.956	4.455	3.896	4.456	3.953	3.71	4.31	3.807	3.535	4.766	3.826
HCM Lane V/C Ratio	0.099	0.051	0.115	0.03	0.28	0.207	0.192	0.254	0.197	0.145	0.027
HCM Control Delay	10.7	9.8	9.7	9.7	11.4	10.3	10.9	10.9	10	11	9
HCM Lane LOS	B	A	A	A	B	B	B	B	A	B	A
HCM 95th-tile Q	0.3	0.2	0.4	0.1	1.1	0.8	0.7	1	0.7	0.5	0.1

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	35	38	16
Peak Hour Factor	0.92	0.98	0.98	0.98
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	36	39	16
Number of Lanes	0	0	1	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	10.6
HCM LOS	B

Lane

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	2	4	126	0	0	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	50	
Storage Lanes	1	0		0	0	
Taper Length (ft)	60				25	
Link Speed (mph)	30		40			40
Link Distance (ft)	223		216			336
Travel Time (s)	5.1		3.7			5.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	2	4	126	0	0	226
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	2	4	137	0	0	246

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	260	68	0	0	137	0
Stage 1	137	-	-	-	-	-
Stage 2	123	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	707	981	-	-	1445	-
Stage 1	875	-	-	-	-	-
Stage 2	889	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	707	981	-	-	1445	-
Mov Cap-2 Maneuver	725	-	-	-	-	-
Stage 1	875	-	-	-	-	-
Stage 2	889	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	878	1445	-
HCM Lane V/C Ratio	-	-	0.007	-	-
HCM Control Delay (s)	-	-	9.1	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	2	9	127	2	10	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	25	
Storage Lanes	1	0		0	1	
Taper Length (ft)	60				60	
Link Speed (mph)	30		40			40
Link Distance (ft)	223		336			284
Travel Time (s)	5.1		5.7			4.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	2	9	127	2	10	224
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	-	-	-	25	-
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	2	10	138	2	11	243

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	282	70	0	0	140	0
Stage 1	139	-	-	-	-	-
Stage 2	143	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	685	978	-	-	1441	-
Stage 1	873	-	-	-	-	-
Stage 2	869	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	680	978	-	-	1441	-
Mov Cap-2 Maneuver	706	-	-	-	-	-
Stage 1	873	-	-	-	-	-
Stage 2	862	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	914	1441	-
HCM Lane V/C Ratio	-	-	0.013	0.008	-
HCM Control Delay (s)	-	-	9	7.5	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	0	0	126	2	4	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	25	
Storage Lanes	1	0		0	1	
Taper Length (ft)	60				25	
Link Speed (mph)	30		40			40
Link Distance (ft)	219		189			216
Travel Time (s)	5.0		3.2			3.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	0	126	2	4	224
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	-	-	-	25	-
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	137	2	4	243

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	268	70	0	0	139	0
Stage 1	138	-	-	-	-	-
Stage 2	130	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	699	978	-	-	1442	-
Stage 1	874	-	-	-	-	-
Stage 2	882	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	697	978	-	-	1442	-
Mov Cap-2 Maneuver	718	-	-	-	-	-
Stage 1	874	-	-	-	-	-
Stage 2	880	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1442	-
HCM Lane V/C Ratio	-	-	-	0.003	-
HCM Control Delay (s)	-	-	0	7.5	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	241	60	71	385	145	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	50		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			60		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	244			428	257	
Travel Time (s)	4.2			7.3	5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	5.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	241	60	71	385	145	171
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	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	262	65	77	418	158	186

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	327	0	659	164
Stage 1	-	-	-	-	295	-
Stage 2	-	-	-	-	364	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1229	-	397	852
Stage 1	-	-	-	-	730	-
Stage 2	-	-	-	-	673	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1229	-	372	852
Mov Cap-2 Maneuver	-	-	-	-	477	-
Stage 1	-	-	-	-	730	-
Stage 2	-	-	-	-	631	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	17.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	626	-	-	1229	-
HCM Lane V/C Ratio	0.549	-	-	0.063	-
HCM Control Delay (s)	17.5	-	-	8.1	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	3.3	-	-	0.2	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	155	3	9	179	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	25		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	493			135	181	
Travel Time (s)	8.4			2.3	4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	155	3	9	179	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	-	-	25	-	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	168	3	10	195	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	172	0	287	86
Stage 1	-	-	-	-	170	-
Stage 2	-	-	-	-	117	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1402	-	680	956
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	895	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1402	-	675	956
Mov Cap-2 Maneuver	-	-	-	-	702	-
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	889	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1402	-
HCM Lane V/C Ratio	-	-	-	0.007	-
HCM Control Delay (s)	0	-	-	7.6	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection: 2: Box Springs Bl. & Eastridge Av.

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	TR	L	T	R	L	T
Maximum Queue (ft)	134	260	162	29	102	260	407	52	128	38	137	112
Average Queue (ft)	77	167	101	8	44	161	273	19	78	22	107	49
95th Queue (ft)	156	279	167	29	115	355	505	66	140	48	158	130
Link Distance (ft)		672	672			620	620		216			322
Upstream Blk Time (%)							0					
Queuing Penalty (veh)							1					
Storage Bay Dist (ft)	90			80	150			75		160	90	
Storage Blk Time (%)	3	22	12			6			21		31	2
Queuing Penalty (veh)	11	14	2			4			15		12	3

Intersection: 2: Box Springs Bl. & Eastridge Av.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	18
Average Queue (ft)	5
95th Queue (ft)	22
Link Distance (ft)	322
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: I-215 SB/NB Ramps & Eastridge Av.

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	
Directions Served	L	T	T	L	L	T	T	L	L	L	L	
Maximum Queue (ft)	110	163	138	192	212	244	277	313	334	339	269	
Average Queue (ft)	63	142	102	129	151	158	200	219	244	254	192	
95th Queue (ft)	121	196	149	213	234	282	309	352	376	396	372	
Link Distance (ft)	114	114	114	233	233	233	233	718	718	602	602	
Upstream Blk Time (%)	2	26	7	0	1	1	4					
Queuing Penalty (veh)	6	68	17	0	3	6	19					
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 4: Valley Springs Pkwy. & Eucalyptus Av.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	L	T
Maximum Queue (ft)	367	477	494	112	26	65	448	473	49	194	246	626
Average Queue (ft)	220	377	284	68	10	20	363	388	14	156	187	349
95th Queue (ft)	452	561	668	131	34	80	525	565	54	224	286	707
Link Distance (ft)			540	540			1982	1982				762
Upstream Blk Time (%)			15									3
Queuing Penalty (veh)			107									0
Storage Bay Dist (ft)	300	300			360	100			30	150	150	
Storage Blk Time (%)	6	38					49	56	3	11	22	3
Queuing Penalty (veh)	20	128					11	55	22	24	47	11

Intersection: 4: Valley Springs Pkwy. & Eucalyptus Av.

Movement	NB	SB	SB	SB	SB
Directions Served	TR	L	T	R	R
Maximum Queue (ft)	656	64	55	219	24
Average Queue (ft)	487	28	30	125	5
95th Queue (ft)	781	66	64	254	45
Link Distance (ft)	762		450	450	450
Upstream Blk Time (%)	4				
Queuing Penalty (veh)	0				
Storage Bay Dist (ft)		140			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 5: Day St. & SR-60 WB Ramps

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	T	R	L	T	T
Maximum Queue (ft)	203	212	64	82	91	75	111	108	126
Average Queue (ft)	158	152	37	46	57	42	74	71	74
95th Queue (ft)	243	230	74	97	104	88	120	121	139
Link Distance (ft)	227	227	227	877	877			755	755
Upstream Blk Time (%)	1	1							
Queuing Penalty (veh)	4	2							
Storage Bay Dist (ft)						175	200		
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 6: Day St. & SR-60 EB Ramps

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	L	R	T	T	R	L	T	T	T
Maximum Queue (ft)	160	178	23	144	190	144	122	98	102	111
Average Queue (ft)	122	163	15	90	138	77	82	58	50	72
95th Queue (ft)	188	197	32	178	230	157	144	110	114	121
Link Distance (ft)	170	170	170	403	403	403		877	877	
Upstream Blk Time (%)	1	11								
Queuing Penalty (veh)	1	23								
Storage Bay Dist (ft)							425			105
Storage Blk Time (%)									1	1
Queuing Penalty (veh)									3	3

Intersection: 7: Day St. & Cyn. Springs Pkwy.

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	L	T	R	L	T	R	L	T	T	TR	L
Maximum Queue (ft)	152	237	42	36	50	59	51	67	46	70	119	176
Average Queue (ft)	76	159	16	17	29	30	38	45	22	41	61	116
95th Queue (ft)	168	249	44	36	68	75	64	79	52	82	118	197
Link Distance (ft)		981	981	981		340	340		608	608	608	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	180				145			165				170
Storage Blk Time (%)		14										2
Queuing Penalty (veh)		21										6

Intersection: 7: Day St. & Cyn. Springs Pkwy.

Movement	SB	SB	SB	SB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	100	112	150	68	52
Average Queue (ft)	67	72	98	43	32
95th Queue (ft)	109	124	152	81	56
Link Distance (ft)	403	403	403	403	403
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)	0				
Queuing Penalty (veh)	0				

Intersection: 8: Day St. & Campus Pkwy.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	R	L	T	T	R	L	L	T	T
Maximum Queue (ft)	18	49	35	29	44	70	16	42	51	69	68	88
Average Queue (ft)	4	28	18	18	19	38	4	29	20	40	30	52
95th Queue (ft)	18	57	45	36	49	84	18	52	64	79	74	97
Link Distance (ft)		816	816			445	445	445			915	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			50	200				130	130		
Storage Blk Time (%)			4	1								
Queuing Penalty (veh)			2	0								

Intersection: 8: Day St. & Campus Pkwy.

Movement	NB	NB	SB	SB	SB	SB	SB	SB
Directions Served	T	R	L	L	T	T	T	R
Maximum Queue (ft)	105	12	20	56	36	43	73	12
Average Queue (ft)	60	2	7	34	18	12	26	3
95th Queue (ft)	109	16	25	64	43	51	83	12
Link Distance (ft)	915				608	608	608	608
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		50	190	190				
Storage Blk Time (%)	9							
Queuing Penalty (veh)	3							

Intersection: 9: Day St. & Gateway Dr.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	TR	L	L
Maximum Queue (ft)	131	28	64	56	82	109	119	106	123	143	38	54
Average Queue (ft)	85	12	38	33	55	68	86	70	75	85	16	43
95th Queue (ft)	153	39	74	60	87	176	135	123	139	160	43	65
Link Distance (ft)		226	226		519	519		511	511			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			100			190			400	260	260
Storage Blk Time (%)					0							
Queuing Penalty (veh)					0							

Intersection: 9: Day St. & Gateway Dr.

Movement	SB	SB	SB
Directions Served	T	T	TR
Maximum Queue (ft)	160	186	302
Average Queue (ft)	105	100	227
95th Queue (ft)	177	206	356
Link Distance (ft)	915	915	915
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 10: Day St. & Dwy. 1

Movement	EB	NB	SB
Directions Served	LR	L	T
Maximum Queue (ft)	28	31	57
Average Queue (ft)	11	15	13
95th Queue (ft)	36	40	60
Link Distance (ft)	302		511
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		80	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 11: Day St. & Dwy. 2

Movement	EB	SB	SB	SB
Directions Served	R	T	T	TR
Maximum Queue (ft)	18	97	65	63
Average Queue (ft)	6	69	27	44
95th Queue (ft)	26	107	75	67
Link Distance (ft)	303	116	116	116
Upstream Blk Time (%)		0	0	
Queuing Penalty (veh)		0	0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 12: Day St. & Eucalyptus Av.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	T	T	R	L	T	T	R
Maximum Queue (ft)	163	200	205	96	250	396	388	44	177	258	223	166
Average Queue (ft)	119	117	131	52	212	321	316	29	150	175	154	102
95th Queue (ft)	191	219	248	129	307	444	437	56	201	273	240	190
Link Distance (ft)		1982	1982			1088	1088	1088		304		
Upstream Blk Time (%)										3		
Queuing Penalty (veh)										21		
Storage Bay Dist (ft)	100			50	175				100		100	100
Storage Blk Time (%)	22	11	32	0	8	37			30	26	29	2
Queuing Penalty (veh)	64	27	28	1	44	108			211	187	139	10

Intersection: 12: Day St. & Eucalyptus Av.

Movement	B80	SB	SB	SB	SB
Directions Served	T	L	T	T	R
Maximum Queue (ft)	38	94	222	134	64
Average Queue (ft)	8	65	144	50	35
95th Queue (ft)	69	97	267	169	81
Link Distance (ft)	2171		352	352	352
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		200			
Storage Blk Time (%)			7		
Queuing Penalty (veh)			6		

Intersection: 13: Day St. & Cottonwood Av.

Movement	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	L	T	R	L	TR
Maximum Queue (ft)	65	153	119	159	145	63	339	160	153	175
Average Queue (ft)	35	96	70	95	94	32	203	47	106	81
95th Queue (ft)	78	170	146	190	176	73	368	153	178	215
Link Distance (ft)		827		792			749			2171
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	100		95		95	80		100	100	
Storage Blk Time (%)		14	10	10	4	1	25		19	5
Queuing Penalty (veh)		5	36	31	9	6	40		89	10

Intersection: 31: I-215 SB Ramps/I-215 SB Ramps (W) & Eastridge Av.

Movement	EB	WB	WB	SB
Directions Served	T	T	T	R
Maximum Queue (ft)	20	138	144	223
Average Queue (ft)	6	127	129	162
95th Queue (ft)	25	147	153	258
Link Distance (ft)	620	114	114	312
Upstream Blk Time (%)		13	14	1
Queuing Penalty (veh)		108	117	0
Storage Bay Dist (ft)				
Storage Blk Time (%)	0			
Queuing Penalty (veh)	0			

Intersection: 32: I-215 NB Ramps (E)/I-215 NB Ramps & Eastridge Av./Eucalyptus Av.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	T	T	T	R	R
Maximum Queue (ft)	212	177	4	15	313	259
Average Queue (ft)	180	122	1	3	241	159
95th Queue (ft)	235	189	7	22	356	288
Link Distance (ft)	233	233	540	540	352	352
Upstream Blk Time (%)	1				11	0
Queuing Penalty (veh)	6				0	0
Storage Bay Dist (ft)						
Storage Blk Time (%)			0			
Queuing Penalty (veh)			2			

Zone Summary

Zone wide Queuing Penalty: 1978

Intersection: 2: Box Springs Bl. & Eastridge Av.

Movement	EB	EB	EB	B67	B67	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	T	T	L	T	TR	L	T	R	L
Maximum Queue (ft)	52	428	413	10	5	114	228	252	27	78	36	149
Average Queue (ft)	14	350	317	2	1	38	159	191	10	52	15	144
95th Queue (ft)	61	514	483	18	8	123	265	285	29	95	41	158
Link Distance (ft)		672	672	471	471		620	620		216		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	90					150			75		160	90
Storage Blk Time (%)		40	39				9			6		58
Queuing Penalty (veh)		5	1				4			3		39

Intersection: 2: Box Springs Bl. & Eastridge Av.

Movement	SB	SB
Directions Served	T	TR
Maximum Queue (ft)	300	187
Average Queue (ft)	222	67
95th Queue (ft)	376	197
Link Distance (ft)	322	322
Upstream Blk Time (%)	3	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		
Storage Blk Time (%)	3	
Queuing Penalty (veh)	8	

Intersection: 3: I-215 SB/NB Ramps & Eastridge Av.

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	L	L	T	T	L	L	L	L
Maximum Queue (ft)	152	193	175	225	249	171	184	86	60	621	621
Average Queue (ft)	109	171	159	181	211	113	132	59	35	574	544
95th Queue (ft)	178	207	195	260	290	199	201	99	66	713	725
Link Distance (ft)	114	114	114	233	233	233	233	718	718	602	602
Upstream Blk Time (%)	13	58	51	3	8	1	0			52	38
Queuing Penalty (veh)	63	292	257	16	39	2	1			0	0
Storage Bay Dist (ft)											
Storage Blk Time (%)											
Queuing Penalty (veh)											

Intersection: 4: Valley Springs Pkwy. & Eucalyptus Av.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	L	T
Maximum Queue (ft)	175	219	226	236	67	149	460	703	55	66	68	102
Average Queue (ft)	135	175	175	186	44	56	317	319	24	35	41	58
95th Queue (ft)	202	263	248	271	73	162	553	852	67	83	80	107
Link Distance (ft)			540	540			1979	1979				762
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	300	300			360	100			30	150	150	
Storage Blk Time (%)						0	56	59	2	0		0
Queuing Penalty (veh)						1	22	51	11	0		0

Intersection: 4: Valley Springs Pkwy. & Eucalyptus Av.

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	R	R
Maximum Queue (ft)	131	62	135	346	474	431
Average Queue (ft)	66	23	103	190	427	310
95th Queue (ft)	135	70	178	429	557	572
Link Distance (ft)	762			450	450	450
Upstream Blk Time (%)				3	23	2
Queuing Penalty (veh)				17	133	13
Storage Bay Dist (ft)		50	140			
Storage Blk Time (%)	23	0	8	7		
Queuing Penalty (veh)	11	0	20	9		

Intersection: 5: Day St. & SR-60 WB Ramps

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	T	R	L	T	T
Maximum Queue (ft)	239	231	69	83	86	144	104	120	100
Average Queue (ft)	188	188	32	53	70	79	68	81	59
95th Queue (ft)	261	251	71	95	108	171	128	138	110
Link Distance (ft)	227	227	227	877	877			755	755
Upstream Blk Time (%)	10	8							
Queuing Penalty (veh)	27	20							
Storage Bay Dist (ft)						175	200		
Storage Blk Time (%)						1			
Queuing Penalty (veh)						3			

Intersection: 6: Day St. & SR-60 EB Ramps

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	L	R	T	T	R	L	T	T	T
Maximum Queue (ft)	182	177	150	304	343	277	146	106	81	111
Average Queue (ft)	156	172	79	211	260	172	98	65	44	62
95th Queue (ft)	191	184	155	336	380	297	165	130	97	129
Link Distance (ft)	170	170	170	403	403	403		877	877	
Upstream Blk Time (%)	5	30	1			0				
Queuing Penalty (veh)	19	105	3			0				
Storage Bay Dist (ft)							425			105
Storage Blk Time (%)									0	1
Queuing Penalty (veh)									1	4

Intersection: 7: Day St. & Cyn. Springs Pkwy.

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	L	T	R	L	T	R	L	T	T	TR	L
Maximum Queue (ft)	272	618	268	67	76	89	147	127	216	396	478	213
Average Queue (ft)	243	505	164	36	42	50	99	98	130	252	304	141
95th Queue (ft)	334	796	496	79	85	91	159	152	251	420	509	241
Link Distance (ft)		981	981	981		340	340		608	608	608	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	180				145			165				170
Storage Blk Time (%)	11	67							1			5
Queuing Penalty (veh)	36	230							2			12

Intersection: 7: Day St. & Cyn. Springs Pkwy.

Movement	SB	SB	SB	SB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	236	158	149	114	94
Average Queue (ft)	189	109	106	79	62
95th Queue (ft)	255	178	169	133	105
Link Distance (ft)	403	403	403	403	403
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)	11				
Queuing Penalty (veh)	23				

Intersection: 8: Day St. & Campus Pkwy.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	R	L	T	T	R	L	L	T	T
Maximum Queue (ft)	70	104	59	72	65	146	117	115	95	106	128	180
Average Queue (ft)	35	71	35	45	45	97	45	80	46	67	94	131
95th Queue (ft)	80	121	70	78	82	162	113	131	100	121	155	199
Link Distance (ft)		816	816			445	445	445			915	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			50	200				130	130		
Storage Blk Time (%)			6	7		1			0	1	1	
Queuing Penalty (veh)			10	7		1			0	4	2	

Intersection: 8: Day St. & Campus Pkwy.

Movement	NB	NB	SB	SB	SB	SB	SB	SB
Directions Served	T	R	L	L	T	T	T	R
Maximum Queue (ft)	205	108	95	150	238	209	219	38
Average Queue (ft)	151	51	58	89	190	162	167	20
95th Queue (ft)	236	124	106	170	263	220	232	51
Link Distance (ft)	915				608	608	608	608
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		50	190	190				
Storage Blk Time (%)	29	1			6			
Queuing Penalty (veh)	28	4			16			

Intersection: 9: Day St. & Gateway Dr.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	TR	L	L
Maximum Queue (ft)	199	237	159	122	113	125	120	150	162	224	77	103
Average Queue (ft)	177	97	104	76	70	74	77	101	113	145	41	69
95th Queue (ft)	215	251	172	145	122	148	142	170	191	245	101	122
Link Distance (ft)		226	226		519	519		511	511			
Upstream Blk Time (%)		2	0									
Queuing Penalty (veh)		7	0									
Storage Bay Dist (ft)	200			100			190			400	260	260
Storage Blk Time (%)	6	1		7	3			2				
Queuing Penalty (veh)	4	5		4	4			2				

Intersection: 9: Day St. & Gateway Dr.

Movement	SB	SB	SB
Directions Served	T	T	TR
Maximum Queue (ft)	196	139	214
Average Queue (ft)	132	80	132
95th Queue (ft)	224	160	229
Link Distance (ft)	915	915	915
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)	0		
Queuing Penalty (veh)	0		

Intersection: 10: Day St. & Dwy. 1

Movement	EB	NB	SB	SB	SB
Directions Served	LR	L	T	T	TR
Maximum Queue (ft)	77	35	219	153	89
Average Queue (ft)	42	17	89	38	18
95th Queue (ft)	76	43	267	172	109
Link Distance (ft)	302		511	511	511
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		80			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 11: Day St. & Dwy. 2

Movement	EB	SB	SB	SB
Directions Served	R	T	T	TR
Maximum Queue (ft)	40	130	109	96
Average Queue (ft)	20	98	69	61
95th Queue (ft)	49	144	130	101
Link Distance (ft)	303	116	116	116
Upstream Blk Time (%)		16	1	0
Queuing Penalty (veh)		56	2	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 12: Day St. & Eucalyptus Av.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	T	T	R	L	T	T	R
Maximum Queue (ft)	199	302	318	110	242	320	306	76	148	201	211	187
Average Queue (ft)	153	248	271	80	202	251	232	40	91	152	151	143
95th Queue (ft)	244	329	348	151	288	344	313	80	173	228	252	230
Link Distance (ft)		1979	1979			1088	1088	1088		304		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	100			50	175				100		100	100
Storage Blk Time (%)	14	26	39	0	28	19			6	27	28	17
Queuing Penalty (veh)	89	74	80	2	112	49			50	190	97	59

Intersection: 12: Day St. & Eucalyptus Av.

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	319	369	351	222
Average Queue (ft)	195	287	217	118
95th Queue (ft)	395	456	456	251
Link Distance (ft)		352	352	352
Upstream Blk Time (%)		22	11	1
Queuing Penalty (veh)		78	37	3
Storage Bay Dist (ft)	200			
Storage Blk Time (%)	1	55		
Queuing Penalty (veh)	3	96		

Intersection: 13: Day St. & Cottonwood Av.

Movement	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	L	T	R	L	TR
Maximum Queue (ft)	34	193	130	230	163	139	547	160	146	199
Average Queue (ft)	18	124	85	122	105	83	431	106	106	103
95th Queue (ft)	44	228	170	281	195	148	614	215	168	219
Link Distance (ft)		827		792			749			2171
Upstream Blk Time (%)							0			
Queuing Penalty (veh)							0			
Storage Bay Dist (ft)	100		95		95	80		100	100	
Storage Blk Time (%)		19	14	5	10	6	48	1	24	5
Queuing Penalty (veh)		5	59	22	29	45	89	4	149	13

Intersection: 31: I-215 SB Ramps/I-215 SB Ramps (W) & Eastridge Av.

Movement	EB	EB	EB	WB	WB	SB
Directions Served	T	T	TR	T	T	R
Maximum Queue (ft)	109	451	429	138	120	248
Average Queue (ft)	52	237	217	99	87	165
95th Queue (ft)	139	562	560	150	131	262
Link Distance (ft)		620	620	114	114	312
Upstream Blk Time (%)		0		4	2	
Queuing Penalty (veh)		1		26	9	
Storage Bay Dist (ft)	50					
Storage Blk Time (%)		44				
Queuing Penalty (veh)		221				

Intersection: 32: I-215 NB Ramps (E)/I-215 NB Ramps & Eastridge Av./Eucalyptus Av.

Movement	EB	EB	NB	NB
Directions Served	T	T	R	R
Maximum Queue (ft)	257	263	346	236
Average Queue (ft)	239	230	268	180
95th Queue (ft)	274	309	379	286
Link Distance (ft)	233	233	352	352
Upstream Blk Time (%)	9	8	2	0
Queuing Penalty (veh)	96	80	0	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 3529

APPENDIX 6.3:

OPENING YEAR WITHOUT PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (2016) Conditions - Weekday AM Peak Hour**

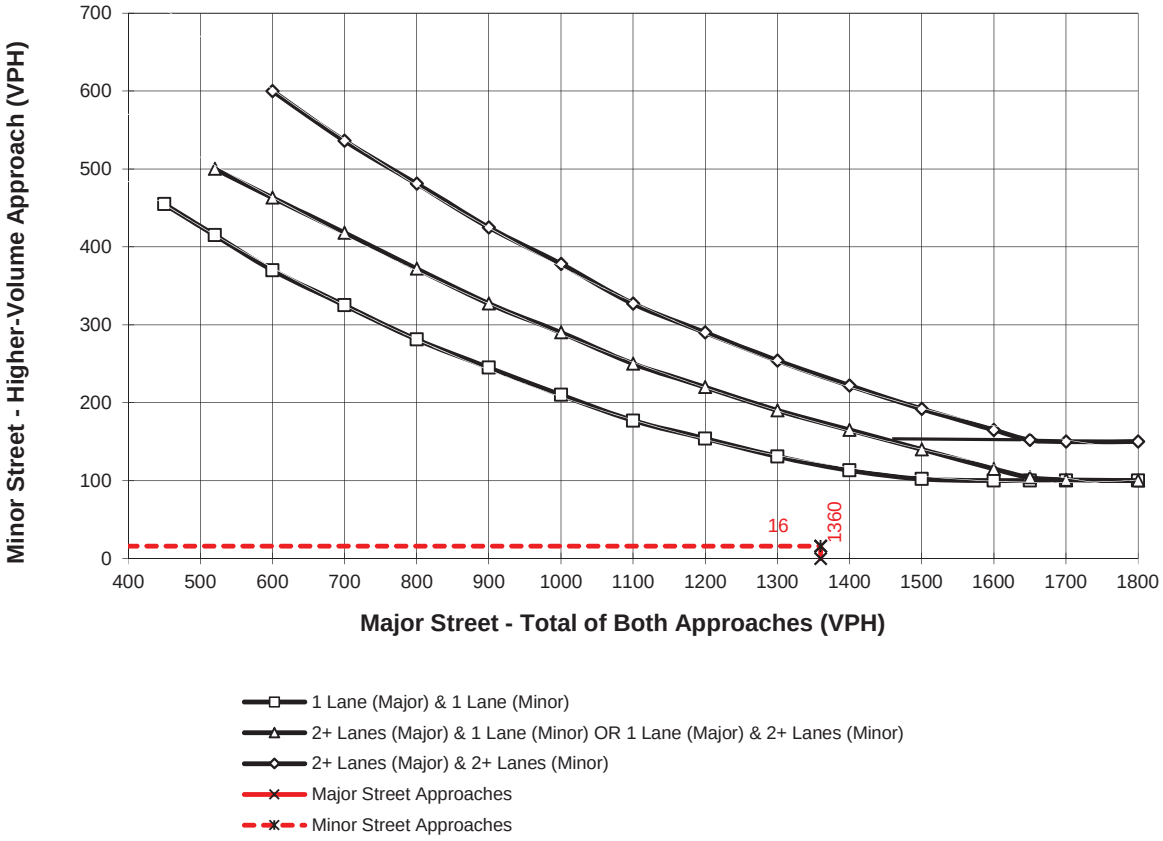
Major Street Name = **Day St.**

Total of Both Approaches (VPH) = **1,360**
Number of Approach Lanes on Major Street = **3**

Minor Street Name = **Dwy. 2**

High Volume Approach (VPH) = **16**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (2016) Conditions - Weekday PM Peak Hour**

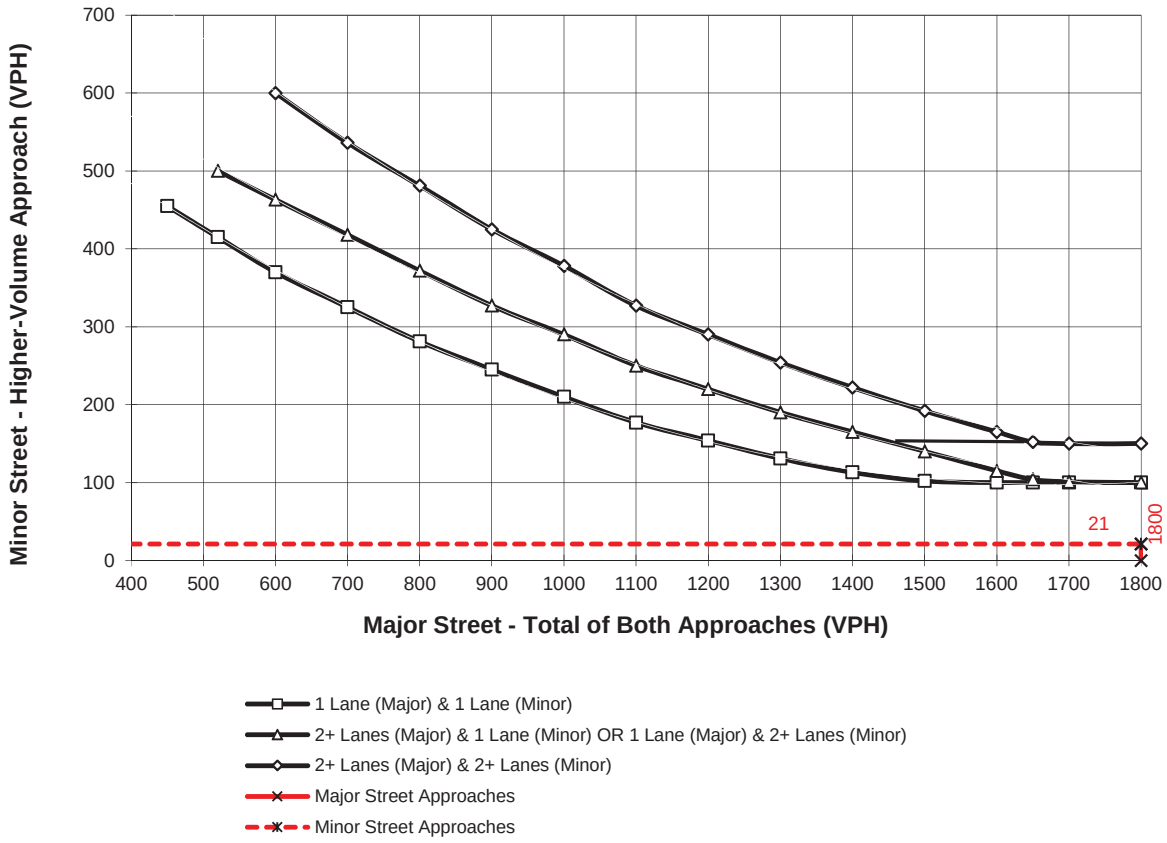
Major Street Name = **Day St.**

Total of Both Approaches (VPH) = **1,937**
Number of Approach Lanes on Major Street = **3**

Minor Street Name = **Dwy. 2**

High Volume Approach (VPH) = **21**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

California MUTCD 2012 Edition
(FHWA's MUTCD 2009, as amended for use in California)

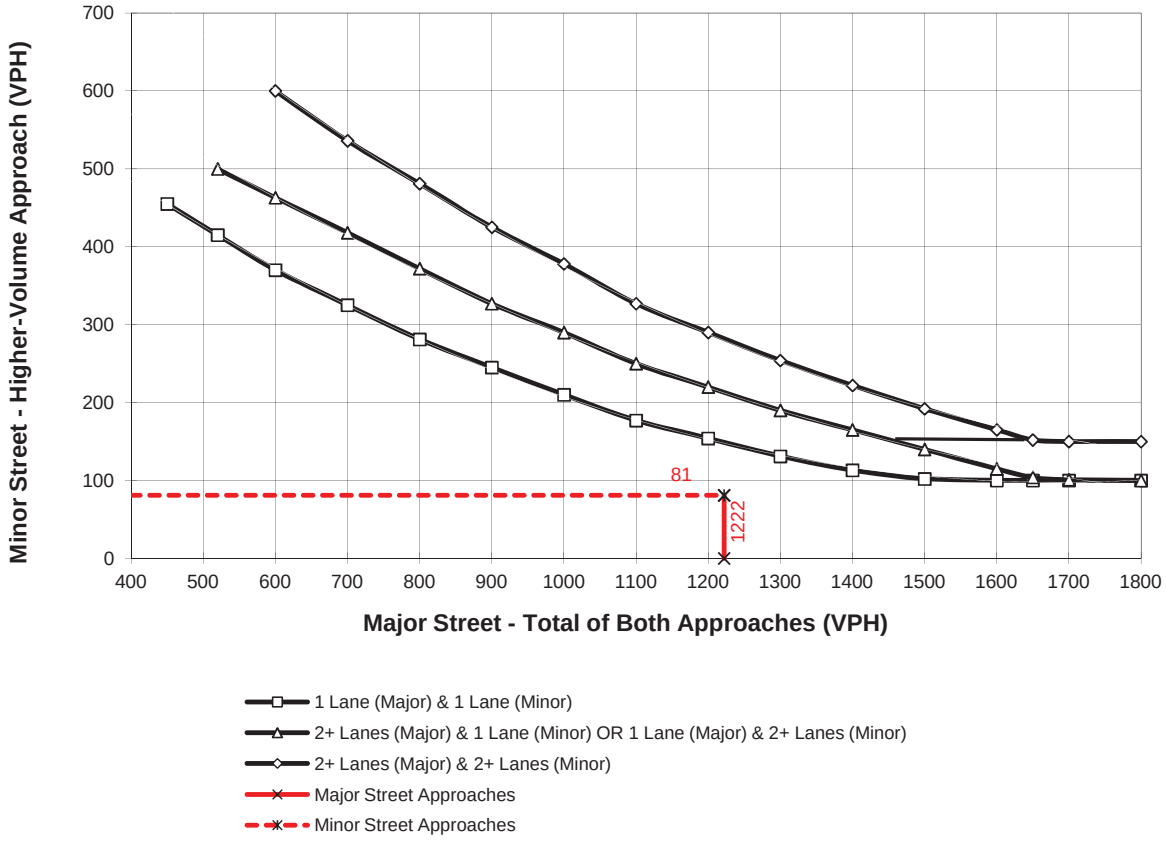
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (2016) Conditions - Weekday AM Peak Hour**

Major Street Name = **Day St.**
Total of Both Approaches (VPH) = **1,222**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Bay Av.**
High Volume Approach (VPH) = **81**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

California MUTCD 2012 Edition
(FHWA's MUTCD 2009, as amended for use in California)

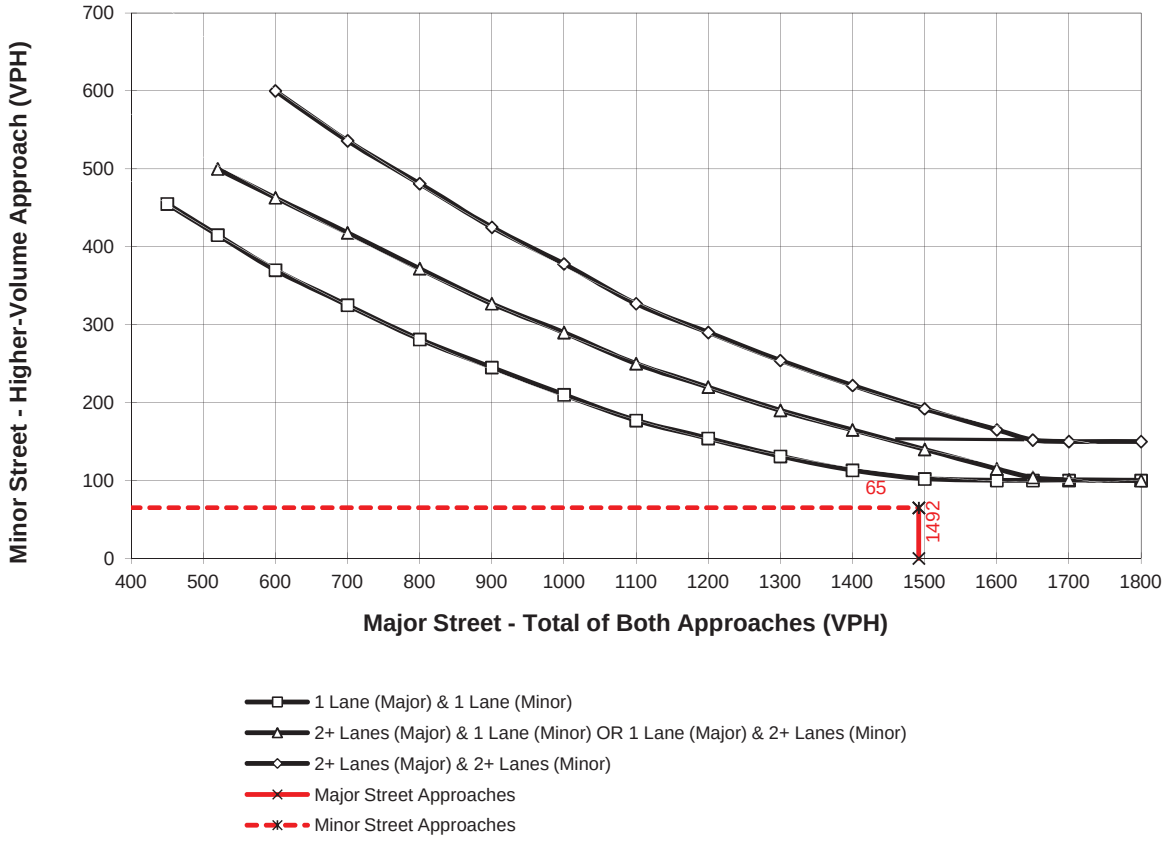
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (2016) Conditions - Weekday PM Peak Hour**

Major Street Name = **Day St.**
Total of Both Approaches (VPH) = **1,492**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Bay Av.**
High Volume Approach (VPH) = **65**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

California MUTCD 2012 Edition
(FHWA's MUTCD 2009, as amended for use in California)

Figure 4C-3. Warrant 3, Peak Hour

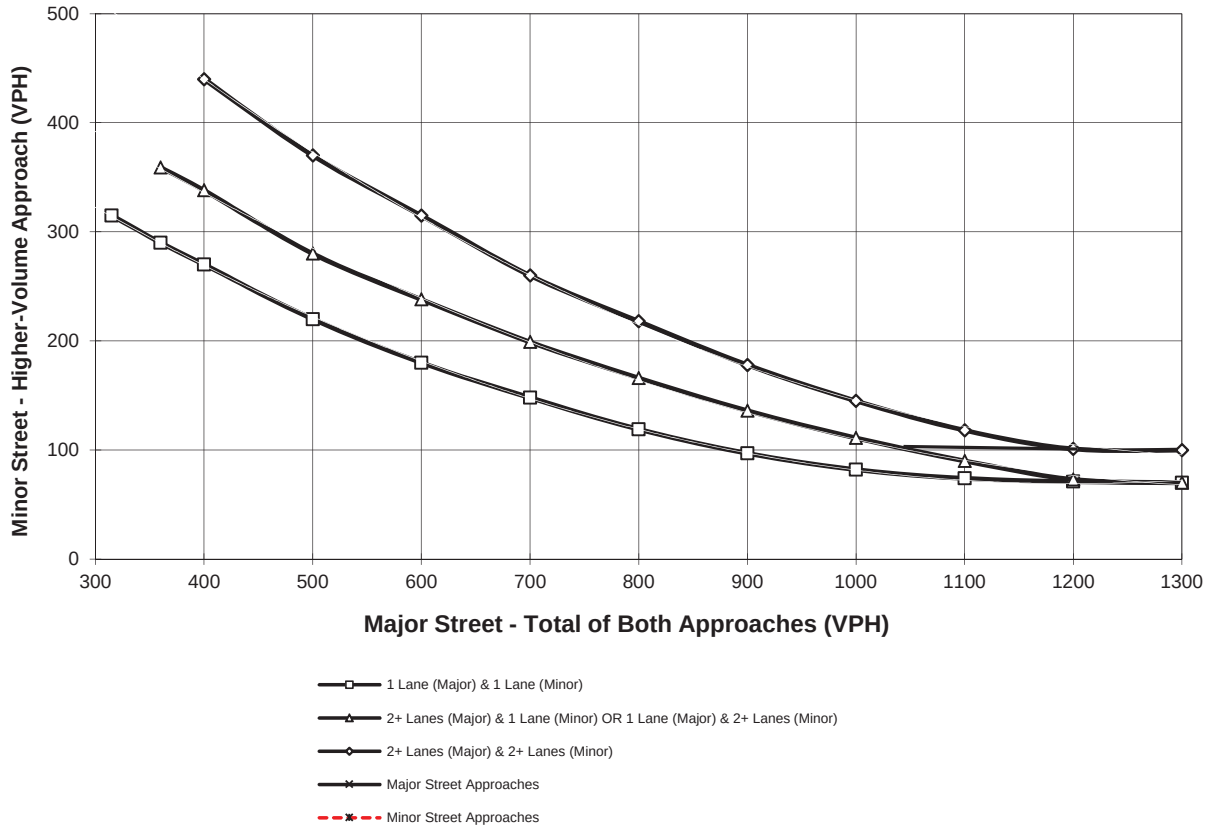
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC (2016) Conditions - Weekday AM Peak Hour**

Major Street Name = **Campus Pkwy.**
Total of Both Approaches (VPH) = **174**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Corporate Centre Pl.**
High Volume Approach (VPH) = **78**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

California MUTCD 2012 Edition
(FHWA's MUTCD 2009, as amended for use in California)

Figure 4C-3. Warrant 3, Peak Hour

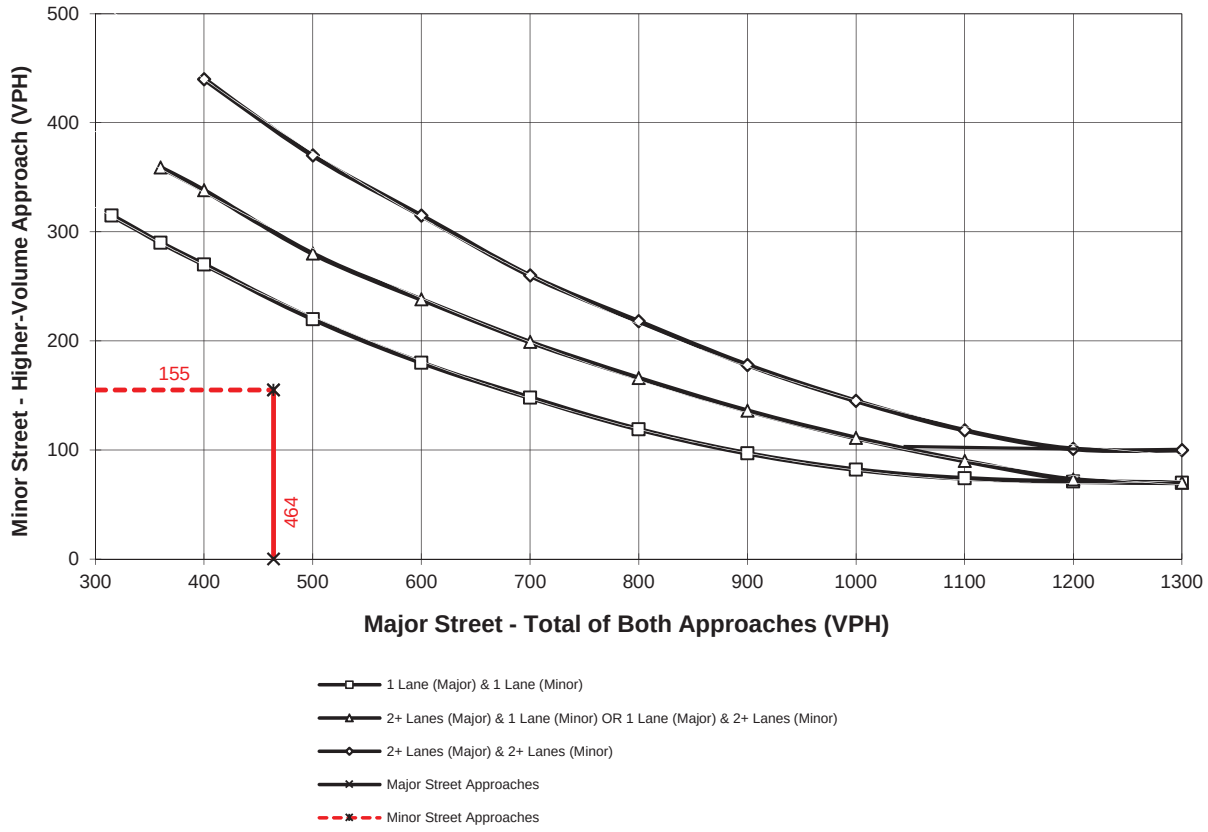
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC (2016) Conditions - Weekday PM Peak Hour**

Major Street Name = **Campus Pkwy.**
Total of Both Approaches (VPH) = **464**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Corporate Centre Pl.**
High Volume Approach (VPH) = **155**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

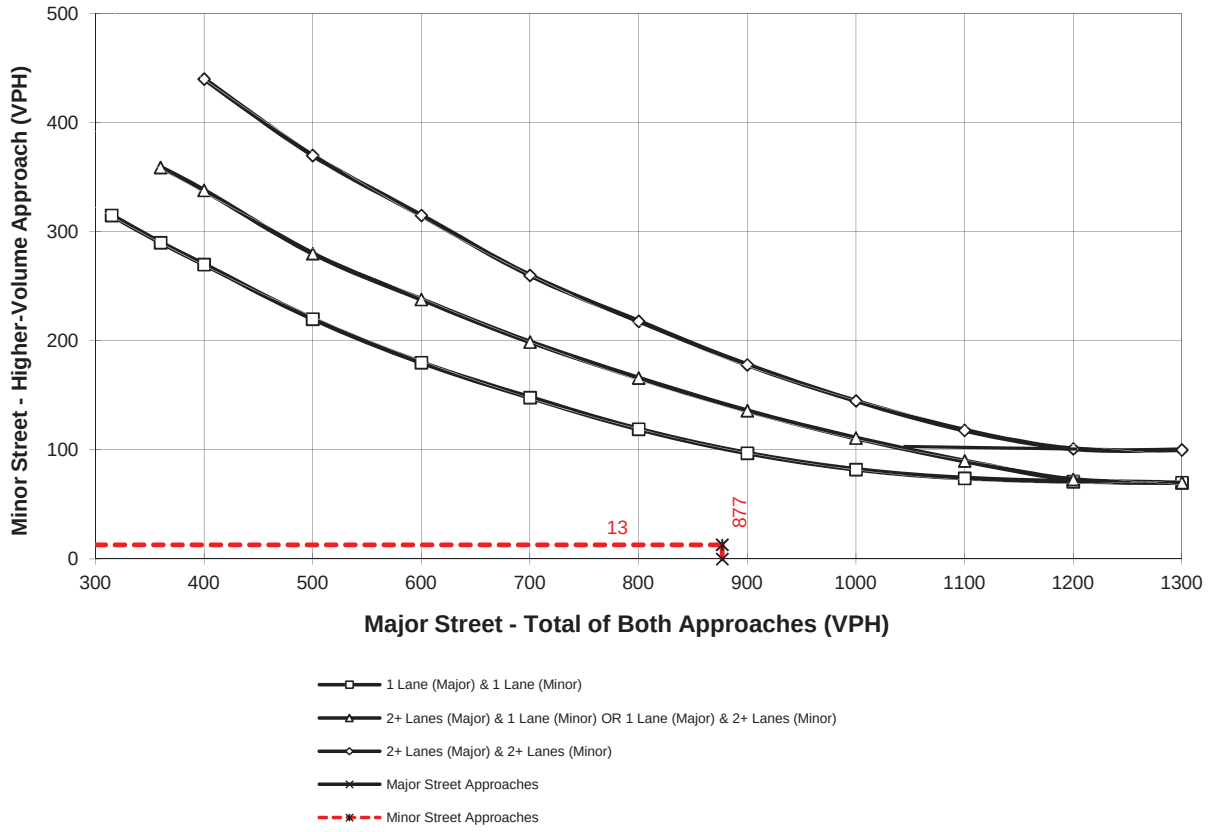
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC (2016) Conditions - Weekday AM Peak Hour**

Major Street Name = **Valley Springs Pkwy.**
Total of Both Approaches (VPH) = **877**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 4**
High Volume Approach (VPH) = **13**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

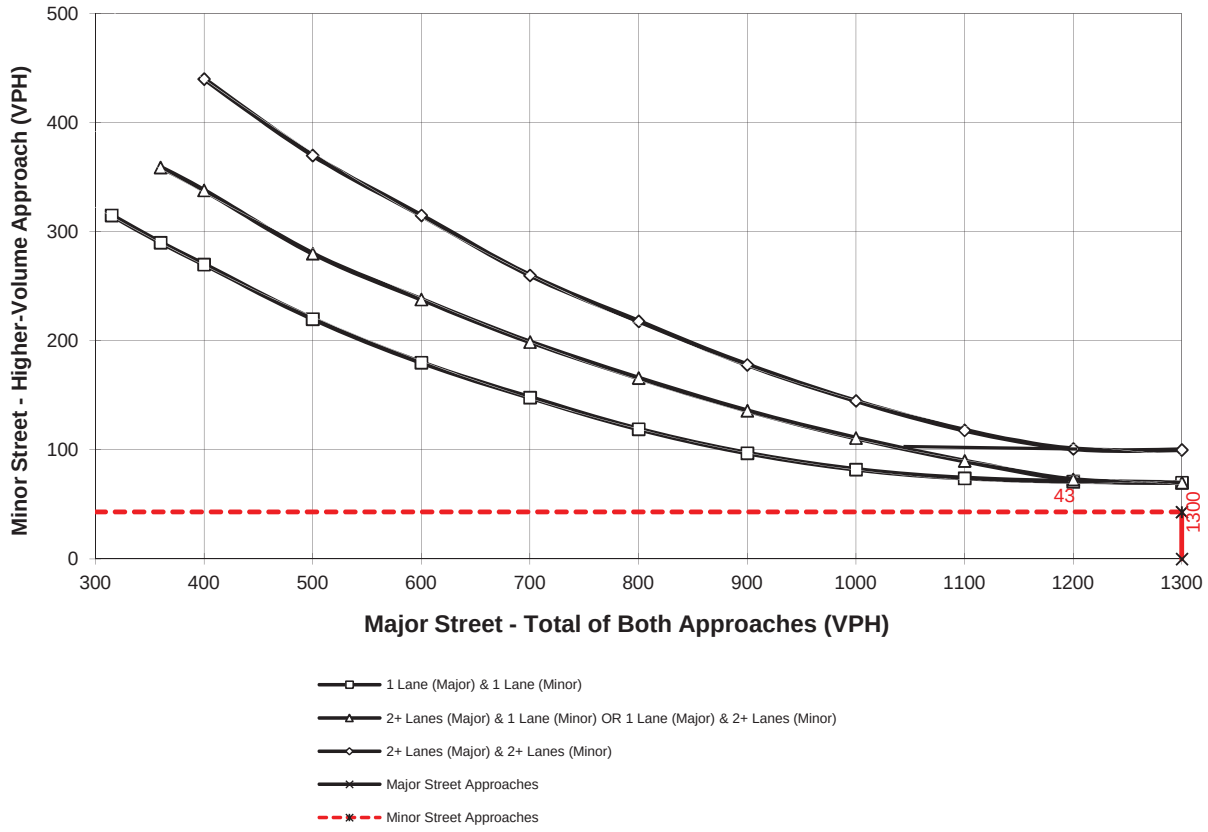
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC (2016) Conditions - Weekday PM Peak Hour**

Major Street Name = **Valley Springs Pkwy.**
Total of Both Approaches (VPH) = **1,589**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 4**
High Volume Approach (VPH) = **43**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

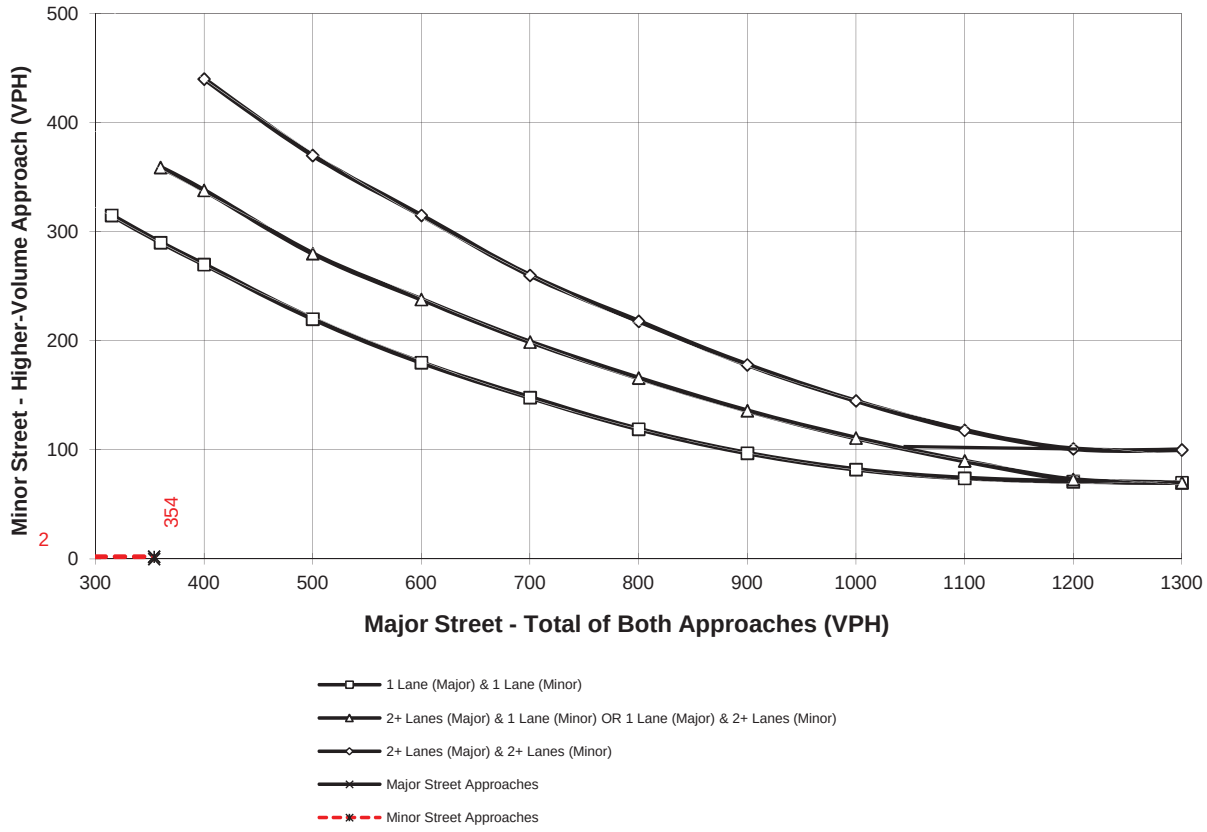
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC (2016) Conditions - Weekday AM Peak Hour**

Major Street Name = **Gateway Dr.**
Total of Both Approaches (VPH) = **354**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 6**
High Volume Approach (VPH) = **2**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

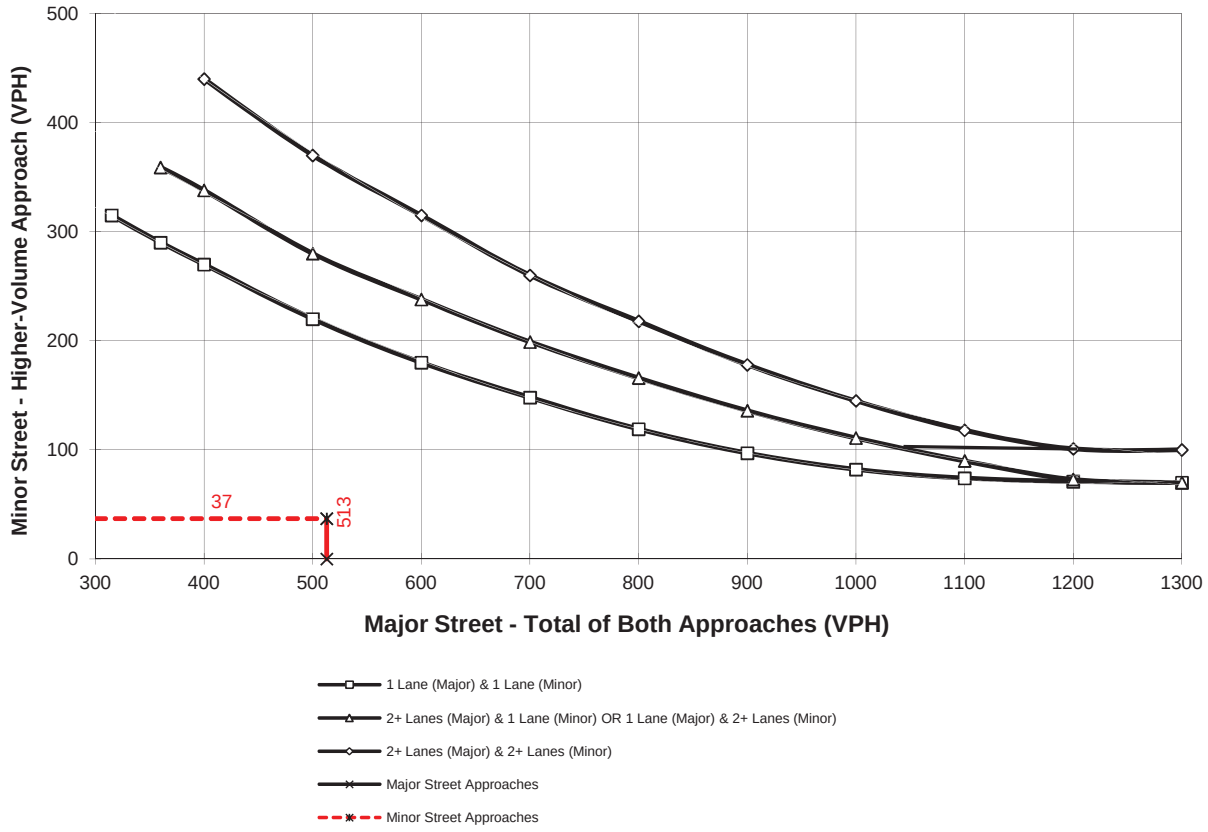
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC (2016) Conditions - Weekday PM Peak Hour**

Major Street Name = **Gateway Dr.**
Total of Both Approaches (VPH) = **513**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 6**
High Volume Approach (VPH) = **37**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

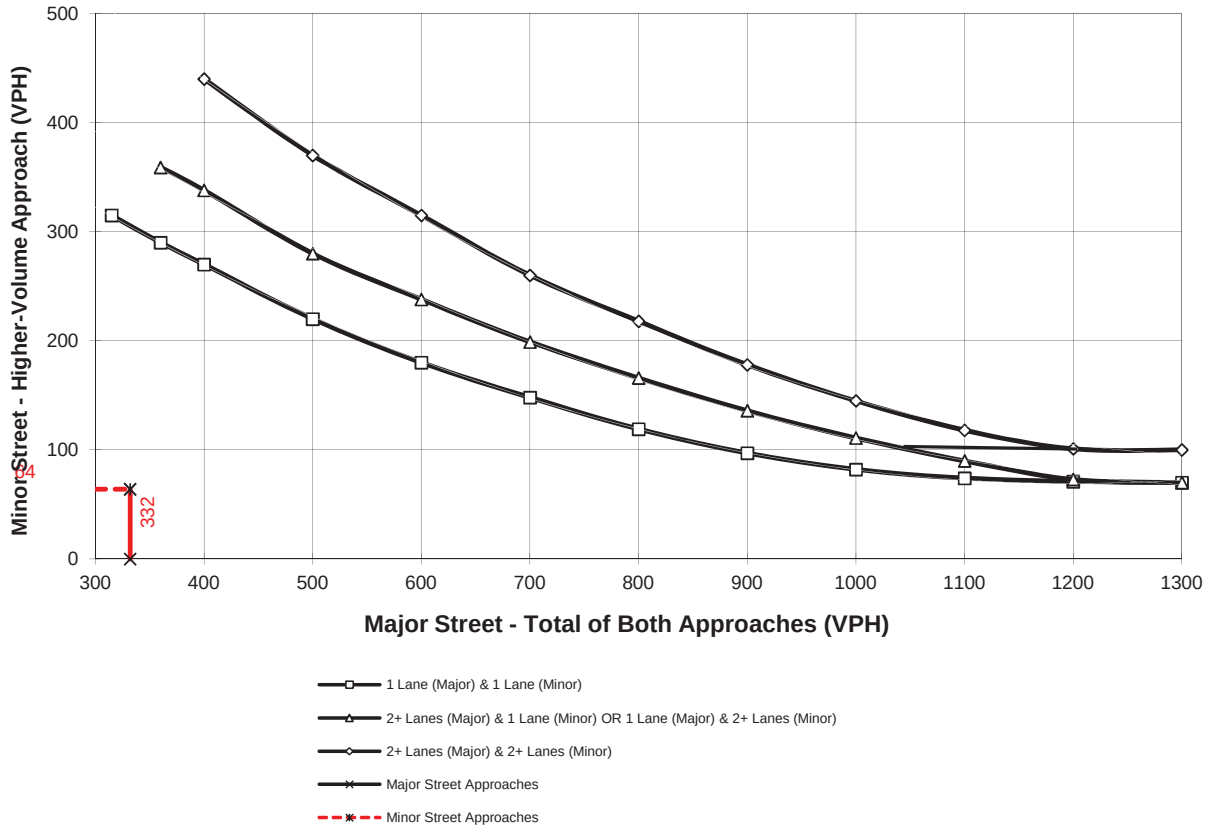
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC (2016) Conditions - Weekday AM Peak Hour**

Major Street Name = **Gateway Dr.** Total of Both Approaches (VPH) = **332**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Canyon Park Dr. - Dwy. 7** High Volume Approach (VPH) = **64**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

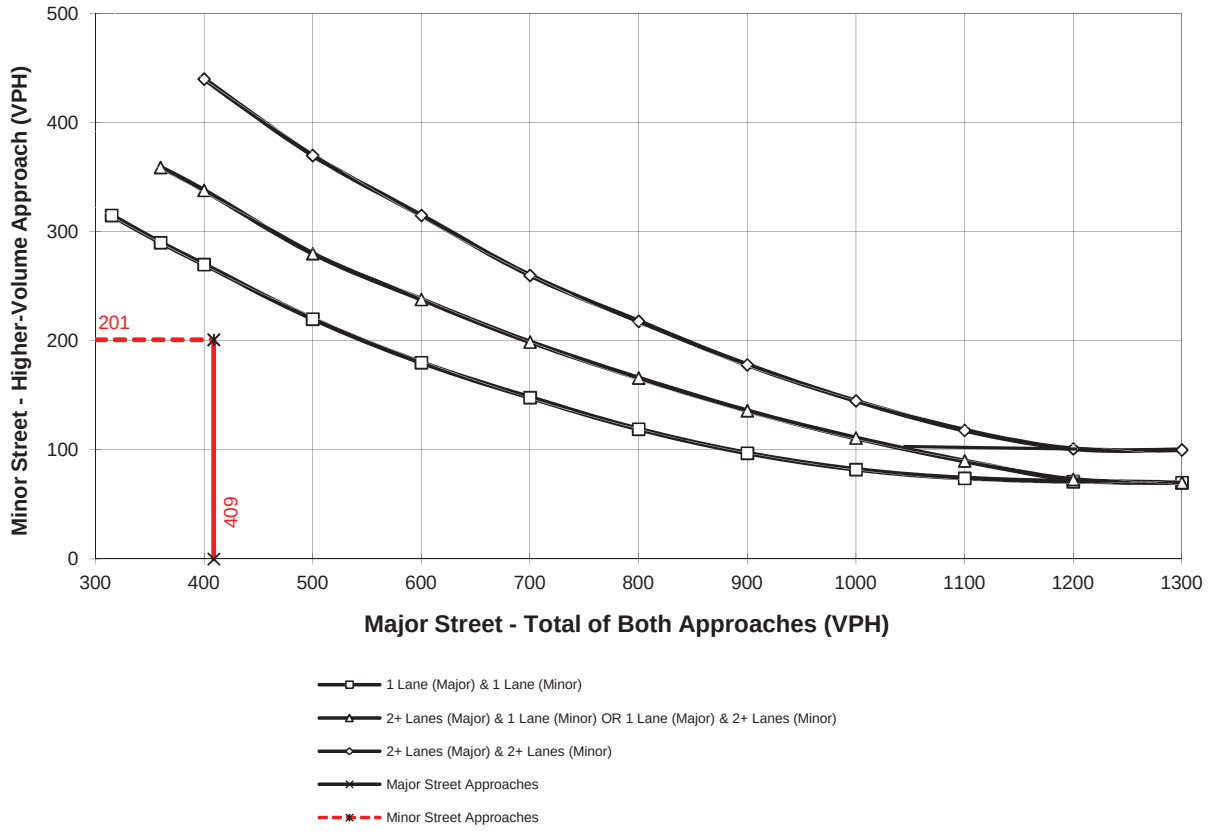
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC (2016) Conditions - Weekday PM Peak Hour**

Major Street Name = **Gateway Dr.** Total of Both Approaches (VPH) = **409**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Canyon Park Dr. - Dwy. 7** High Volume Approach (VPH) = **201**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

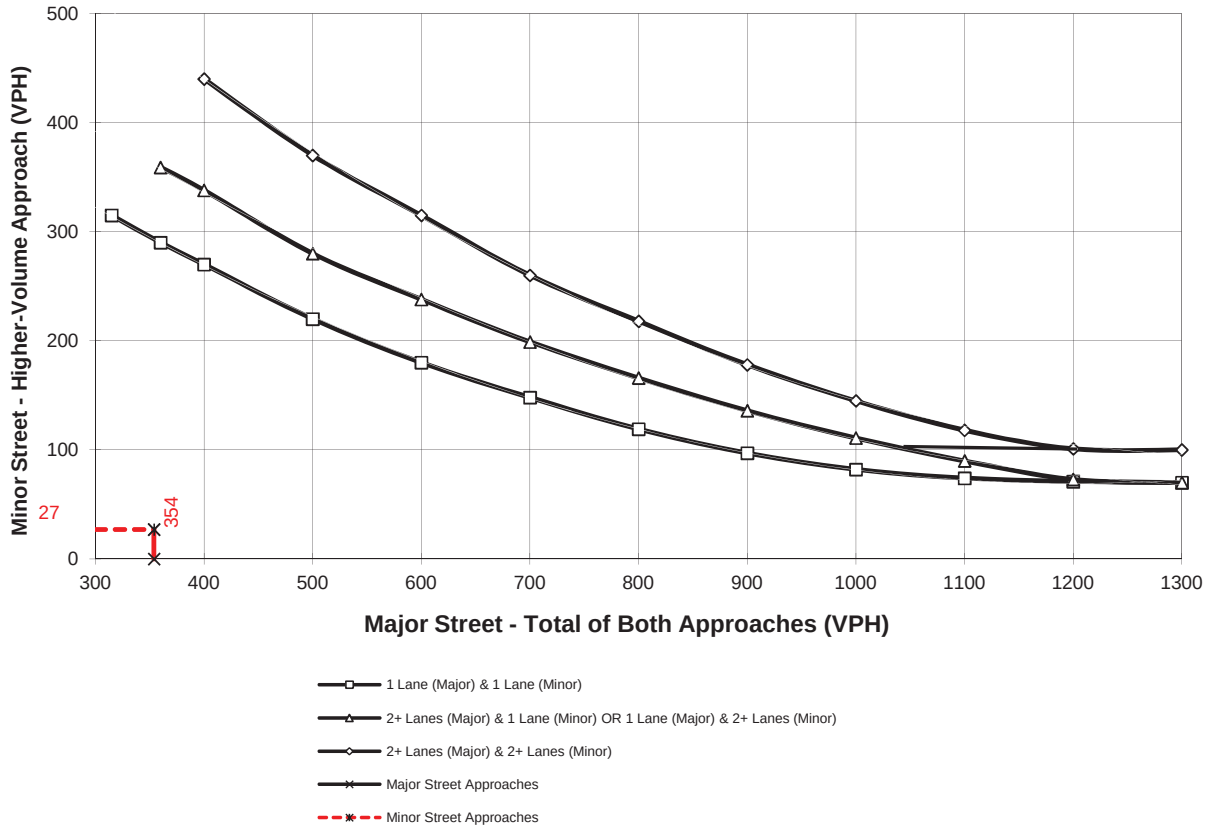
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC (2016) Conditions - Weekday AM Peak Hour**

Major Street Name = **Gateway Dr.**
Total of Both Approaches (VPH) = **354**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 9**
High Volume Approach (VPH) = **27**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

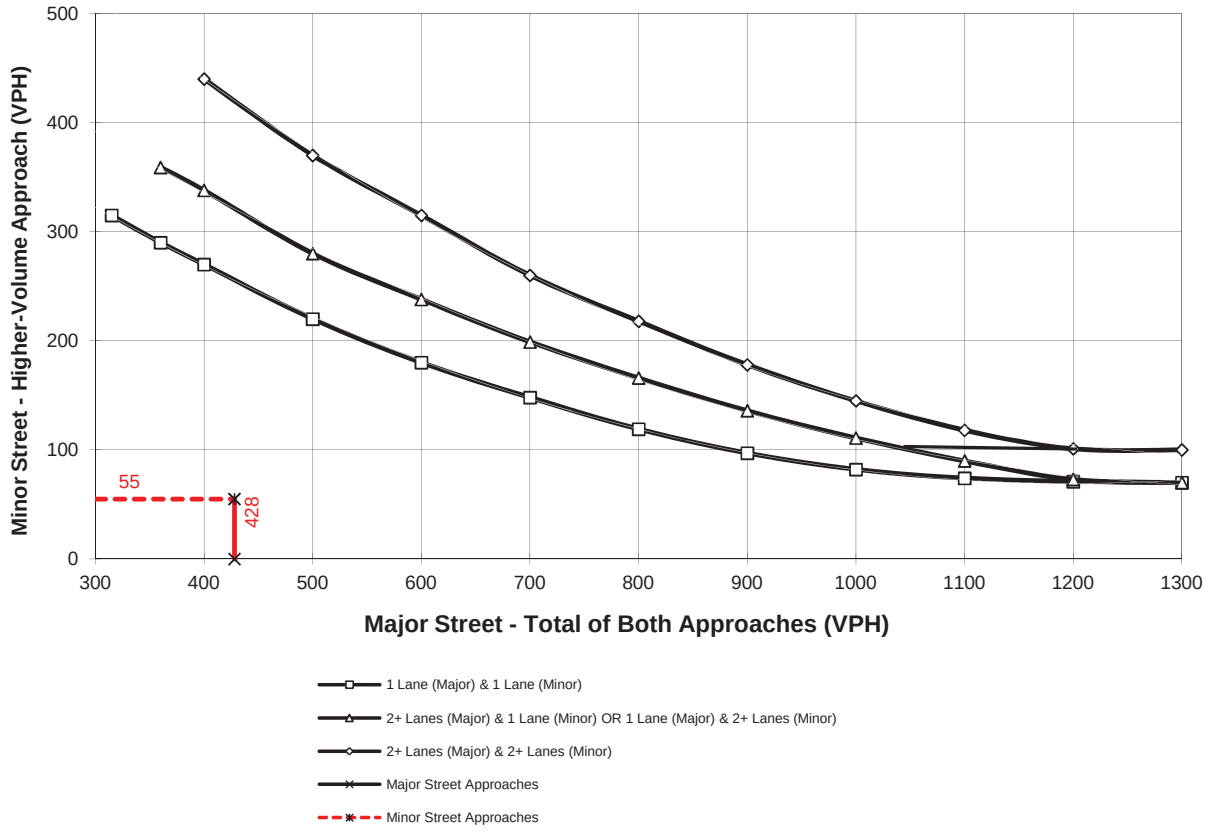
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC (2016) Conditions - Weekday PM Peak Hour**

Major Street Name = **Gateway Dr.**
Total of Both Approaches (VPH) = **428**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 9**
High Volume Approach (VPH) = **55**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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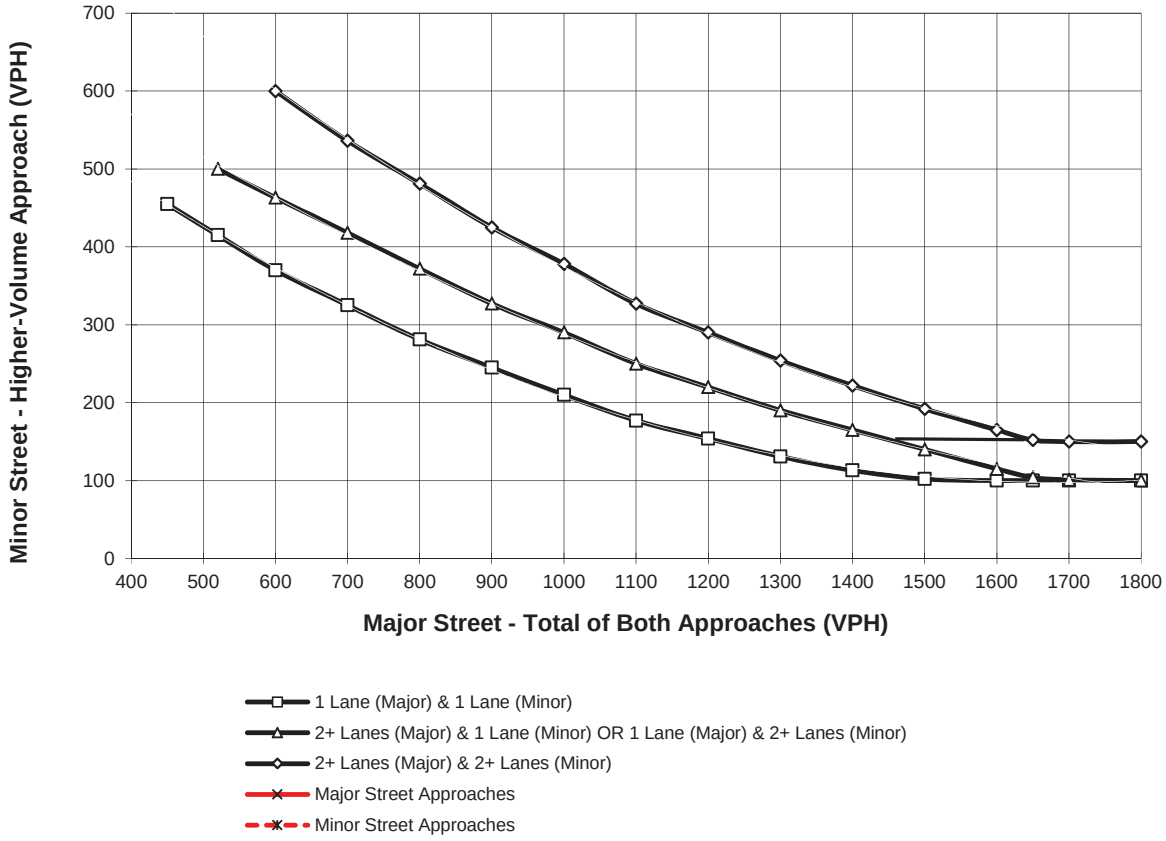
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (2016) Conditions - Weekday AM Peak Hour**

Major Street Name = **Campus Pkwy.** Total of Both Approaches (VPH) = **231**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Canyon Park Dr.** High Volume Approach (VPH) = **56**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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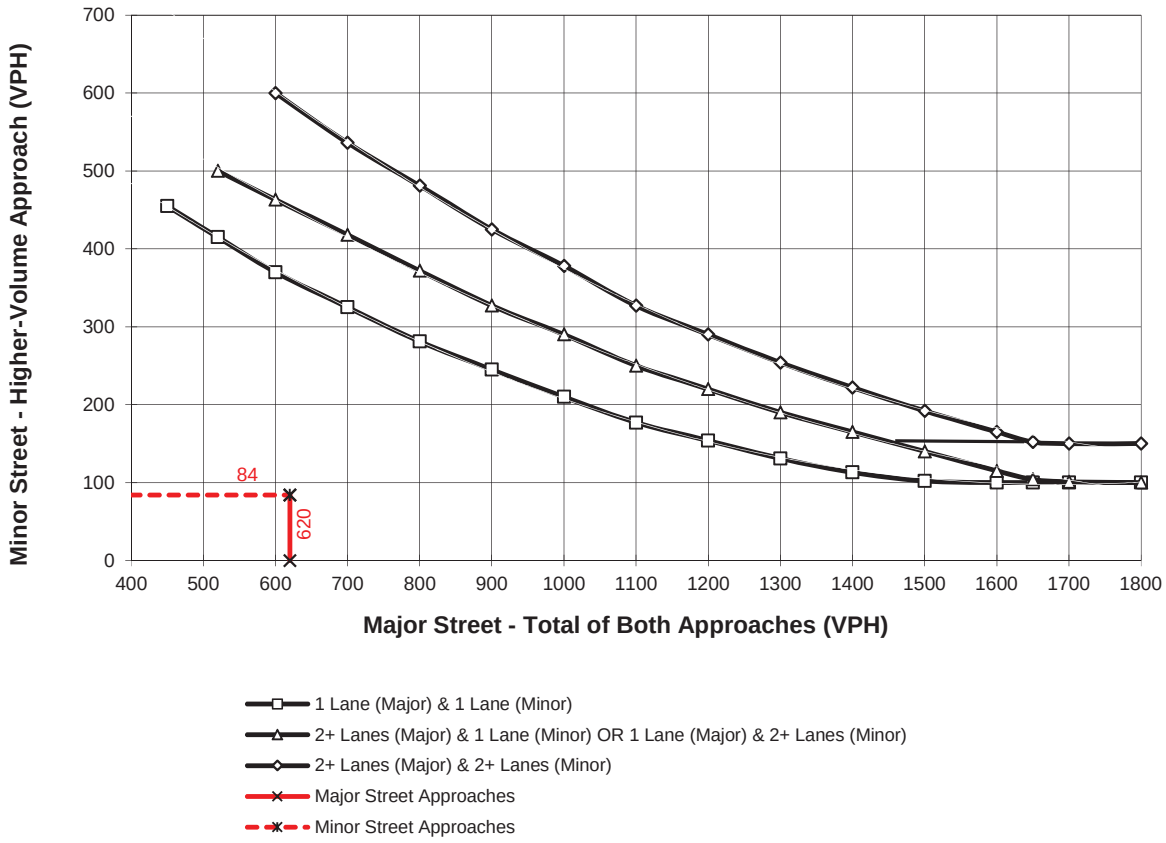
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (2016) Conditions - Weekday PM Peak Hour**

Major Street Name = **Campus Pkwy.** Total of Both Approaches (VPH) = **620**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Canyon Park Dr.** High Volume Approach (VPH) = **84**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

APPENDIX 6.4:

OPENING YEAR WITH PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EACP (2016) Conditions - Weekday AM Peak Hour**

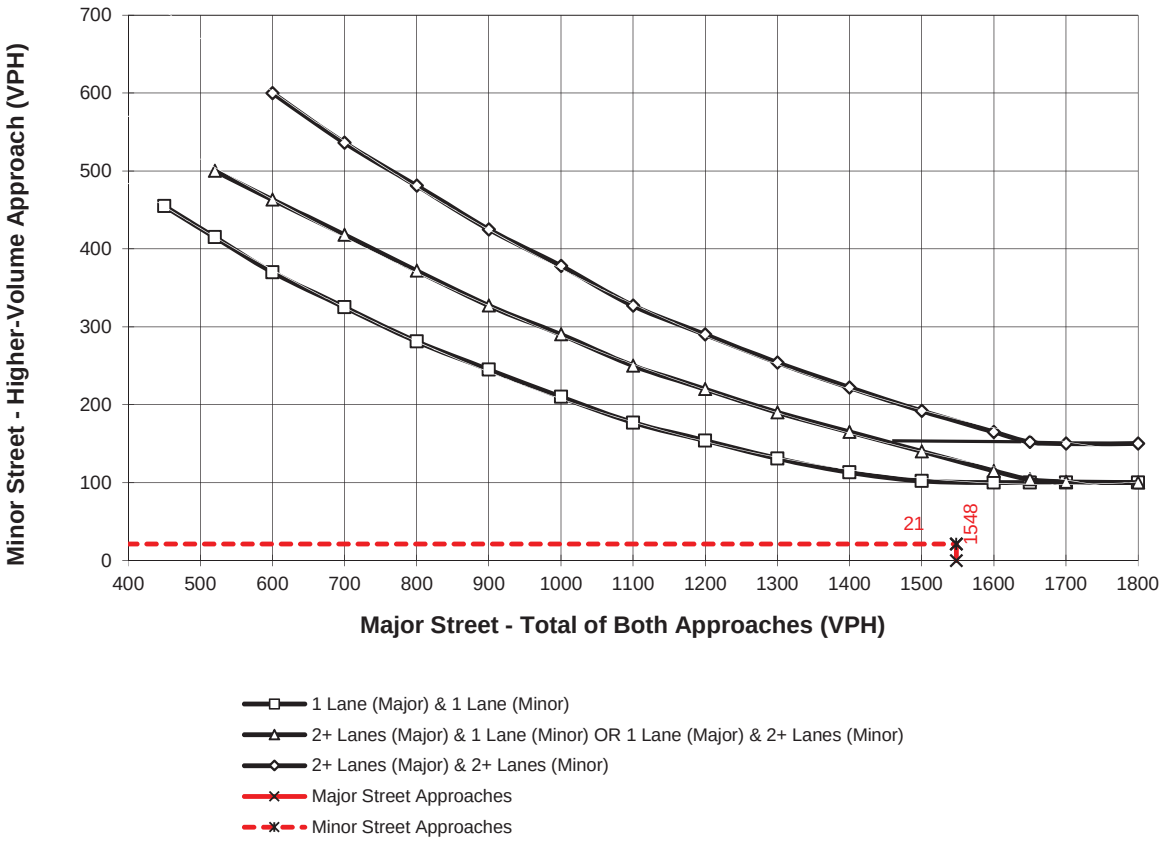
Major Street Name = **Day St.**

Total of Both Approaches (VPH) = **1,548**
Number of Approach Lanes on Major Street = **3**

Minor Street Name = **Dwy. 2**

High Volume Approach (VPH) = **21**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EACP (2016) Conditions - Weekday PM Peak Hour**

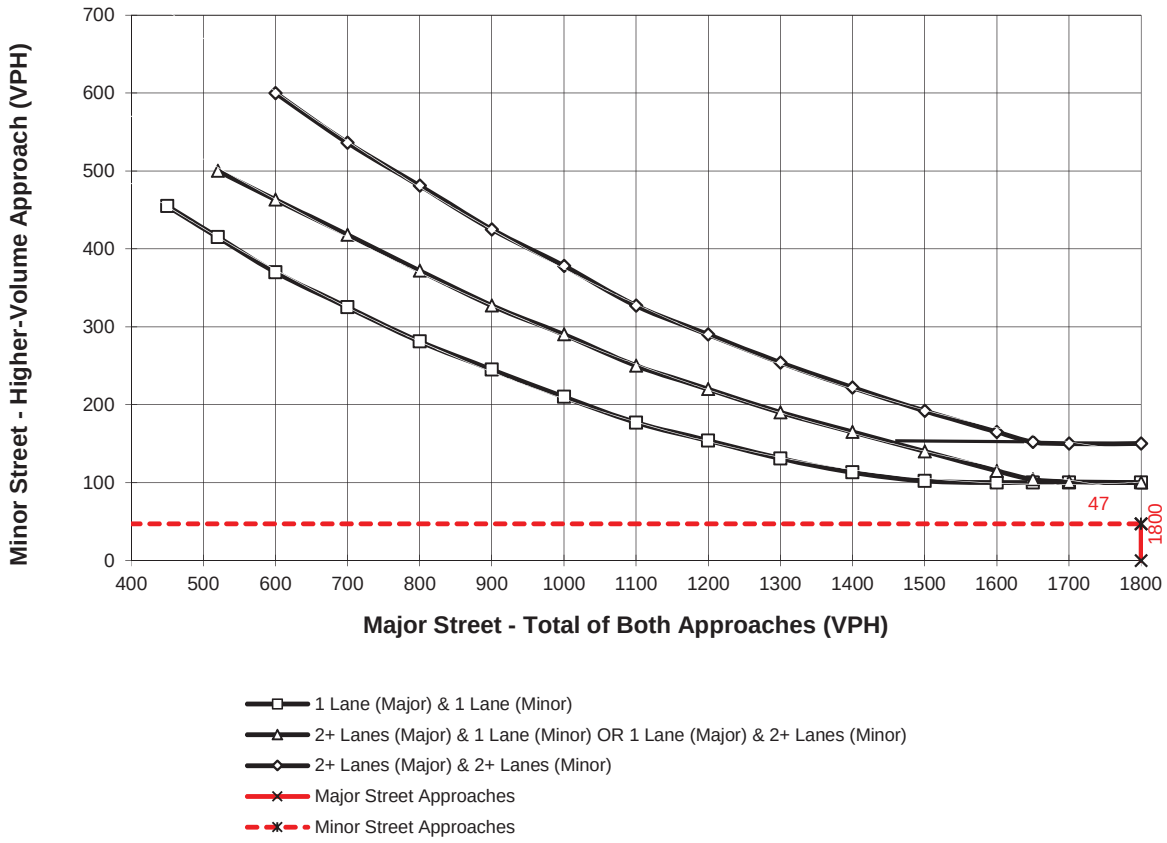
Major Street Name = **Day St.**

Total of Both Approaches (VPH) = **2,178**
Number of Approach Lanes on Major Street = **3**

Minor Street Name = **Dwy. 2**

High Volume Approach (VPH) = **47**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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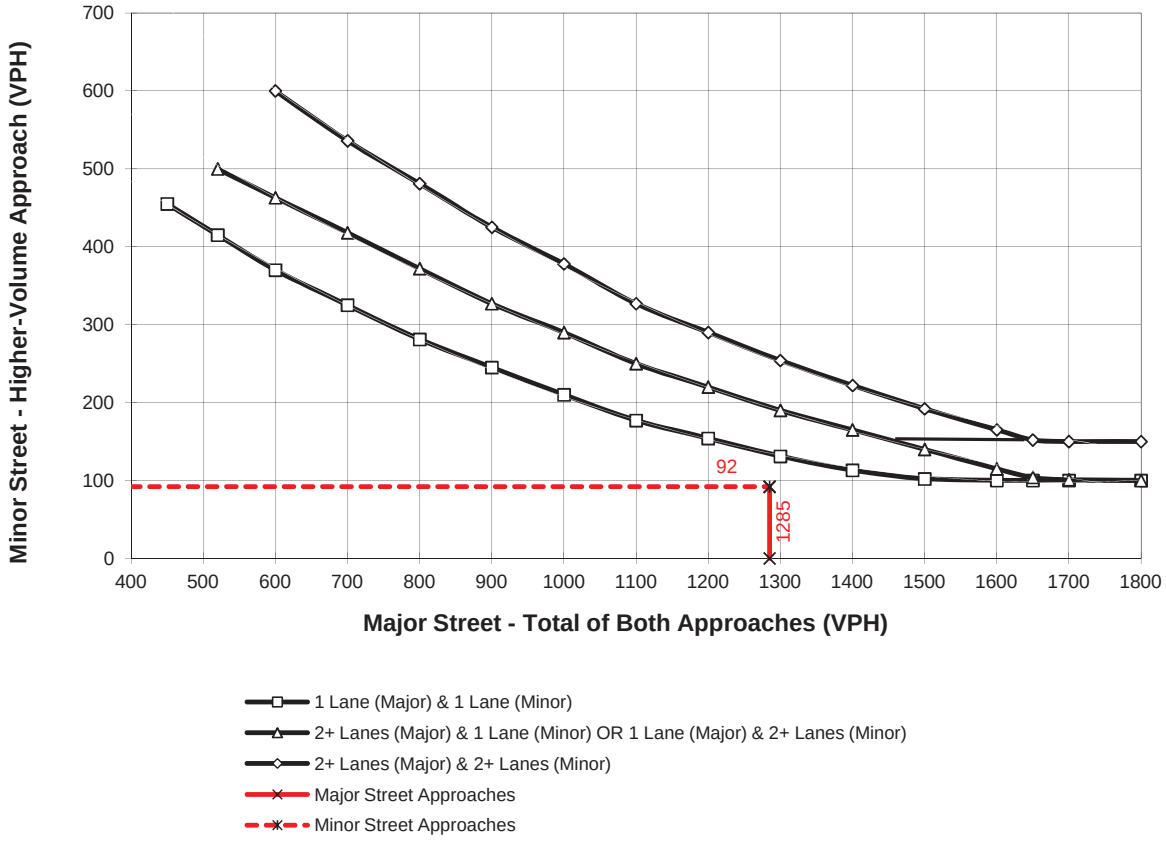
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EACP (2016) Conditions - Weekday AM Peak Hour**

Major Street Name = **Day St.**
Total of Both Approaches (VPH) = **1,285**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Bay Av.**
High Volume Approach (VPH) = **92**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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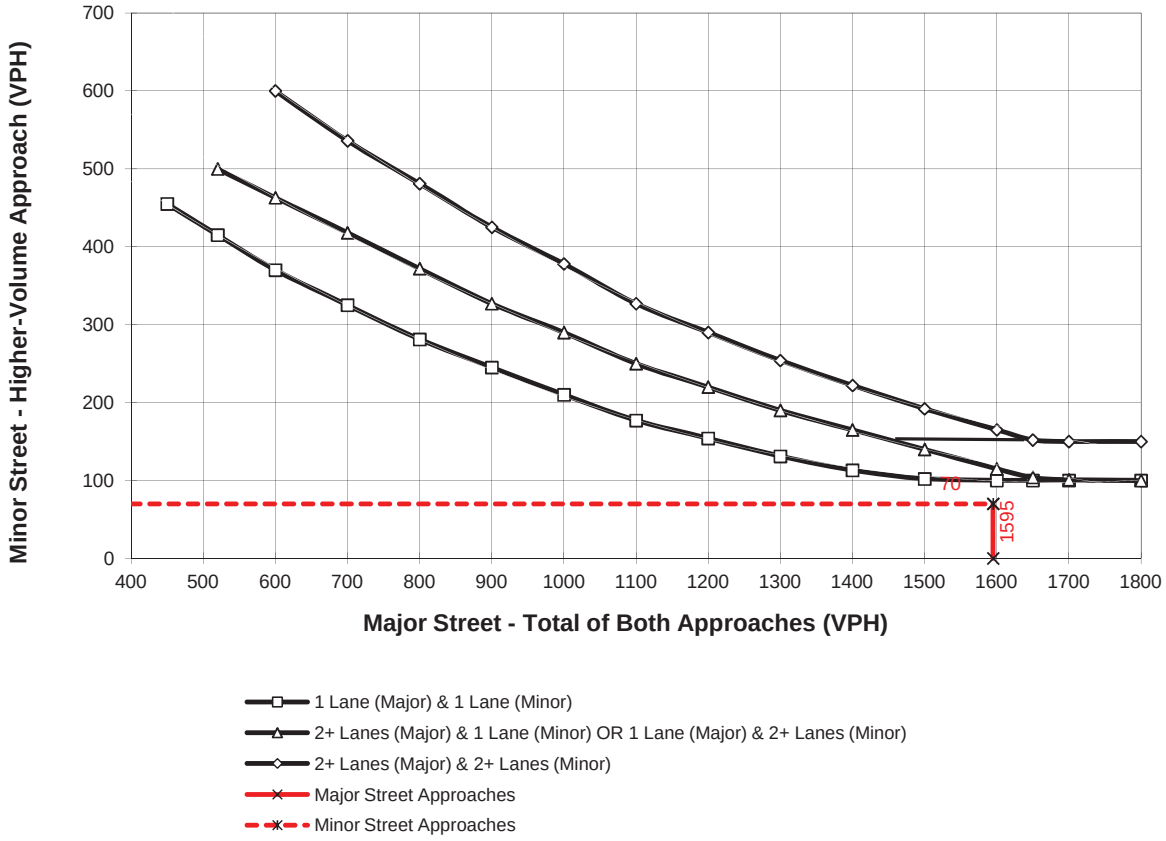
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EACP (2016) Conditions - Weekday PM Peak Hour**

Major Street Name = **Day St.**
Total of Both Approaches (VPH) = **1,595**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Bay Av.**
High Volume Approach (VPH) = **70**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

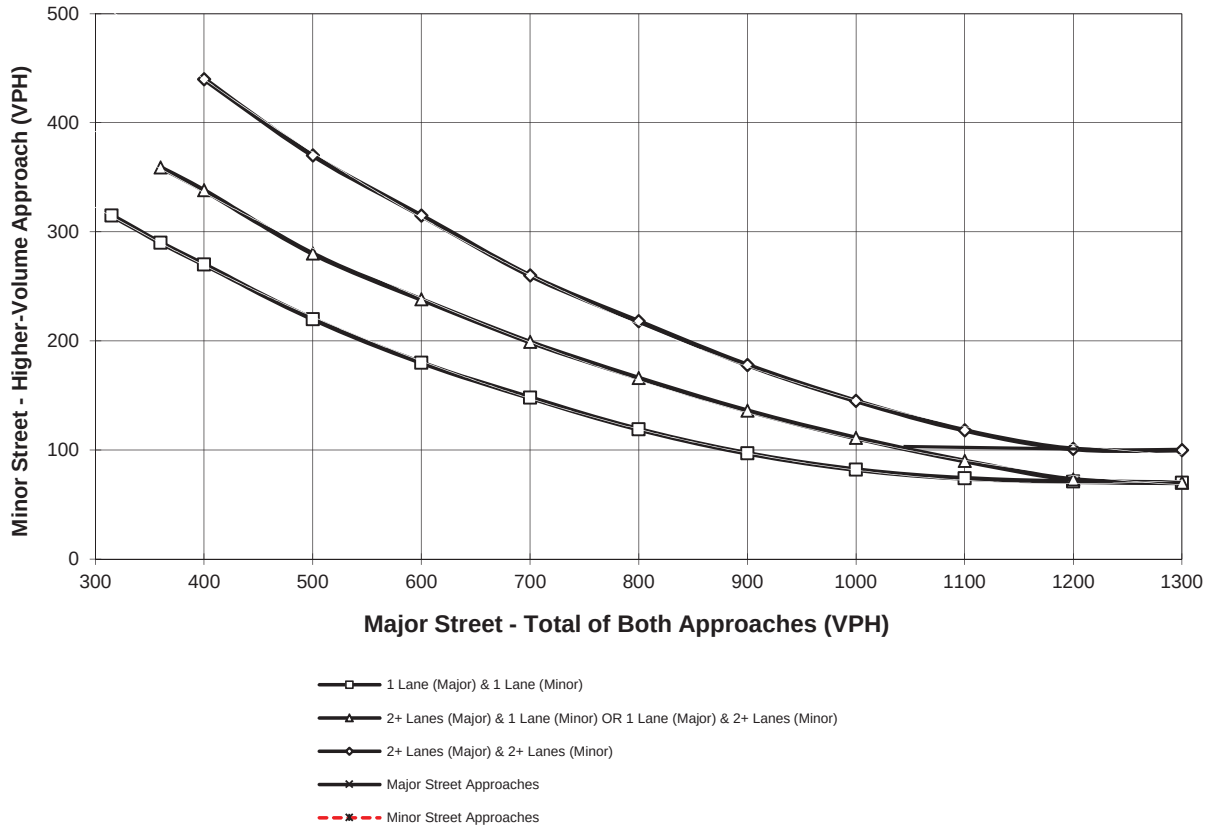
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP (2016) Conditions - Weekday AM Peak Hour**

Major Street Name = **Campus Pkwy.**
Total of Both Approaches (VPH) = **195**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Corporate Centre Pl.**
High Volume Approach (VPH) = **90**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

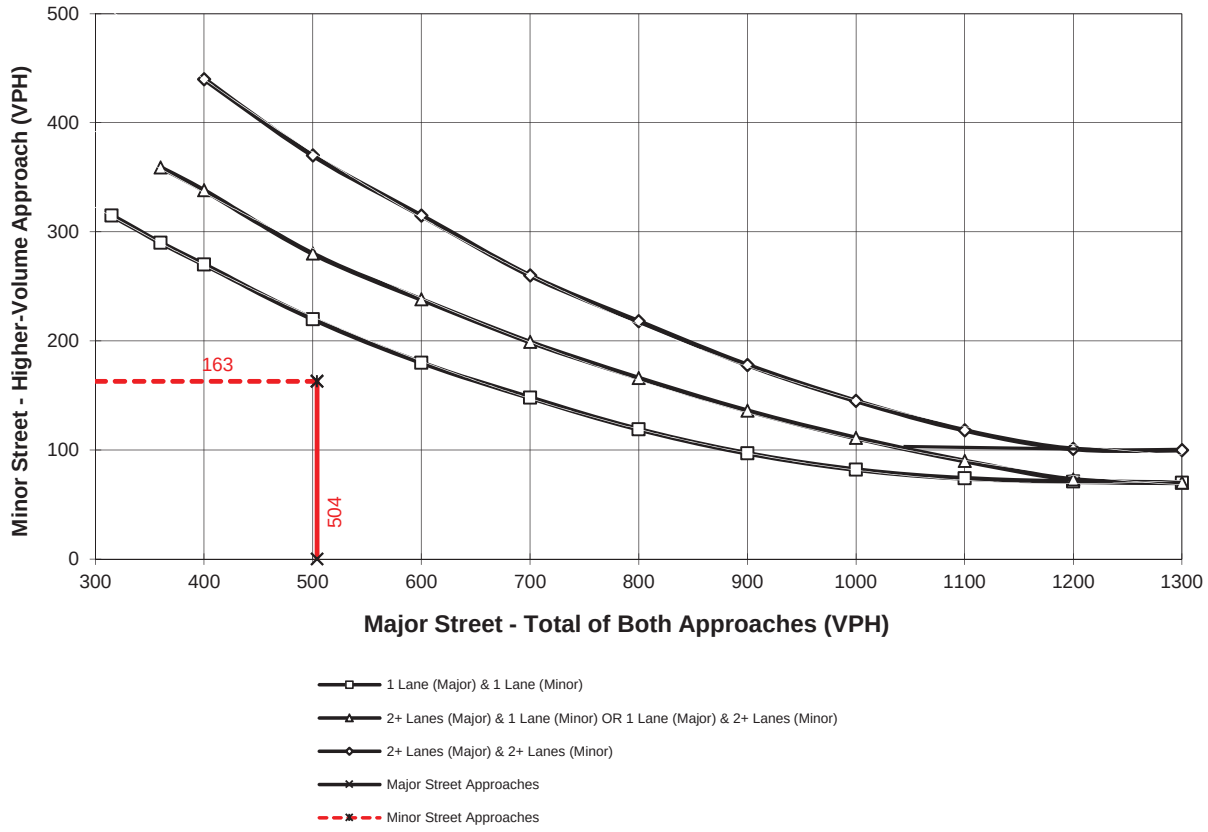
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP (2016) Conditions - Weekday PM Peak Hour**

Major Street Name = **Campus Pkwy.** Total of Both Approaches (VPH) = **504**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Corporate Centre Pl.** High Volume Approach (VPH) = **163**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

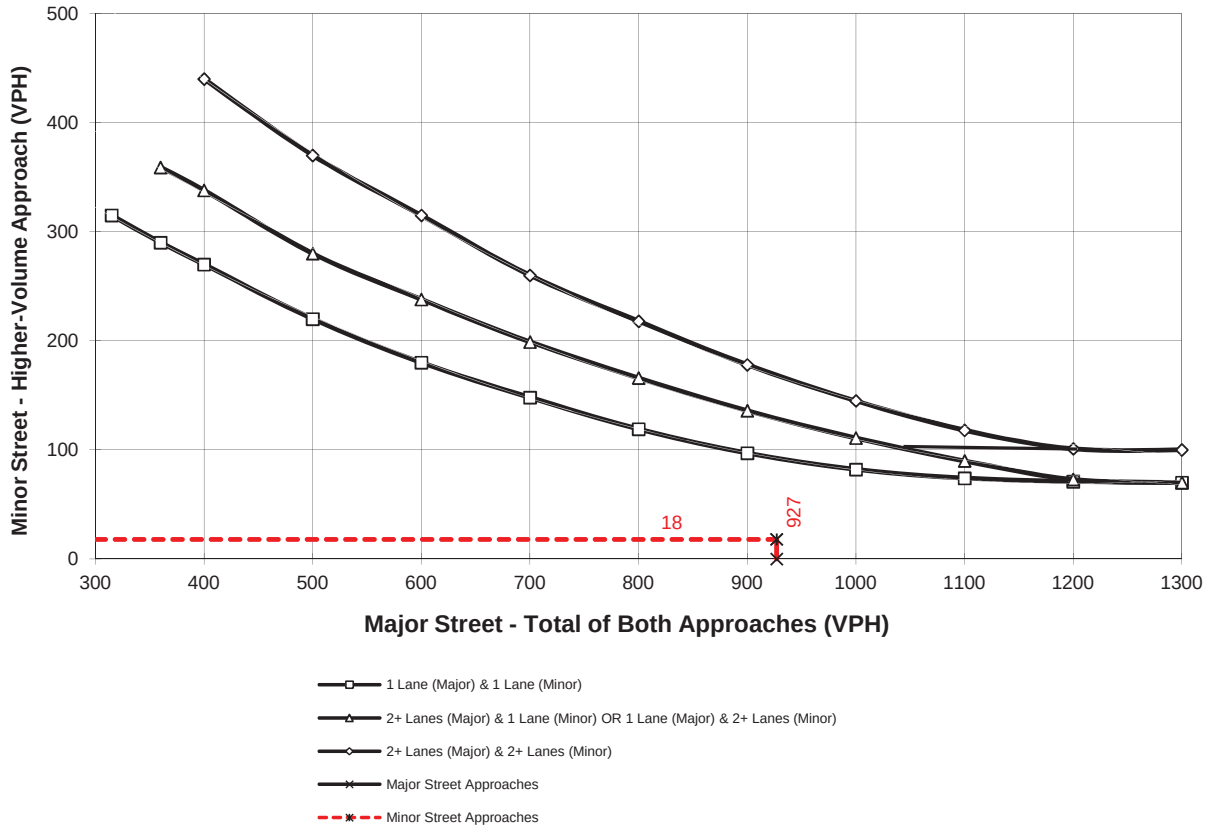
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP (2016) Conditions - Weekday AM Peak Hour**

Major Street Name = **Valley Springs Pkwy.**
Total of Both Approaches (VPH) = **927**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 4**
High Volume Approach (VPH) = **18**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

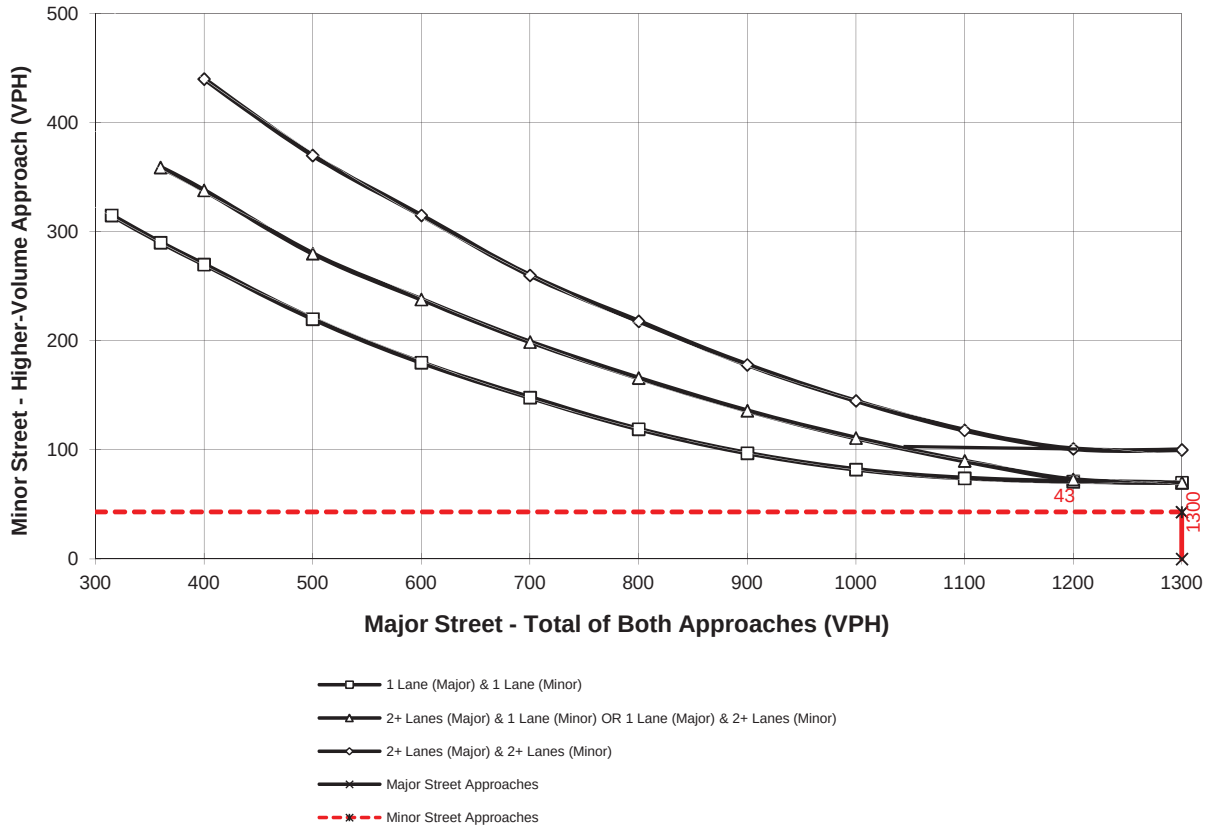
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP (2016) Conditions - Weekday PM Peak Hour**

Major Street Name = **Valley Springs Pkwy.**
Total of Both Approaches (VPH) = **1,664**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 4**
High Volume Approach (VPH) = **43**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP Conditions - Weekday AM Peak Hour**

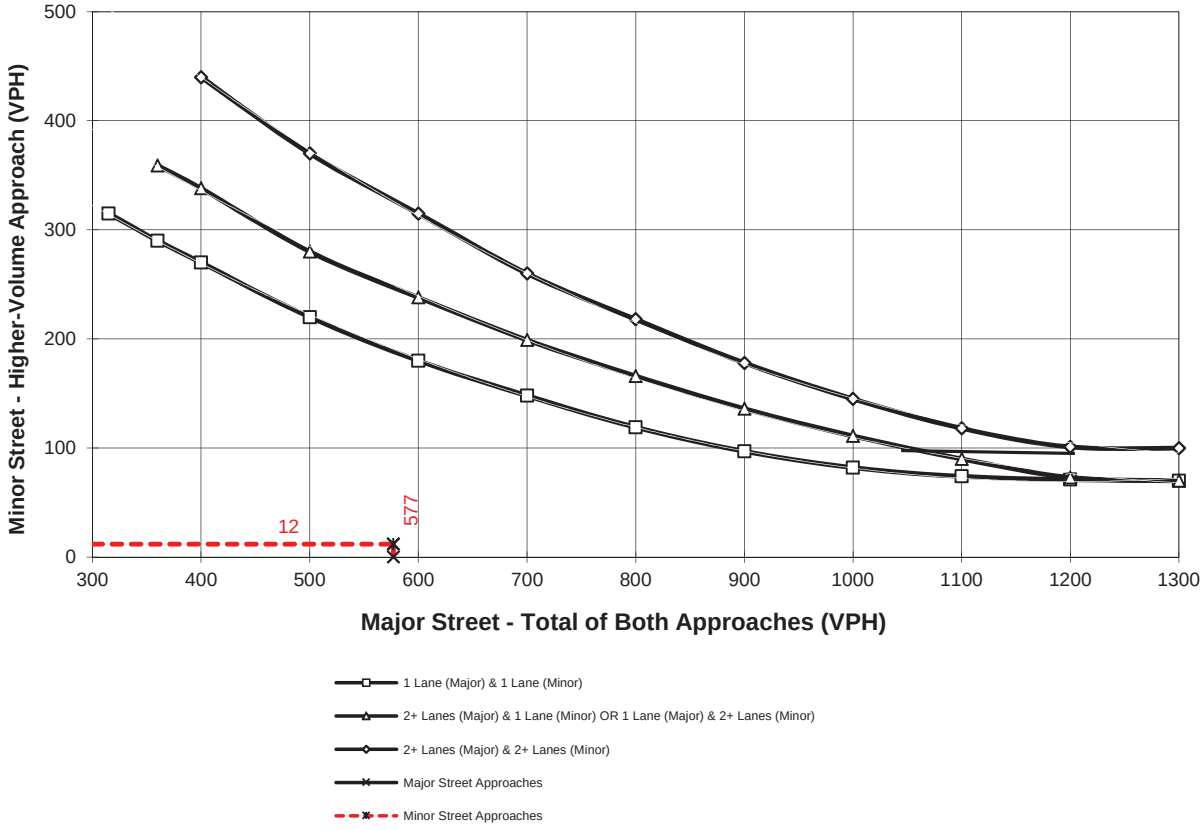
Major Street Name = **Gateway Dr.**

Total of Both Approaches (VPH) = **577**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 6**

High Volume Approach (VPH) = **12**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP Conditions - Weekday PM Peak Hour**

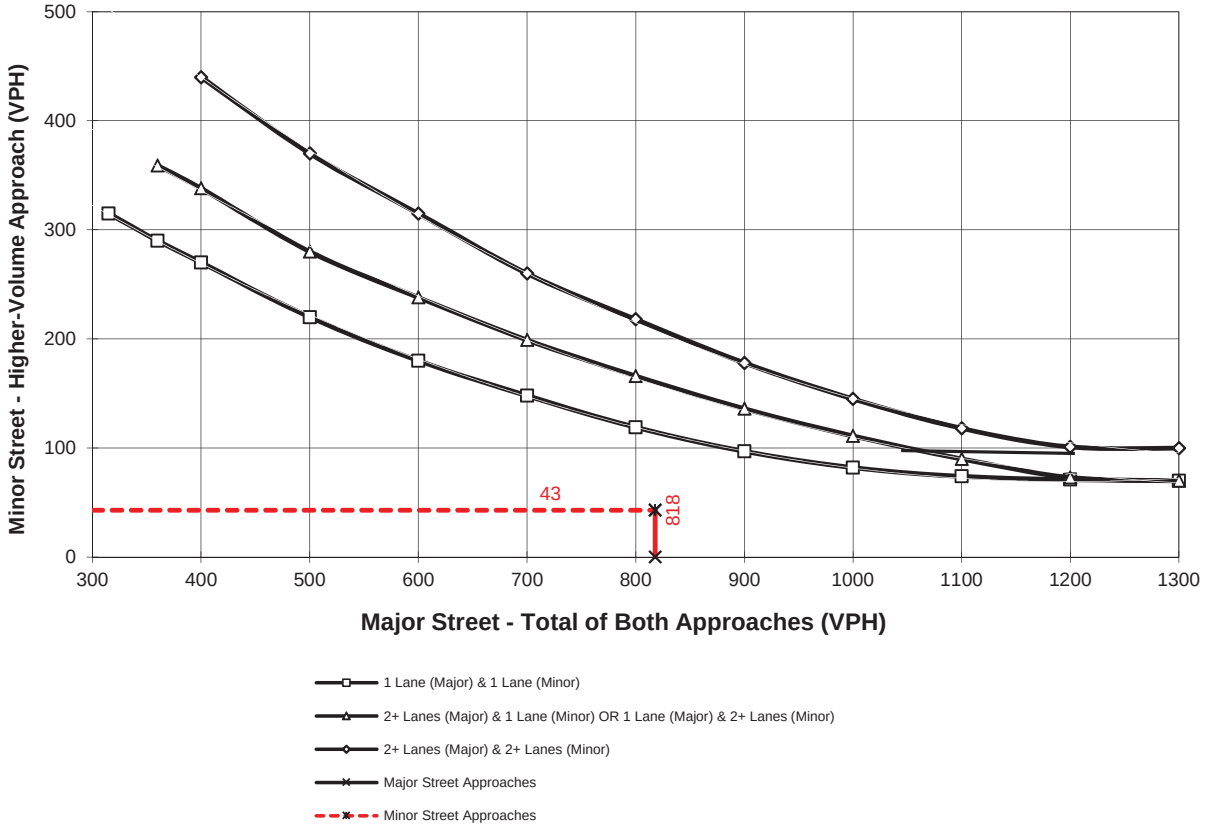
Major Street Name = **Gateway Dr.**

Total of Both Approaches (VPH) = **818**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 6**

High Volume Approach (VPH) = **43**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

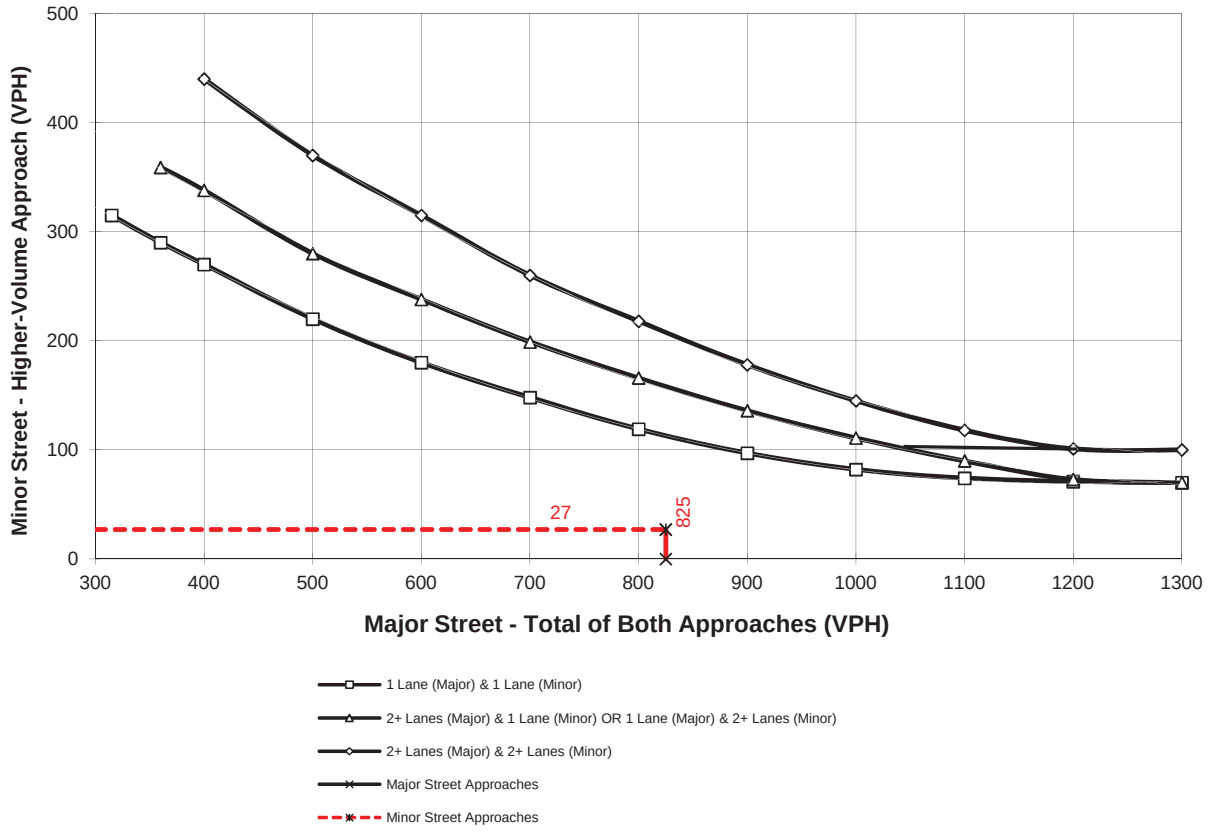
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP (2016) Conditions - Weekday AM Peak Hour**

Major Street Name = **Gateway Dr.**
Total of Both Approaches (VPH) = **825**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 9**
High Volume Approach (VPH) = **27**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

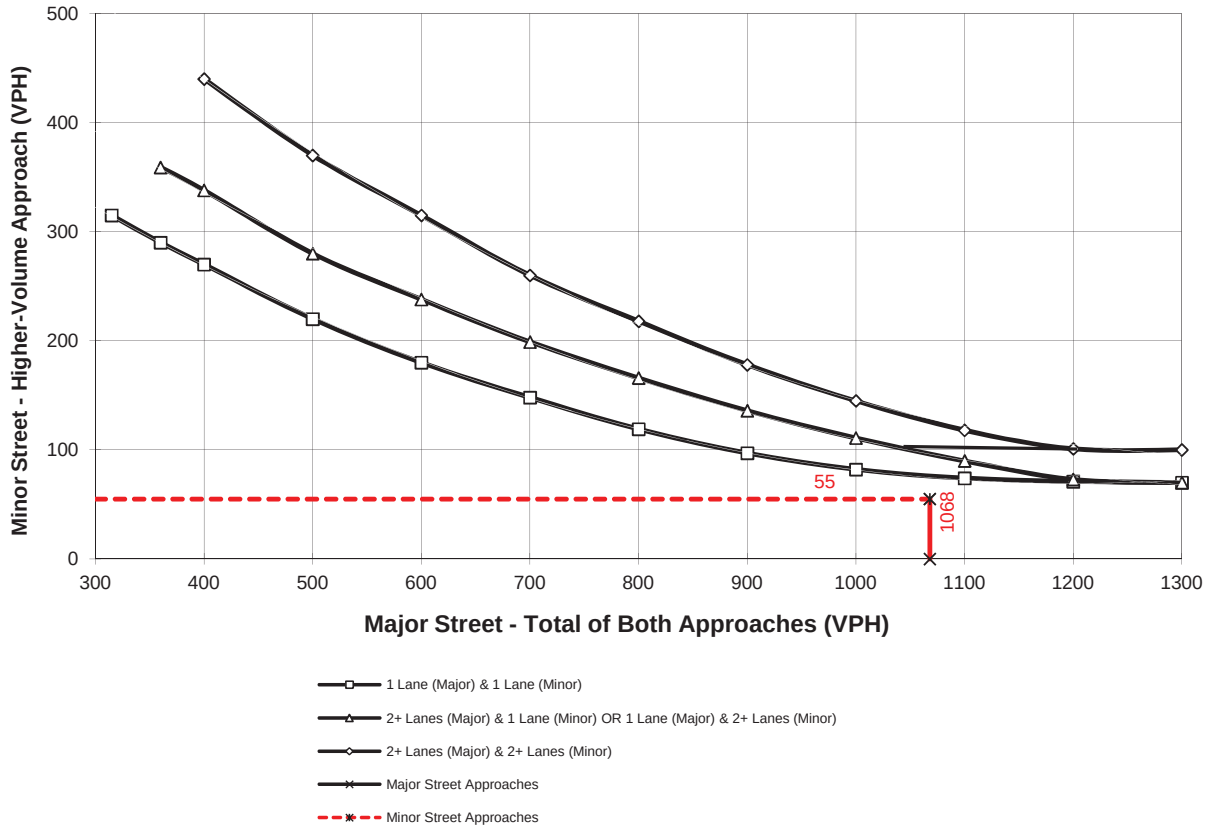
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EACP (2016) Conditions - Weekday PM Peak Hour**

Major Street Name = **Gateway Dr.**
Total of Both Approaches (VPH) = **1,068**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 9**
High Volume Approach (VPH) = **55**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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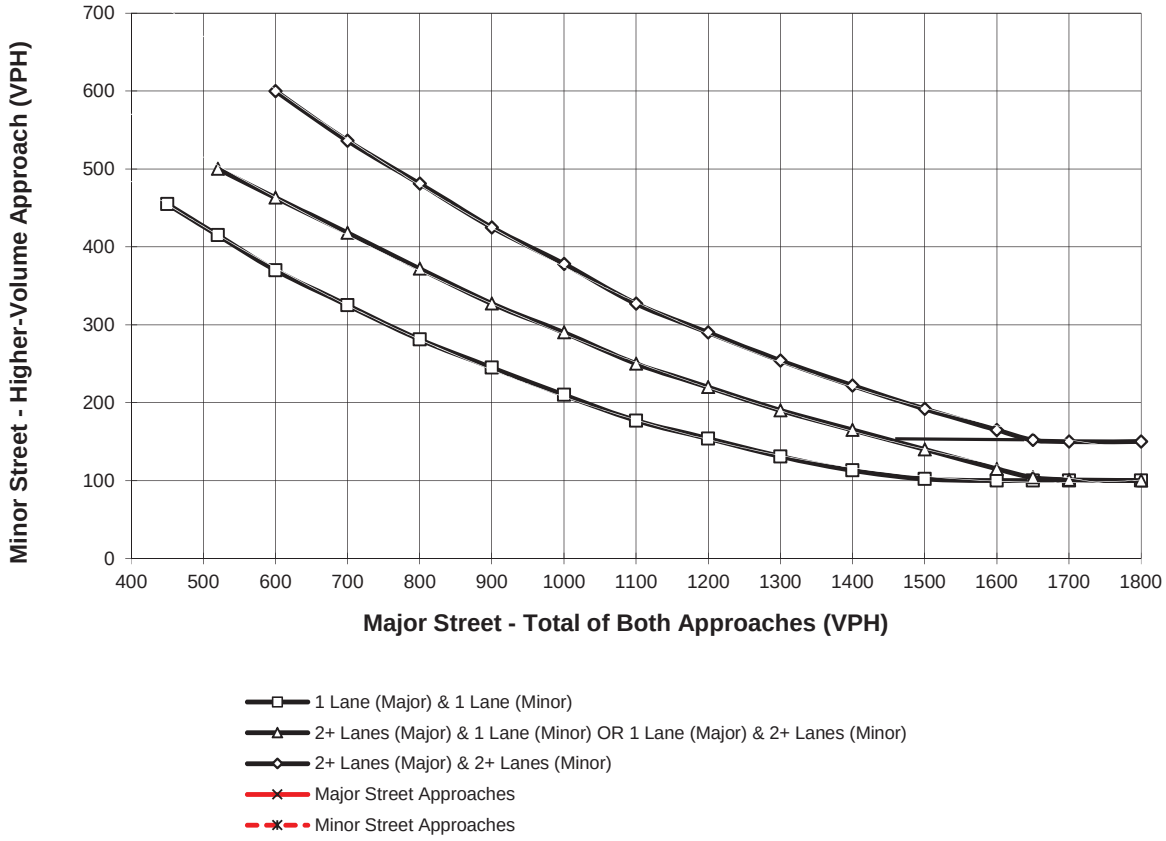
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (2016) Conditions - Weekday AM Peak Hour**

Major Street Name = **Campus Pkwy.**
Total of Both Approaches (VPH) = **275**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Canyon Park Dr.**
High Volume Approach (VPH) = **69**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

California MUTCD 2012 Edition
(FHWA's MUTCD 2009, as amended for use in California)

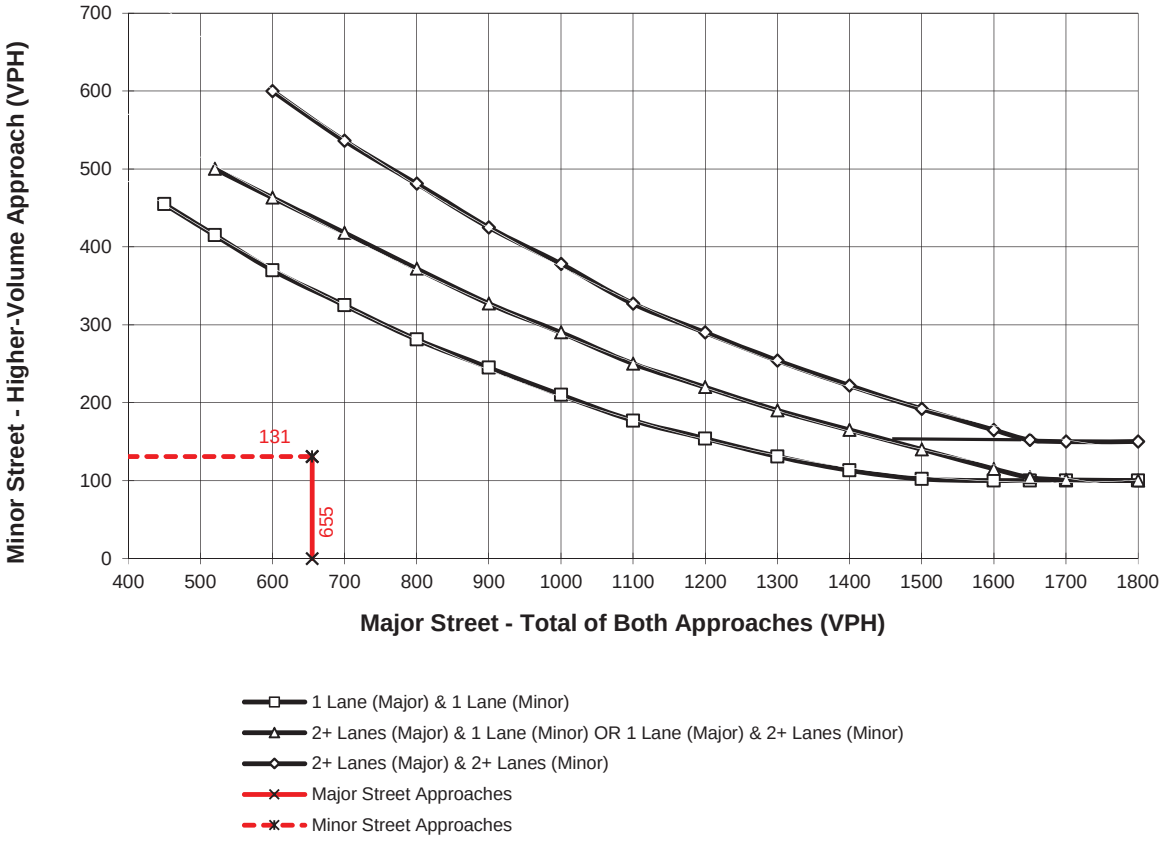
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (2016) Conditions - Weekday PM Peak Hour**

Major Street Name = **Campus Pkwy.**
Total of Both Approaches (VPH) = **655**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Canyon Park Dr.**
High Volume Approach (VPH) = **131**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

APPENDIX 6.5:

OPENING YEAR WITHOUT PROJECT CONDITIONS BASIC FREEWAY SEGMENT ANALYSIS WORKSHEETS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*South of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4364*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1700*	pc/h/ln
S	*67.1*	mph
D = v_p / S	*25.3*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3839*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1495*	pc/h/ln
S	*69.0*	mph
D = v_p / S	*21.7*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*North of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4242*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1652*	pc/h/ln
S	*67.6*	mph
D = v_p / S	*24.4*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 10-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*North Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5262*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1230*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*17.6*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4883*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1902*	pc/h/ln
S	*64.3*	mph
D = v_p / S	*29.6*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*South of Eucalyptus*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5358*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2087*	pc/h/ln
S	*60.9*	mph
D = v_p / S	*34.3*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3634*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1042*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*14.9*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*2950*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1128*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*16.1*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3318*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1268*	pc/h/ln
S	*69.9*	mph
D = v_p / S	*18.1*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3556*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*6*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*680*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*9.7*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3012*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*863*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*12.3*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3561*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*817*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*11.7*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*South of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4629*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1803*	pc/h/ln
S	*65.8*	mph
D = v_p / S	*27.4*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3902*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1520*	pc/h/ln
S	*68.8*	mph
D = v_p / S	*22.1*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*North of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4427*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1724*	pc/h/ln
S	*66.8*	mph
D = v_p / S	*25.8*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*North Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6556*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1532*	pc/h/ln
S	*68.7*	mph
D = v_p / S	*22.3*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 10-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5570*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2169*	pc/h/ln
S	*59.1*	mph
D = v_p / S	*36.7*	pc/mi/ln
LOS	*E*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*South of Eucalyptus*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6379*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2485*	pc/h/ln
S	*50.8*	mph
D = v_p / S	*48.9*	pc/mi/ln
LOS	*F*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3831*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1098*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*15.7*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 10-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3133*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1198*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*17.1*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3734*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1427*	pc/h/ln
S	*69.4*	mph
D = v_p / S	*20.6*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5653*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*6*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1080*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*15.4*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4660*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1336*	pc/h/ln
S	*69.8*	mph
D = v_p / S	*19.1*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*EAC (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5637*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1293*	pc/h/ln
S	*69.9*	mph
D = v_p / S	*18.5*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX 6.6:

OPENING YEAR WITH PROJECT CONDITIONS BASIC FREEWAY SEGMENT ANALYSIS WORKSHEETS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*South of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4576*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1782*	pc/h/ln
S	*66.1*	mph
D = v_p / S	*27.0*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3839*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1495*	pc/h/ln
S	*69.0*	mph
D = v_p / S	*21.7*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*North of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4296*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1673*	pc/h/ln
S	*67.4*	mph
D = v_p / S	*24.8*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*North Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5428*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1268*	pc/h/ln
S	*69.9*	mph
D = v_p / S	*18.1*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4883*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1902*	pc/h/ln
S	*64.3*	mph
D = v_p / S	*29.6*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*South of Eucalyptus*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5428*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2114*	pc/h/ln
S	*60.3*	mph
D = v_p / S	*35.1*	pc/mi/ln
LOS	*E*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3796*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1088*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*15.5*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*2950*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1128*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*16.1*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3351*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1281*	pc/h/ln
S	*69.9*	mph
D = v_p / S	*18.3*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3653*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*6*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*698*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*10.0*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3012*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*863*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*12.3*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3615*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*829*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*11.8*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*South of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4748*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1849*	pc/h/ln
S	*65.1*	mph
D = v_p / S	*28.4*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3902*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1520*	pc/h/ln
S	*68.8*	mph
D = v_p / S	*22.1*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*North of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4637*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1806*	pc/h/ln
S	*65.7*	mph
D = v_p / S	*27.5*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*North Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6648*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1554*	pc/h/ln
S	*68.5*	mph
D = v_p / S	*22.7*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5570*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*		E_R	*1.2*
E_T	*1.5*		$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2169*	pc/h/ln
S	*59.1*	mph
D = v_p / S	*36.7*	pc/mi/ln
LOS	*E*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*South of Eucalyptus*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6648*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2589*	pc/h/ln
S	*47.6*	mph
D = v_p / S	*54.4*	pc/mi/ln
LOS	*F*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3923*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1125*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*16.1*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3133*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1198*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*17.1*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3857*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1474*	pc/h/ln
S	*69.1*	mph
D = v_p / S	*21.3*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5709*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*6*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1091*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*15.6*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4660*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1336*	pc/h/ln
S	*69.8*	mph
D = v_p / S	*19.1*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*EACP (2016)*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5842*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1340*	pc/h/ln
S	*69.8*	mph
D = v_p / S	*19.2*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX 6.7:

OPENING YEAR WITHOUT PROJECT CONDITIONS FREEWAY RAMP JUNCTION (MERGE/DIVERGE) ANALYSIS WORKSHEETS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	EAC (2016)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 3	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2400 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 403 veh/h
	Freeway Volume, V_F: 4364	
	Ramp Volume, V_R: 525	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4364	0.92	Level	15	0	0.930	1.00	5099
Ramp	525	0.92	Level	2	0	0.990	1.00	576
UpStream								
DownStream	403	0.92	Level	2	0	0.990	1.00	442

Merge Areas | Diverge Areas

Estimation of v_{12} — Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Estimation of v_{12} — Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.606 using Equation (Exhibit 13-7)

V_{12} = 3317 pc/h

V_3 or V_{av34} 1782 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks — Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Capacity Checks — Diverge Areas

	Actual	Capacity		LOS F?
V_F	5099	Exhibit 13-8	7200	No
$V_{FO} = V_F - V_R$	4523	Exhibit 13-8	7200	No
V_R	576	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	3317	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F) — Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Level of Service Determination (if not F) — Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 31.2 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination — Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Speed Determination — Diverge Areas

D_s = 0.480 (Exhibit 13-12)

S_R = 56.6 mph (Exhibit 13-12)

S_0 = 73.7 mph (Exhibit 13-12)

S = 61.6 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	EAC (2016)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	3	Downstream Adj Ramp	
☑ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☐ No	☑ Off	Acceleration Lane Length, L_A	400	☑ No	☐ Off
L_{up} =	2400 ft	Deceleration Lane Length L_D		L_{down} =	ft
V_u =	525 veh/h	Freeway Volume, V_F	3839	V_D =	veh/h
		Ramp Volume, V_R	403		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	35.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3839	0.92	Level	15	0	0.930	1.00	4486
Ramp	403	0.92	Level	2	0	0.990	1.00	442
UpStream	525	0.92	Level	2	0	0.990	1.00	576
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 660.39 (Equation 13-6 or 13-7)

P_{FM} = 0.589 using Equation (Exhibit 13-6)

V_{12} = 2641 pc/h

V_3 or V_{av34} 1845 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 2641 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4928	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3083	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 26.8 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.378 (Exibit 13-11)

S_R= 59.4 mph (Exhibit 13-11)

S_0= 65.2 mph (Exhibit 13-11)

S = 61.4 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	EAC (2016)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2900 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 475 veh/h
	Freeway Volume, V_F: 5262	
	Ramp Volume, V_R: 379	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5262	0.92	Level	15	0	0.930	1.00	6149
Ramp	379	0.92	Level	2	0	0.990	1.00	416
UpStream								
DownStream	475	0.92	Level	2	0	0.990	1.00	521

Merge Areas | Diverge Areas

Estimation of v_{12}

Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 1667 pc/h

V_3 or V_{av34} 1780 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2090 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Diverge Areas

	Actual	Capacity		LOS F?
V_F	5227	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4811	Exhibit 13-8	9600	No
V_R	416	Exhibit 13-10	4000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1667	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

Merge Areas

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Diverge Areas

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = 10.0 (pc/mi/ln)

LOS = A (Exhibit 13-2)

Speed Determination

Merge Areas

M_S = (Exibit 13-11)

S_R= mph (Exhibit 13-11)

S_0= mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

D_s = 0.465 (Exhibit 13-12)

S_R= 57.0 mph (Exhibit 13-12)

S_0= 74.6 mph (Exhibit 13-12)

S = 66.4 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	EAC (2016)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2900 ft	Acceleration Lane Length, L_A: 600	L_{down} = ft
V_u = 379 veh/h	Deceleration Lane Length L_D	V_D = veh/h
	Freeway Volume, V_F: 4883	
	Ramp Volume, V_R: 475	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4883	0.92	Level	15	0	0.930	1.00	5706
Ramp	475	0.92	Level	2	0	0.990	1.00	521
UpStream	379	0.92	Level	2	0	0.990	1.00	416
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 1027.18 (Equation 13-6 or 13-7)

P_{FM} = 0.594 using Equation (Exhibit 13-6)

V_{12} = 3391 pc/h

V_3 or V_{av34} 2315 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 3391 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6227	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3912	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 32.0 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.474 (Exibit 13-11)

S_R= 56.7 mph (Exhibit 13-11)

S_0= 63.4 mph (Exhibit 13-11)

S = 59.0 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	EAC (2016)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp
☐ Yes ☐ On
☑ No ☐ Off
L_{up} = ft
V_u = veh/h

Freeway Number of Lanes, N	4
Ramp Number of Lanes, N	1
Acceleration Lane Length, L_A	
Deceleration Lane Length L_D	1000
Freeway Volume, V_F	3634
Ramp Volume, V_R	684
Freeway Free-Flow Speed, S_{FF}	70.0
Ramp Free-Flow Speed, S_{FR}	35.0

Downstream Adj Ramp
☑ Yes ☑ On
☐ No ☐ Off
L_{down} = 1400 ft
V_D = 368 veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3634	0.92	Level	11	0	0.948	1.00	4167
Ramp	684	0.92	Level	2	0	0.990	1.00	751
UpStream								
DownStream	368	0.92	Level	2	0	0.990	1.00	404

Merge Areas | Diverge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$
L_{EQ} = (Equation 13-6 or 13-7)
P_{FM} = using Equation (Exhibit 13-6)
V_{12} = pc/h
V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$
L_{EQ} = (Equation 13-12 or 13-13)
P_{FD} = 0.436 using Equation (Exhibit 13-7)
V_{12} = 2240 pc/h
V_3 or V_{av34} 963 pc/h (Equation 13-14 or 13-17)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No
If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

	Actual	Capacity		LOS F?
V_F	4167	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3416	Exhibit 13-8	9600	No
V_R	751	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2240	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$
D_R = (pc/mi/ln)
LOS = (Exhibit 13-2)

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$
D_R = 14.5 (pc/mi/ln)
LOS = B (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)
S_R = mph (Exhibit 13-11)
S_0 = mph (Exhibit 13-11)
S = mph (Exhibit 13-13)

Speed Determination

D_s = 0.496 (Exhibit 13-12)
S_R = 56.1 mph (Exhibit 13-12)
S_0 = 76.8 mph (Exhibit 13-12)
S = 64.1 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	EAC (2016)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 1400 ft	Acceleration Lane Length, L_A: 900	L_{down} = ft
V_u = 684 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 2950	
	Ramp Volume, V_R: 368	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	2950	0.92	Level	11	0	0.948	1.00	3383
Ramp	368	0.92	Level	2	0	0.990	1.00	404
UpStream	684	0.92	Level	2	0	0.990	1.00	751
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 638.22 (Equation 13-6 or 13-7)

P_{FM} = 0.603 using Equation (Exhibit 13-6)

V_{12} = 2039 pc/h

V_3 or V_{av34} 1344 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 2039 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	3787	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2443	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 18.7 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

M_S = 0.303 (Exibit 13-11)

S_R= 61.5 mph (Exhibit 13-11)

S_0= 67.0 mph (Exhibit 13-11)

S = 63.3 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	EAC (2016)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☑ Yes	☑ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☐ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	180	L_{down} =	2000 ft
V_u =	veh/h	Freeway Volume, V_F	3556	V_D =	549 veh/h
		Ramp Volume, V_R	544		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	35.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3556	0.92	Level	11	0	0.948	1.00	4078
Ramp	544	0.92	Level	2	0	0.990	1.00	597
UpStream								
DownStream	549	0.92	Level	2	0	0.990	1.00	603

Merge Areas | Diverge Areas

Estimation of v_{12}

Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 1396 pc/h

V_3 or V_{av34} 1137 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1468 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Diverge Areas

	Actual	Capacity		LOS F?
V_F	3671	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3074	Exhibit 13-8	9600	No
V_R	597	Exhibit 13-10	4000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1396	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

Merge Areas

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Diverge Areas

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = 12.7 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

Merge Areas

M_S = (Exibit 13-11)

S_R= mph (Exhibit 13-11)

S_0= mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

D_s = 0.482 (Exhibit 13-12)

S_R= 56.5 mph (Exhibit 13-12)

S_0= 76.4 mph (Exhibit 13-12)

S = 67.0 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	EAC (2016)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 4	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2000 ft	Acceleration Lane Length, L_A: 1000	L_{down} = ft
V_u = 544 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3012	
	Ramp Volume, V_R: 549	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3012	0.92	Level	11	0	0.948	1.00	3454
Ramp	549	0.92	Level	2	0	0.990	1.00	603
UpStream	544	0.92	Level	2	0	0.990	1.00	597
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 740.40 (Equation 13-6 or 13-7)

P_{FM} = 0.142 using Equation (Exhibit 13-6)

V_{12} = 492 pc/h

V_3 or V_{av34} 1481 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 1381 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4057	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1984	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 14.4 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

M_S = 0.279 (Exibit 13-11)

S_R= 62.2 mph (Exhibit 13-11)

S_0= 68.1 mph (Exhibit 13-11)

S = 65.1 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	EAC (2016)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 3	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2400 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 525 veh/h
	Freeway Volume, V_F: 4629	
	Ramp Volume, V_R: 727	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4629	0.92	Level	15	0	0.930	1.00	5409
Ramp	727	0.92	Level	2	0	0.990	1.00	798
UpStream								
DownStream	525	0.92	Level	2	0	0.990	1.00	576

Merge Areas | Diverge Areas

Estimation of v_{12} — Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Estimation of v_{12} — Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.588 using Equation (Exhibit 13-7)

V_{12} = 3510 pc/h

V_3 or V_{av34} 1899 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks — Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Capacity Checks — Diverge Areas

	Actual	Capacity		LOS F?
V_F	5409	Exhibit 13-8	7200	No
$V_{FO} = V_F - V_R$	4611	Exhibit 13-8	7200	No
V_R	798	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	3510	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F) — Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Level of Service Determination (if not F) — Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 32.8 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination — Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Speed Determination — Diverge Areas

D_s = 0.500 (Exhibit 13-12)

S_R = 56.0 mph (Exhibit 13-12)

S_0 = 73.3 mph (Exhibit 13-12)

S = 61.1 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	EAC (2016)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2400 ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = 727 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3902	
	Ramp Volume, V_R: 525	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3902	0.92	Level	15	0	0.930	1.00	4559
Ramp	525	0.92	Level	2	0	0.990	1.00	576
UpStream	727	0.92	Level	2	0	0.990	1.00	798
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 704.69 (Equation 13-6 or 13-7)

P_{FM} = 0.589 using Equation (Exhibit 13-6)

V_{12} = 2684 pc/h

V_3 or V_{av34} 1875 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 2684 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5135	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3260	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 28.1 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.395 (Exibit 13-11)

S_R= 59.0 mph (Exhibit 13-11)

S_0= 65.1 mph (Exhibit 13-11)

S = 61.0 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	EAC (2016)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2900 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 809 veh/h
	Freeway Volume, V_F: 6556	
	Ramp Volume, V_R: 986	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6556	0.92	Level	15	0	0.930	1.00	7661
Ramp	986	0.92	Level	2	0	0.990	1.00	1082
UpStream								
DownStream	809	0.92	Level	2	0	0.990	1.00	888

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R= mph (Exhibit 13-11)

S_0= mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2394 pc/h

V_3 or V_{av34} 1867 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2451 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	6129	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	5047	Exhibit 13-8	9600	No
V_R	1082	Exhibit 13-10	4000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2394	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 13.1 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.525 (Exhibit 13-12)

S_R= 55.3 mph (Exhibit 13-12)

S_0= 73.5 mph (Exhibit 13-12)

S = 65.0 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	EAC (2016)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp
☑ Yes ☐ On
☐ No ☑ Off
L_{up} = 2900 ft
V_u = 986 veh/h

Freeway Number of Lanes, N	3
Ramp Number of Lanes, N	1
Acceleration Lane Length, L_A	600
Deceleration Lane Length L_D	
Freeway Volume, V_F	5570
Ramp Volume, V_R	809
Freeway Free-Flow Speed, S_{FF}	70.0
Ramp Free-Flow Speed, S_{FR}	35.0

Downstream Adj Ramp
☐ Yes ☐ On
☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5570	0.92	Level	15	0	0.930	1.00	6508
Ramp	809	0.92	Level	2	0	0.990	1.00	888
UpStream	986	0.92	Level	2	0	0.990	1.00	1082
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$
L_{EQ} = 1277.34 (Equation 13-6 or 13-7)
P_{FM} = 0.594 using Equation (Exhibit 13-6)
V_{12} = 3868 pc/h
V_3 or V_{av34} 2640 pc/h (Equation 13-14 or 13-17)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No
If Yes,V_{12a} = 3868 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	7396	Exhibit 13-8		Yes

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	4756	Exhibit 13-8	4600:All	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$
D_R = 38.4 (pc/mi/ln)
LOS = F (Exhibit 13-2)

Speed Determination

M_S = 0.732 (Exibit 13-11)
S_R= 49.5 mph (Exhibit 13-11)
S_0= 61.4 mph (Exhibit 13-11)
S = 53.2 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$
L_{EQ} = (Equation 13-12 or 13-13)
P_{FD} = using Equation (Exhibit 13-7)
V_{12} = pc/h
V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$
D_R = (pc/mi/ln)
LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)
S_R= mph (Exhibit 13-12)
S_0= mph (Exhibit 13-12)
S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	EAC (2016)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 4	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 1400 ft
V_u = veh/h	Deceleration Lane Length L_D: 1000	V_D = 601 veh/h
	Freeway Volume, V_F: 3831	
	Ramp Volume, V_R: 698	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3831	0.92	Level	11	0	0.948	1.00	4393
Ramp	698	0.92	Level	2	0	0.990	1.00	766
UpStream								
DownStream	601	0.92	Level	2	0	0.990	1.00	660

Merge Areas | Diverge Areas

Estimation of v_{12}

Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2347 pc/h

V_3 or V_{av34} 1023 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Diverge Areas

	Actual	Capacity		LOS F?
V_F	4393	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3627	Exhibit 13-8	9600	No
V_R	766	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2347	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 15.4 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

D_s = 0.497 (Exhibit 13-12)

S_R = 56.1 mph (Exhibit 13-12)

S_0 = 76.7 mph (Exhibit 13-12)

S = 64.1 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	EAC (2016)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 1400 ft	Acceleration Lane Length, L_A: 900	L_{down} = ft
V_u = 698 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3133	
	Ramp Volume, V_R: 601	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3133	0.92	Level	11	0	0.948	1.00	3593
Ramp	601	0.92	Level	2	0	0.990	1.00	660
UpStream	698	0.92	Level	2	0	0.990	1.00	766
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 737.94 (Equation 13-6 or 13-7)

P_{FM} = 0.603 using Equation (Exhibit 13-6)

V_{12} = 2166 pc/h

V_3 or V_{av34} 1427 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 2166 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4253	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2826	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 21.6 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.324 (Exibit 13-11)

S_R= 60.9 mph (Exhibit 13-11)

S_0= 66.7 mph (Exhibit 13-11)

S = 62.7 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	EAC (2016)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2000 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 977 veh/h
	Freeway Volume, V_F: 5653	
	Ramp Volume, V_R: 993	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5653	0.92	Level	11	0	0.948	1.00	6483
Ramp	993	0.92	Level	2	0	0.990	1.00	1090
UpStream								
DownStream	977	0.92	Level	2	0	0.990	1.00	1073

Merge Areas | Diverge Areas

Estimation of v_{12} — Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Estimation of v_{12} — Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2239 pc/h

V_3 or V_{av34} 1636 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks — Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Capacity Checks — Diverge Areas

	Actual	Capacity		LOS F?
V_F	5511	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4421	Exhibit 13-8	9600	No
V_R	1090	Exhibit 13-10	4000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2239	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F) — Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Level of Service Determination (if not F) — Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 19.4 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination — Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Speed Determination — Diverge Areas

D_s = 0.526 (Exhibit 13-12)

S_R = 55.3 mph (Exhibit 13-12)

S_0 = 74.3 mph (Exhibit 13-12)

S = 65.2 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	EAC (2016)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	4	Downstream Adj Ramp	
☑ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☐ No	☑ Off	Acceleration Lane Length, L_A	1000	☑ No	☐ Off
L_{up} =	2000 ft	Deceleration Lane Length L_D		L_{down} =	ft
V_u =	993 veh/h	Freeway Volume, V_F	4660	V_D =	veh/h
		Ramp Volume, V_R	977		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	35.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4660	0.92	Level	11	0	0.948	1.00	5344
Ramp	977	0.92	Level	2	0	0.990	1.00	1073
UpStream	993	0.92	Level	2	0	0.990	1.00	1090
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 1245.44 (Equation 13-6 or 13-7)

P_{FM} = 0.084 using Equation (Exhibit 13-6)

V_{12} = 447 pc/h

V_3 or V_{av34} = 2448 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2137 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6417	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3210	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 23.7 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.348 (Exibit 13-11)

S_R = 60.3 mph (Exhibit 13-11)

S_0 = 66.0 mph (Exhibit 13-11)

S = 63.0 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX 6.8:

OPENING YEAR WITH PROJECT CONDITIONS FREEWAY RAMP JUNCTION (MERGE/DIVERGE) ANALYSIS WORKSHEETS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	EACP (2016)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 3	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2400 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 457 veh/h
	Freeway Volume, V_F: 4576	
	Ramp Volume, V_R: 737	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4576	0.92	Level	15	0	0.930	1.00	5347
Ramp	737	0.92	Level	2	0	0.990	1.00	809
UpStream								
DownStream	457	0.92	Level	2	0	0.990	1.00	502

Merge Areas | Diverge Areas

Estimation of v_{12}

Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.589 using Equation (Exhibit 13-7)

V_{12} = 3482 pc/h

V_3 or V_{av34} 1865 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Diverge Areas

	Actual	Capacity		LOS F?
V_F	5347	Exhibit 13-8	7200	No
$V_{FO} = V_F - V_R$	4538	Exhibit 13-8	7200	No
V_R	809	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	3482	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 32.6 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

D_s = 0.501 (Exhibit 13-12)

S_R = 56.0 mph (Exhibit 13-12)

S_0 = 73.4 mph (Exhibit 13-12)

S = 61.0 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	EACP (2016)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2400 ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = 737 veh/h	Deceleration Lane Length L_D	V_D = veh/h
	Freeway Volume, V_F: 3839	
	Ramp Volume, V_R: 457	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3839	0.92	Level	15	0	0.930	1.00	4486
Ramp	457	0.92	Level	2	0	0.990	1.00	502
UpStream	737	0.92	Level	2	0	0.990	1.00	809
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 673.23 (Equation 13-6 or 13-7)

P_{FM} = 0.589 using Equation (Exhibit 13-6)

V_{12} = 2641 pc/h

V_3 or V_{av34} 1845 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 2641 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4988	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3143	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 27.3 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.383 (Exibit 13-11)

S_R= 59.3 mph (Exhibit 13-11)

S_0= 65.2 mph (Exhibit 13-11)

S = 61.3 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	EACP (2016)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2900 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 545 veh/h
	Freeway Volume, V_F: 5428	
	Ramp Volume, V_R: 545	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5428	0.92	Level	15	0	0.930	1.00	6342
Ramp	545	0.92	Level	2	0	0.990	1.00	598
UpStream								
DownStream	545	0.92	Level	2	0	0.990	1.00	598

Merge Areas | Diverge Areas

Estimation of v_{12}

Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 1844 pc/h

V_3 or V_{av34} 1773 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2156 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Diverge Areas

	Actual	Capacity		LOS F?
V_F	5391	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4793	Exhibit 13-8	9600	No
V_R	598	Exhibit 13-10	4000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1844	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

Merge Areas

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Diverge Areas

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = 10.6 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

Merge Areas

M_S = (Exibit 13-11)

S_R= mph (Exhibit 13-11)

S_0= mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

D_s = 0.482 (Exhibit 13-12)

S_R= 56.5 mph (Exhibit 13-12)

S_0= 74.4 mph (Exhibit 13-12)

S = 66.0 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	EACP (2016)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2900 ft	Acceleration Lane Length, L_A: 600	L_{down} = ft
V_u = 545 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 4883	
	Ramp Volume, V_R: 545	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4883	0.92	Level	15	0	0.930	1.00	5706
Ramp	545	0.92	Level	2	0	0.990	1.00	598
UpStream	545	0.92	Level	2	0	0.990	1.00	598
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 1043.66 (Equation 13-6 or 13-7)

P_{FM} = 0.594 using Equation (Exhibit 13-6)

V_{12} = 3391 pc/h

V_3 or V_{av34} 2315 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 3391 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6304	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3989	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 32.6 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.490 (Exibit 13-11)

S_R= 56.3 mph (Exhibit 13-11)

S_0= 63.4 mph (Exhibit 13-11)

S = 58.7 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	EACP (2016)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 4	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 1400 ft
V_u = veh/h	Deceleration Lane Length L_D: 1000	V_D = 401 veh/h
	Freeway Volume, V_F: 3796	
	Ramp Volume, V_R: 846	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3796	0.92	Level	11	0	0.948	1.00	4353
Ramp	846	0.92	Level	2	0	0.990	1.00	929
UpStream								
DownStream	401	0.92	Level	2	0	0.990	1.00	440

Merge Areas | Diverge Areas

Estimation of v_{12} — Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Estimation of v_{12} — Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2422 pc/h

V_3 or V_{av34} 965 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks — Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Capacity Checks — Diverge Areas

	Actual	Capacity		LOS F?
V_F	4353	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3424	Exhibit 13-8	9600	No
V_R	929	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2422	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F) — Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Level of Service Determination (if not F) — Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 16.1 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination — Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Speed Determination — Diverge Areas

D_s = 0.512 (Exhibit 13-12)

S_R = 55.7 mph (Exhibit 13-12)

S_0 = 76.8 mph (Exhibit 13-12)

S = 63.4 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	EACP (2016)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 1400 ft	Acceleration Lane Length, L_A: 900	L_{down} = ft
V_u = 846 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 2950	
	Ramp Volume, V_R: 401	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	2950	0.92	Level	11	0	0.948	1.00	3383
Ramp	401	0.92	Level	2	0	0.990	1.00	440
UpStream	846	0.92	Level	2	0	0.990	1.00	929
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 645.92 (Equation 13-6 or 13-7)

P_{FM} = 0.603 using Equation (Exhibit 13-6)

V_{12} = 2039 pc/h

V_3 or V_{av34} = 1344 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2039 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	3823	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2479	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 19.0 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

M_S = 0.305 (Exibit 13-11)

S_R = 61.5 mph (Exhibit 13-11)

S_0 = 67.0 mph (Exhibit 13-11)

S = 63.3 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	EACP (2016)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☑ Yes	☑ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☐ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	180	L_{down} =	2000 ft
V_u =	veh/h	Freeway Volume, V_F	3653	V_D =	603 veh/h
		Ramp Volume, V_R	641		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	35.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3653	0.92	Level	11	0	0.948	1.00	4189
Ramp	641	0.92	Level	2	0	0.990	1.00	704
UpStream								
DownStream	603	0.92	Level	2	0	0.990	1.00	662

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R= mph (Exhibit 13-11)

S_0= mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 1501 pc/h

V_3 or V_{av34} 1135 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1508 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	3771	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3067	Exhibit 13-8	9600	No
V_R	704	Exhibit 13-10	4000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1501	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 13.1 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.491 (Exhibit 13-12)

S_R= 56.2 mph (Exhibit 13-12)

S_0= 76.3 mph (Exhibit 13-12)

S = 66.8 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	EACP (2016)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	4	Downstream Adj Ramp	
☑ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☐ No	☑ Off	Acceleration Lane Length, L_A	1000	☑ No	☐ Off
L_{up} =	2000 ft	Deceleration Lane Length L_D		L_{down} =	ft
V_u =	641 veh/h	Freeway Volume, V_F	3012	V_D =	veh/h
		Ramp Volume, V_R	603		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	35.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3012	0.92	Level	11	0	0.948	1.00	3454
Ramp	603	0.92	Level	2	0	0.990	1.00	662
UpStream	641	0.92	Level	2	0	0.990	1.00	704
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 753.02 (Equation 13-6 or 13-7)

P_{FM} = 0.135 using Equation (Exhibit 13-6)

V_{12} = 466 pc/h

V_3 or V_{av34} = 1494 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1381 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4116	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2043	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 14.8 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

M_S = 0.281 (Exibit 13-11)

S_R = 62.1 mph (Exhibit 13-11)

S_0 = 68.1 mph (Exhibit 13-11)

S = 65.0 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	EACP (2016)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 3	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2400 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 735 veh/h
	Freeway Volume, V_F: 4748	
	Ramp Volume, V_R: 846	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4748	0.92	Level	15	0	0.930	1.00	5548
Ramp	846	0.92	Level	2	0	0.990	1.00	929
UpStream								
DownStream	735	0.92	Level	2	0	0.990	1.00	807

Merge Areas | Diverge Areas

Estimation of v_{12} — Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Estimation of v_{12} — Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.579 using Equation (Exhibit 13-7)

V_{12} = 3601 pc/h

V_3 or V_{av34} 1947 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks — Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Capacity Checks — Diverge Areas

	Actual	Capacity		LOS F?
V_F	5548	Exhibit 13-8	7200	No
$V_{FO} = V_F - V_R$	4619	Exhibit 13-8	7200	No
V_R	929	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	3601	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F) — Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Level of Service Determination (if not F) — Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 33.6 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination — Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Speed Determination — Diverge Areas

D_s = 0.512 (Exhibit 13-12)

S_R = 55.7 mph (Exhibit 13-12)

S_0 = 73.1 mph (Exhibit 13-12)

S = 60.8 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	EACP (2016)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2400 ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = 846 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3902	
	Ramp Volume, V_R: 735	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3902	0.92	Level	15	0	0.930	1.00	4559
Ramp	735	0.92	Level	2	0	0.990	1.00	807
UpStream	846	0.92	Level	2	0	0.990	1.00	929
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 754.12 (Equation 13-6 or 13-7)

P_{FM} = 0.589 using Equation (Exhibit 13-6)

V_{12} = 2684 pc/h

V_3 or V_{av34} 1875 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 2684 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5366	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3491	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 29.8 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.421 (Exibit 13-11)

S_R= 58.2 mph (Exhibit 13-11)

S_0= 65.1 mph (Exhibit 13-11)

S = 60.4 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	EACP (2016)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2900 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 1078 veh/h
	Freeway Volume, V_F: 6648	
	Ramp Volume, V_R: 1078	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6648	0.92	Level	15	0	0.930	1.00	7768
Ramp	1078	0.92	Level	2	0	0.990	1.00	1183
UpStream								
DownStream	1078	0.92	Level	2	0	0.990	1.00	1183

Merge Areas | Diverge Areas

Estimation of v_{12}

Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2491 pc/h

V_3 or V_{av34} 1862 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Diverge Areas

	Actual	Capacity		LOS F?
V_F	6215	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	5032	Exhibit 13-8	9600	No
V_R	1183	Exhibit 13-10	4000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2491	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 13.4 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

D_s = 0.534 (Exhibit 13-12)

S_R = 55.0 mph (Exhibit 13-12)

S_0 = 73.4 mph (Exhibit 13-12)

S = 64.8 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	EACP (2016)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2900 ft	Acceleration Lane Length, L_A: 600	L_{down} = ft
V_u = 1078 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 5570	
	Ramp Volume, V_R: 1078	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5570	0.92	Level	15	0	0.930	1.00	6508
Ramp	1078	0.92	Level	2	0	0.990	1.00	1183
UpStream	1078	0.92	Level	2	0	0.990	1.00	1183
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 1340.47 (Equation 13-6 or 13-7)

P_{FM} = 0.594 using Equation (Exhibit 13-6)

V_{12} = 3868 pc/h

V_3 or V_{av34} 2640 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 3868 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	7691	Exhibit 13-8		Yes

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	5051	Exhibit 13-8	4600:All	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 40.6 (pc/mi/ln)

LOS = F (Exhibit 13-2)

Speed Determination

M_S = 0.888 (Exibit 13-11)

S_R= 45.1 mph (Exhibit 13-11)

S_0= 61.4 mph (Exhibit 13-11)

S = 49.7 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	EACP (2016)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 4	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 1400 ft
V_u = veh/h	Deceleration Lane Length L_D: 1000	V_D = 724 veh/h
	Freeway Volume, V_F: 3923	
	Ramp Volume, V_R: 790	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3923	0.92	Level	11	0	0.948	1.00	4499
Ramp	790	0.92	Level	2	0	0.990	1.00	867
UpStream								
DownStream	724	0.92	Level	2	0	0.990	1.00	795

Merge Areas | Diverge Areas

Estimation of v_{12} — Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Estimation of v_{12} — Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2451 pc/h

V_3 or V_{av34} 1024 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks — Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Capacity Checks — Diverge Areas

	Actual	Capacity		LOS F?
V_F	4499	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3632	Exhibit 13-8	9600	No
V_R	867	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2451	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F) — Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Level of Service Determination (if not F) — Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 16.3 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination — Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Speed Determination — Diverge Areas

D_s = 0.506 (Exhibit 13-12)

S_R = 55.8 mph (Exhibit 13-12)

S_0 = 76.7 mph (Exhibit 13-12)

S = 63.7 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	EACP (2016)

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 1400 ft	Acceleration Lane Length, L_A: 900	L_{down} = ft
V_u = 790 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3133	
	Ramp Volume, V_R: 724	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	$v = V/PHF \times f_{HV} \times f_p$
Freeway	3133	0.92	Level	11	0	0.948	1.00	3593
Ramp	724	0.92	Level	2	0	0.990	1.00	795
UpStream	790	0.92	Level	2	0	0.990	1.00	867
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 766.83 (Equation 13-6 or 13-7)

P_{FM} = 0.603 using Equation (Exhibit 13-6)

V_{12} = 2166 pc/h

V_3 or V_{av34} 1427 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4388	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2961	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 22.6 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.333 (Exibit 13-11)

S_R= 60.7 mph (Exhibit 13-11)

S_0= 66.7 mph (Exhibit 13-11)

S = 62.5 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	EACP (2016)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2000 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 1182 veh/h
	Freeway Volume, V_F: 5709	
	Ramp Volume, V_R: 1049	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5709	0.92	Level	11	0	0.948	1.00	6547
Ramp	1049	0.92	Level	2	0	0.990	1.00	1152
UpStream								
DownStream	1182	0.92	Level	2	0	0.990	1.00	1298

Merge Areas | Diverge Areas

Estimation of v_{12}

Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2299 pc/h

V_3 or V_{av34} 1633 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Diverge Areas

	Actual	Capacity		LOS F?
V_F	5565	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4413	Exhibit 13-8	9600	No
V_R	1152	Exhibit 13-10	4000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2299	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 19.9 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

D_s = 0.532 (Exhibit 13-12)

S_R = 55.1 mph (Exhibit 13-12)

S_0 = 74.3 mph (Exhibit 13-12)

S = 65.0 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	EACP (2016)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp

☑ Yes ☐ On

☐ No ☑ Off

L_{up} = 2000 ft

V_u = 1049 veh/h

Freeway Number of Lanes, N	4
Ramp Number of Lanes, N	1
Acceleration Lane Length, L_A	1000
Deceleration Lane Length L_D	
Freeway Volume, V_F	4660
Ramp Volume, V_R	1182
Freeway Free-Flow Speed, S_{FF}	70.0
Ramp Free-Flow Speed, S_{FR}	35.0

Downstream Adj Ramp

☐ Yes ☐ On

☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4660	0.92	Level	11	0	0.948	1.00	5344
Ramp	1182	0.92	Level	2	0	0.990	1.00	1298
UpStream	1049	0.92	Level	2	0	0.990	1.00	1152
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 1293.59 (Equation 13-6 or 13-7)

P_{FM} = 0.056 using Equation (Exhibit 13-6)

V_{12} = 297 pc/h

V_3 or V_{av34} = 2523 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2137 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6642	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3435	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 25.4 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.372 (Exibit 13-11)

S_R = 59.6 mph (Exhibit 13-11)

S_0 = 66.0 mph (Exhibit 13-11)

S = 62.5 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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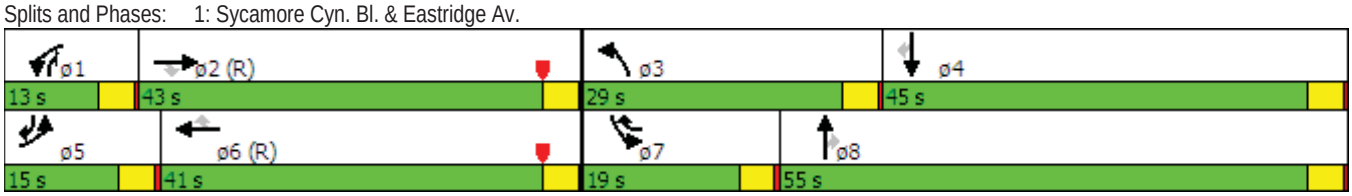
APPENDIX 7.1:

GENERAL PLAN BUILDOUT WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	224	453	205	118	785	488	434	1189	173	119	201	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		150	310		200	360		320	275		110
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	120			120			120			200		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		910			577			817			952	
Travel Time (s)		15.5			9.8			12.4			14.4	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	11.0	11.0	20.0	11.0
Total Split (s)	15.0	43.0	43.0	13.0	41.0	19.0	29.0	55.0	13.0	19.0	45.0	15.0
Total Split (%)	11.5%	33.1%	33.1%	10.0%	31.5%	14.6%	22.3%	42.3%	10.0%	14.6%	34.6%	11.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	Max	None	None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 97 (75%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Sycamore Cyn. Bl. & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	224	453	205	118	785	488	434	1189	173	119	201	320
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	243	492	0	128	853	530	472	1292	188	129	218	348
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	2	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	291	1790	557	183	1135	592	538	1480	747	184	1116	633
Arrive On Green	0.08	0.35	0.00	0.05	0.32	0.32	0.16	0.42	0.42	0.05	0.32	0.32
Sat Flow, veh/h	3442	5085	1583	3442	3539	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	243	492	0	128	853	530	472	1292	188	129	218	348
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1770	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	9.0	9.0	0.0	4.8	28.0	40.9	17.4	43.5	9.3	4.8	5.8	22.0
Cycle Q Clear(g_c), s	9.0	9.0	0.0	4.8	28.0	40.9	17.4	43.5	9.3	4.8	5.8	22.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	291	1790	557	183	1135	592	538	1480	747	184	1116	633
V/C Ratio(X)	0.83	0.27	0.00	0.70	0.75	0.89	0.88	0.87	0.25	0.70	0.20	0.55
Avail Cap(c_a), veh/h	291	1790	557	238	1135	592	662	1480	747	397	1116	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.6	30.2	0.0	60.5	39.5	38.3	53.6	34.6	20.6	60.5	32.5	30.0
Incr Delay (d2), s/veh	18.5	0.4	0.0	5.9	4.6	18.6	11.0	7.4	0.8	4.8	0.4	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	4.3	0.0	2.4	14.5	20.9	9.1	22.7	4.2	2.4	2.9	10.2
LnGrp Delay(d),s/veh	77.1	30.6	0.0	66.5	44.1	56.9	64.7	42.0	21.4	65.4	32.9	33.4
LnGrp LOS	E	C		E	D	E	E	D	C	E	C	C
Approach Vol, veh/h		735			1511			1952			695	
Approach Delay, s/veh		46.0			50.5			45.5			39.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	49.8	24.3	45.0	15.0	45.7	10.9	58.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	39.0	25.0	41.0	11.0	37.0	15.0	51.0
Max Q Clear Time (g_c+I1), s	6.8	11.0	19.4	24.0	11.0	42.9	6.8	45.5
Green Ext Time (p_c), s	0.1	13.3	0.9	10.9	0.0	0.0	0.2	4.4

Intersection Summary	
HCM 2010 Ctrl Delay	46.2
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	622	17	62	1444	552	11	125	54	153	78	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		80	150		0	75		160	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		760			700			315			411	
Travel Time (s)		13.0			11.9			7.2			9.3	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0		11.0	20.0	20.0	11.0	20.0	
Total Split (s)	11.0	80.0	80.0	14.0	83.0		11.0	20.0	20.0	16.0	25.0	
Total Split (%)	8.5%	61.5%	61.5%	10.8%	63.8%		8.5%	15.4%	15.4%	12.3%	19.2%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 125 (96%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Box Springs Bl. & Eastridge Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	66	622	17	62	1444	552	11	125	54	153	78	4
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	72	676	18	67	1570	600	12	136	59	166	85	4
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	1	2	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	91	2168	970	87	1558	560	34	229	195	164	676	32
Arrive On Green	0.05	0.61	0.61	0.10	1.00	1.00	0.02	0.12	0.12	0.09	0.20	0.20
Sat Flow, veh/h	1774	3539	1583	1774	2553	917	1774	1863	1583	1774	3443	161
Grp Volume(v), veh/h	72	676	18	67	1057	1113	12	136	59	166	43	46
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1701	1774	1863	1583	1774	1770	1834
Q Serve(g_s), s	5.2	11.9	0.6	4.8	0.0	79.3	0.9	9.0	4.4	12.0	2.6	2.7
Cycle Q Clear(g_c), s	5.2	11.9	0.6	4.8	0.0	79.3	0.9	9.0	4.4	12.0	2.6	2.7
Prop In Lane	1.00		1.00	1.00		0.54	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	91	2168	970	87	1080	1038	34	229	195	164	348	360
V/C Ratio(X)	0.79	0.31	0.02	0.77	0.98	1.07	0.36	0.59	0.30	1.01	0.12	0.13
Avail Cap(c_a), veh/h	96	2168	970	136	1080	1038	96	229	195	164	348	360
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.0	12.1	9.9	57.9	0.0	0.0	63.0	53.9	51.9	59.0	43.0	43.0
Incr Delay (d2), s/veh	33.6	0.4	0.0	13.3	22.8	49.5	6.3	10.8	4.0	74.0	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	5.9	0.3	2.7	6.8	14.3	0.5	5.3	2.1	9.2	1.4	1.4
LnGrp Delay(d),s/veh	94.6	12.4	9.9	71.2	22.8	49.5	69.3	64.7	55.9	133.1	43.8	43.8
LnGrp LOS	F	B	A	E	C	F	E	E	E	F	D	D
Approach Vol, veh/h		766			2237			207			255	
Approach Delay, s/veh		20.1			37.5			62.5			101.9	
Approach LOS		C			D			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	83.6	6.5	29.5	10.7	83.3	16.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	76.0	7.0	21.0	7.0	79.0	12.0	16.0
Max Q Clear Time (g_c+I1), s	6.8	13.9	2.9	4.7	7.2	81.3	14.0	11.0
Green Ext Time (p_c), s	0.0	47.1	0.0	1.3	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	39.9
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	88	655	0	416	1427	0	344	0	0	171	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	275		0	0		0	0		0
Storage Lanes	0		0	0		0	2		0	2		0
Taper Length (ft)	90			190			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		241			359			784			672	
Travel Time (s)		4.1			6.1			15.3			13.1	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot			Prot		
Protected Phases	5	2		1	6		3			7		
Permitted Phases												
Detector Phase	5	2		1	6		3			7		
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0			7.0		
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0			11.0		
Total Split (s)	20.0	74.0		29.0	83.0		27.0			27.0		
Total Split (%)	15.4%	56.9%		22.3%	63.8%		20.8%			20.8%		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5			3.5		
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5			0.5		
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0			0.0		
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0			4.0		
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		None			None		

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 13 (10%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: I-215 SB/NB Ramps & Eastridge Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	88	655	0	416	1427	0	344	0	0	171	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	0	0	1863	0	0
Adj Flow Rate, veh/h	96	712	0	452	1551	0	374	0	0	186	0	0
Adj No. of Lanes	1	2	0	2	2	0	2	0	0	2	0	0
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
Percent Heavy Veh, %	2	2	0	2	2	0	2	0	0	2	0	0
Cap, veh/h	118	2220	0	525	2524	0	440	0	0	440	0	0
Arrive On Green	0.13	1.00	0.00	0.05	0.24	0.00	0.13	0.00	0.00	0.13	0.00	0.00
Sat Flow, veh/h	1774	3632	0	3442	3632	0	3442	374		3442	186	
Grp Volume(v), veh/h	96	712	0	452	1551	0	374	63.7		186	52.9	
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1721	1770	0	1721	E		1721	D	
Q Serve(g_s), s	6.8	0.0	0.0	16.9	50.9	0.0	13.8			6.5		
Cycle Q Clear(g_c), s	6.8	0.0	0.0	16.9	50.9	0.0	13.8			6.5		
Prop In Lane	1.00		0.00	1.00		0.00	1.00			1.00		
Lane Grp Cap(c), veh/h	118	2220	0	525	2524	0	440			440		
V/C Ratio(X)	0.81	0.32	0.00	0.86	0.61	0.00	0.85			0.42		
Avail Cap(c_a), veh/h	218	2220	0	662	2524	0	609			609		
HCM Platoon Ratio	2.00	2.00	1.00	0.33	0.33	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.96	0.96	0.00	1.00			1.00		
Uniform Delay (d), s/veh	55.5	0.0	0.0	60.4	33.7	0.0	55.5			52.3		
Incr Delay (d2), s/veh	12.4	0.4	0.0	9.0	1.1	0.0	8.2			0.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	3.8	0.1	0.0	8.8	25.4	0.0	7.1			3.1		
LnGrp Delay(d),s/veh	68.0	0.4	0.0	69.3	34.8	0.0	63.7			52.9		
LnGrp LOS	E	A		E	C		E			D		
Approach Vol, veh/h		808			2003							
Approach Delay, s/veh		8.4			42.6							
Approach LOS		A			D							

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3		5	6	7	
Phs Duration (G+Y+Rc), s	23.8	85.5	20.6		12.7	96.7	20.6	
Change Period (Y+Rc), s	4.0	4.0	4.0		4.0	4.0	4.0	
Max Green Setting (Gmax), s	25.0	70.0	23.0		16.0	79.0	23.0	
Max Q Clear Time (g_c+I1), s	18.9	2.0	15.8		8.8	52.9	8.5	
Green Ext Time (p_c), s	0.9	32.4	0.8		0.1	18.5	0.5	

Intersection Summary	
HCM 2010 Ctrl Delay	37.3
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	743	87	0	1771	0	0	0	0	0	0	287
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		700			241			458			364	
Travel Time (s)		11.9			4.1			8.9			7.1	
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
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	17.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	743	87	0	1771	0	0	0	0	0	0	287
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	1082515456		-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	808	95	0	1925	0	0	0	0	0	0	312

Major/Minor	Major1			Major2						Minor2		
Conflicting Flow All	1925	0	-	808	0	0				2248	2733	963
Stage 1	-	-	-	-	-	-				1925	1925	-
Stage 2	-	-	-	-	-	-				323	808	-
Critical Hdwy	4.14	-	-	5.34	-	-				6.29	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-				5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-				6.04	5.54	-
Follow-up Hdwy	2.22	-	-	3.12	-	-				3.67	4.02	3.32
Pot Cap-1 Maneuver	303	-	0	484	-	-				49	20	~ 256
Stage 1	-	-	0	-	-	-				99	113	-
Stage 2	-	-	0	-	-	-				670	392	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	303	-	-	484	-	-				49	0	~ 256
Mov Cap-2 Maneuver	-	-	-	-	-	-				87	0	-
Stage 1	-	-	-	-	-	-				99	0	-
Stage 2	-	-	-	-	-	-				670	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	168.9
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	303	-	484	-	-	256
HCM Lane V/C Ratio	-	-	-	-	-	1.219
HCM Control Delay (s)	0	-	0	-	-	168.9
HCM Lane LOS	A	-	A	-	-	F
HCM 95th %tile Q(veh)	0	-	0	-	-	14.9

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	0	1771	0	0	287
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50			0	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	60				60	
Right Turn on Red				Yes		Yes
Link Speed (mph)		40	40		30	
Link Distance (ft)		174	120		486	
Travel Time (s)		3.0	2.0		11.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type			NA			Prot
Protected Phases			6			7
Permitted Phases						
Detector Phase			6			7
Switch Phase						
Minimum Initial (s)			7.0			7.0
Minimum Split (s)			20.0			11.0
Total Split (s)			96.0			34.0
Total Split (%)			73.8%			26.2%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			0.5			0.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.0			4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 31: Eastridge Av. & I-215 SB Ramps (W)

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	0	1771	0	0	287
Number			6	16	7	14
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	0	0	1863
Adj Flow Rate, veh/h			1925	0	0	312
Adj No. of Lanes			2	0	0	1
Peak Hour Factor			0.92	0.92	0.92	0.92
Percent Heavy Veh, %			2	0	0	2
Cap, veh/h			2505	0	0	0
Arrive On Green			0.71	0.00	0.00	0.00
Sat Flow, veh/h			3725	0	0	
Grp Volume(v), veh/h			1925	0	0.0	
Grp Sat Flow(s),veh/h/ln			1770	0		
Q Serve(g_s), s			45.3	0.0		
Cycle Q Clear(g_c), s			45.3	0.0		
Prop In Lane				0.00		
Lane Grp Cap(c), veh/h			2505	0		
V/C Ratio(X)			0.77	0.00		
Avail Cap(c_a), veh/h			2505	0		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	0.00		
Uniform Delay (d), s/veh			12.2	0.0		
Incr Delay (d2), s/veh			2.3	0.0		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			22.7	0.0		
LnGrp Delay(d),s/veh			14.5	0.0		
LnGrp LOS			B			
Approach Vol, veh/h			1925			
Approach Delay, s/veh			14.5			
Approach LOS			B			

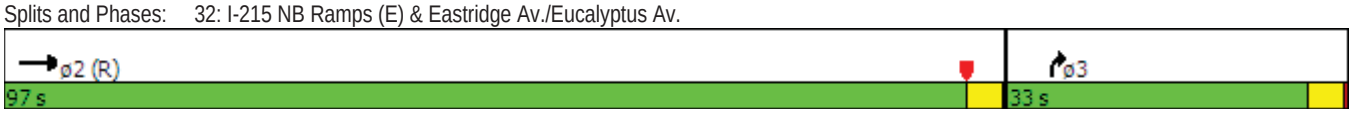
Timer	1	2	3	4	5	6	7	8
Assigned Phs						6		
Phs Duration (G+Y+Rc), s						96.0		
Change Period (Y+Rc), s						4.0		
Max Green Setting (Gmax), s						92.0		
Max Q Clear Time (g_c+I1), s						47.3		
Green Ext Time (p_c), s						24.0		

Intersection Summary	
HCM 2010 Ctrl Delay	14.5
HCM 2010 LOS	B

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	826	0	0	0	0	217
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Right Turn on Red		Yes				Yes
Link Speed (mph)	30			40	30	
Link Distance (ft)	100			131	592	
Travel Time (s)	2.3			2.2	13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA					Prot
Protected Phases	2					3
Permitted Phases						
Detector Phase	2					3
Switch Phase						
Minimum Initial (s)	7.0					7.0
Minimum Split (s)	20.0					11.0
Total Split (s)	97.0					33.0
Total Split (%)	74.6%					25.4%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	0.5					0.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	4.0					4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max					None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	

Splits and Phases: 32: I-215 NB Ramps (E) & Eastridge Av./Eucalyptus Av.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	826	0	0	0	0	217
Number	2	12			3	18
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)		1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0			0	1863
Adj Flow Rate, veh/h	898	0			0	236
Adj No. of Lanes	2	0			0	2
Peak Hour Factor	0.92	0.92			0.92	0.92
Percent Heavy Veh, %	2	0			0	2
Cap, veh/h	3430	0			0	0
Arrive On Green	0.97	0.00			0.00	0.00
Sat Flow, veh/h	3725	0			0	
Grp Volume(v), veh/h	898	0			0.0	
Grp Sat Flow(s),veh/h/ln	1770	0				
Q Serve(g_s), s	1.4	0.0				
Cycle Q Clear(g_c), s	1.4	0.0				
Prop In Lane		0.00				
Lane Grp Cap(c), veh/h	3430	0				
V/C Ratio(X)	0.26	0.00				
Avail Cap(c_a), veh/h	3430	0				
HCM Platoon Ratio	1.00	1.00				
Upstream Filter(I)	1.00	0.00				
Uniform Delay (d), s/veh	0.1	0.0				
Incr Delay (d2), s/veh	0.2	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile BackOfQ(50%),veh/ln	0.7	0.0				
LnGrp Delay(d),s/veh	0.3	0.0				
LnGrp LOS	A					
Approach Vol, veh/h	898					
Approach Delay, s/veh	0.3					
Approach LOS	A					

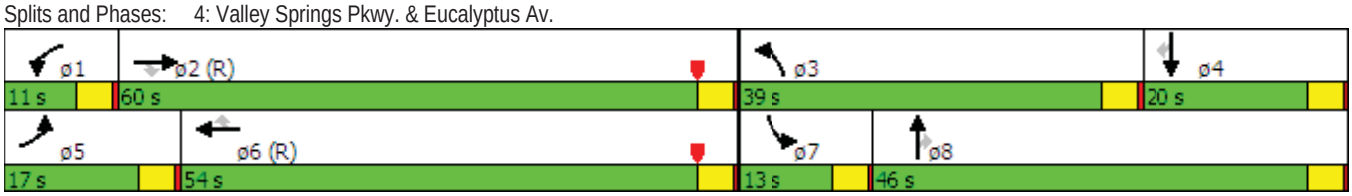
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		130.0						
Change Period (Y+Rc), s		4.0						
Max Green Setting (Gmax), s		93.0						
Max Q Clear Time (g_c+I1), s		3.4						
Green Ext Time (p_c), s		8.2						

Intersection Summary	
HCM 2010 Ctrl Delay	0.3
HCM 2010 LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	333	648	61	24	1371	49	449	436	144	22	38	392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	1		1	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0
Total Split (s)	17.0	60.0	60.0	11.0	54.0	54.0	39.0	46.0	46.0	13.0	20.0	20.0
Total Split (%)	13.1%	46.2%	46.2%	8.5%	41.5%	41.5%	30.0%	35.4%	35.4%	10.0%	15.4%	15.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	Max	None	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	333	648	61	24	1371	49	449	436	144	22	38	392
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	362	704	66	26	1490	53	488	474	157	24	41	426
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	344	1599	715	58	1361	609	478	1278	572	55	229	343
Arrive On Green	0.03	0.15	0.15	0.03	0.38	0.38	0.27	0.36	0.36	0.03	0.12	0.12
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	1774	3539	1583	1774	1863	2787
Grp Volume(v), veh/h	362	704	66	26	1490	53	488	474	157	24	41	426
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1774	1770	1583	1774	1863	1393
Q Serve(g_s), s	13.0	23.5	4.7	1.9	50.0	2.8	35.0	12.8	9.1	1.7	2.6	16.0
Cycle Q Clear(g_c), s	13.0	23.5	4.7	1.9	50.0	2.8	35.0	12.8	9.1	1.7	2.6	16.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	344	1599	715	58	1361	609	478	1278	572	55	229	343
V/C Ratio(X)	1.05	0.44	0.09	0.45	1.09	0.09	1.02	0.37	0.27	0.43	0.18	1.24
Avail Cap(c_a), veh/h	344	1599	715	96	1361	609	478	1278	572	123	229	343
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	0.41	0.41	0.41	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.9	40.3	32.3	61.7	40.0	25.5	47.5	30.6	29.5	61.8	51.1	57.0
Incr Delay (d2), s/veh	61.6	0.8	0.2	2.2	48.1	0.1	46.8	0.8	1.2	5.3	1.7	131.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	11.7	2.1	1.0	33.5	1.2	23.3	6.4	4.2	0.9	1.4	12.4
LnGrp Delay(d),s/veh	124.5	41.2	32.6	63.9	88.1	25.6	94.3	31.5	30.6	67.1	52.8	188.3
LnGrp LOS	F	D	C	E	F	C	F	C	C	E	D	F
Approach Vol, veh/h		1132			1569			1119			491	
Approach Delay, s/veh		67.3			85.6			58.8			171.0	
Approach LOS		E			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	62.7	39.0	20.0	17.0	54.0	8.1	50.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	56.0	35.0	16.0	13.0	50.0	9.0	42.0
Max Q Clear Time (g_c+I1), s	3.9	25.5	37.0	18.0	15.0	52.0	3.7	14.8
Green Ext Time (p_c), s	0.0	20.5	0.0	0.0	0.0	0.0	0.0	6.2

Intersection Summary	
HCM 2010 Ctrl Delay	83.6
HCM 2010 LOS	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	333	648	61	24	1371	49	449	436	144	22	38	392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	2		0	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6						4
Detector Phase	5	2	2	1	6	6	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	11.0	11.0
Total Split (s)	21.0	78.0	78.0	11.0	68.0	68.0	29.0	30.0		11.0	12.0	21.0
Total Split (%)	16.2%	60.0%	60.0%	8.5%	52.3%	52.3%	22.3%	23.1%		8.5%	9.2%	16.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max		None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	333	648	61	24	1371	49	449	436	144	22	38	392
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	362	704	66	26	1490	53	488	474	157	24	41	426
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	409	2169	970	58	1865	834	553	524	172	55	131	528
Arrive On Green	0.24	1.00	1.00	0.03	0.53	0.53	0.16	0.20	0.20	0.03	0.07	0.07
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	3442	2619	862	1774	1863	2787
Grp Volume(v), veh/h	362	704	66	26	1490	53	488	319	312	24	41	426
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1721	1770	1711	1774	1863	1393
Q Serve(g_s), s	13.2	0.0	0.0	1.9	44.7	2.1	18.0	22.9	23.2	1.7	2.7	9.2
Cycle Q Clear(g_c), s	13.2	0.0	0.0	1.9	44.7	2.1	18.0	22.9	23.2	1.7	2.7	9.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	409	2169	970	58	1865	834	553	354	342	55	131	528
V/C Ratio(X)	0.88	0.32	0.07	0.45	0.80	0.06	0.88	0.90	0.91	0.43	0.31	0.81
Avail Cap(c_a), veh/h	450	2169	970	96	1865	834	662	354	342	96	131	528
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	0.44	0.44	0.44	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	0.0	0.0	61.7	25.1	15.1	53.3	50.8	50.9	61.8	57.4	50.4
Incr Delay (d2), s/veh	16.9	0.4	0.1	2.3	1.6	0.1	11.7	28.5	30.6	5.3	6.1	12.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	0.1	0.0	1.0	22.2	0.9	9.4	14.0	13.8	0.9	1.6	8.2
LnGrp Delay(d),s/veh	65.5	0.4	0.1	64.0	26.8	15.1	65.0	79.2	81.5	67.1	63.5	62.9
LnGrp LOS	E	A	A	E	C	B	E	E	F	E	E	E
Approach Vol, veh/h		1132			1569			1119			491	
Approach Delay, s/veh		21.2			27.0			73.7			63.2	
Approach LOS		C			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	83.7	24.9	13.2	19.5	72.5	8.1	30.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	74.0	25.0	8.0	17.0	64.0	7.0	26.0
Max Q Clear Time (g_c+I1), s	3.9	2.0	20.0	11.2	15.2	46.7	3.7	25.2
Green Ext Time (p_c), s	0.0	32.6	0.9	0.0	0.3	13.4	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	41.7
HCM 2010 LOS	D

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	475	251	412	253	135	593
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		175	200	
Storage Lanes	2	1		1	1	
Taper Length (ft)	60				80	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		40			40
Link Distance (ft)	307		957			795
Travel Time (s)	6.0		16.3			13.6
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	36.0	27.0	33.0	36.0	27.0	60.0
Total Split (%)	37.5%	28.1%	34.4%	37.5%	28.1%	62.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 76 (79%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: Day St. & SR-60 WB Ramps

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	475	251	412	253	135	593
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	490	259	425	261	139	611
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	629	907	1069	768	692	2597
Arrive On Green	0.18	0.18	0.20	0.20	0.39	0.73
Sat Flow, veh/h	3442	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	490	259	425	261	139	611
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1770
Q Serve(g_s), s	13.0	0.0	10.0	10.5	5.0	5.3
Cycle Q Clear(g_c), s	13.0	0.0	10.0	10.5	5.0	5.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	629	907	1069	768	692	2597
V/C Ratio(X)	0.78	0.29	0.40	0.34	0.20	0.24
Avail Cap(c_a), veh/h	1147	1145	1069	768	692	2597
HCM Platoon Ratio	1.00	1.00	0.67	0.67	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.95	0.95	1.00	1.00
Uniform Delay (d), s/veh	37.4	10.5	30.7	17.6	19.4	4.1
Incr Delay (d2), s/veh	2.1	0.2	1.1	1.1	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	3.5	5.0	6.5	2.5	2.6
LnGrp Delay(d),s/veh	39.5	10.6	31.8	18.8	19.5	4.3
LnGrp LOS	D	B	C	B	B	A
Approach Vol, veh/h	749		686			750
Approach Delay, s/veh	29.5		26.8			7.1
Approach LOS	C		C			A

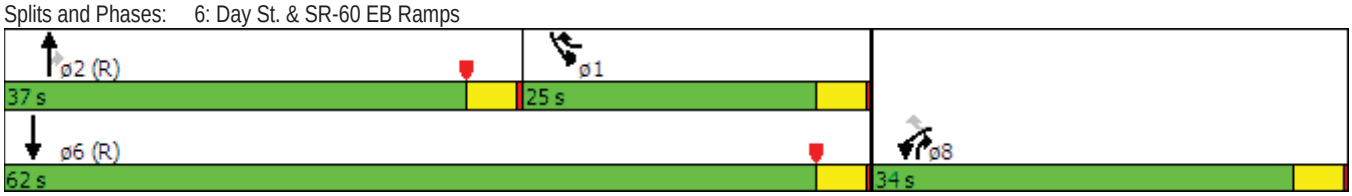
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	41.4	33.0				74.4		21.6
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	23.0	29.0				56.0		32.0
Max Q Clear Time (g_c+I1), s	7.0	12.5				7.3		15.0
Green Ext Time (p_c), s	3.9	3.2				4.8		2.5

Intersection Summary	
HCM 2010 Ctrl Delay	21.0
HCM 2010 LOS	C

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	488	88	577	463	117	951
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	200		0	425	
Storage Lanes	2	0		1	1	
Taper Length (ft)	60				60	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		40			40
Link Distance (ft)	263		524			957
Travel Time (s)	5.1		8.9			16.3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	34.0	25.0	37.0	34.0	25.0	62.0
Total Split (%)	35.4%	26.0%	38.5%	35.4%	26.0%	64.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 52 (54%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Day St. & SR-60 EB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	488	88	577	463	117	951
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	498	90	589	472	119	970
Adj No. of Lanes	2	1	2	1	1	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	617	841	1217	828	624	3750
Arrive On Green	0.18	0.18	0.11	0.11	0.70	1.00
Sat Flow, veh/h	3442	1583	3632	1583	1774	5253
Grp Volume(v), veh/h	498	90	589	472	119	970
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1695
Q Serve(g_s), s	13.3	0.0	15.0	20.5	2.2	0.0
Cycle Q Clear(g_c), s	13.3	0.0	15.0	20.5	2.2	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	617	841	1217	828	624	3750
V/C Ratio(X)	0.81	0.11	0.48	0.57	0.19	0.26
Avail Cap(c_a), veh/h	1076	1052	1217	828	624	3750
HCM Platoon Ratio	1.00	1.00	0.33	0.33	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.90	0.90	0.90	0.90
Uniform Delay (d), s/veh	37.8	11.2	34.6	21.3	9.5	0.0
Incr Delay (d2), s/veh	2.6	0.1	1.2	2.6	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	1.2	7.5	13.0	1.1	0.1
LnGrp Delay(d),s/veh	40.4	11.2	35.8	23.9	9.7	0.2
LnGrp LOS	D	B	D	C	A	A
Approach Vol, veh/h	588		1061			1089
Approach Delay, s/veh	35.9		30.5			1.2
Approach LOS	D		C			A

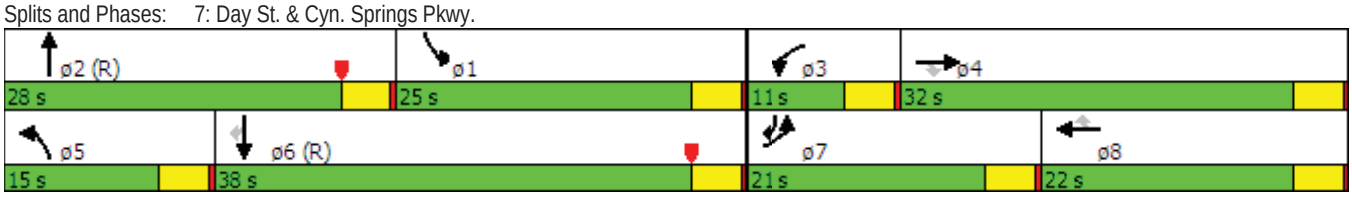
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	37.8	37.0				74.8		21.2
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	21.0	33.0				58.0		30.0
Max Q Clear Time (g_c+I1), s	4.2	22.5				2.0		15.3
Green Ext Time (p_c), s	6.3	4.1				8.4		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	20.0
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	313	34	37	34	46	112	70	615	58	175	862	316
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	145		0	165		0	170		200
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	95			100			120			80		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		1120			404			728			524	
Travel Time (s)		19.1			7.9			12.4			8.9	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												34%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	21.0	32.0	32.0	11.0	22.0	22.0	15.0	28.0		25.0	38.0	21.0
Total Split (%)	21.9%	33.3%	33.3%	11.5%	22.9%	22.9%	15.6%	29.2%		26.0%	39.6%	21.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead		Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Day St. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	313	34	37	34	46	112	70	615	58	175	862	316
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	323	35	38	35	47	115	72	634	60	180	1014	243
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	4	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	407	274	233	78	136	115	110	1183	111	696	4321	1106
Arrive On Green	0.12	0.15	0.15	0.04	0.07	0.07	0.02	0.08	0.08	0.52	0.77	0.77
Sat Flow, veh/h	3442	1863	1583	1774	1863	1583	1774	4731	444	1774	7451	1583
Grp Volume(v), veh/h	323	35	38	35	47	115	72	453	241	180	1014	243
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1863	1583	1774	1695	1784	1774	1863	1583
Q Serve(g_s), s	8.8	1.6	2.0	1.8	2.3	3.4	3.9	12.3	12.5	5.4	3.6	3.0
Cycle Q Clear(g_c), s	8.8	1.6	2.0	1.8	2.3	3.4	3.9	12.3	12.5	5.4	3.6	3.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	407	274	233	78	136	115	110	848	446	696	4321	1106
V/C Ratio(X)	0.79	0.13	0.16	0.45	0.35	1.00	0.65	0.53	0.54	0.26	0.23	0.22
Avail Cap(c_a), veh/h	609	543	462	129	349	297	203	848	446	696	4321	1106
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.33	1.33	1.33
Upstream Filter(I)	0.90	0.90	0.90	1.00	1.00	1.00	0.99	0.99	0.99	0.92	0.92	0.92
Uniform Delay (d), s/veh	41.2	35.6	35.8	44.7	42.3	10.6	46.0	38.7	38.7	15.2	5.0	2.6
Incr Delay (d2), s/veh	3.9	0.2	0.3	3.9	1.5	38.2	6.3	2.4	4.6	0.2	0.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.8	0.9	1.0	1.2	2.7	2.1	6.1	6.7	2.6	1.8	1.4
LnGrp Delay(d),s/veh	45.1	35.8	36.1	48.7	43.8	48.7	52.3	41.1	43.3	15.4	5.1	3.0
LnGrp LOS	D	D	D	D	D	D	D	D	D	B	A	A
Approach Vol, veh/h		396			197			766			1437	
Approach Delay, s/veh		43.4			47.6			42.8			6.1	
Approach LOS		D			D			D			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	41.6	28.0	8.2	18.1	10.0	59.7	15.4	11.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	24.0	7.0	28.0	11.0	34.0	17.0	18.0
Max Q Clear Time (g_c+I1), s	7.4	14.5	3.8	4.0	5.9	5.6	10.8	5.4
Green Ext Time (p_c), s	6.7	2.9	0.0	0.9	0.0	9.5	0.6	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	24.3
HCM 2010 LOS	C

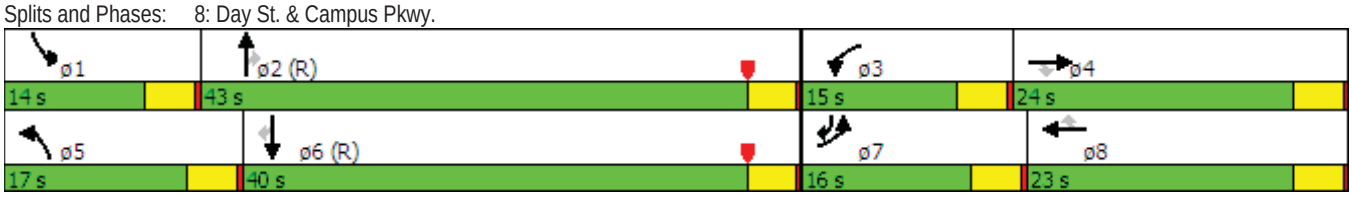
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	55	52	21	93	70	142	622	41	66	695	142
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		50	200		0	130		50	190		0
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	60			120			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		938			519			1025			728	
Travel Time (s)		16.0			10.1			17.5			12.4	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	16.0	24.0	24.0	15.0	23.0	23.0	17.0	43.0	43.0	14.0	40.0	16.0
Total Split (%)	16.7%	25.0%	25.0%	15.6%	24.0%	24.0%	17.7%	44.8%	44.8%	14.6%	41.7%	16.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 36 (38%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Day St. & Campus Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	51	55	52	21	93	70	142	622	41	66	695	142
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	52	56	53	21	94	71	143	628	41	67	702	143
Adj No. of Lanes	2	1	1	1	2	1	2	3	1	2	3	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	182	154	55	262	117	245	3274	1019	209	3220	1089
Arrive On Green	0.05	0.10	0.10	0.03	0.07	0.07	0.14	1.00	1.00	0.02	0.21	0.21
Sat Flow, veh/h	3442	1863	1583	1774	3539	1583	3442	5085	1583	3442	5085	1583
Grp Volume(v), veh/h	52	56	53	21	94	71	143	628	41	67	702	143
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1770	1583	1721	1695	1583	1721	1695	1583
Q Serve(g_s), s	1.4	2.7	3.0	1.1	2.4	4.2	3.7	0.0	0.0	1.8	11.0	6.0
Cycle Q Clear(g_c), s	1.4	2.7	3.0	1.1	2.4	4.2	3.7	0.0	0.0	1.8	11.0	6.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	188	182	154	55	262	117	245	3274	1019	209	3220	1089
V/C Ratio(X)	0.28	0.31	0.34	0.38	0.36	0.60	0.58	0.19	0.04	0.32	0.22	0.13
Avail Cap(c_a), veh/h	430	388	330	203	700	313	466	3274	1019	359	3220	1089
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98	0.96	0.96	0.96
Uniform Delay (d), s/veh	43.6	40.3	40.4	45.6	42.3	43.1	39.8	0.0	0.0	45.1	18.3	12.1
Incr Delay (d2), s/veh	0.8	1.0	1.3	4.2	0.8	4.9	2.2	0.1	0.1	0.8	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.4	1.4	0.6	1.2	2.0	1.8	0.0	0.0	0.9	5.2	2.7
LnGrp Delay(d),s/veh	44.3	41.3	41.8	49.8	43.1	48.0	42.0	0.1	0.1	45.9	18.4	12.3
LnGrp LOS	D	D	D	D	D	D	D	A	A	D	B	B
Approach Vol, veh/h		161			186			812			912	
Approach Delay, s/veh		42.4			45.7			7.5			19.5	
Approach LOS		D			D			A			B	

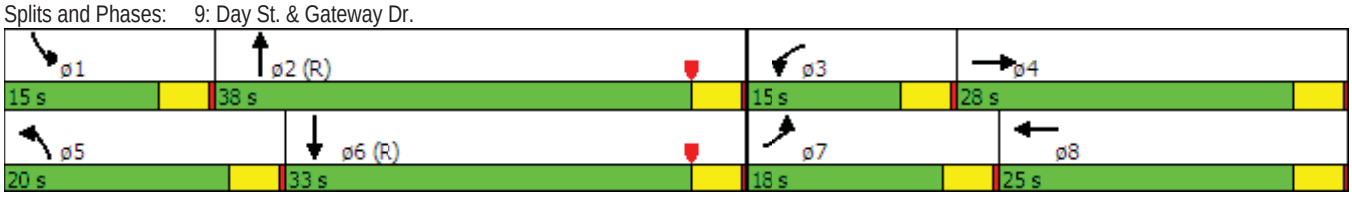
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	65.8	7.0	13.4	10.8	64.8	9.3	11.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	39.0	11.0	20.0	13.0	36.0	12.0	19.0
Max Q Clear Time (g_c+I1), s	3.8	2.0	3.1	5.0	5.7	13.0	3.4	6.2
Green Ext Time (p_c), s	0.1	12.1	0.0	1.0	0.2	10.1	0.1	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	18.9
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	58	40	35	35	91	108	87	586	51	85	484	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	100		0	190		400	260		0
Storage Lanes	1		0	1		0	1		1	2		0
Taper Length (ft)	0			120			60			165		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		318			585			592			1025	
Travel Time (s)		5.4			11.4			10.1			17.5	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	18.0	28.0		15.0	25.0		20.0	38.0		15.0	33.0	
Total Split (%)	18.8%	29.2%		15.6%	26.0%		20.8%	39.6%		15.6%	34.4%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 45 (47%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

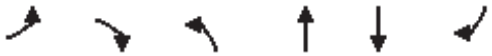
Splits and Phases: 9: Day St. & Gateway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	58	40	35	35	91	108	87	586	51	85	484	92
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	59	40	35	35	92	109	88	592	52	86	489	93
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	103	215	167	78	176	158	117	2908	253	226	2629	489
Arrive On Green	0.06	0.11	0.11	0.04	0.10	0.10	0.07	0.61	0.61	0.02	0.20	0.20
Sat Flow, veh/h	1774	1897	1475	1774	1770	1583	1774	4765	415	3442	4310	802
Grp Volume(v), veh/h	59	37	38	35	92	109	88	420	224	86	382	200
Grp Sat Flow(s),veh/h/ln	1774	1770	1602	1774	1770	1583	1774	1695	1790	1721	1695	1721
Q Serve(g_s), s	3.1	1.8	2.1	1.8	4.7	6.4	4.7	5.3	5.4	2.4	9.0	9.2
Cycle Q Clear(g_c), s	3.1	1.8	2.1	1.8	4.7	6.4	4.7	5.3	5.4	2.4	9.0	9.2
Prop In Lane	1.00		0.92	1.00		1.00	1.00		0.23	1.00		0.47
Lane Grp Cap(c), veh/h	103	200	181	78	176	158	117	2069	1092	226	2068	1050
V/C Ratio(X)	0.58	0.18	0.21	0.45	0.52	0.69	0.75	0.20	0.21	0.38	0.18	0.19
Avail Cap(c_a), veh/h	259	442	401	203	387	346	296	2069	1092	394	2068	1050
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	44.1	38.6	38.7	44.7	41.0	41.8	44.1	8.3	8.3	45.0	18.5	18.6
Incr Delay (d2), s/veh	5.0	0.4	0.6	3.9	2.4	5.3	9.3	0.2	0.4	1.0	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.9	0.9	1.0	2.4	3.0	2.6	2.5	2.7	1.2	4.3	4.5
LnGrp Delay(d),s/veh	49.1	39.0	39.2	48.7	43.4	47.1	53.4	8.5	8.8	46.1	18.7	19.0
LnGrp LOS	D	D	D	D	D	D	D	A	A	D	B	B
Approach Vol, veh/h		134			236			732			668	
Approach Delay, s/veh		43.5			45.9			14.0			22.3	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	62.6	8.2	14.9	10.3	62.6	9.5	13.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	34.0	11.0	24.0	16.0	29.0	14.0	21.0
Max Q Clear Time (g_c+I1), s	4.4	7.4	3.8	4.1	6.7	11.2	5.1	8.4
Green Ext Time (p_c), s	0.1	8.4	0.0	1.4	0.1	7.2	0.1	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	23.6
HCM 2010 LOS	C



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	7	9	22	829	557	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	25			0
Storage Lanes	1	0	1			0
Taper Length (ft)	60		60			
Link Speed (mph)	30			40	40	
Link Distance (ft)	264			453	180	
Travel Time (s)	6.0			7.7	3.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	7	9	22	829	557	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	-	25	-	-	-
Veh in Median Storage, #	1	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	10	24	891	599	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1107	315	629	0	-	0
Stage 1	614	-	-	-	-	-
Stage 2	493	-	-	-	-	-
Critical Hdwy	6.29	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	237	581	589	-	-	-
Stage 1	425	-	-	-	-	-
Stage 2	561	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	227	581	589	-	-	-
Mov Cap-2 Maneuver	318	-	-	-	-	-
Stage 1	425	-	-	-	-	-
Stage 2	538	-	-	-	-	-

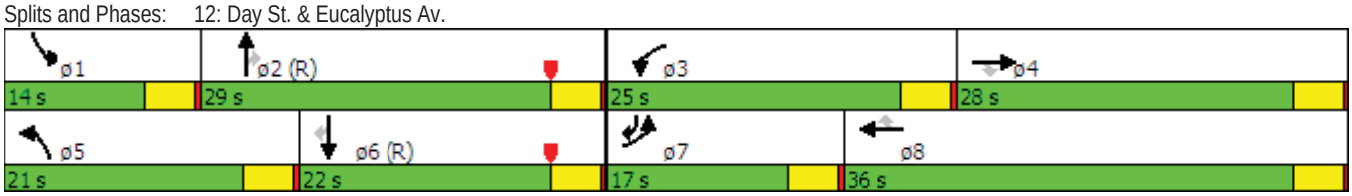
Approach	EB	NB	SB
HCM Control Delay, s	13.8	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	589	-	427	-	-
HCM Lane V/C Ratio	0.04	-	0.04	-	-
HCM Control Delay (s)	11.4	-	13.8	-	-
HCM Lane LOS	B	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	192	604	86	307	1063	115	243	459	238	82	268	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		50	175		0	100		100	200		0
Storage Lanes	1		1	1		1	1		2	1		1
Taper Length (ft)	100			75			80			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			40	
Link Distance (ft)		2104			1174			390			453	
Travel Time (s)		35.9			20.0			7.6			7.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	17.0	28.0	28.0	25.0	36.0	36.0	21.0	29.0	29.0	14.0	22.0	17.0
Total Split (%)	17.7%	29.2%	29.2%	26.0%	37.5%	37.5%	21.9%	30.2%	30.2%	14.6%	22.9%	17.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 13 (14%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Day St. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	192	604	86	307	1063	115	243	459	238	82	268	178
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	202	636	91	323	1119	121	256	483	251	86	282	187
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	234	931	416	356	1174	525	289	1076	481	116	731	536
Arrive On Green	0.13	0.26	0.26	0.20	0.33	0.33	0.16	0.30	0.30	0.07	0.21	0.21
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	202	636	91	323	1119	121	256	483	251	86	282	187
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	10.7	15.5	4.3	17.1	29.7	5.3	13.6	10.6	12.6	4.6	6.6	8.5
Cycle Q Clear(g_c), s	10.7	15.5	4.3	17.1	29.7	5.3	13.6	10.6	12.6	4.6	6.6	8.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	234	931	416	356	1174	525	289	1076	481	116	731	536
V/C Ratio(X)	0.86	0.68	0.22	0.91	0.95	0.23	0.89	0.45	0.52	0.74	0.39	0.35
Avail Cap(c_a), veh/h	240	931	416	388	1180	528	314	1076	481	185	731	536
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.8	31.8	27.7	37.5	31.3	23.2	39.3	26.9	27.6	44.0	32.8	23.8
Incr Delay (d2), s/veh	24.2	1.9	0.2	23.3	16.2	0.2	23.4	1.4	4.0	8.8	1.5	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	7.8	1.9	10.6	17.1	2.4	8.5	5.4	6.0	2.5	3.4	4.0
LnGrp Delay(d),s/veh	65.0	33.7	27.9	60.8	47.5	23.4	62.7	28.3	31.6	52.9	34.4	25.6
LnGrp LOS	E	C	C	E	D	C	E	C	C	D	C	C
Approach Vol, veh/h		929			1563			990			555	
Approach Delay, s/veh		40.0			48.4			38.0			34.3	
Approach LOS		D			D			D			C	

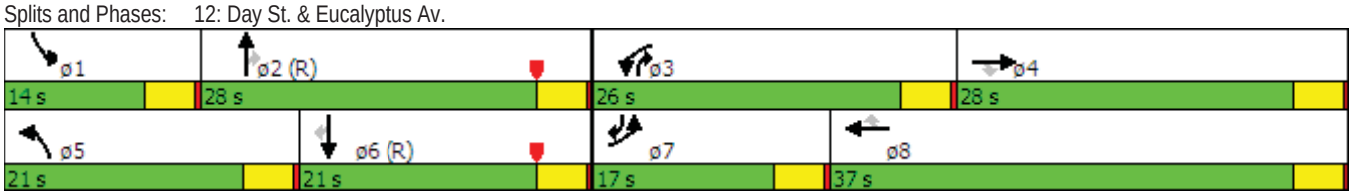
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	33.2	23.3	29.2	19.6	23.8	16.7	35.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	25.0	21.0	24.0	17.0	18.0	13.0	32.0
Max Q Clear Time (g_c+I1), s	6.6	14.6	19.1	17.5	15.6	10.5	12.7	31.7
Green Ext Time (p_c), s	0.0	4.7	0.2	5.2	0.1	3.7	0.0	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	42.0
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	192	604	86	307	1063	115	243	459	238	82	268	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		50	175		0	100		100	200		0
Storage Lanes	1		1	1		1	1		2	1		1
Taper Length (ft)	100			75			80			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			40	
Link Distance (ft)		2104			1174			390			453	
Travel Time (s)		35.9			20.0			7.6			7.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	11.0
Total Split (s)	17.0	28.0	28.0	26.0	37.0	37.0	21.0	28.0	26.0	14.0	21.0	17.0
Total Split (%)	17.7%	29.2%	29.2%	27.1%	38.5%	38.5%	21.9%	29.2%	27.1%	14.6%	21.9%	17.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 13 (14%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Day St. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	192	604	86	307	1063	115	243	459	238	82	268	178
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	202	636	91	323	1119	121	256	483	251	86	282	187
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	234	945	423	358	1191	533	289	1059	793	116	714	528
Arrive On Green	0.13	0.27	0.27	0.20	0.34	0.34	0.16	0.30	0.30	0.07	0.20	0.20
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	202	636	91	323	1119	121	256	483	251	86	282	187
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	10.7	15.4	4.3	17.1	29.4	5.3	13.6	10.6	9.0	4.6	6.6	8.6
Cycle Q Clear(g_c), s	10.7	15.4	4.3	17.1	29.4	5.3	13.6	10.6	9.0	4.6	6.6	8.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	234	945	423	358	1191	533	289	1059	793	116	714	528
V/C Ratio(X)	0.86	0.67	0.22	0.90	0.94	0.23	0.89	0.46	0.32	0.74	0.39	0.35
Avail Cap(c_a), veh/h	240	945	423	407	1217	544	314	1059	793	185	714	528
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.8	31.4	27.4	37.4	30.9	22.9	39.3	27.3	14.2	44.0	33.2	24.2
Incr Delay (d2), s/veh	24.8	1.8	0.2	21.4	13.6	0.2	23.4	1.4	1.0	8.8	1.6	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	7.7	1.9	10.5	16.6	2.3	8.5	5.4	4.1	2.5	3.4	4.0
LnGrp Delay(d),s/veh	65.6	33.2	27.6	58.8	44.5	23.1	62.7	28.7	15.3	52.9	34.9	26.0
LnGrp LOS	E	C	C	E	D	C	E	C	B	D	C	C
Approach Vol, veh/h		929			1563			990			555	
Approach Delay, s/veh		39.7			45.8			34.1			34.7	
Approach LOS		D			D			C			C	

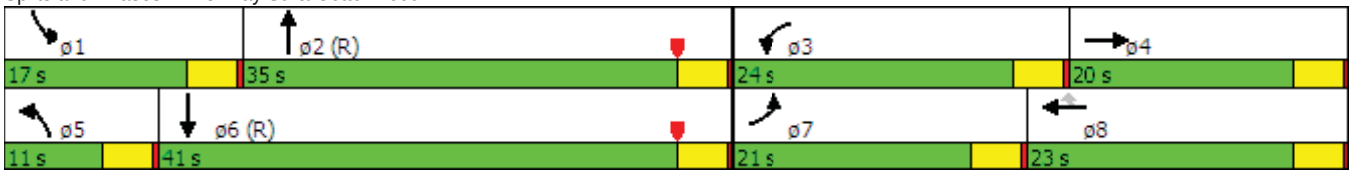
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	32.7	23.4	29.6	19.6	23.4	16.7	36.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	24.0	22.0	24.0	17.0	17.0	13.0	33.0
Max Q Clear Time (g_c+I1), s	6.6	12.6	19.1	17.4	15.6	10.6	12.7	31.4
Green Ext Time (p_c), s	0.0	4.9	0.3	5.2	0.1	3.3	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	40.0
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	138	64	151	217	345	44	579	132	212	464	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	95		95	80		0	100		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	60			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			25			35	
Link Distance (ft)		861			839			1320			2260	
Travel Time (s)		16.8			16.3			36.0			44.0	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	21.0	20.0		24.0	23.0	23.0	11.0	35.0		17.0	41.0	
Total Split (%)	21.9%	20.8%		25.0%	24.0%	24.0%	11.5%	36.5%		17.7%	42.7%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 34 (35%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Day St. & Cottonwood Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	36	138	64	151	217	345	44	579	132	212	464	27
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	39	150	70	164	236	375	48	629	143	230	504	29
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	84	175	82	200	393	334	93	647	147	240	912	52
Arrive On Green	0.05	0.15	0.15	0.11	0.21	0.21	0.05	0.44	0.44	0.14	0.52	0.52
Sat Flow, veh/h	1774	1203	561	1774	1863	1583	1774	1470	334	1774	1745	100
Grp Volume(v), veh/h	39	0	220	164	236	375	48	0	772	230	0	533
Grp Sat Flow(s),veh/h/ln	1774	0	1764	1774	1863	1583	1774	0	1804	1774	0	1845
Q Serve(g_s), s	2.1	0.0	11.7	8.7	11.0	20.2	2.5	0.0	40.2	12.4	0.0	18.6
Cycle Q Clear(g_c), s	2.1	0.0	11.7	8.7	11.0	20.2	2.5	0.0	40.2	12.4	0.0	18.6
Prop In Lane	1.00		0.32	1.00		1.00	1.00		0.19	1.00		0.05
Lane Grp Cap(c), veh/h	84	0	256	200	393	334	93	0	794	240	0	964
V/C Ratio(X)	0.47	0.00	0.86	0.82	0.60	1.12	0.51	0.00	0.97	0.96	0.00	0.55
Avail Cap(c_a), veh/h	314	0	294	370	393	334	129	0	794	240	0	964
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.6	0.0	40.1	41.6	34.2	37.9	44.3	0.0	26.3	41.2	0.0	15.4
Incr Delay (d2), s/veh	4.0	0.0	19.7	8.1	2.5	86.9	4.3	0.0	26.0	46.1	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	7.1	4.7	5.9	16.8	1.4	0.0	25.7	9.1	0.0	10.1
LnGrp Delay(d),s/veh	48.6	0.0	59.7	49.8	36.8	124.8	48.6	0.0	52.3	87.4	0.0	17.7
LnGrp LOS	D		E	D	D	F	D		D	F		B
Approach Vol, veh/h		259			775			820			763	
Approach Delay, s/veh		58.1			82.1			52.1			38.7	
Approach LOS		E			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	46.2	14.8	18.0	9.1	54.2	8.5	24.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	31.0	20.0	16.0	7.0	37.0	17.0	19.0
Max Q Clear Time (g_c+I1), s	14.4	42.2	10.7	13.7	4.5	20.6	4.1	22.2
Green Ext Time (p_c), s	0.0	0.0	0.3	0.3	0.0	8.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	57.7
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	138	64	151	217	345	44	579	132	212	464	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		100	95		95	80		100	100		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	60			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			25			35	
Link Distance (ft)		861			839			811			2260	
Travel Time (s)		16.8			16.3			22.1			44.0	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8			2			
Detector Phase	7	4	4	3	8	1	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	20.0	11.0	20.0	
Total Split (s)	11.0	20.0	20.0	15.0	24.0	19.0	11.0	42.0	42.0	19.0	50.0	
Total Split (%)	11.5%	20.8%	20.8%	15.6%	25.0%	19.8%	11.5%	43.8%	43.8%	19.8%	52.1%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Day St. & Cottonwood Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	36	138	64	151	217	345	44	579	132	212	464	27
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	39	150	70	164	236	375	48	629	143	230	504	29
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	84	271	230	195	388	564	93	801	681	263	916	53
Arrive On Green	0.05	0.15	0.15	0.11	0.21	0.21	0.05	0.43	0.43	0.15	0.53	0.53
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	1745	100
Grp Volume(v), veh/h	39	150	70	164	236	375	48	629	143	230	0	533
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	0	1845
Q Serve(g_s), s	2.1	7.2	3.8	8.7	11.0	19.2	2.5	27.9	5.4	12.2	0.0	18.5
Cycle Q Clear(g_c), s	2.1	7.2	3.8	8.7	11.0	19.2	2.5	27.9	5.4	12.2	0.0	18.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	84	271	230	195	388	564	93	801	681	263	0	969
V/C Ratio(X)	0.47	0.55	0.30	0.84	0.61	0.66	0.51	0.79	0.21	0.88	0.00	0.55
Avail Cap(c_a), veh/h	129	310	264	203	388	564	129	801	681	277	0	969
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.6	38.1	36.7	41.9	34.4	26.1	44.3	23.6	17.2	40.0	0.0	15.2
Incr Delay (d2), s/veh	4.0	1.8	0.7	24.9	2.7	2.9	4.3	7.6	0.7	24.6	0.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.8	1.7	5.6	5.9	8.8	1.4	16.0	2.5	7.7	0.0	9.9
LnGrp Delay(d),s/veh	48.6	39.9	37.4	66.8	37.2	29.0	48.6	31.2	17.9	64.6	0.0	17.5
LnGrp LOS	D	D	D	E	D	C	D	C	B	E		B
Approach Vol, veh/h		259			775			820			763	
Approach Delay, s/veh		40.5			39.5			29.9			31.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.2	45.3	14.6	17.9	9.1	54.4	8.5	24.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	38.0	11.0	16.0	7.0	46.0	7.0	20.0
Max Q Clear Time (g_c+I1), s	14.2	29.9	10.7	9.2	4.5	20.5	4.1	21.2
Green Ext Time (p_c), s	0.1	4.8	0.0	2.2	0.0	9.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	34.3
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	29	18	9	24	52	7	735	1	19	623	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		861			839			634			1320	
Travel Time (s)		19.6			19.1			17.3			36.0	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	53.7
Intersection LOS	F

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	10	29	18	0	9	24	52	0	7	735	1
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	11	32	20	0	10	26	57	0	8	799	1
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	11.3	11	58.1
HCM LOS	B	B	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	1%	26%	0%	27%	0%	3%
Vol Thru, %	99%	74%	0%	73%	0%	96%
Vol Right, %	0%	0%	100%	0%	100%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	743	39	18	33	52	648
LT Vol	7	10	0	9	0	19
Through Vol	735	29	0	24	0	623
RT Vol	1	0	18	0	52	6
Lane Flow Rate	808	42	20	36	57	704
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	1	0.096	0.04	0.08	0.113	1
Departure Headway (Hd)	5.381	8.139	7.311	8.038	7.202	5.371
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	670	443	492	448	500	669
Service Time	3.464	5.844	5.017	5.744	4.908	3.463
HCM Lane V/C Ratio	1.206	0.095	0.041	0.08	0.114	1.052
HCM Control Delay	58.1	11.7	10.3	11.4	10.8	58
HCM Lane LOS	F	B	B	B	B	F
HCM 95th-tile Q	15.7	0.3	0.1	0.3	0.4	15.7

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	19	623	6
Peak Hour Factor	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	21	677	7
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	58
HCM LOS	F

Lane

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	29	18	9	24	52	7	735	1	19	623	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	100		0	100		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		861			839			634			509	
Travel Time (s)		19.6			19.1			17.3			13.9	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0		20.0	20.0	
Total Split (s)	26.0	26.0	26.0	26.0	26.0	26.0	70.0	70.0		70.0	70.0	
Total Split (%)	27.1%	27.1%	27.1%	27.1%	27.1%	27.1%	72.9%	72.9%		72.9%	72.9%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0			0.0	
Total Lost Time (s)		4.0	4.0		4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	C-Max	C-Max		C-Max	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	

Splits and Phases: 14: Day St. & Bay Av/Bay Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	29	18	9	24	52	7	735	1	19	623	6
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	11	32	20	10	26	57	8	799	1	21	677	7
Adj No. of Lanes	0	1	1	0	1	1	0	2	0	0	2	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	66	108	114	67	107	114	47	2979	4	93	2826	29
Arrive On Green	0.07	0.07	0.07	0.07	0.07	0.07	0.84	0.84	0.84	0.84	0.84	0.84
Sat Flow, veh/h	257	1498	1583	271	1488	1583	11	3526	4	63	3345	34
Grp Volume(v), veh/h	43	0	20	36	0	57	422	0	386	360	0	345
Grp Sat Flow(s),veh/h/ln	1754	0	1583	1759	0	1583	1847	0	1694	1753	0	1689
Q Serve(g_s), s	0.0	0.0	1.1	0.0	0.0	3.3	0.0	0.0	4.4	0.0	0.0	3.8
Cycle Q Clear(g_c), s	2.1	0.0	1.1	1.8	0.0	3.3	4.4	0.0	4.4	3.6	0.0	3.8
Prop In Lane	0.26		1.00	0.28		1.00	0.02		0.00	0.06		0.02
Lane Grp Cap(c), veh/h	173	0	114	174	0	114	1599	0	1432	1521	0	1427
V/C Ratio(X)	0.25	0.00	0.18	0.21	0.00	0.50	0.26	0.00	0.27	0.24	0.00	0.24
Avail Cap(c_a), veh/h	438	0	363	439	0	363	1599	0	1432	1521	0	1427
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.3	0.0	41.9	42.2	0.0	42.9	1.5	0.0	1.5	1.4	0.0	1.5
Incr Delay (d2), s/veh	0.7	0.0	0.7	0.6	0.0	3.4	0.4	0.0	0.5	0.4	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.5	0.9	0.0	1.6	2.3	0.0	2.2	2.0	0.0	1.9
LnGrp Delay(d),s/veh	43.1	0.0	42.6	42.8	0.0	46.3	1.9	0.0	2.0	1.8	0.0	1.9
LnGrp LOS	D		D	D		D	A		A	A		A
Approach Vol, veh/h		63			93			808			705	
Approach Delay, s/veh		42.9			44.9			1.9			1.8	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		85.1		10.9		85.1		10.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		66.0		22.0		66.0		22.0
Max Q Clear Time (g_c+I1), s		6.4		4.1		5.8		5.3
Green Ext Time (p_c), s		15.5		0.6		15.5		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	5.8
HCM 2010 LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	285	1226	191	171	1671	105	100	299	109	92	431	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	245		0	220		75	50		50	200		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	100			120			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		861			839			831			716	
Travel Time (s)		13.0			12.7			16.2			19.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		
Detector Phase	5	2		1	6	6	8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (s)	17.0	47.0		17.0	47.0	47.0	32.0	32.0	32.0	32.0	32.0	
Total Split (%)	17.7%	49.0%		17.7%	49.0%	49.0%	33.3%	33.3%	33.3%	33.3%	33.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max		None	C-Max	C-Max	Max	Max	Max	Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 42 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 15: Day St. & Alessandro Bl.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	285	1226	191	171	1671	105	100	299	109	92	431	150
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	303	1304	203	182	1778	112	106	318	116	98	459	160
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	240	2053	320	215	1585	709	75	543	462	214	385	134
Arrive On Green	0.14	0.46	0.46	0.12	0.45	0.45	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1774	4440	691	1774	3539	1583	801	1863	1583	951	1321	460
Grp Volume(v), veh/h	303	996	511	182	1778	112	106	318	116	98	0	619
Grp Sat Flow(s),veh/h/ln	1774	1695	1741	1774	1770	1583	801	1863	1583	951	0	1781
Q Serve(g_s), s	13.0	21.5	21.5	9.6	43.0	4.0	0.0	14.0	5.4	9.4	0.0	28.0
Cycle Q Clear(g_c), s	13.0	21.5	21.5	9.6	43.0	4.0	28.0	14.0	5.4	23.4	0.0	28.0
Prop In Lane	1.00		0.40	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	240	1567	805	215	1585	709	75	543	462	214	0	520
V/C Ratio(X)	1.26	0.64	0.64	0.85	1.12	0.16	1.41	0.59	0.25	0.46	0.00	1.19
Avail Cap(c_a), veh/h	240	1567	805	240	1585	709	75	543	462	214	0	520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.5	19.6	19.6	41.3	26.5	15.7	48.0	29.0	26.0	39.0	0.0	34.0
Incr Delay (d2), s/veh	146.6	2.0	3.8	21.9	63.7	0.5	247.6	4.6	1.3	6.9	0.0	104.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.1	10.4	11.1	6.0	34.9	1.8	7.1	7.8	2.5	2.9	0.0	28.7
LnGrp Delay(d),s/veh	188.1	21.6	23.5	63.2	90.2	16.2	295.6	33.6	27.3	46.0	0.0	138.0
LnGrp LOS	F	C	C	E	F	B	F	C	C	D		F
Approach Vol, veh/h		1810			2072			540			717	
Approach Delay, s/veh		50.0			83.8			83.7			125.4	
Approach LOS		D			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.6	48.4		32.0	17.0	47.0		32.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	13.0	43.0		28.0	13.0	43.0		28.0
Max Q Clear Time (g_c+I1), s	11.6	23.5		30.0	15.0	45.0		30.0
Green Ext Time (p_c), s	0.1	18.0		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	77.7
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	285	1226	191	171	1671	105	100	299	109	92	431	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	245		50	220		75	50		50	200		100
Storage Lanes	2		0	2		0	1		0	0		1
Taper Length (ft)	100			120			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		861			839			831			716	
Travel Time (s)		13.0			12.7			16.2			19.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0		11.0	20.0		20.0	20.0		20.0	20.0	20.0
Total Split (s)	15.0	46.0		13.0	44.0		37.0	37.0		37.0	37.0	37.0
Total Split (%)	15.6%	47.9%		13.5%	45.8%		38.5%	38.5%		38.5%	38.5%	38.5%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		Max	Max		Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 15: Day St. & Alessandro Bl.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	285	1226	191	171	1671	105	100	299	109	92	431	150
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	303	1304	203	182	1778	112	106	318	116	98	459	160
Adj No. of Lanes	2	3	0	2	3	0	1	2	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	371	2034	317	252	2071	130	178	879	315	311	640	544
Arrive On Green	0.11	0.46	0.46	0.07	0.42	0.42	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	3442	4440	691	3442	4891	308	801	2556	915	951	1863	1583
Grp Volume(v), veh/h	303	996	511	182	1231	659	106	218	216	98	459	160
Grp Sat Flow(s),veh/h/ln	1721	1695	1741	1721	1695	1808	801	1770	1701	951	1863	1583
Q Serve(g_s), s	8.3	21.6	21.6	5.0	31.6	31.7	12.4	8.9	9.1	8.3	20.6	7.1
Cycle Q Clear(g_c), s	8.3	21.6	21.6	5.0	31.6	31.7	33.0	8.9	9.1	17.4	20.6	7.1
Prop In Lane	1.00		0.40	1.00		0.17	1.00		0.54	1.00		1.00
Lane Grp Cap(c), veh/h	371	1553	798	252	1436	766	178	608	585	311	640	544
V/C Ratio(X)	0.82	0.64	0.64	0.72	0.86	0.86	0.59	0.36	0.37	0.31	0.72	0.29
Avail Cap(c_a), veh/h	394	1553	798	323	1436	766	178	608	585	311	640	544
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.9	20.0	20.0	43.5	25.1	25.1	41.9	23.6	23.7	30.2	27.4	23.0
Incr Delay (d2), s/veh	12.0	2.0	3.9	5.7	6.8	12.1	13.7	1.6	1.8	2.6	6.8	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	10.5	11.2	2.5	16.1	18.3	3.5	4.6	4.5	2.4	11.8	3.3
LnGrp Delay(d),s/veh	53.9	22.0	23.9	49.2	31.9	37.2	55.7	25.2	25.5	32.9	34.2	24.4
LnGrp LOS	D	C	C	D	C	D	E	C	C	C	C	C
Approach Vol, veh/h		1810			2072			540			717	
Approach Delay, s/veh		27.9			35.1			31.3			31.8	
Approach LOS		C			D			C			C	

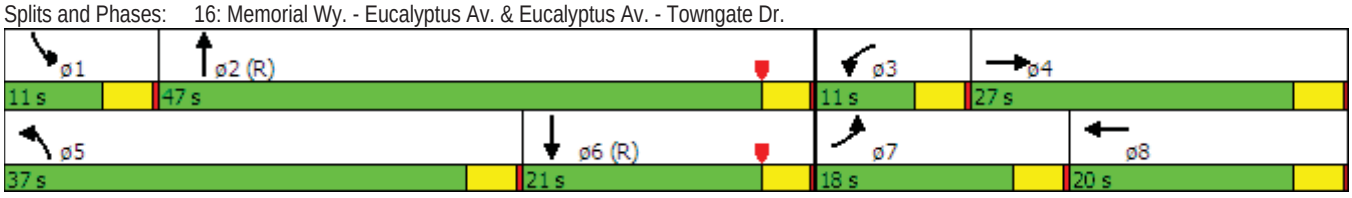
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.0	48.0		37.0	14.3	44.7		37.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.0	42.0		33.0	11.0	40.0		33.0
Max Q Clear Time (g_c+I1), s	7.0	23.6		22.6	10.3	33.7		35.0
Green Ext Time (p_c), s	0.1	16.8		5.3	0.1	6.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	31.7
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	232	392	326	10	508	34	533	174	17	16	89	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		0	150		0	200		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	18.0	27.0		11.0	20.0		37.0	47.0		11.0	21.0	
Total Split (%)	18.8%	28.1%		11.5%	20.8%		38.5%	49.0%		11.5%	21.9%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	232	392	326	10	508	34	533	174	17	16	89	330
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	252	426	354	11	552	37	579	189	18	17	97	359
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	913	426	33	691	46	605	1697	160	47	362	324
Arrive On Green	0.15	0.27	0.27	0.02	0.14	0.14	0.34	0.52	0.52	0.03	0.20	0.20
Sat Flow, veh/h	1774	3390	1583	1774	4872	324	1774	3270	308	1774	1770	1583
Grp Volume(v), veh/h	252	426	354	11	383	206	579	101	106	17	97	359
Grp Sat Flow(s),veh/h/ln	1774	1695	1583	1774	1695	1806	1774	1770	1808	1774	1770	1583
Q Serve(g_s), s	13.6	10.1	20.2	0.6	10.5	10.6	30.6	2.8	2.9	0.9	4.4	19.6
Cycle Q Clear(g_c), s	13.6	10.1	20.2	0.6	10.5	10.6	30.6	2.8	2.9	0.9	4.4	19.6
Prop In Lane	1.00		1.00	1.00		0.18	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	259	913	426	33	481	256	605	919	939	47	362	324
V/C Ratio(X)	0.97	0.47	0.83	0.33	0.80	0.80	0.96	0.11	0.11	0.36	0.27	1.11
Avail Cap(c_a), veh/h	259	913	426	129	565	301	610	919	939	129	362	324
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.8	29.3	33.0	46.5	39.8	39.9	30.9	11.8	11.8	45.9	32.1	38.2
Incr Delay (d2), s/veh	48.6	0.4	13.0	5.8	6.7	12.8	26.0	0.2	0.2	4.6	1.8	82.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	4.8	10.4	0.3	5.3	6.2	19.3	1.4	1.5	0.5	2.3	16.0
LnGrp Delay(d),s/veh	89.4	29.7	46.0	52.4	46.6	52.7	56.9	12.0	12.0	50.5	33.9	120.6
LnGrp LOS	F	C	D	D	D	D	E	B	B	D	C	F
Approach Vol, veh/h		1032			600			786			473	
Approach Delay, s/veh		49.9			48.8			45.1			100.3	
Approach LOS		D			D			D			F	

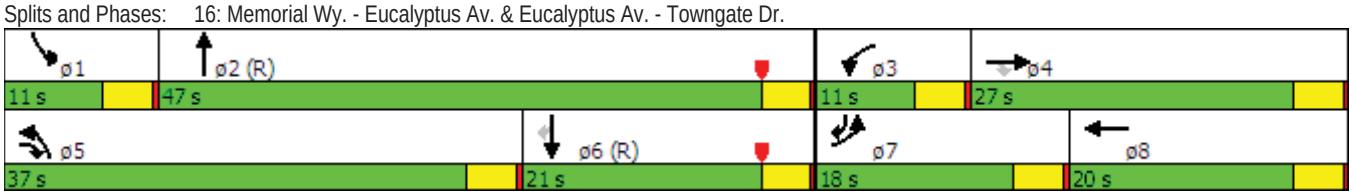
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	53.8	5.8	29.8	36.7	23.6	18.0	17.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	43.0	7.0	23.0	33.0	17.0	14.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	4.9	2.6	22.2	32.6	21.6	15.6	12.6
Green Ext Time (p_c), s	0.0	4.4	0.0	0.6	0.1	0.0	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	56.6
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	232	392	326	10	508	34	533	174	17	16	89	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		0	150		0	200		0	200		0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4	5	3	8		5	2		1	6	7
Permitted Phases			4									6
Detector Phase	7	4	5	3	8		5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	11.0	11.0	20.0		11.0	20.0		11.0	20.0	11.0
Total Split (s)	18.0	27.0	37.0	11.0	20.0		37.0	47.0		11.0	21.0	18.0
Total Split (%)	18.8%	28.1%	38.5%	11.5%	20.8%		38.5%	49.0%		11.5%	21.9%	18.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	232	392	326	10	508	34	533	174	17	16	89	330
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	252	426	354	11	552	37	579	189	18	17	97	359
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	1	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	951	965	33	688	46	605	1699	160	47	382	556
Arrive On Green	0.15	0.27	0.27	0.02	0.14	0.14	0.34	0.52	0.52	0.03	0.21	0.21
Sat Flow, veh/h	1774	3539	1583	1774	4872	324	1774	3270	308	1774	1863	1583
Grp Volume(v), veh/h	252	426	354	11	383	206	579	101	106	17	97	359
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1695	1806	1774	1770	1808	1774	1863	1583
Q Serve(g_s), s	13.6	9.6	10.8	0.6	10.5	10.6	30.6	2.8	2.9	0.9	4.2	18.3
Cycle Q Clear(g_c), s	13.6	9.6	10.8	0.6	10.5	10.6	30.6	2.8	2.9	0.9	4.2	18.3
Prop In Lane	1.00		1.00	1.00		0.18	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	259	951	965	33	479	255	605	920	940	47	382	556
V/C Ratio(X)	0.97	0.45	0.37	0.33	0.80	0.81	0.96	0.11	0.11	0.36	0.25	0.65
Avail Cap(c_a), veh/h	259	951	965	129	565	301	610	920	940	129	382	556
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.8	29.2	9.4	46.5	39.9	40.0	30.9	11.7	11.8	45.9	32.0	26.1
Incr Delay (d2), s/veh	48.6	0.3	0.2	5.8	6.9	13.1	26.0	0.2	0.2	4.6	1.6	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	4.7	4.7	0.3	5.3	6.3	19.3	1.4	1.5	0.5	2.3	8.8
LnGrp Delay(d),s/veh	89.4	29.5	9.7	52.4	46.8	53.0	56.9	12.0	12.0	50.5	33.6	31.9
LnGrp LOS	F	C	A	D	D	D	E	B	B	D	C	C
Approach Vol, veh/h		1032			600			786			473	
Approach Delay, s/veh		37.3			49.0			45.1			32.9	
Approach LOS		D			D			D			C	

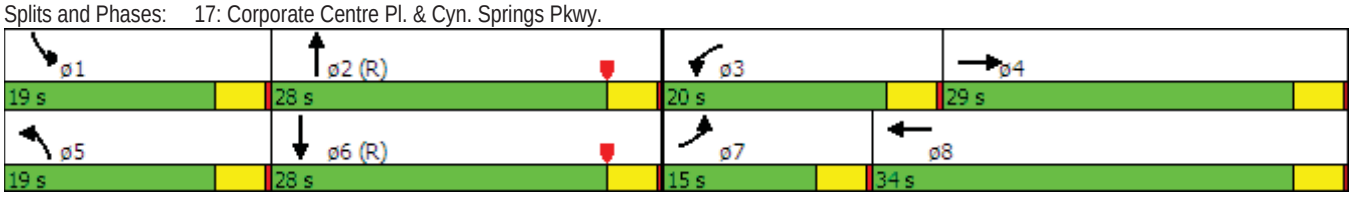
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	53.9	5.8	29.8	36.7	23.7	18.0	17.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	43.0	7.0	23.0	33.0	17.0	14.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	4.9	2.6	12.8	32.6	20.3	15.6	12.6
Green Ext Time (p_c), s	0.0	3.0	0.0	5.3	0.1	0.0	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	41.1
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	218	25	34	308	27	27	27	31	28	13	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	175		0	130		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			90			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		476			1120			987			205	
Travel Time (s)		8.1			19.1			16.8			4.7	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	15.0	29.0		20.0	34.0		19.0	28.0		19.0	28.0	
Total Split (%)	15.6%	30.2%		20.8%	35.4%		19.8%	29.2%		19.8%	29.2%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 52 (54%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 17: Corporate Centre Pl. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	9	218	25	34	308	27	27	27	31	28	13	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	10	237	27	37	335	29	29	29	34	30	14	13
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	494	55	81	644	55	70	1135	1015	71	572	531
Arrive On Green	0.02	0.11	0.11	0.02	0.04	0.04	0.04	0.64	0.64	0.04	0.64	0.64
Sat Flow, veh/h	1774	4645	517	1774	4774	407	1774	1770	1583	1774	890	827
Grp Volume(v), veh/h	10	171	93	37	236	128	29	29	34	30	0	27
Grp Sat Flow(s),veh/h/ln	1774	1695	1772	1774	1695	1791	1774	1770	1583	1774	0	1717
Q Serve(g_s), s	0.5	4.6	4.7	2.0	6.5	6.7	1.5	0.6	0.8	1.6	0.0	0.5
Cycle Q Clear(g_c), s	0.5	4.6	4.7	2.0	6.5	6.7	1.5	0.6	0.8	1.6	0.0	0.5
Prop In Lane	1.00		0.29	1.00		0.23	1.00		1.00	1.00		0.48
Lane Grp Cap(c), veh/h	30	360	188	81	458	242	70	1135	1015	71	0	1102
V/C Ratio(X)	0.33	0.48	0.49	0.46	0.52	0.53	0.42	0.03	0.03	0.42	0.00	0.02
Avail Cap(c_a), veh/h	203	883	461	296	1059	560	277	1135	1015	277	0	1102
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	46.6	40.4	40.5	46.1	42.8	42.9	45.0	6.3	6.3	45.0	0.0	6.2
Incr Delay (d2), s/veh	6.2	1.0	2.0	3.8	0.9	1.7	3.9	0.0	0.1	3.9	0.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.2	2.4	1.1	3.1	3.4	0.8	0.3	0.3	0.9	0.0	0.3
LnGrp Delay(d),s/veh	52.8	41.4	42.4	49.9	43.7	44.6	49.0	6.3	6.4	48.9	0.0	6.3
LnGrp LOS	D	D	D	D	D	D	D	A	A	D		A
Approach Vol, veh/h		274			401			92			57	
Approach Delay, s/veh		42.1			44.6			19.8			28.7	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	65.6	8.4	14.2	7.8	65.6	5.6	17.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	24.0	16.0	25.0	15.0	24.0	11.0	30.0
Max Q Clear Time (g_c+I1), s	3.6	2.8	4.0	6.7	3.5	2.5	2.5	8.7
Green Ext Time (p_c), s	0.0	0.4	0.0	3.5	0.0	0.4	0.0	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	39.9
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	60	4	74	101	40	16	48	20	6	25	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	170		0	100		0	130		0	135		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			45			60			60		
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		474			710			623			987	
Travel Time (s)		8.1			12.1			10.6			16.8	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	12	60	4	0	74	101	40	0	16	48	20
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	13	65	4	0	80	110	43	0	17	52	22
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	3
HCM Control Delay	8.5	8.6	8.5
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	44%	0%	100%	83%	0%	100%	46%	0%	100%
Vol Right, %	0%	0%	56%	0%	0%	17%	0%	0%	54%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	16	32	36	12	40	24	74	67	74	6	17
LT Vol	16	0	0	12	0	0	74	0	0	6	0
Through Vol	0	32	16	0	40	20	0	67	34	0	17
RT Vol	0	0	20	0	0	4	0	0	40	0	0
Lane Flow Rate	17	35	39	13	43	26	80	73	80	7	18
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.029	0.053	0.056	0.021	0.066	0.039	0.126	0.105	0.106	0.011	0.028
Departure Headway (Hd)	6.003	5.503	5.114	5.931	5.431	5.314	5.655	5.155	4.775	6.04	5.54
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	595	649	698	602	657	671	633	694	749	591	644
Service Time	3.753	3.253	2.864	3.682	3.182	3.065	3.398	2.898	2.518	3.791	3.291
HCM Lane V/C Ratio	0.029	0.054	0.056	0.022	0.065	0.039	0.126	0.105	0.107	0.012	0.028
HCM Control Delay	8.9	8.6	8.2	8.8	8.6	8.3	9.2	8.5	8.1	8.9	8.5
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.2	0.1	0.2	0.1	0.4	0.4	0.4	0	0.1

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	6	25	39
Peak Hour Factor	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	7	27	42
Number of Lanes	0	1	2	0

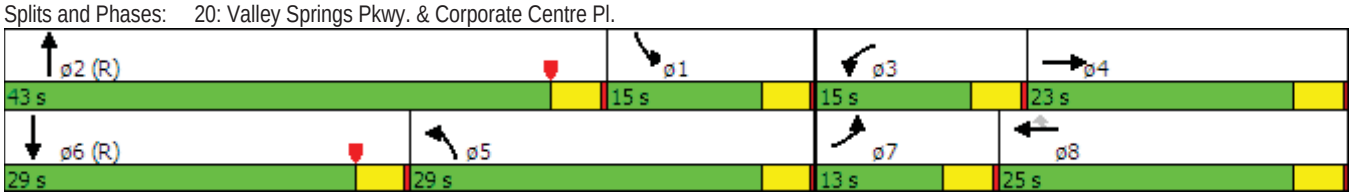
Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	8.3
HCM LOS	A

Lane	SBLn3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	12	28	30	69	5	128	393	43	29	336	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		70	140		50	150		0	120		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			40			40			40	
Link Distance (ft)		327			603			402			804	
Travel Time (s)		7.4			10.3			6.9			13.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	13.0	23.0		15.0	25.0	25.0	29.0	43.0		15.0	29.0	
Total Split (%)	13.5%	24.0%		15.6%	26.0%	26.0%	30.2%	44.8%		15.6%	30.2%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 90 (94%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Valley Springs Pkwy. & Corporate Centre Pl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	9	12	28	30	69	5	128	393	43	29	336	22
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	10	13	30	32	74	5	138	423	46	31	361	24
Adj No. of Lanes	1	1	0	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.93	0.93	0.93	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	2	2	2	2	2	2	2
Cap, veh/h	30	35	82	74	338	151	817	1895	203	558	1270	83
Arrive On Green	0.02	0.07	0.07	0.04	0.10	0.10	0.92	0.81	0.81	0.31	0.26	0.26
Sat Flow, veh/h	1774	501	1157	1774	3539	1583	1774	4665	499	1774	4876	320
Grp Volume(v), veh/h	10	0	43	32	74	5	138	306	163	31	250	135
Grp Sat Flow(s),veh/h/ln	1774	0	1659	1774	1770	1583	1774	1695	1775	1774	1695	1806
Q Serve(g_s), s	0.5	0.0	2.4	1.7	1.9	0.2	0.7	2.0	2.0	1.2	5.6	5.7
Cycle Q Clear(g_c), s	0.5	0.0	2.4	1.7	1.9	0.2	0.7	2.0	2.0	1.2	5.6	5.7
Prop In Lane	1.00		0.70	1.00		1.00	1.00		0.28	1.00		0.18
Lane Grp Cap(c), veh/h	30	0	117	74	338	151	817	1377	721	558	883	470
V/C Ratio(X)	0.33	0.00	0.37	0.43	0.22	0.03	0.17	0.22	0.23	0.06	0.28	0.29
Avail Cap(c_a), veh/h	166	0	328	203	774	346	817	1377	721	558	883	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	0.0	42.6	44.9	40.1	12.4	2.1	5.5	5.5	23.0	28.3	28.4
Incr Delay (d2), s/veh	6.2	0.0	1.9	3.9	0.3	0.1	0.1	0.4	0.7	0.0	0.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	1.1	0.9	0.9	0.1	0.3	0.9	1.1	0.6	2.7	3.1
LnGrp Delay(d),s/veh	52.8	0.0	44.5	48.8	40.4	12.4	2.2	5.9	6.3	23.0	29.1	29.9
LnGrp LOS	D		D	D	D	B	A	A	A	C	C	C
Approach Vol, veh/h		53			111			607			416	
Approach Delay, s/veh		46.0			41.6			5.2			28.9	
Approach LOS		D			D			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.2	43.0	8.0	10.8	48.2	29.0	5.6	13.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	39.0	11.0	19.0	25.0	25.0	9.0	21.0
Max Q Clear Time (g_c+I1), s	3.2	4.0	3.7	4.4	2.7	7.7	2.5	3.9
Green Ext Time (p_c), s	0.2	3.0	0.0	0.5	0.4	2.0	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	18.7
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	0	15	0	0	0	22	561	0	0	382	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	25		0	75		50
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	60			60			10			80		
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		252			253			418			402	
Travel Time (s)		5.7			5.8			7.1			6.9	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	0	15	0	0	0	22	561	0	0	382	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	0	16	0	0	0	24	610	0	0	415	13

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	714	1080	214				428	0	0	610	0	0
Stage 1	422	422	-				-	-	-	-	-	-
Stage 2	292	658	-				-	-	-	-	-	-
Critical Hdwy	5.74	6.54	7.14				5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	6.64	5.54	-				-	-	-	-	-	-
Critical Hdwy Stg 2	6.04	5.54	-				-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92				3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	431	217	673				732	-	-	601	-	-
Stage 1	537	587	-				-	-	-	-	-	-
Stage 2	671	459	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	409	0	673				732	-	-	601	-	-
Mov Cap-2 Maneuver	409	0	-				-	-	-	-	-	-
Stage 1	537	0	-				-	-	-	-	-	-
Stage 2	637	0	-				-	-	-	-	-	-

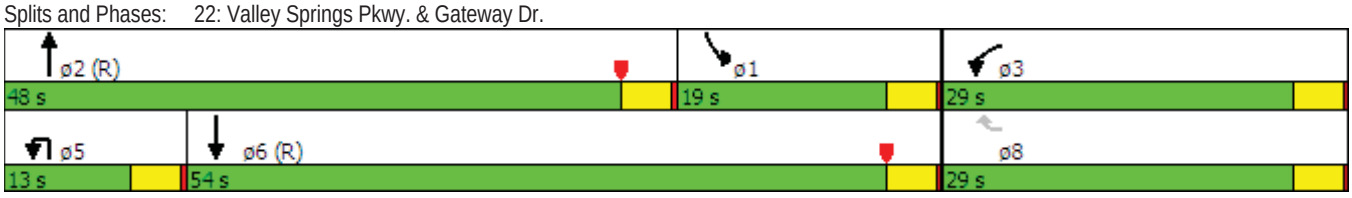
Approach	EB	NB	SB
HCM Control Delay, s	11.1	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	732	-	-	608	601	-	-
HCM Lane V/C Ratio	0.033	-	-	0.032	-	-	-
HCM Control Delay (s)	10.1	0.2	-	11.1	0	-	-
HCM Lane LOS	B	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0	-	-

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (vph)	107	44	0	538	281	51	346
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	180		0	115	
Storage Lanes	1	1	1		0	1	
Taper Length (ft)	60		100			120	
Right Turn on Red		Yes			Yes		
Link Speed (mph)	40			40			40
Link Distance (ft)	609			576			418
Travel Time (s)	10.4			9.8			7.1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)							
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	3		5	2		1	6
Permitted Phases		8					
Detector Phase	3	8	5	2		1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	11.0	20.0	11.0	20.0		11.0	20.0
Total Split (s)	29.0	29.0	13.0	48.0		19.0	54.0
Total Split (%)	30.2%	30.2%	13.5%	50.0%		19.8%	56.3%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead	Lead		Lag	Lag
Lead-Lag Optimize?			Yes	Yes		Yes	Yes
Recall Mode	None	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 26 (27%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 22: Valley Springs Pkwy. & Gateway Dr.



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	107	44	0	538	281	51	346
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1900	1863	1863
Adj Flow Rate, veh/h	113	46		566	296	54	364
Adj No. of Lanes	1	1		3	0	1	3
Peak Hour Factor	0.95	0.95		0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	152	135		1554	726	587	4226
Arrive On Green	0.09	0.09		0.46	0.46	0.22	0.56
Sat Flow, veh/h	1774	1583		3558	1583	1774	5253
Grp Volume(v), veh/h	113	46		566	296	54	364
Grp Sat Flow(s),veh/h/ln	1774	1583		1695	1583	1774	1695
Q Serve(g_s), s	6.0	2.6		10.4	12.0	2.3	3.2
Cycle Q Clear(g_c), s	6.0	2.6		10.4	12.0	2.3	3.2
Prop In Lane	1.00	1.00			1.00	1.00	
Lane Grp Cap(c), veh/h	152	135		1554	726	587	4226
V/C Ratio(X)	0.74	0.34		0.36	0.41	0.09	0.09
Avail Cap(c_a), veh/h	462	412		1554	726	587	4226
HCM Platoon Ratio	1.00	1.00		1.00	1.00	0.67	0.67
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.9	41.3		16.9	17.3	25.9	4.3
Incr Delay (d2), s/veh	7.0	1.5		0.7	1.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	1.2		5.0	5.5	1.2	1.5
LnGrp Delay(d),s/veh	49.9	42.8		17.6	19.0	26.0	4.3
LnGrp LOS	D	D		B	B	C	A
Approach Vol, veh/h	159			862			418
Approach Delay, s/veh	47.8			18.1			7.1
Approach LOS	D			B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	35.8	48.0				83.8		12.2
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	15.0	44.0				50.0		25.0
Max Q Clear Time (g_c+I1), s	4.3	14.0				5.2		8.0
Green Ext Time (p_c), s	0.2	6.1				2.6		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	18.2
HCM 2010 LOS	B

Notes

User approved ignoring U-Turning movement.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	13	208	157	11	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	60				60	
Link Speed (mph)		40	40		30	
Link Distance (ft)		609	672		287	
Travel Time (s)		10.4	11.5		6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	13	208	157	11	3	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	100	-	-	-	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	14	226	171	12	3	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	183	0	-	0	318	91
Stage 1	-	-	-	-	177	-
Stage 2	-	-	-	-	141	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1389	-	-	-	650	949
Stage 1	-	-	-	-	836	-
Stage 2	-	-	-	-	871	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1389	-	-	-	643	949
Mov Cap-2 Maneuver	-	-	-	-	681	-
Stage 1	-	-	-	-	836	-
Stage 2	-	-	-	-	862	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1389	-	-	-	681
HCM Lane V/C Ratio	0.01	-	-	-	0.005
HCM Control Delay (s)	7.6	-	-	-	10.3
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	74	133	123	30	24	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125			0	150	0
Storage Lanes	1			0	0	1
Taper Length (ft)	60				60	
Link Speed (mph)		40	40		40	
Link Distance (ft)		672	394		405	
Travel Time (s)		11.5	6.7		6.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	74	133	123	30	24	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	77	139	128	31	25	47

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	159	0	-	0	367	80
Stage 1	-	-	-	-	144	-
Stage 2	-	-	-	-	223	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1418	-	-	-	606	964
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	793	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1418	-	-	-	573	964
Mov Cap-2 Maneuver	-	-	-	-	624	-
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	750	-

Approach	EB	WB	SB
HCM Control Delay, s	2.7	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1418	-	-	-	624	964
HCM Lane V/C Ratio	0.054	-	-	-	0.04	0.049
HCM Control Delay (s)	7.7	-	-	-	11	8.9
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.1	0.2

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	105	19	102	169	1	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	25		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			0		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	226			318	265	
Travel Time (s)	3.9			5.4	6.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	105	19	102	169	1	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	25	-	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	114	21	111	184	1	29

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	135	0	438	67
Stage 1	-	-	-	-	124	-
Stage 2	-	-	-	-	314	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1447	-	547	983
Stage 1	-	-	-	-	888	-
Stage 2	-	-	-	-	714	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1447	-	505	983
Mov Cap-2 Maneuver	-	-	-	-	561	-
Stage 1	-	-	-	-	888	-
Stage 2	-	-	-	-	659	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.9	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	957	-	-	1447	-
HCM Lane V/C Ratio	0.032	-	-	0.077	-
HCM Control Delay (s)	8.9	-	-	7.7	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	60	20	66	197	35	12	17	31	15	26	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		50	110		100	100		50	0		50
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		710			938			620			207	
Travel Time (s)		12.1			16.0			10.6			4.7	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	5	60	20	0	66	197	35	0	12	17	31
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	5	65	22	0	72	214	38	0	13	18	34
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	2	3
HCM Control Delay	8.4	8.8	8.4
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	37%	0%
Vol Thru, %	0%	100%	15%	0%	100%	50%	0%	100%	65%	63%	0%
Vol Right, %	0%	0%	85%	0%	0%	50%	0%	0%	35%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	12	11	37	5	40	40	66	131	101	41	5
LT Vol	12	0	0	5	0	0	66	0	0	15	0
Through Vol	0	11	6	0	40	20	0	131	66	26	0
RT Vol	0	0	31	0	0	20	0	0	35	0	5
Lane Flow Rate	13	12	40	5	43	43	72	143	109	45	5
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.022	0.019	0.056	0.009	0.066	0.062	0.111	0.201	0.146	0.073	0.008
Departure Headway (Hd)	6.182	5.683	5.091	5.987	5.486	5.135	5.564	5.063	4.819	5.887	5.005
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	578	628	701	597	651	696	644	708	743	607	712
Service Time	3.933	3.433	2.842	3.733	3.232	2.881	3.3	2.799	2.555	3.637	2.754
HCM Lane V/C Ratio	0.022	0.019	0.057	0.008	0.066	0.062	0.112	0.202	0.147	0.074	0.007
HCM Control Delay	9.1	8.5	8.1	8.8	8.6	8.2	9	9.1	8.4	9.1	7.8
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0.2	0	0.2	0.2	0.4	0.7	0.5	0.2	0

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	15	26	5
Peak Hour Factor	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	16	28	5
Number of Lanes	0	0	1	1

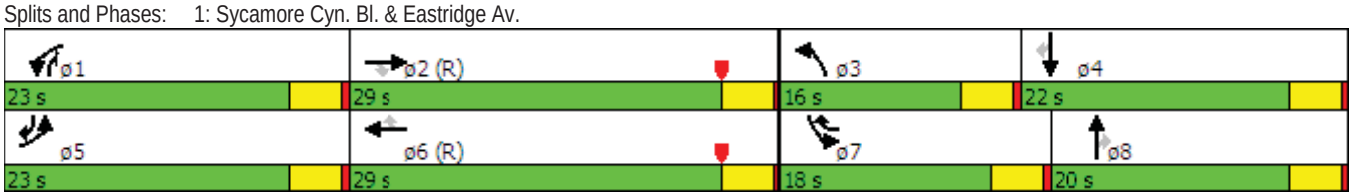
Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	9
HCM LOS	A

Lane

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	441	884	424	500	551	270	268	288	141	368	410	256
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		150	310		200	360		320	275		110
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	120			120			120			200		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		910			577			817			952	
Travel Time (s)		15.5			9.8			12.4			14.4	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	11.0	11.0	20.0	11.0
Total Split (s)	23.0	29.0	29.0	23.0	29.0	18.0	16.0	20.0	23.0	18.0	22.0	23.0
Total Split (%)	25.6%	32.2%	32.2%	25.6%	32.2%	20.0%	17.8%	22.2%	25.6%	20.0%	24.4%	25.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	Max	None	None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 26 (29%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Sycamore Cyn. Bl. & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	441	884	424	500	551	270	268	288	141	368	410	256
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	479	961	0	543	599	293	291	313	153	400	446	278
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	2	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	572	1641	511	630	1202	757	370	629	571	477	740	594
Arrive On Green	0.17	0.32	0.00	0.18	0.34	0.34	0.11	0.18	0.18	0.14	0.21	0.21
Sat Flow, veh/h	3442	5085	1583	3442	3539	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	479	961	0	543	599	293	291	313	153	400	446	278
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1770	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	12.1	14.2	0.0	13.8	12.1	10.7	7.4	7.2	6.2	10.2	10.3	12.0
Cycle Q Clear(g_c), s	12.1	14.2	0.0	13.8	12.1	10.7	7.4	7.2	6.2	10.2	10.3	12.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	572	1641	511	630	1202	757	370	629	571	477	740	594
V/C Ratio(X)	0.84	0.59	0.00	0.86	0.50	0.39	0.79	0.50	0.27	0.84	0.60	0.47
Avail Cap(c_a), veh/h	727	1641	511	727	1202	757	459	629	571	535	740	594
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.3	25.4	0.0	35.7	23.6	15.0	39.2	33.4	20.4	37.8	32.2	21.3
Incr Delay (d2), s/veh	6.9	1.5	0.0	9.4	1.5	1.5	7.1	2.8	1.1	10.3	3.6	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	6.8	0.0	7.4	6.2	4.9	3.9	3.8	2.9	5.5	5.4	5.6
LnGrp Delay(d),s/veh	43.3	27.0	0.0	45.0	25.1	16.5	46.3	36.2	21.5	48.1	35.8	23.9
LnGrp LOS	D	C		D	C	B	D	D	C	D	D	C
Approach Vol, veh/h		1440			1435			757			1124	
Approach Delay, s/veh		32.4			30.9			37.1			37.3	
Approach LOS		C			C			D			D	

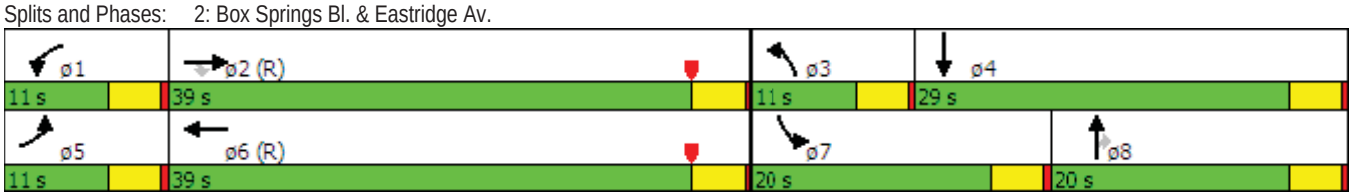
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.5	33.1	13.7	22.8	19.0	34.6	16.5	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	25.0	12.0	18.0	19.0	25.0	14.0	16.0
Max Q Clear Time (g_c+I1), s	15.8	16.2	9.4	14.0	14.1	14.1	12.2	9.2
Green Ext Time (p_c), s	0.7	6.3	0.3	2.2	0.8	7.5	0.3	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	33.8
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	1375	3	33	1282	207	20	96	35	318	141	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		80	150		0	75		160	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		760			700			315			411	
Travel Time (s)		13.0			11.9			7.2			9.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0		11.0	20.0	20.0	11.0	20.0	
Total Split (s)	11.0	39.0	39.0	11.0	39.0		11.0	20.0	20.0	20.0	29.0	
Total Split (%)	12.2%	43.3%	43.3%	12.2%	43.3%		12.2%	22.2%	22.2%	22.2%	32.2%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 33 (37%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Box Springs Bl. & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	13	1375	3	33	1282	207	20	96	35	318	141	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	13	1418	3	34	1322	213	21	99	36	328	145	41
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	38	1494	668	79	1361	217	56	331	281	315	889	244
Arrive On Green	0.02	0.42	0.42	0.06	0.59	0.59	0.03	0.18	0.18	0.18	0.32	0.32
Sat Flow, veh/h	1774	3539	1583	1774	3058	488	1774	1863	1583	1774	2746	753
Grp Volume(v), veh/h	13	1418	3	34	760	775	21	99	36	328	92	94
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1777	1774	1863	1583	1774	1770	1730
Q Serve(g_s), s	0.7	34.8	0.1	1.7	36.8	38.2	1.0	4.2	1.7	16.0	3.3	3.5
Cycle Q Clear(g_c), s	0.7	34.8	0.1	1.7	36.8	38.2	1.0	4.2	1.7	16.0	3.3	3.5
Prop In Lane	1.00		1.00	1.00		0.27	1.00		1.00	1.00		0.44
Lane Grp Cap(c), veh/h	38	1494	668	79	788	791	56	331	281	315	573	560
V/C Ratio(X)	0.34	0.95	0.00	0.43	0.96	0.98	0.37	0.30	0.13	1.04	0.16	0.17
Avail Cap(c_a), veh/h	138	1494	668	138	788	791	138	331	281	315	573	560
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.4	25.1	15.1	41.2	17.7	18.0	42.7	32.1	31.1	37.0	21.7	21.8
Incr Delay (d2), s/veh	5.1	14.0	0.0	3.7	24.6	27.5	4.0	2.3	0.9	61.5	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	19.8	0.0	0.9	23.0	24.3	0.6	2.4	0.8	13.2	1.7	1.8
LnGrp Delay(d),s/veh	48.5	39.0	15.1	44.9	42.3	45.5	46.7	34.4	32.1	98.5	22.3	22.4
LnGrp LOS	D	D	B	D	D	D	D	C	C	F	C	C
Approach Vol, veh/h		1434			1569			156			514	
Approach Delay, s/veh		39.1			43.9			35.5			70.9	
Approach LOS		D			D			D			E	

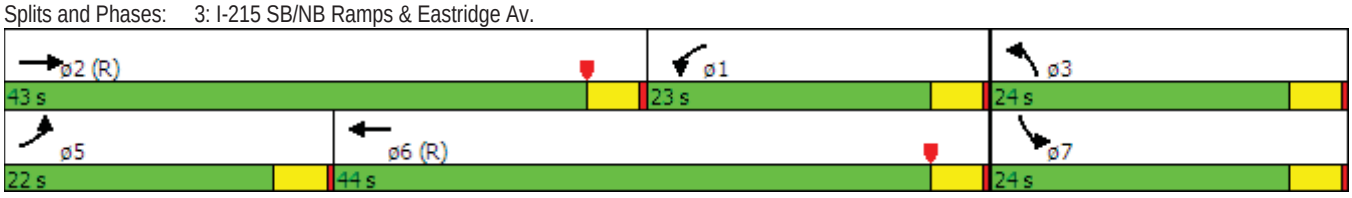
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	42.0	6.9	33.1	5.9	44.1	20.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	35.0	7.0	25.0	7.0	35.0	16.0	16.0
Max Q Clear Time (g_c+I1), s	3.7	36.8	3.0	5.5	2.7	40.2	18.0	6.2
Green Ext Time (p_c), s	0.0	0.0	0.0	1.6	0.0	0.0	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	45.5
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	188	1360	0	683	1020	0	162	0	0	701	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	275		0	0		0	0		0
Storage Lanes	0		0	0		0	2		0	2		0
Taper Length (ft)	90			190			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		241			359			784			672	
Travel Time (s)		4.1			6.1			15.3			13.1	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot			Prot		
Protected Phases	5	2		1	6		3			7		
Permitted Phases												
Detector Phase	5	2		1	6		3			7		
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0			7.0		
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0			11.0		
Total Split (s)	22.0	43.0		23.0	44.0		24.0			24.0		
Total Split (%)	24.4%	47.8%		25.6%	48.9%		26.7%			26.7%		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5			3.5		
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5			0.5		
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0			0.0		
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0			4.0		
Lead/Lag	Lead	Lead		Lag	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		None			None		

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 2 (2%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: I-215 SB/NB Ramps & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	188	1360	0	683	1020	0	162	0	0	701	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	0	0	1863	0	0
Adj Flow Rate, veh/h	194	1402	0	704	1052	0	167	0	0	723	0	0
Adj No. of Lanes	1	2	0	2	2	0	2	0	0	2	0	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0	2	2	0	2	0	0	2	0	0
Cap, veh/h	235	1534	0	727	1812	0	765	0	0	765	0	0
Arrive On Green	0.04	0.14	0.00	0.07	0.17	0.00	0.22	0.00	0.00	0.22	0.00	0.00
Sat Flow, veh/h	1774	3632	0	3442	3632	0	3442	167		3442	723	
Grp Volume(v), veh/h	194	1402	0	704	1052	0	167	28.8		723	54.8	
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1721	1770	0	1721	C		1721	D	
Q Serve(g_s), s	9.8	35.1	0.0	18.4	24.7	0.0	3.6			18.6		
Cycle Q Clear(g_c), s	9.8	35.1	0.0	18.4	24.7	0.0	3.6			18.6		
Prop In Lane	1.00		0.00	1.00		0.00	1.00			1.00		
Lane Grp Cap(c), veh/h	235	1534	0	727	1812	0	765			765		
V/C Ratio(X)	0.83	0.91	0.00	0.97	0.58	0.00	0.22			0.95		
Avail Cap(c_a), veh/h	355	1534	0	727	1812	0	765			765		
HCM Platoon Ratio	0.33	0.33	1.00	0.33	0.33	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.97	0.97	0.00	1.00			1.00		
Uniform Delay (d), s/veh	42.0	36.9	0.0	41.6	28.5	0.0	28.6			34.5		
Incr Delay (d2), s/veh	9.3	9.9	0.0	25.4	1.3	0.0	0.1			20.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	5.4	19.3	0.0	11.3	12.4	0.0	1.7			11.0		
LnGrp Delay(d),s/veh	51.3	46.9	0.0	66.9	29.8	0.0	28.8			54.8		
LnGrp LOS	D	D		E	C		C			D		
Approach Vol, veh/h		1596			1756							
Approach Delay, s/veh		47.4			44.7							
Approach LOS		D			D							

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3		5	6	7	
Phs Duration (G+Y+Rc), s	23.0	43.0	24.0		15.9	50.1	24.0	
Change Period (Y+Rc), s	4.0	4.0	4.0		4.0	4.0	4.0	
Max Green Setting (Gmax), s	19.0	39.0	20.0		18.0	40.0	20.0	
Max Q Clear Time (g_c+I1), s	20.4	37.1	5.6		11.8	26.7	20.6	
Green Ext Time (p_c), s	0.0	1.4	0.4		0.3	7.9	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	46.8
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1548	180	0	1182	0	0	0	0	0	0	339
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		700			241			458			364	
Travel Time (s)		11.9			4.1			8.9			7.1	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	1548	180	0	1182	0	0	0	0	0	0	339
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	1082	515	456	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1596	186	0	1219	0	0	0	0	0	0	349

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	1219	0	-	1596	0	0	1857	2815	609
Stage 1	-	-	-	-	-	-	1219	1219	-
Stage 2	-	-	-	-	-	-	638	1596	-
Critical Hdwy	4.14	-	-	5.34	-	-	6.29	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.04	5.54	-
Follow-up Hdwy	2.22	-	-	3.12	-	-	3.67	4.02	3.32
Pot Cap-1 Maneuver	568	-	0	200	-	-	85	18	438
Stage 1	-	-	0	-	-	-	237	251	-
Stage 2	-	-	0	-	-	-	457	165	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	568	-	-	200	-	-	85	0	438
Mov Cap-2 Maneuver	-	-	-	-	-	-	176	0	-
Stage 1	-	-	-	-	-	-	237	0	-
Stage 2	-	-	-	-	-	-	457	0	-

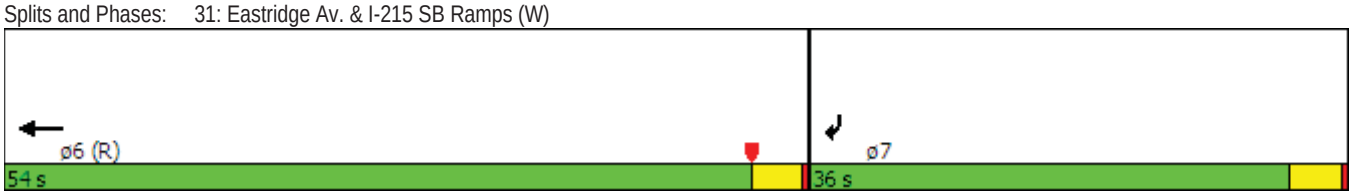
Approach	EB	WB	SB
HCM Control Delay, s	0	0	38.6
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	568	-	200	-	-	438
HCM Lane V/C Ratio	-	-	-	-	-	0.798
HCM Control Delay (s)	0	-	0	-	-	38.6
HCM Lane LOS	A	-	A	-	-	E
HCM 95th %tile Q(veh)	0	-	0	-	-	7.2

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	0	1182	0	0	339
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50			0	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	60				60	
Right Turn on Red				Yes		Yes
Link Speed (mph)		40	40		30	
Link Distance (ft)		174	120		486	
Travel Time (s)		3.0	2.0		11.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type			NA			Prot
Protected Phases			6			7
Permitted Phases						
Detector Phase			6			7
Switch Phase						
Minimum Initial (s)			7.0			7.0
Minimum Split (s)			20.0			11.0
Total Split (s)			54.0			36.0
Total Split (%)			60.0%			40.0%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			0.5			0.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.0			4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	

Splits and Phases: 31: Eastridge Av. & I-215 SB Ramps (W)



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	0	1182	0	0	339
Number			6	16	7	14
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	0	0	1863
Adj Flow Rate, veh/h			1219	0	0	349
Adj No. of Lanes			2	0	0	1
Peak Hour Factor			0.97	0.97	0.97	0.97
Percent Heavy Veh, %			2	0	0	2
Cap, veh/h			1966	0	0	0
Arrive On Green			0.56	0.00	0.00	0.00
Sat Flow, veh/h			3725	0	0	
Grp Volume(v), veh/h			1219	0	0.0	
Grp Sat Flow(s),veh/h/ln			1770	0		
Q Serve(g_s), s			21.0	0.0		
Cycle Q Clear(g_c), s			21.0	0.0		
Prop In Lane				0.00		
Lane Grp Cap(c), veh/h			1966	0		
V/C Ratio(X)			0.62	0.00		
Avail Cap(c_a), veh/h			1966	0		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	0.00		
Uniform Delay (d), s/veh			13.6	0.0		
Incr Delay (d2), s/veh			1.5	0.0		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			10.6	0.0		
LnGrp Delay(d),s/veh			15.0	0.0		
LnGrp LOS			B			
Approach Vol, veh/h			1219			
Approach Delay, s/veh			15.0			
Approach LOS			B			

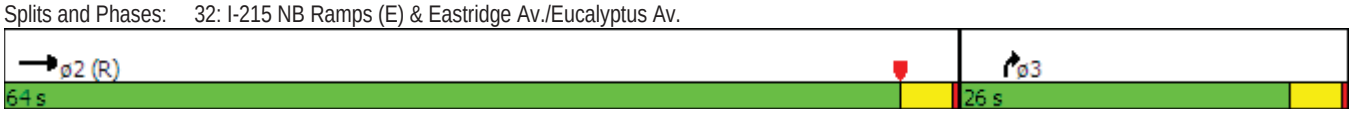
Timer	1	2	3	4	5	6	7	8
Assigned Phs						6		
Phs Duration (G+Y+Rc), s						54.0		
Change Period (Y+Rc), s						4.0		
Max Green Setting (Gmax), s						50.0		
Max Q Clear Time (g_c+I1), s						23.0		
Green Ext Time (p_c), s						9.8		

Intersection Summary	
HCM 2010 Ctrl Delay	15.0
HCM 2010 LOS	B

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	2061	0	0	0	0	608
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Right Turn on Red		Yes				Yes
Link Speed (mph)	30			40	30	
Link Distance (ft)	100			131	592	
Travel Time (s)	2.3			2.2	13.5	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA					Prot
Protected Phases	2					3
Permitted Phases						
Detector Phase	2					3
Switch Phase						
Minimum Initial (s)	7.0					7.0
Minimum Split (s)	20.0					11.0
Total Split (s)	64.0					26.0
Total Split (%)	71.1%					28.9%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	0.5					0.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	4.0					4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max					None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 32: I-215 NB Ramps (E) & Eastridge Av./Eucalyptus Av.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	2061	0	0	0	0	608
Number	2	12			3	18
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)		1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0			0	1863
Adj Flow Rate, veh/h	2125	0			0	627
Adj No. of Lanes	2	0			0	2
Peak Hour Factor	0.97	0.97			0.97	0.97
Percent Heavy Veh, %	2	0			0	2
Cap, veh/h	3382	0			0	0
Arrive On Green	0.96	0.00			0.00	0.00
Sat Flow, veh/h	3725	0			0	
Grp Volume(v), veh/h	2125	0			0.0	
Grp Sat Flow(s),veh/h/ln	1770	0				
Q Serve(g_s), s	6.0	0.0				
Cycle Q Clear(g_c), s	6.0	0.0				
Prop In Lane		0.00				
Lane Grp Cap(c), veh/h	3382	0				
V/C Ratio(X)	0.63	0.00				
Avail Cap(c_a), veh/h	3382	0				
HCM Platoon Ratio	1.00	1.00				
Upstream Filter(I)	1.00	0.00				
Uniform Delay (d), s/veh	0.2	0.0				
Incr Delay (d2), s/veh	0.9	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile BackOfQ(50%),veh/ln	2.8	0.0				
LnGrp Delay(d),s/veh	1.1	0.0				
LnGrp LOS	A					
Approach Vol, veh/h	2125					
Approach Delay, s/veh	1.1					
Approach LOS	A					

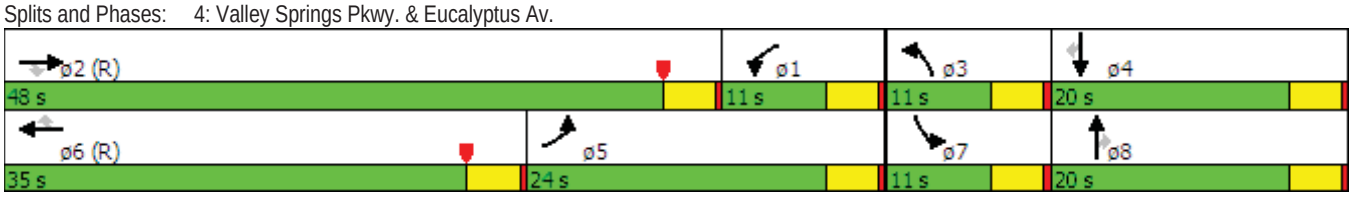
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		90.0						
Change Period (Y+Rc), s		4.0						
Max Green Setting (Gmax), s		60.0						
Max Q Clear Time (g_c+I1), s		8.0						
Green Ext Time (p_c), s		33.2						

Intersection Summary	
HCM 2010 Ctrl Delay	1.1
HCM 2010 LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	700	1670	298	40	1074	60	115	171	55	77	203	896
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	1		1	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0
Total Split (s)	24.0	48.0	48.0	11.0	35.0	35.0	11.0	20.0	20.0	11.0	20.0	20.0
Total Split (%)	26.7%	53.3%	53.3%	12.2%	38.9%	38.9%	12.2%	22.2%	22.2%	12.2%	22.2%	22.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	Max	None	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	700	1670	298	40	1074	60	115	171	55	77	203	896
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	729	1740	310	42	1119	62	120	178	57	80	211	933
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	765	1730	774	138	1219	545	138	666	298	119	331	495
Arrive On Green	0.44	0.98	0.98	0.16	0.69	0.69	0.08	0.19	0.19	0.02	0.06	0.06
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	1774	3539	1583	1774	1863	2787
Grp Volume(v), veh/h	729	1740	310	42	1119	62	120	178	57	80	211	933
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1774	1770	1583	1774	1863	1393
Q Serve(g_s), s	18.4	44.0	0.4	1.9	24.1	0.9	6.0	3.9	2.2	4.0	10.0	9.9
Cycle Q Clear(g_c), s	18.4	44.0	0.4	1.9	24.1	0.9	6.0	3.9	2.2	4.0	10.0	9.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	765	1730	774	138	1219	545	138	666	298	119	331	495
V/C Ratio(X)	0.95	1.01	0.40	0.30	0.92	0.11	0.87	0.27	0.19	0.67	0.64	1.88
Avail Cap(c_a), veh/h	765	1730	774	138	1219	545	138	666	298	138	331	495
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.31	0.31	0.31	0.73	0.73	0.73	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.5	1.0	0.2	35.8	12.9	5.4	41.0	31.2	19.4	43.0	39.5	16.4
Incr Delay (d2), s/veh	9.6	13.5	0.5	0.9	9.6	0.3	40.8	1.0	1.4	9.8	9.0	405.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.5	3.7	0.2	0.9	12.8	0.4	4.5	2.0	1.1	2.3	6.0	31.7
LnGrp Delay(d),s/veh	34.1	14.5	0.7	36.7	22.5	5.7	81.9	32.2	20.8	52.8	48.6	421.5
LnGrp LOS	C	F	A	D	C	A	F	C	C	D	D	F
Approach Vol, veh/h		2779			1223			355			1224	
Approach Delay, s/veh		18.1			22.2			47.2			333.1	
Approach LOS		B			C			D			F	

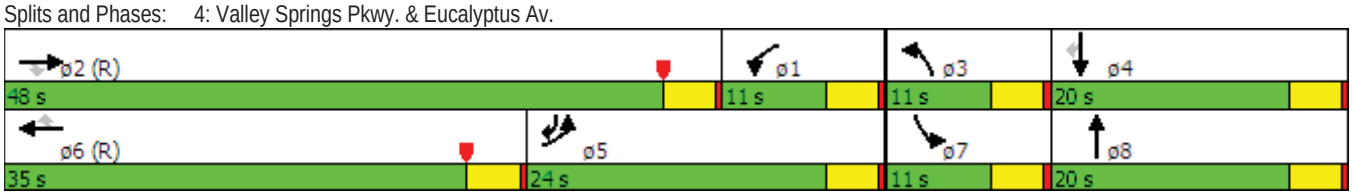
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	48.0	11.0	20.0	24.0	35.0	10.1	20.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	44.0	7.0	16.0	20.0	31.0	7.0	16.0
Max Q Clear Time (g_c+I1), s	3.9	46.0	8.0	12.0	20.4	26.1	6.0	5.9
Green Ext Time (p_c), s	1.0	0.0	0.0	2.4	0.0	3.0	0.0	4.8

Intersection Summary	
HCM 2010 Ctrl Delay	89.9
HCM 2010 LOS	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	700	1670	298	40	1074	60	115	171	55	77	203	896
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	2		0	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6						4
Detector Phase	5	2	2	1	6	6	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	24.0	48.0	48.0	11.0	35.0	35.0	11.0	20.0		11.0	20.0	24.0
Total Split (%)	26.7%	53.3%	53.3%	12.2%	38.9%	38.9%	12.2%	22.2%		12.2%	22.2%	26.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max		None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	700	1670	298	40	1074	60	115	171	55	77	203	896
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	729	1740	310	42	1119	62	120	178	57	80	211	933
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	778	1730	774	145	1219	545	254	491	152	119	331	1125
Arrive On Green	0.45	0.98	0.98	0.16	0.69	0.69	0.07	0.18	0.18	0.02	0.06	0.06
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	3442	2660	826	1774	1863	2787
Grp Volume(v), veh/h	729	1740	310	42	1119	62	120	117	118	80	211	933
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1721	1770	1717	1774	1863	1393
Q Serve(g_s), s	18.1	44.0	0.4	1.9	24.1	0.9	3.0	5.2	5.4	4.0	10.0	5.6
Cycle Q Clear(g_c), s	18.1	44.0	0.4	1.9	24.1	0.9	3.0	5.2	5.4	4.0	10.0	5.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.48	1.00		1.00
Lane Grp Cap(c), veh/h	778	1730	774	145	1219	545	254	326	317	119	331	1125
V/C Ratio(X)	0.94	1.01	0.40	0.29	0.92	0.11	0.47	0.36	0.37	0.67	0.64	0.83
Avail Cap(c_a), veh/h	778	1730	774	145	1219	545	268	326	317	138	331	1125
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.31	0.31	0.31	0.73	0.73	0.73	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.0	1.0	0.2	35.4	12.9	5.4	40.0	32.0	32.1	43.0	39.5	14.1
Incr Delay (d2), s/veh	7.6	13.5	0.5	0.8	9.6	0.3	1.4	3.0	3.4	9.8	9.0	7.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	3.7	0.2	0.9	12.8	0.4	1.5	2.8	2.9	2.3	6.0	3.2
LnGrp Delay(d),s/veh	31.7	14.5	0.7	36.2	22.5	5.7	41.3	35.1	35.5	52.8	48.6	21.2
LnGrp LOS	C	F	A	D	C	A	D	D	D	D	D	C
Approach Vol, veh/h		2779			1223			355			1224	
Approach Delay, s/veh		17.5			22.1			37.3			28.0	
Approach LOS		B			C			D			C	

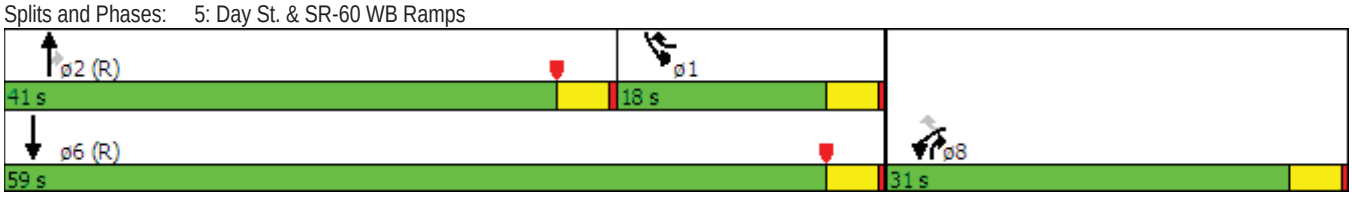
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	48.0	10.7	20.0	24.3	35.0	10.1	20.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	44.0	7.0	16.0	20.0	31.0	7.0	16.0
Max Q Clear Time (g_c+I1), s	3.9	46.0	5.0	12.0	20.1	26.1	6.0	7.4
Green Ext Time (p_c), s	1.0	0.0	0.1	2.4	0.0	3.0	0.0	4.3

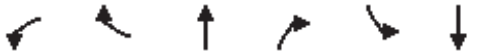
Intersection Summary	
HCM 2010 Ctrl Delay	22.1
HCM 2010 LOS	C

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	582	155	934	555	82	728
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		175	200	
Storage Lanes	2	1		1	1	
Taper Length (ft)	60				80	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	30		40			40
Link Distance (ft)	307		957			795
Travel Time (s)	7.0		16.3			13.6
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	31.0	18.0	41.0	31.0	18.0	59.0
Total Split (%)	34.4%	20.0%	45.6%	34.4%	20.0%	65.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 14 (16%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: Day St. & SR-60 WB Ramps





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	582	155	934	555	82	728
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	600	160	963	572	85	751
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	732	721	1455	988	431	2472
Arrive On Green	0.21	0.21	0.82	0.82	0.24	0.70
Sat Flow, veh/h	3442	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	600	160	963	572	85	751
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1770
Q Serve(g_s), s	15.0	0.0	9.6	13.3	3.4	7.3
Cycle Q Clear(g_c), s	15.0	0.0	9.6	13.3	3.4	7.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	732	721	1455	988	431	2472
V/C Ratio(X)	0.82	0.22	0.66	0.58	0.20	0.30
Avail Cap(c_a), veh/h	1032	859	1455	988	431	2472
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.67	0.67	1.00	1.00
Uniform Delay (d), s/veh	33.8	14.8	5.6	2.7	27.1	5.2
Incr Delay (d2), s/veh	3.7	0.2	1.6	1.7	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	2.4	4.6	8.7	1.7	3.7
LnGrp Delay(d),s/veh	37.4	15.0	7.2	4.3	27.3	5.5
LnGrp LOS	D	B	A	A	C	A
Approach Vol, veh/h	760		1535			836
Approach Delay, s/veh	32.7		6.1			7.7
Approach LOS	C		A			A

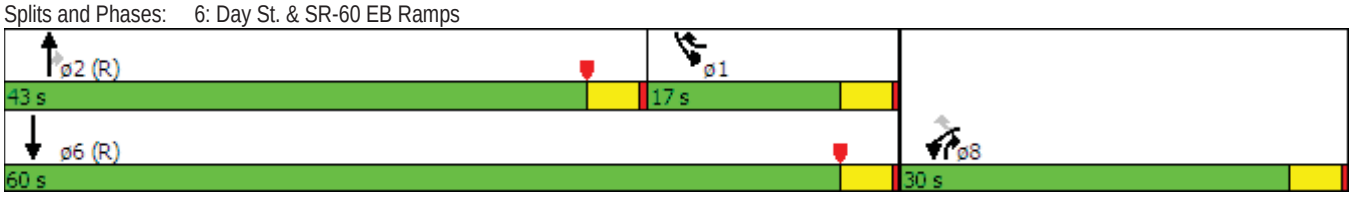
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	25.9	41.0				66.9		23.1
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	14.0	37.0				55.0		27.0
Max Q Clear Time (g_c+I1), s	5.4	15.3				9.3		17.0
Green Ext Time (p_c), s	3.3	9.3				5.9		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	13.0
HCM 2010 LOS	B

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	730	315	1174	867	169	1142
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	200		0	425	
Storage Lanes	2	0		1	1	
Taper Length (ft)	60				60	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		40			40
Link Distance (ft)	263		524			957
Travel Time (s)	5.1		8.9			16.3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	30.0	17.0	43.0	30.0	17.0	60.0
Total Split (%)	33.3%	18.9%	47.8%	33.3%	18.9%	66.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 88 (98%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Day St. & SR-60 EB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	730	315	1174	867	169	1142
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	745	321	1198	885	172	1165
Adj No. of Lanes	2	1	2	1	1	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	869	686	1534	1086	321	3350
Arrive On Green	0.25	0.25	0.29	0.29	0.36	1.00
Sat Flow, veh/h	3442	1583	3632	1583	1774	5253
Grp Volume(v), veh/h	745	321	1198	885	172	1165
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1695
Q Serve(g_s), s	18.6	0.0	28.0	31.7	6.9	0.0
Cycle Q Clear(g_c), s	18.6	0.0	28.0	31.7	6.9	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	869	686	1534	1086	321	3350
V/C Ratio(X)	0.86	0.47	0.78	0.82	0.54	0.35
Avail Cap(c_a), veh/h	994	744	1534	1086	321	3350
HCM Platoon Ratio	1.00	1.00	0.67	0.67	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.49	0.49	0.87	0.87
Uniform Delay (d), s/veh	32.1	18.1	28.0	11.8	25.7	0.0
Incr Delay (d2), s/veh	6.9	0.5	2.0	3.5	1.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	5.7	14.1	23.0	3.5	0.1
LnGrp Delay(d),s/veh	39.0	18.6	30.0	15.3	27.2	0.2
LnGrp LOS	D	B	C	B	C	A
Approach Vol, veh/h	1066		2083			1337
Approach Delay, s/veh	32.8		23.8			3.7
Approach LOS	C		C			A

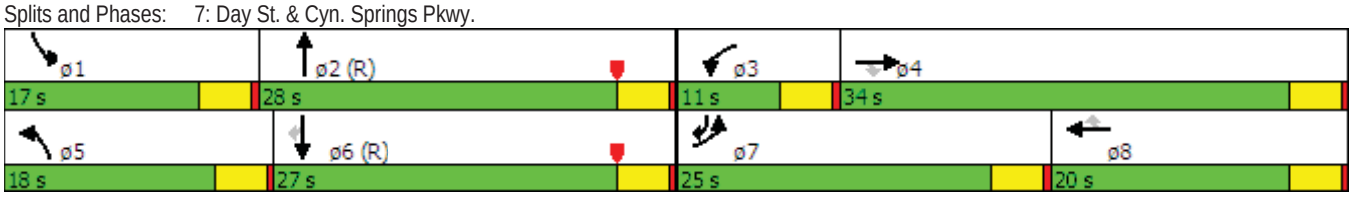
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	20.3	43.0				63.3		26.7
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	13.0	39.0				56.0		26.0
Max Q Clear Time (g_c+I1), s	8.9	33.7				2.0		20.6
Green Ext Time (p_c), s	2.7	4.4				11.2		2.1

Intersection Summary	
HCM 2010 Ctrl Delay	19.9
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	722	132	175	51	89	245	228	1074	64	223	919	561
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	145		0	165		0	170		200
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	95			100			120			80		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		1120			404			728			524	
Travel Time (s)		19.1			7.9			12.4			8.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												50%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	25.0	34.0	34.0	11.0	20.0	20.0	18.0	28.0		17.0	27.0	25.0
Total Split (%)	27.8%	37.8%	37.8%	12.2%	22.2%	22.2%	20.0%	31.1%		18.9%	30.0%	27.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 12 (13%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Day St. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	722	132	175	51	89	245	228	1074	64	223	919	561
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	737	135	179	52	91	250	233	1096	65	228	938	572
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	799	656	558	100	329	280	270	1320	78	256	1458	1561
Arrive On Green	0.23	0.35	0.35	0.06	0.18	0.18	0.05	0.09	0.09	0.05	0.09	0.09
Sat Flow, veh/h	3442	1863	1583	1774	1863	1583	1774	4911	291	1774	5588	3167
Grp Volume(v), veh/h	737	135	179	52	91	250	233	756	405	228	938	572
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1863	1583	1774	1695	1811	1774	1863	1583
Q Serve(g_s), s	18.8	4.6	7.4	2.6	3.8	13.9	11.7	19.8	19.8	11.5	14.6	10.8
Cycle Q Clear(g_c), s	18.8	4.6	7.4	2.6	3.8	13.9	11.7	19.8	19.8	11.5	14.6	10.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	799	656	558	100	329	280	270	911	487	256	1458	1561
V/C Ratio(X)	0.92	0.21	0.32	0.52	0.28	0.89	0.86	0.83	0.83	0.89	0.64	0.37
Avail Cap(c_a), veh/h	803	656	558	138	331	281	276	911	487	256	1458	1561
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33
Upstream Filter(I)	0.78	0.78	0.78	1.00	1.00	1.00	0.88	0.88	0.88	0.83	0.83	0.83
Uniform Delay (d), s/veh	33.8	20.3	21.3	41.3	32.1	36.2	41.8	39.0	39.0	42.1	37.1	17.7
Incr Delay (d2), s/veh	13.2	0.1	0.3	4.1	0.5	28.0	20.7	7.7	13.5	25.8	1.8	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	2.3	3.3	1.4	2.0	8.2	7.3	10.3	11.8	7.5	7.8	4.9
LnGrp Delay(d),s/veh	47.0	20.5	21.5	45.3	32.5	64.2	62.5	46.7	52.5	67.9	38.9	18.3
LnGrp LOS	D	C	C	D	C	E	E	D	D	E	D	B
Approach Vol, veh/h		1051			393			1394			1738	
Approach Delay, s/veh		39.2			54.4			51.0			35.9	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	28.2	9.1	35.7	17.7	27.5	24.9	19.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	24.0	7.0	30.0	14.0	23.0	21.0	16.0
Max Q Clear Time (g_c+I1), s	13.5	21.8	4.6	9.4	13.7	16.6	20.8	15.9
Green Ext Time (p_c), s	0.0	2.1	0.0	2.6	0.0	5.7	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	42.9
HCM 2010 LOS	D

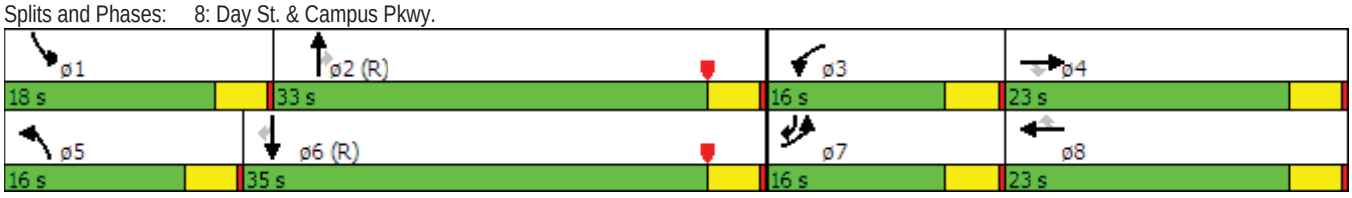
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	201	94	184	91	202	267	203	898	101	275	822	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		50	200		0	130		50	190		0
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	60			120			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		938			519			1025			728	
Travel Time (s)		16.0			10.1			17.5			12.4	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	16.0	23.0	23.0	16.0	23.0	23.0	16.0	33.0	33.0	18.0	35.0	16.0
Total Split (%)	17.8%	25.6%	25.6%	17.8%	25.6%	25.6%	17.8%	36.7%	36.7%	20.0%	38.9%	17.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 59 (66%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Day St. & Campus Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	201	94	184	91	202	267	203	898	101	275	822	54
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	209	98	192	95	210	278	211	935	105	286	856	56
Adj No. of Lanes	2	1	1	1	2	1	2	3	1	2	3	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	289	396	337	125	705	315	294	2187	681	375	2307	851
Arrive On Green	0.08	0.21	0.21	0.07	0.20	0.20	0.03	0.14	0.14	0.04	0.15	0.15
Sat Flow, veh/h	3442	1863	1583	1774	3539	1583	3442	5085	1583	3442	5085	1583
Grp Volume(v), veh/h	209	98	192	95	210	278	211	935	105	286	856	56
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1770	1583	1721	1695	1583	1721	1695	1583
Q Serve(g_s), s	5.3	3.9	9.8	4.7	4.5	15.3	5.5	15.1	5.2	7.4	13.6	2.3
Cycle Q Clear(g_c), s	5.3	3.9	9.8	4.7	4.5	15.3	5.5	15.1	5.2	7.4	13.6	2.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	289	396	337	125	705	315	294	2187	681	375	2307	851
V/C Ratio(X)	0.72	0.25	0.57	0.76	0.30	0.88	0.72	0.43	0.15	0.76	0.37	0.07
Avail Cap(c_a), veh/h	459	396	337	237	747	334	459	2187	681	535	2307	851
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.92	0.92	0.92	0.74	0.74	0.74
Uniform Delay (d), s/veh	40.2	29.5	31.8	41.1	30.7	35.0	42.6	28.5	24.3	42.2	26.7	15.8
Incr Delay (d2), s/veh	3.4	0.3	2.3	9.0	0.2	22.1	3.0	0.6	0.4	3.0	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	2.0	4.5	2.6	2.2	8.7	2.7	7.2	2.4	3.7	6.5	1.0
LnGrp Delay(d),s/veh	43.6	29.8	34.0	50.1	30.9	57.1	45.7	29.1	24.7	45.2	27.1	15.9
LnGrp LOS	D	C	C	D	C	E	D	C	C	D	C	B
Approach Vol, veh/h		499			583			1251			1198	
Approach Delay, s/veh		37.2			46.5			31.5			30.9	
Approach LOS		D			D			C			C	

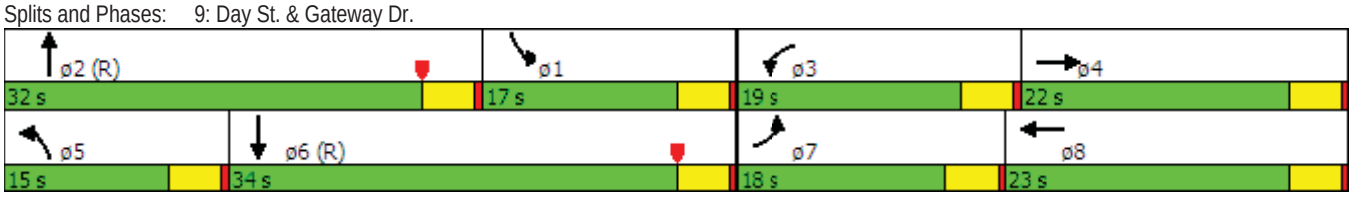
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.8	42.7	10.3	23.1	11.7	44.8	11.6	21.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	29.0	12.0	19.0	12.0	31.0	12.0	19.0
Max Q Clear Time (g_c+I1), s	9.4	17.1	6.7	11.8	7.5	15.6	7.3	17.3
Green Ext Time (p_c), s	0.4	8.5	0.1	2.1	0.3	10.4	0.3	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	34.6
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	113	118	79	127	110	197	65	703	127	221	706	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	100		0	190		400	260		0
Storage Lanes	1		0	1		0	1		1	2		0
Taper Length (ft)	0			120			60			165		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		318			585			592			1025	
Travel Time (s)		5.4			11.4			10.1			17.5	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	18.0	22.0		19.0	23.0		15.0	32.0		17.0	34.0	
Total Split (%)	20.0%	24.4%		21.1%	25.6%		16.7%	35.6%		18.9%	37.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 75 (83%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

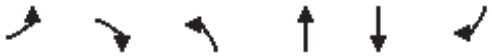
Splits and Phases: 9: Day St. & Gateway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	113	118	79	127	110	197	65	703	127	221	706	45
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	115	120	81	130	112	201	66	717	130	226	720	46
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	316	199	163	285	255	111	1349	242	921	2522	160
Arrive On Green	0.08	0.15	0.15	0.09	0.16	0.16	0.06	0.31	0.31	0.09	0.17	0.17
Sat Flow, veh/h	1774	2086	1314	1774	1770	1583	1774	4337	778	3442	4887	311
Grp Volume(v), veh/h	115	101	100	130	112	201	66	559	288	226	498	268
Grp Sat Flow(s),veh/h/ln	1774	1770	1631	1774	1770	1583	1774	1695	1725	1721	1695	1808
Q Serve(g_s), s	5.7	4.6	5.0	6.5	5.1	11.0	3.3	12.2	12.4	5.5	11.5	11.6
Cycle Q Clear(g_c), s	5.7	4.6	5.0	6.5	5.1	11.0	3.3	12.2	12.4	5.5	11.5	11.6
Prop In Lane	1.00		0.81	1.00		1.00	1.00		0.45	1.00		0.17
Lane Grp Cap(c), veh/h	146	268	247	163	285	255	111	1055	537	921	1749	933
V/C Ratio(X)	0.79	0.38	0.41	0.80	0.39	0.79	0.59	0.53	0.54	0.25	0.28	0.29
Avail Cap(c_a), veh/h	276	354	326	296	374	334	217	1055	537	921	1749	933
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	40.5	34.4	34.5	40.0	33.8	36.3	41.0	25.6	25.6	32.6	22.9	22.9
Incr Delay (d2), s/veh	9.0	0.9	1.1	8.5	0.9	9.0	4.9	1.9	3.8	0.1	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	2.3	2.3	3.6	2.6	5.4	1.7	6.0	6.5	2.6	5.5	6.0
LnGrp Delay(d),s/veh	49.6	35.2	35.6	48.6	34.7	45.2	46.0	27.5	29.5	32.7	23.2	23.6
LnGrp LOS	D	D	D	D	C	D	D	C	C	C	C	C
Approach Vol, veh/h		316			443			913			992	
Approach Delay, s/veh		40.6			43.5			29.4			25.5	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	28.1	32.0	12.3	17.6	9.7	50.4	11.4	18.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	28.0	15.0	18.0	11.0	30.0	14.0	19.0
Max Q Clear Time (g_c+I1), s	7.5	14.4	8.5	7.0	5.3	13.6	7.7	13.0
Green Ext Time (p_c), s	0.7	4.4	0.2	2.2	0.0	5.0	0.1	1.5

Intersection Summary	
HCM 2010 Ctrl Delay	31.6
HCM 2010 LOS	C



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	12	9	2	1091	952	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	25			0
Storage Lanes	1	0	1			0
Taper Length (ft)	60		60			
Link Speed (mph)	30			40	40	
Link Distance (ft)	364			453	180	
Travel Time (s)	8.3			7.7	3.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	12	9	2	1091	952	1
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	-	25	-	-	-
Veh in Median Storage, #	1	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	10	2	1173	1024	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1615	512	1025	0	-	0
Stage 1	1024	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Critical Hdwy	6.29	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	119	434	381	-	-	-
Stage 1	239	-	-	-	-	-
Stage 2	501	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	118	434	381	-	-	-
Mov Cap-2 Maneuver	191	-	-	-	-	-
Stage 1	239	-	-	-	-	-
Stage 2	498	-	-	-	-	-

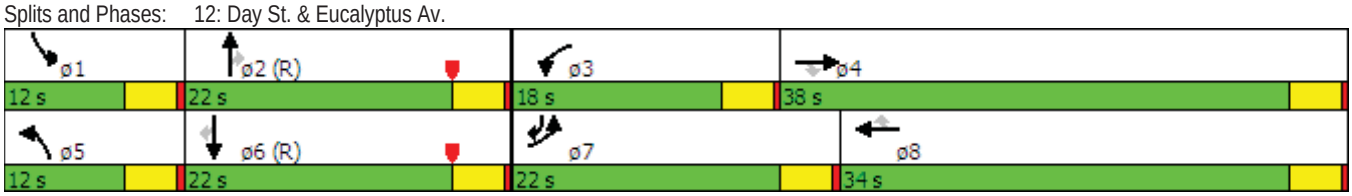
Approach	EB	NB	SB
HCM Control Delay, s	20.8	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	381	-	251	-	-
HCM Lane V/C Ratio	0.006	-	0.09	-	-
HCM Control Delay (s)	14.5	-	20.8	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	263	1286	195	266	832	149	96	508	392	151	510	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		50	175		0	100		100	200		0
Storage Lanes	1		1	1		1	1		2	1		1
Taper Length (ft)	100			75			80			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			40	
Link Distance (ft)		2104			1174			390			453	
Travel Time (s)		35.9			20.0			7.6			7.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	22.0	38.0	38.0	18.0	34.0	34.0	12.0	22.0	22.0	12.0	22.0	22.0
Total Split (%)	24.4%	42.2%	42.2%	20.0%	37.8%	37.8%	13.3%	24.4%	24.4%	13.3%	24.4%	24.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Day St. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	263	1286	195	266	832	149	96	508	392	151	510	261
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	277	1354	205	280	876	157	101	535	413	159	537	275
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	317	1337	598	276	1254	561	128	708	317	158	767	626
Arrive On Green	0.06	0.12	0.12	0.16	0.35	0.35	0.07	0.20	0.20	0.09	0.22	0.22
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	277	1354	205	280	876	157	101	535	413	159	537	275
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	13.9	34.0	10.7	14.0	19.1	6.4	5.0	12.8	18.0	8.0	12.6	11.4
Cycle Q Clear(g_c), s	13.9	34.0	10.7	14.0	19.1	6.4	5.0	12.8	18.0	8.0	12.6	11.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	317	1337	598	276	1254	561	128	708	317	158	767	626
V/C Ratio(X)	0.87	1.01	0.34	1.01	0.70	0.28	0.79	0.76	1.30	1.01	0.70	0.44
Avail Cap(c_a), veh/h	355	1337	598	276	1254	561	158	708	317	158	767	626
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.36	0.36	0.36	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	39.4	29.2	38.0	24.9	20.8	41.1	33.9	36.0	41.0	32.5	19.9
Incr Delay (d2), s/veh	8.1	18.0	0.1	58.0	1.7	0.3	19.1	7.4	158.0	73.9	5.3	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	20.0	4.7	11.3	9.5	2.8	3.1	7.0	21.7	7.1	6.7	5.4
LnGrp Delay(d),s/veh	49.4	57.4	29.3	96.1	26.6	21.1	60.2	41.3	194.0	114.9	37.8	22.1
LnGrp LOS	D	F	C	F	C	C	E	D	F	F	D	C
Approach Vol, veh/h		1836			1313			1049			971	
Approach Delay, s/veh		53.1			40.8			103.2			46.0	
Approach LOS		D			D			F			D	

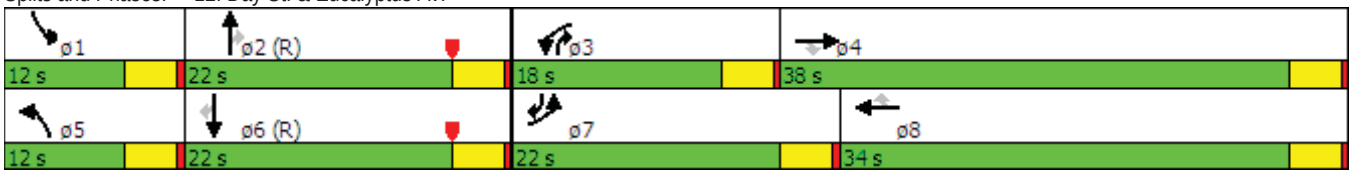
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	22.0	18.0	38.0	10.5	23.5	20.1	35.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	18.0	14.0	34.0	8.0	18.0	18.0	30.0
Max Q Clear Time (g_c+I1), s	10.0	20.0	16.0	36.0	7.0	14.6	15.9	21.1
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	2.6	0.2	7.8

Intersection Summary	
HCM 2010 Ctrl Delay	58.8
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	263	1286	195	266	832	149	96	508	392	151	510	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		50	175		0	100		100	200		0
Storage Lanes	1		1	1		1	1		2	1		1
Taper Length (ft)	100			75			80			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			40	
Link Distance (ft)		2104			1174			390			453	
Travel Time (s)		35.9			20.0			7.6			7.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	11.0
Total Split (s)	22.0	38.0	38.0	18.0	34.0	34.0	12.0	22.0	18.0	12.0	22.0	22.0
Total Split (%)	24.4%	42.2%	42.2%	20.0%	37.8%	37.8%	13.3%	24.4%	20.0%	13.3%	24.4%	24.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Day St. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	263	1286	195	266	832	149	96	508	392	151	510	261
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	277	1354	205	280	876	157	101	535	413	159	537	275
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	317	1337	598	276	1254	561	128	708	563	158	767	626
Arrive On Green	0.06	0.12	0.12	0.16	0.35	0.35	0.07	0.20	0.20	0.09	0.22	0.22
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	277	1354	205	280	876	157	101	535	413	159	537	275
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	13.9	34.0	10.7	14.0	19.1	6.4	5.0	12.8	18.0	8.0	12.6	11.4
Cycle Q Clear(g_c), s	13.9	34.0	10.7	14.0	19.1	6.4	5.0	12.8	18.0	8.0	12.6	11.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	317	1337	598	276	1254	561	128	708	563	158	767	626
V/C Ratio(X)	0.87	1.01	0.34	1.01	0.70	0.28	0.79	0.76	0.73	1.01	0.70	0.44
Avail Cap(c_a), veh/h	355	1337	598	276	1254	561	158	708	563	158	767	626
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.31	0.31	0.31	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	39.4	29.2	38.0	24.9	20.8	41.1	33.9	25.3	41.0	32.5	19.9
Incr Delay (d2), s/veh	7.1	17.0	0.1	58.0	1.7	0.3	19.1	7.4	8.2	73.9	5.3	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	19.8	4.7	11.3	9.5	2.8	3.1	7.0	10.2	7.1	6.7	5.4
LnGrp Delay(d),s/veh	48.5	56.4	29.3	96.1	26.6	21.1	60.2	41.3	33.5	114.9	37.8	22.1
LnGrp LOS	D	F	C	F	C	C	E	D	C	F	D	C
Approach Vol, veh/h		1836			1313			1049			971	
Approach Delay, s/veh		52.2			40.8			40.1			46.0	
Approach LOS		D			D			D			D	

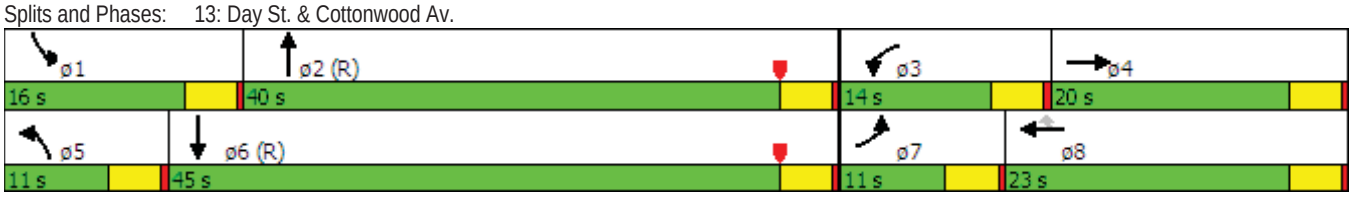
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	22.0	18.0	38.0	10.5	23.5	20.1	35.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	18.0	14.0	34.0	8.0	18.0	18.0	30.0
Max Q Clear Time (g_c+I1), s	10.0	20.0	16.0	36.0	7.0	14.6	15.9	21.1
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	2.6	0.2	7.8

Intersection Summary	
HCM 2010 Ctrl Delay	45.7
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	140	57	226	232	395	86	669	119	267	552	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	95		95	80		0	100		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	60			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			25			35	
Link Distance (ft)		861			839			1320			2260	
Travel Time (s)		16.8			16.3			36.0			44.0	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	11.0	20.0		14.0	23.0	23.0	11.0	40.0		16.0	45.0	
Total Split (%)	12.2%	22.2%		15.6%	25.6%	25.6%	12.2%	44.4%		17.8%	50.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Day St. & Cottonwood Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	25	140	57	226	232	395	86	669	119	267	552	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	27	152	62	246	252	429	93	727	129	290	600	26
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	68	181	74	197	403	343	124	669	119	237	881	38
Arrive On Green	0.04	0.14	0.14	0.11	0.22	0.22	0.07	0.43	0.43	0.13	0.50	0.50
Sat Flow, veh/h	1774	1259	513	1774	1863	1583	1774	1541	273	1774	1772	77
Grp Volume(v), veh/h	27	0	214	246	252	429	93	0	856	290	0	626
Grp Sat Flow(s),veh/h/ln	1774	0	1772	1774	1863	1583	1774	0	1814	1774	0	1849
Q Serve(g_s), s	1.3	0.0	10.6	10.0	11.0	19.5	4.6	0.0	39.1	12.0	0.0	23.2
Cycle Q Clear(g_c), s	1.3	0.0	10.6	10.0	11.0	19.5	4.6	0.0	39.1	12.0	0.0	23.2
Prop In Lane	1.00		0.29	1.00		1.00	1.00		0.15	1.00		0.04
Lane Grp Cap(c), veh/h	68	0	255	197	403	343	124	0	788	237	0	920
V/C Ratio(X)	0.40	0.00	0.84	1.25	0.62	1.25	0.75	0.00	1.09	1.23	0.00	0.68
Avail Cap(c_a), veh/h	138	0	315	197	403	343	138	0	788	237	0	920
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.3	0.0	37.5	40.0	31.9	35.3	41.1	0.0	25.5	39.0	0.0	17.2
Incr Delay (d2), s/veh	3.8	0.0	15.3	146.6	3.0	134.8	18.0	0.0	58.2	133.2	0.0	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	6.3	12.9	6.0	21.4	2.9	0.0	32.2	14.6	0.0	12.7
LnGrp Delay(d),s/veh	46.0	0.0	52.8	186.6	34.9	170.1	59.1	0.0	83.7	172.2	0.0	21.3
LnGrp LOS	D		D	F	C	F	E		F	F		C
Approach Vol, veh/h		241			927			949			916	
Approach Delay, s/veh		52.0			137.7			81.3			69.0	
Approach LOS		D			F			F			E	

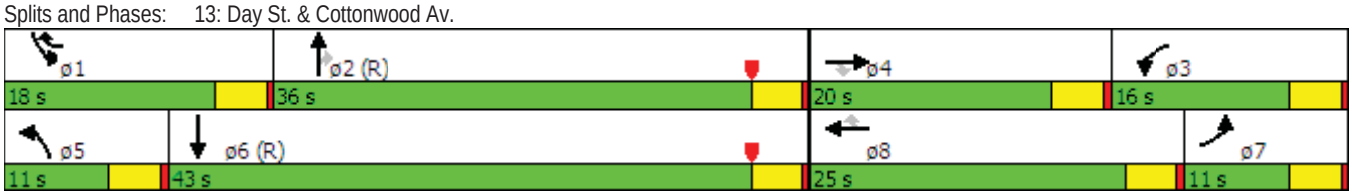
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	43.1	14.0	16.9	10.3	48.8	7.4	23.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	36.0	10.0	16.0	7.0	41.0	7.0	19.0
Max Q Clear Time (g_c+I1), s	14.0	41.1	12.0	12.6	6.6	25.2	3.3	21.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.0	9.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	92.5
HCM 2010 LOS	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	140	57	226	232	395	86	669	119	267	552	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		100	95		95	80		100	100		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	60			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			25			35	
Link Distance (ft)		861			839			811			2260	
Travel Time (s)		16.8			16.3			22.1			44.0	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8			2			
Detector Phase	7	4	4	3	8	1	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	20.0	11.0	20.0	
Total Split (s)	11.0	20.0	20.0	16.0	25.0	18.0	11.0	36.0	36.0	18.0	43.0	
Total Split (%)	12.2%	22.2%	22.2%	17.8%	27.8%	20.0%	12.2%	40.0%	40.0%	20.0%	47.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Day St. & Cottonwood Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	25	140	57	226	232	395	86	669	119	267	552	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	27	152	62	246	252	429	93	727	129	290	600	26
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	63	199	170	242	387	575	124	789	670	276	902	39
Arrive On Green	0.04	0.11	0.11	0.14	0.21	0.21	0.07	0.42	0.42	0.16	0.51	0.51
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	1772	77
Grp Volume(v), veh/h	27	152	62	246	252	429	93	727	129	290	0	626
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	0	1849
Q Serve(g_s), s	1.3	7.1	2.7	12.3	11.2	15.6	4.6	33.2	2.8	14.0	0.0	22.6
Cycle Q Clear(g_c), s	1.3	7.1	2.7	12.3	11.2	15.6	4.6	33.2	2.8	14.0	0.0	22.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	63	199	170	242	387	575	124	789	670	276	0	941
V/C Ratio(X)	0.43	0.76	0.37	1.02	0.65	0.75	0.75	0.92	0.19	1.05	0.00	0.67
Avail Cap(c_a), veh/h	138	331	281	242	435	616	138	789	670	276	0	941
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.5	39.1	25.2	38.9	32.7	13.9	41.1	24.5	6.1	38.0	0.0	16.4
Incr Delay (d2), s/veh	4.6	5.9	1.3	62.7	2.9	4.6	18.0	17.8	0.6	68.2	0.0	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	4.0	1.2	10.2	6.1	7.5	2.9	20.9	1.3	12.0	0.0	12.4
LnGrp Delay(d),s/veh	47.1	45.0	26.5	101.7	35.6	18.5	59.1	42.4	6.7	106.2	0.0	20.1
LnGrp LOS	D	D	C	F	D	B	E	D	A	F		C
Approach Vol, veh/h		241			927			949			916	
Approach Delay, s/veh		40.5			45.2			39.2			47.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	42.1	16.3	13.6	10.3	49.8	7.2	22.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	32.0	12.0	16.0	7.0	39.0	7.0	21.0
Max Q Clear Time (g_c+I1), s	16.0	35.2	14.3	9.1	6.6	24.6	3.3	17.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.5	0.0	8.4	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	43.6
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	45	15	9	24	20	14	877	7	23	770	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		861			839			634			1320	
Travel Time (s)		19.6			19.1			17.3			36.0	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	54.4
Intersection LOS	F

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	9	45	15	0	9	24	20	0	14	877	7
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	10	49	16	0	10	26	22	0	15	953	8
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	11.5	11	57.5
HCM LOS	B	B	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	2%	17%	0%	27%	0%	3%
Vol Thru, %	98%	83%	0%	73%	0%	96%
Vol Right, %	1%	0%	100%	0%	100%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	898	54	15	33	20	801
LT Vol	14	9	0	9	0	23
Through Vol	877	45	0	24	0	770
RT Vol	7	0	15	0	20	8
Lane Flow Rate	976	59	16	36	22	871
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	1	0.13	0.032	0.08	0.044	1
Departure Headway (Hd)	5.335	7.953	7.17	8.078	7.242	5.336
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	683	453	501	445	496	679
Service Time	3.372	5.667	4.884	5.798	4.962	3.374
HCM Lane V/C Ratio	1.429	0.13	0.032	0.081	0.044	1.283
HCM Control Delay	57.5	11.9	10.1	11.5	10.3	57.6
HCM Lane LOS	F	B	B	B	B	F
HCM 95th-tile Q	15.9	0.4	0.1	0.3	0.1	15.8

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	23	770	8
Peak Hour Factor	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	25	837	9
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	57.6
HCM LOS	F

Lane

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	45	15	9	24	20	14	877	7	23	770	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	100		0	100		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		861			839			634			509	
Travel Time (s)		19.6			19.1			17.3			13.9	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0		20.0	20.0	
Total Split (s)	23.0	23.0	23.0	23.0	23.0	23.0	67.0	67.0		67.0	67.0	
Total Split (%)	25.6%	25.6%	25.6%	25.6%	25.6%	25.6%	74.4%	74.4%		74.4%	74.4%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0			0.0	
Total Lost Time (s)		4.0	4.0		4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	C-Max	C-Max		C-Max	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	

Splits and Phases: 14: Day St. & Bay Av/Bay Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	9	45	15	9	24	20	14	877	7	23	770	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	10	49	16	10	26	22	15	953	8	25	837	9
Adj No. of Lanes	0	1	1	0	1	1	0	2	0	0	2	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	60	122	119	71	112	119	59	2895	24	90	2788	30
Arrive On Green	0.07	0.07	0.07	0.07	0.07	0.07	0.84	0.84	0.84	0.84	0.84	0.84
Sat Flow, veh/h	171	1628	1583	268	1488	1583	21	3462	29	57	3334	35
Grp Volume(v), veh/h	59	0	16	36	0	22	507	0	469	442	0	429
Grp Sat Flow(s),veh/h/ln	1798	0	1583	1756	0	1583	1823	0	1690	1738	0	1689
Q Serve(g_s), s	0.0	0.0	0.8	0.0	0.0	1.2	0.0	0.0	5.7	0.0	0.0	5.0
Cycle Q Clear(g_c), s	2.7	0.0	0.8	1.6	0.0	1.2	5.5	0.0	5.7	4.6	0.0	5.0
Prop In Lane	0.17		1.00	0.28		1.00	0.03		0.02	0.06		0.02
Lane Grp Cap(c), veh/h	182	0	119	183	0	119	1565	0	1413	1495	0	1412
V/C Ratio(X)	0.32	0.00	0.13	0.20	0.00	0.19	0.32	0.00	0.33	0.30	0.00	0.30
Avail Cap(c_a), veh/h	420	0	334	411	0	334	1565	0	1413	1495	0	1412
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.8	0.0	38.9	39.3	0.0	39.0	1.7	0.0	1.7	1.6	0.0	1.6
Incr Delay (d2), s/veh	1.0	0.0	0.5	0.5	0.0	0.7	0.5	0.0	0.6	0.5	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.4	0.9	0.0	0.5	2.9	0.0	2.9	2.5	0.0	2.5
LnGrp Delay(d),s/veh	40.8	0.0	39.4	39.8	0.0	39.8	2.2	0.0	2.3	2.1	0.0	2.2
LnGrp LOS	D		D	D		D	A		A	A		A
Approach Vol, veh/h		75			58			976			871	
Approach Delay, s/veh		40.5			39.8			2.3			2.1	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		79.3		10.7		79.3		10.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		63.0		19.0		63.0		19.0
Max Q Clear Time (g_c+I1), s		7.7		4.7		7.0		3.6
Green Ext Time (p_c), s		21.8		0.4		21.9		0.5

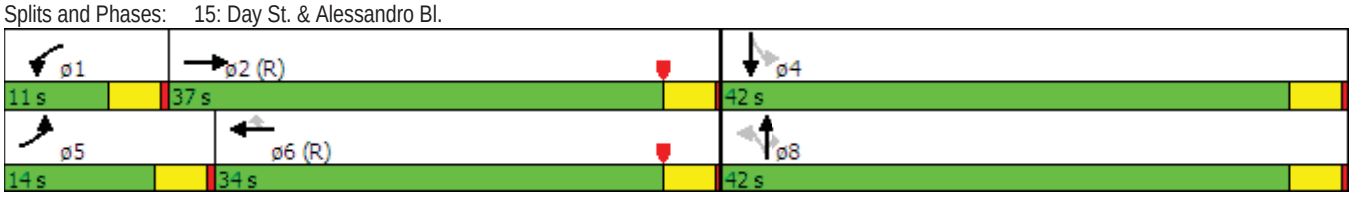
Intersection Summary	
HCM 2010 Ctrl Delay	4.7
HCM 2010 LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	248	2195	121	107	1324	135	163	463	166	220	377	218
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	245		0	220		75	50		50	200		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	100			120			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		861			839			831			716	
Travel Time (s)		13.0			12.7			16.2			19.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		
Detector Phase	5	2		1	6	6	8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (s)	14.0	37.0		11.0	34.0	34.0	42.0	42.0	42.0	42.0	42.0	
Total Split (%)	15.6%	41.1%		12.2%	37.8%	37.8%	46.7%	46.7%	46.7%	46.7%	46.7%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max		None	C-Max	C-Max	Max	Max	Max	Max	Max	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 15: Day St. & Alessandro Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	248	2195	121	107	1324	135	163	463	166	220	377	218
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	264	2335	129	114	1409	144	173	493	177	234	401	232
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	1809	99	138	1180	528	155	786	669	244	468	271
Arrive On Green	0.11	0.37	0.37	0.08	0.33	0.33	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1774	4935	270	1774	3539	1583	791	1863	1583	764	1108	641
Grp Volume(v), veh/h	264	1598	866	114	1409	144	173	493	177	234	0	633
Grp Sat Flow(s),veh/h/ln	1774	1695	1815	1774	1770	1583	791	1863	1583	764	0	1750
Q Serve(g_s), s	10.0	33.0	33.0	5.7	30.0	6.0	8.5	18.7	6.5	19.3	0.0	29.5
Cycle Q Clear(g_c), s	10.0	33.0	33.0	5.7	30.0	6.0	38.0	18.7	6.5	38.0	0.0	29.5
Prop In Lane	1.00		0.15	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	197	1243	666	138	1180	528	155	786	669	244	0	739
V/C Ratio(X)	1.34	1.29	1.30	0.83	1.19	0.27	1.12	0.63	0.26	0.96	0.00	0.86
Avail Cap(c_a), veh/h	197	1243	666	138	1180	528	155	786	669	244	0	739
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.0	28.5	28.5	40.9	30.0	22.0	42.9	20.4	16.9	38.3	0.0	23.5
Incr Delay (d2), s/veh	182.8	134.7	146.4	32.0	96.0	1.3	107.2	3.8	1.0	48.2	0.0	12.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.9	38.6	43.5	4.0	30.3	2.8	8.4	10.4	3.0	9.0	0.0	16.6
LnGrp Delay(d),s/veh	222.8	163.2	174.9	72.9	126.0	23.3	150.1	24.2	17.9	86.5	0.0	35.8
LnGrp LOS	F	F	F	E	F	C	F	C	B	F		D
Approach Vol, veh/h		2728			1667			843			867	
Approach Delay, s/veh		172.7			113.5			48.7			49.5	
Approach LOS		F			F			D			D	

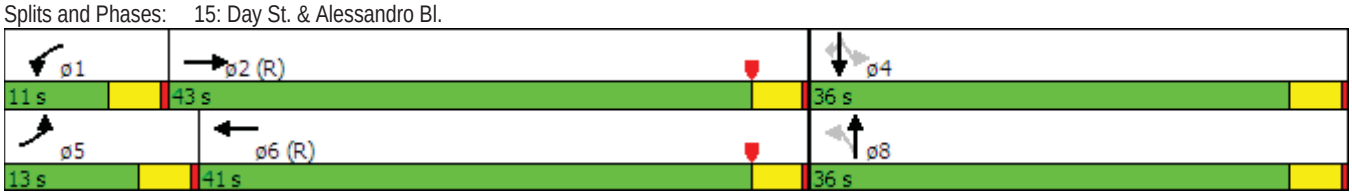
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.0	37.0		42.0	14.0	34.0		42.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	33.0		38.0	10.0	30.0		38.0
Max Q Clear Time (g_c+I1), s	7.7	35.0		40.0	12.0	32.0		40.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	121.9
HCM 2010 LOS	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	248	2195	121	107	1324	135	163	463	166	220	377	218
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	245		0	220		75	50		50	200		100
Storage Lanes	2		0	2		0	1		0	0		1
Taper Length (ft)	100			120			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		861			839			831			716	
Travel Time (s)		13.0			12.7			16.2			19.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0		11.0	20.0		20.0	20.0		20.0	20.0	20.0
Total Split (s)	13.0	43.0		11.0	41.0		36.0	36.0		36.0	36.0	36.0
Total Split (%)	14.4%	47.8%		12.2%	45.6%		40.0%	40.0%		40.0%	40.0%	40.0%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		Max	Max		Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 42 (47%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	

Splits and Phases: 15: Day St. & Alessandro Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	248	2195	121	107	1324	135	163	463	166	220	377	218
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	264	2335	129	114	1409	144	173	493	177	234	401	232
Adj No. of Lanes	2	3	0	2	3	0	1	2	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	335	2161	118	252	1940	198	221	910	325	233	662	563
Arrive On Green	0.10	0.44	0.44	0.07	0.41	0.41	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	3442	4935	270	3442	4689	479	791	2558	913	764	1863	1583
Grp Volume(v), veh/h	264	1598	866	114	1019	534	173	340	330	234	401	232
Grp Sat Flow(s),veh/h/ln	1721	1695	1815	1721	1695	1778	791	1770	1702	764	1863	1583
Q Serve(g_s), s	6.7	39.4	39.4	2.9	22.7	22.7	16.1	13.8	13.9	18.1	15.9	10.0
Cycle Q Clear(g_c), s	6.7	39.4	39.4	2.9	22.7	22.7	32.0	13.8	13.9	32.0	15.9	10.0
Prop In Lane	1.00		0.15	1.00		0.27	1.00		0.54	1.00		1.00
Lane Grp Cap(c), veh/h	335	1484	795	252	1403	736	221	629	605	233	662	563
V/C Ratio(X)	0.79	1.08	1.09	0.45	0.73	0.73	0.78	0.54	0.55	1.00	0.61	0.41
Avail Cap(c_a), veh/h	344	1484	795	268	1403	736	221	629	605	233	662	563
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.7	25.3	25.3	40.0	22.1	22.1	38.4	23.1	23.2	39.1	23.8	21.9
Incr Delay (d2), s/veh	11.3	47.0	59.2	1.3	3.3	6.2	23.5	3.3	3.5	59.7	4.1	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	28.0	32.7	1.4	11.3	12.4	5.7	7.3	7.1	9.6	8.9	4.7
LnGrp Delay(d),s/veh	51.0	72.3	84.5	41.2	25.4	28.3	61.9	26.4	26.7	98.8	27.9	24.1
LnGrp LOS	D	F	F	D	C	C	E	C	C	F	C	C
Approach Vol, veh/h		2728			1667			843			867	
Approach Delay, s/veh		74.1			27.4			33.8			46.0	
Approach LOS		E			C			C			D	

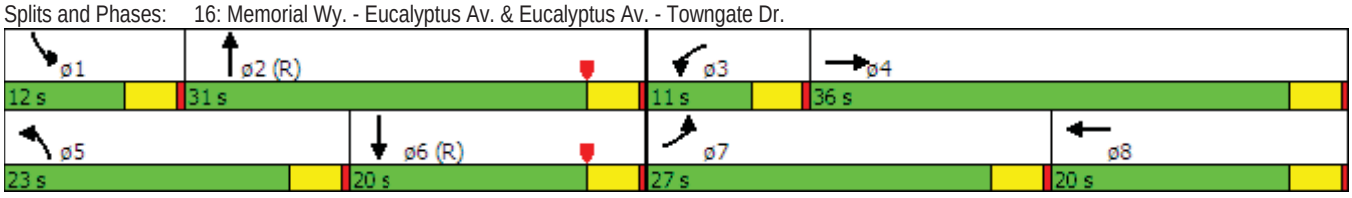
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.6	43.4		36.0	12.8	41.2		36.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	39.0		32.0	9.0	37.0		32.0
Max Q Clear Time (g_c+I1), s	4.9	41.4		34.0	8.7	24.7		34.0
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	12.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	51.8
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	473	641	589	30	525	69	402	290	22	58	296	319
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		0	150		0	200		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	27.0	36.0		11.0	20.0		23.0	31.0		12.0	20.0	
Total Split (%)	30.0%	40.0%		12.2%	22.2%		25.6%	34.4%		13.3%	22.2%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	473	641	589	30	525	69	402	290	22	58	296	319
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	503	682	627	32	559	73	428	309	23	62	315	339
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	453	1237	578	76	694	89	375	1180	87	109	360	322
Arrive On Green	0.26	0.36	0.36	0.04	0.15	0.15	0.21	0.35	0.35	0.06	0.20	0.20
Sat Flow, veh/h	1774	3390	1583	1774	4561	588	1774	3341	247	1774	1770	1583
Grp Volume(v), veh/h	503	682	627	32	414	218	428	163	169	62	315	339
Grp Sat Flow(s),veh/h/ln	1774	1695	1583	1774	1695	1759	1774	1770	1819	1774	1770	1583
Q Serve(g_s), s	23.0	14.4	32.8	1.6	10.6	10.8	19.0	5.9	6.0	3.1	15.5	18.3
Cycle Q Clear(g_c), s	23.0	14.4	32.8	1.6	10.6	10.8	19.0	5.9	6.0	3.1	15.5	18.3
Prop In Lane	1.00		1.00	1.00		0.33	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	453	1237	578	76	516	268	375	625	643	109	360	322
V/C Ratio(X)	1.11	0.55	1.09	0.42	0.80	0.82	1.14	0.26	0.26	0.57	0.87	1.05
Avail Cap(c_a), veh/h	453	1237	578	138	603	313	375	625	643	158	360	322
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	22.7	28.6	42.0	36.8	36.9	35.5	20.7	20.7	41.1	34.7	35.8
Incr Delay (d2), s/veh	75.5	0.5	62.7	3.7	6.7	13.6	91.3	1.0	1.0	4.6	24.4	64.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.7	6.8	24.3	0.9	5.4	6.3	18.8	3.1	3.2	1.6	10.1	13.7
LnGrp Delay(d),s/veh	109.0	23.3	91.3	45.7	43.5	50.5	126.8	21.7	21.7	45.7	59.1	100.4
LnGrp LOS	F	C	F	D	D	D	F	C	C	D	E	F
Approach Vol, veh/h		1812			664			760			716	
Approach Delay, s/veh		70.6			45.9			80.9			77.5	
Approach LOS		E			D			F			E	

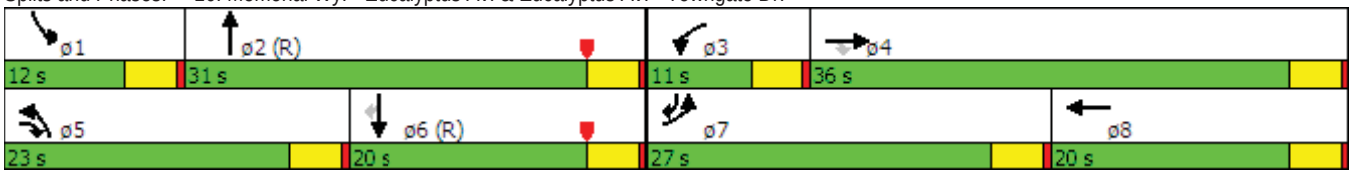
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	35.8	7.9	36.8	23.0	22.3	27.0	17.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	27.0	7.0	32.0	19.0	16.0	23.0	16.0
Max Q Clear Time (g_c+I1), s	5.1	8.0	3.6	34.8	21.0	20.3	25.0	12.8
Green Ext Time (p_c), s	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	69.7
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	473	641	589	30	525	69	402	290	22	58	296	319
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		0	150		0	200		0	200		0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4	5	3	8		5	2		1	6	7
Permitted Phases			4									6
Detector Phase	7	4	5	3	8		5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	11.0	11.0	20.0		11.0	20.0		11.0	20.0	11.0
Total Split (s)	27.0	36.0	23.0	11.0	20.0		23.0	31.0		12.0	20.0	27.0
Total Split (%)	30.0%	40.0%	25.6%	12.2%	22.2%		25.6%	34.4%		13.3%	22.2%	30.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	473	641	589	30	525	69	402	290	22	58	296	319
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	503	682	627	32	559	73	428	309	23	62	315	339
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	453	1289	911	76	692	89	375	1182	88	109	380	728
Arrive On Green	0.26	0.36	0.36	0.04	0.15	0.15	0.21	0.35	0.35	0.06	0.20	0.20
Sat Flow, veh/h	1774	3539	1583	1774	4561	588	1774	3341	247	1774	1863	1583
Grp Volume(v), veh/h	503	682	627	32	414	218	428	163	169	62	315	339
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1695	1759	1774	1770	1819	1774	1863	1583
Q Serve(g_s), s	23.0	13.7	25.1	1.6	10.6	10.8	19.0	5.9	6.0	3.1	14.6	13.3
Cycle Q Clear(g_c), s	23.0	13.7	25.1	1.6	10.6	10.8	19.0	5.9	6.0	3.1	14.6	13.3
Prop In Lane	1.00		1.00	1.00		0.33	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	453	1289	911	76	514	267	375	626	644	109	380	728
V/C Ratio(X)	1.11	0.53	0.69	0.42	0.80	0.82	1.14	0.26	0.26	0.57	0.83	0.47
Avail Cap(c_a), veh/h	453	1289	911	138	603	313	375	626	644	158	380	728
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	22.5	13.4	42.0	36.9	37.0	35.5	20.7	20.7	41.1	34.3	16.7
Incr Delay (d2), s/veh	75.5	0.4	2.2	3.7	6.8	13.8	91.3	1.0	1.0	4.6	18.5	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.7	6.7	11.4	0.9	5.4	6.3	18.8	3.0	3.2	1.6	9.5	6.1
LnGrp Delay(d),s/veh	109.0	22.9	15.6	45.7	43.7	50.8	126.8	21.7	21.7	45.7	52.9	18.9
LnGrp LOS	F	C	B	D	D	D	F	C	C	D	D	B
Approach Vol, veh/h		1812			664			760			716	
Approach Delay, s/veh		44.3			46.1			80.9			36.1	
Approach LOS		D			D			F			D	

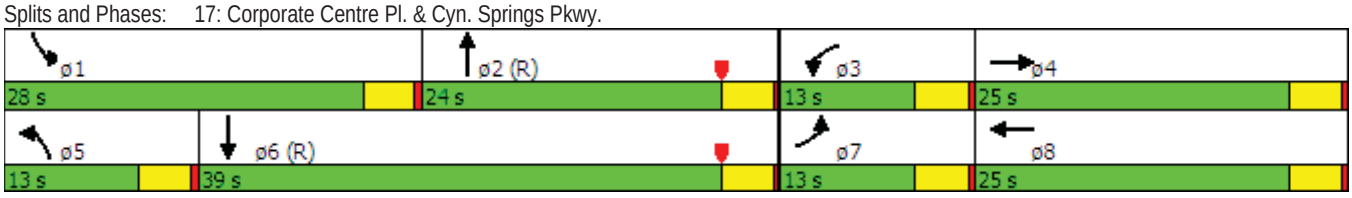
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	35.8	7.9	36.8	23.0	22.4	27.0	17.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	27.0	7.0	32.0	19.0	16.0	23.0	16.0
Max Q Clear Time (g_c+I1), s	5.1	8.0	3.6	27.1	21.0	16.6	25.0	12.8
Green Ext Time (p_c), s	0.0	4.7	0.0	3.8	0.0	0.0	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	50.2
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	48	439	54	55	494	107	40	67	60	181	61	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	175		0	130		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			90			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		476			1120			987			205	
Travel Time (s)		8.1			19.1			16.8			4.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	13.0	25.0		13.0	25.0		13.0	24.0		28.0	39.0	
Total Split (%)	14.4%	27.8%		14.4%	27.8%		14.4%	26.7%		31.1%	43.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 39 (43%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 17: Corporate Centre Pl. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	48	439	54	55	494	107	40	67	60	181	61	39
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	51	462	57	58	520	113	42	71	63	191	64	41
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	864	105	106	804	171	90	832	665	232	557	357
Arrive On Green	0.06	0.19	0.19	0.02	0.06	0.06	0.05	0.44	0.44	0.13	0.52	0.52
Sat Flow, veh/h	1774	4597	558	1774	4202	893	1774	1872	1496	1774	1062	680
Grp Volume(v), veh/h	51	339	180	58	417	216	42	67	67	191	0	105
Grp Sat Flow(s),veh/h/ln	1774	1695	1764	1774	1695	1705	1774	1770	1599	1774	0	1743
Q Serve(g_s), s	2.5	8.1	8.3	2.9	10.8	11.1	2.1	2.0	2.2	9.4	0.0	2.7
Cycle Q Clear(g_c), s	2.5	8.1	8.3	2.9	10.8	11.1	2.1	2.0	2.2	9.4	0.0	2.7
Prop In Lane	1.00		0.32	1.00		0.52	1.00		0.94	1.00		0.39
Lane Grp Cap(c), veh/h	99	637	332	106	649	326	90	786	710	232	0	913
V/C Ratio(X)	0.51	0.53	0.54	0.55	0.64	0.66	0.47	0.08	0.09	0.82	0.00	0.11
Avail Cap(c_a), veh/h	177	791	412	177	791	398	177	786	710	473	0	913
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.86	0.86	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.3	33.0	33.1	42.9	39.2	39.3	41.5	14.4	14.5	38.1	0.0	10.8
Incr Delay (d2), s/veh	4.0	0.7	1.4	3.8	1.1	2.6	3.8	0.2	0.3	7.2	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	3.9	4.2	1.5	5.2	5.5	1.1	1.0	1.0	5.1	0.0	1.4
LnGrp Delay(d),s/veh	45.3	33.7	34.4	46.7	40.3	41.9	45.3	14.7	14.8	45.4	0.0	11.1
LnGrp LOS	D	C	C	D	D	D	D	B	B	D		B
Approach Vol, veh/h		570			691			176			296	
Approach Delay, s/veh		35.0			41.3			22.0			33.2	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	44.0	9.4	20.9	8.6	51.2	9.0	21.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	24.0	20.0	9.0	21.0	9.0	35.0	9.0	21.0
Max Q Clear Time (g_c+I1), s	11.4	4.2	4.9	10.3	4.1	4.7	4.5	13.1
Green Ext Time (p_c), s	0.4	1.1	0.0	5.1	0.0	1.4	0.0	4.1

Intersection Summary	
HCM 2010 Ctrl Delay	35.9
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	180	21	115	161	76	9	79	70	42	92	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	170		0	100		0	130		0	135		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			45			60			60		
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		474			710			623			987	
Travel Time (s)		8.1			12.1			10.6			16.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	10.7
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	24	180	21	0	115	161	76	0	9	79	70
Peak Hour Factor	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	26	194	23	0	124	173	82	0	10	85	75
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	3
HCM Control Delay	10.8	10.9	10.4
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	27%	0%	100%	74%	0%	100%	41%	0%	100%
Vol Right, %	0%	0%	73%	0%	0%	26%	0%	0%	59%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	9	53	96	24	120	81	115	107	130	42	61
LT Vol	9	0	0	24	0	0	115	0	0	42	0
Through Vol	0	53	26	0	120	60	0	107	54	0	61
RT Vol	0	0	70	0	0	21	0	0	76	0	0
Lane Flow Rate	10	57	104	26	129	87	124	115	139	45	66
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.02	0.107	0.182	0.051	0.235	0.154	0.233	0.202	0.228	0.091	0.124
Departure Headway (Hd)	7.318	6.818	6.309	7.052	6.552	6.37	6.793	6.293	5.882	7.247	6.747
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	488	524	567	507	546	561	528	569	608	493	530
Service Time	5.083	4.583	4.074	4.812	4.312	4.131	4.549	4.049	3.638	5.011	4.511
HCM Lane V/C Ratio	0.02	0.109	0.183	0.051	0.236	0.155	0.235	0.202	0.229	0.091	0.125
HCM Control Delay	10.2	10.4	10.5	10.2	11.3	10.3	11.6	10.6	10.4	10.7	10.5
HCM Lane LOS	B	B	B	B	B	B	B	B	B	B	B
HCM 95th-tile Q	0.1	0.4	0.7	0.2	0.9	0.5	0.9	0.7	0.9	0.3	0.4

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	42	92	50
Peak Hour Factor	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	45	99	54
Number of Lanes	0	1	2	0

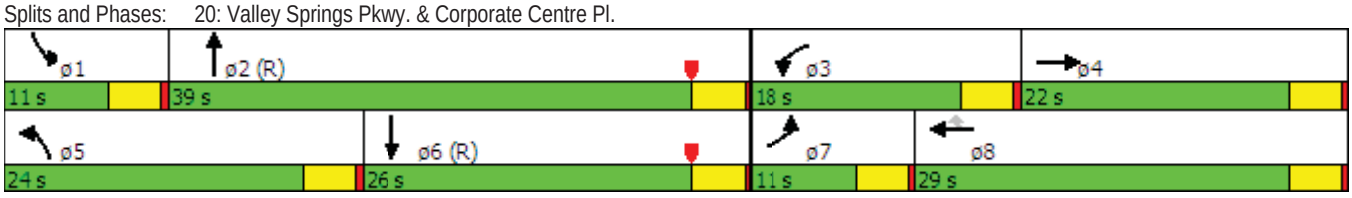
Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	10.4
HCM LOS	B

Lane	SBLn3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	46	115	112	91	25	189	624	70	44	599	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		70	140		50	150		0	120		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			40			40			40	
Link Distance (ft)		327			603			402			804	
Travel Time (s)		7.4			10.3			6.9			13.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	11.0	22.0		18.0	29.0	29.0	24.0	39.0		11.0	26.0	
Total Split (%)	12.2%	24.4%		20.0%	32.2%	32.2%	26.7%	43.3%		12.2%	28.9%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Valley Springs Pkwy. & Corporate Centre Pl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	36	46	115	112	91	25	189	624	70	44	599	34
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	37	47	119	115	94	26	195	643	72	45	618	35
Adj No. of Lanes	1	1	0	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	83	61	153	146	583	261	229	2594	288	93	2372	134
Arrive On Green	0.05	0.13	0.13	0.08	0.16	0.16	0.26	1.00	1.00	0.05	0.48	0.48
Sat Flow, veh/h	1774	468	1185	1774	3539	1583	1774	4647	515	1774	4927	277
Grp Volume(v), veh/h	37	0	166	115	94	26	195	468	247	45	424	229
Grp Sat Flow(s),veh/h/ln	1774	0	1654	1774	1770	1583	1774	1695	1772	1774	1695	1814
Q Serve(g_s), s	1.8	0.0	8.7	5.7	2.1	1.3	9.4	0.0	0.0	2.2	6.7	6.7
Cycle Q Clear(g_c), s	1.8	0.0	8.7	5.7	2.1	1.3	9.4	0.0	0.0	2.2	6.7	6.7
Prop In Lane	1.00		0.72	1.00		1.00	1.00		0.29	1.00		0.15
Lane Grp Cap(c), veh/h	83	0	214	146	583	261	229	1892	989	93	1632	873
V/C Ratio(X)	0.44	0.00	0.78	0.79	0.16	0.10	0.85	0.25	0.25	0.48	0.26	0.26
Avail Cap(c_a), veh/h	138	0	331	276	983	440	394	1892	989	138	1632	873
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.7	0.0	37.9	40.5	32.3	31.9	32.5	0.0	0.0	41.4	13.8	13.8
Incr Delay (d2), s/veh	3.7	0.0	6.1	9.0	0.1	0.2	8.5	0.3	0.6	3.8	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	4.4	3.2	1.0	0.6	5.1	0.1	0.2	1.2	3.2	3.5
LnGrp Delay(d),s/veh	45.4	0.0	44.0	49.6	32.4	32.1	41.1	0.3	0.6	45.3	14.2	14.6
LnGrp LOS	D		D	D	C	C	D	A	A	D	B	B
Approach Vol, veh/h		203			235			910			698	
Approach Delay, s/veh		44.2			40.8			9.1			16.3	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	54.2	11.4	15.6	15.6	47.3	8.2	18.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	35.0	14.0	18.0	20.0	22.0	7.0	25.0
Max Q Clear Time (g_c+I1), s	4.2	2.0	7.7	10.7	11.4	8.7	3.8	4.1
Green Ext Time (p_c), s	0.0	10.3	0.1	0.9	0.3	6.8	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	18.7
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	0	34	0	0	0	20	871	0	0	809	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	25		0	75		50
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	60			60			10			80		
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		252			253			418			402	
Travel Time (s)		5.7			5.8			7.1			6.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	12	0	34	0	0	0	20	871	0	0	809	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	35	0	0	0	20	889	0	0	826	17

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	1230	1764	421				843	0	0	889	0	0
Stage 1	834	834	-				-	-	-	-	-	-
Stage 2	396	930	-				-	-	-	-	-	-
Critical Hdwy	5.74	6.54	7.14				5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	6.64	5.54	-				-	-	-	-	-	-
Critical Hdwy Stg 2	6.04	5.54	-				-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92				3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	237	83	497				466	-	-	443	-	-
Stage 1	305	381	-				-	-	-	-	-	-
Stage 2	594	344	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	217	0	497				466	-	-	443	-	-
Mov Cap-2 Maneuver	217	0	-				-	-	-	-	-	-
Stage 1	305	0	-				-	-	-	-	-	-
Stage 2	544	0	-				-	-	-	-	-	-

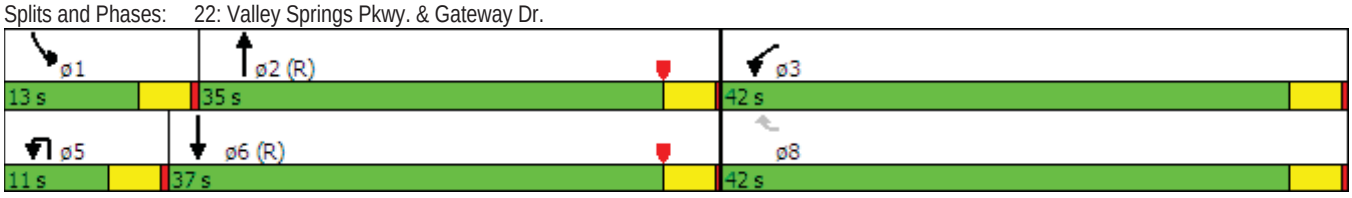
Approach	EB	NB	SB
HCM Control Delay, s	16.1	0.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	466	-	-	372	443	-	-
HCM Lane V/C Ratio	0.044	-	-	0.126	-	-	-
HCM Control Delay (s)	13.1	0.3	-	16.1	0	-	-
HCM Lane LOS	B	A	-	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0	-	-

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (vph)	378	81	0	810	122	43	800
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	180		0	115	
Storage Lanes	1	1	1		0	1	
Taper Length (ft)	60		100			120	
Right Turn on Red		Yes			Yes		
Link Speed (mph)	40			40			40
Link Distance (ft)	609			576			418
Travel Time (s)	10.4			9.8			7.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)							
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	3		5	2		1	6
Permitted Phases		8					
Detector Phase	3	8	5	2		1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	11.0	20.0	11.0	20.0		11.0	20.0
Total Split (s)	42.0	42.0	11.0	35.0		13.0	37.0
Total Split (%)	46.7%	46.7%	12.2%	38.9%		14.4%	41.1%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead	Lag		Lead	Lag
Lead-Lag Optimize?			Yes	Yes		Yes	Yes
Recall Mode	None	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 22: Valley Springs Pkwy. & Gateway Dr.



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	378	81	0	810	122	43	800
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1900	1863	1863
Adj Flow Rate, veh/h	411	88		880	133	47	870
Adj No. of Lanes	1	1		3	0	1	3
Peak Hour Factor	0.92	0.92		0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	463	413		2464	371	95	3307
Arrive On Green	0.26	0.26		0.73	0.73	0.11	1.00
Sat Flow, veh/h	1774	1583		4631	671	1774	5253
Grp Volume(v), veh/h	411	88		668	345	47	870
Grp Sat Flow(s),veh/h/ln	1774	1583		1695	1744	1774	1695
Q Serve(g_s), s	20.1	3.9		6.4	6.4	2.2	0.0
Cycle Q Clear(g_c), s	20.1	3.9		6.4	6.4	2.2	0.0
Prop In Lane	1.00	1.00			0.38	1.00	
Lane Grp Cap(c), veh/h	463	413		1872	963	95	3307
V/C Ratio(X)	0.89	0.21		0.36	0.36	0.49	0.26
Avail Cap(c_a), veh/h	749	669		1872	963	177	3307
HCM Platoon Ratio	1.00	1.00		1.33	1.33	2.00	2.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.0	26.0		6.2	6.2	39.0	0.0
Incr Delay (d2), s/veh	7.8	0.3		0.5	1.0	3.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	1.7		3.1	3.3	1.2	0.1
LnGrp Delay(d),s/veh	39.9	26.3		6.7	7.2	42.9	0.2
LnGrp LOS	D	C		A	A	D	A
Approach Vol, veh/h	499			1013			917
Approach Delay, s/veh	37.5			6.9			2.4
Approach LOS	D			A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.8	53.7				62.5		27.5
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	9.0	31.0				33.0		38.0
Max Q Clear Time (g_c+I1), s	4.2	8.4				2.0		22.1
Green Ext Time (p_c), s	0.0	13.2				15.8		1.4

Intersection Summary	
HCM 2010 Ctrl Delay	11.5
HCM 2010 LOS	B

Notes

User approved ignoring U-Turning movement.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	11	183	345	17	19	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	60				60	
Link Speed (mph)		40	40		30	
Link Distance (ft)		609	672		287	
Travel Time (s)		10.4	11.5		6.5	
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	11	183	345	17	19	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	247	466	23	26	31

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	489	0	-	0	631	245
Stage 1	-	-	-	-	478	-
Stage 2	-	-	-	-	153	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1070	-	-	-	413	755
Stage 1	-	-	-	-	590	-
Stage 2	-	-	-	-	859	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1070	-	-	-	407	755
Mov Cap-2 Maneuver	-	-	-	-	489	-
Stage 1	-	-	-	-	590	-
Stage 2	-	-	-	-	847	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1070	-	-	-	606
HCM Lane V/C Ratio	0.014	-	-	-	0.094
HCM Control Delay (s)	8.4	-	-	-	11.6
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	35	167	196	47	49	163
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125			0	150	0
Storage Lanes	1			0	0	1
Taper Length (ft)	60				60	
Link Speed (mph)		40	40		40	
Link Distance (ft)		672	394		405	
Travel Time (s)		11.5	6.7		6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	35	167	196	47	49	163
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	-	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	38	182	213	51	53	177

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	264	0	-	0	406	132
Stage 1	-	-	-	-	239	-
Stage 2	-	-	-	-	167	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1297	-	-	-	573	893
Stage 1	-	-	-	-	778	-
Stage 2	-	-	-	-	845	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1297	-	-	-	556	893
Mov Cap-2 Maneuver	-	-	-	-	618	-
Stage 1	-	-	-	-	778	-
Stage 2	-	-	-	-	820	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1297	-	-	-	618	893
HCM Lane V/C Ratio	0.029	-	-	-	0.086	0.198
HCM Control Delay (s)	7.9	-	-	-	11.4	10
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3	0.7

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	256	5	18	203	5	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	25		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			0		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	226			318	265	
Travel Time (s)	3.9			5.4	6.0	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	256	5	18	203	5	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	25	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	267	5	19	211	5	57

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	272	0	412	136
Stage 1	-	-	-	-	269	-
Stage 2	-	-	-	-	143	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1288	-	568	888
Stage 1	-	-	-	-	752	-
Stage 2	-	-	-	-	869	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1288	-	560	888
Mov Cap-2 Maneuver	-	-	-	-	617	-
Stage 1	-	-	-	-	752	-
Stage 2	-	-	-	-	856	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	9.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	857	-	-	1288	-
HCM Lane V/C Ratio	0.073	-	-	0.015	-
HCM Control Delay (s)	9.5	-	-	7.8	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	243	33	128	310	67	26	30	32	37	35	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		50	110		100	100		50	0		50
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		710			938			620			207	
Travel Time (s)		12.1			16.0			10.6			4.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	11
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	17	243	33	0	128	310	67	0	26	30	32
Peak Hour Factor	0.92	0.98	0.98	0.98	0.92	0.98	0.98	0.98	0.92	0.98	0.98	0.98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	17	248	34	0	131	316	68	0	27	31	33
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	2	3
HCM Control Delay	11	11.2	10.1
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	51%	0%
Vol Thru, %	0%	100%	24%	0%	100%	71%	0%	100%	61%	49%	0%
Vol Right, %	0%	0%	76%	0%	0%	29%	0%	0%	39%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	26	20	42	17	162	114	128	207	170	72	17
LT Vol	26	0	0	17	0	0	128	0	0	37	0
Through Vol	0	20	10	0	162	81	0	207	103	35	0
RT Vol	0	0	32	0	0	33	0	0	67	0	17
Lane Flow Rate	27	20	43	17	165	116	131	211	174	73	17
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.055	0.04	0.077	0.033	0.289	0.197	0.233	0.346	0.272	0.147	0.03
Departure Headway (Hd)	7.496	6.995	6.46	6.797	6.295	6.091	6.414	5.912	5.636	7.185	6.228
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	477	511	553	526	570	589	559	607	636	498	573
Service Time	5.254	4.752	4.217	4.542	4.04	3.836	4.155	3.653	3.376	4.94	3.983
HCM Lane V/C Ratio	0.057	0.039	0.078	0.032	0.289	0.197	0.234	0.348	0.274	0.147	0.03
HCM Control Delay	10.7	10	9.8	9.8	11.6	10.3	11.1	11.8	10.5	11.2	9.2
HCM Lane LOS	B	A	A	A	B	B	B	B	B	B	A
HCM 95th-tile Q	0.2	0.1	0.2	0.1	1.2	0.7	0.9	1.5	1.1	0.5	0.1

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	37	35	17
Peak Hour Factor	0.92	0.98	0.98	0.98
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	38	36	17
Number of Lanes	0	0	1	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	10.8
HCM LOS	B

Lane

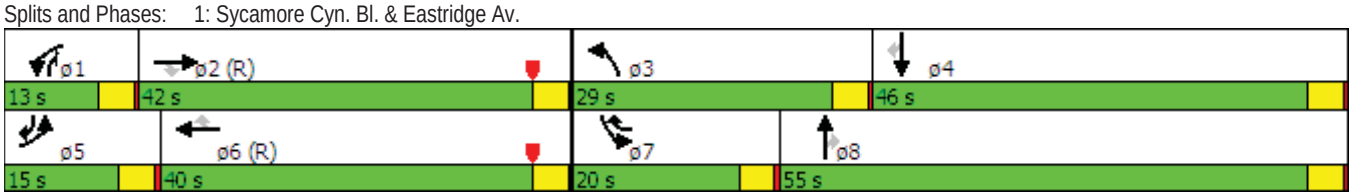
APPENDIX 7.2:

GENERAL PLAN BUILDOUT WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS AND PROGRESSION ANALYSIS WORKSHEETS

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	224	463	205	121	788	498	434	1189	183	149	201	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		150	310		200	360		320	275		110
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	120			120			120			200		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		910			577			817			952	
Travel Time (s)		15.5			9.8			12.4			14.4	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	11.0	11.0	20.0	11.0
Total Split (s)	15.0	42.0	42.0	13.0	40.0	20.0	29.0	55.0	13.0	20.0	46.0	15.0
Total Split (%)	11.5%	32.3%	32.3%	10.0%	30.8%	15.4%	22.3%	42.3%	10.0%	15.4%	35.4%	11.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	Max	None	None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Sycamore Cyn. Bl. & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	224	463	205	121	788	498	434	1189	183	149	201	320
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	243	503	0	132	857	541	472	1292	199	162	218	348
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	2	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	291	1751	545	184	1108	596	538	1471	743	219	1143	646
Arrive On Green	0.08	0.34	0.00	0.05	0.31	0.31	0.16	0.42	0.42	0.06	0.32	0.32
Sat Flow, veh/h	3442	5085	1583	3442	3539	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	243	503	0	132	857	541	472	1292	199	162	218	348
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1770	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	9.0	9.4	0.0	4.9	28.5	40.7	17.4	43.7	9.9	6.0	5.8	21.7
Cycle Q Clear(g_c), s	9.0	9.4	0.0	4.9	28.5	40.7	17.4	43.7	9.9	6.0	5.8	21.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	291	1751	545	184	1108	596	538	1471	743	219	1143	646
V/C Ratio(X)	0.83	0.29	0.00	0.72	0.77	0.91	0.88	0.88	0.27	0.74	0.19	0.54
Avail Cap(c_a), veh/h	291	1751	545	238	1108	596	662	1471	743	424	1143	646
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.6	31.0	0.0	60.6	40.5	38.4	53.6	34.9	21.0	59.8	31.7	29.2
Incr Delay (d2), s/veh	18.5	0.4	0.0	7.1	5.3	20.0	11.0	7.7	0.9	4.9	0.4	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	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	4.4	0.0	2.5	14.7	21.6	9.1	22.9	4.5	3.0	2.9	10.0
LnGrp Delay(d),s/veh	77.1	31.4	0.0	67.7	45.8	58.3	64.7	42.7	21.8	64.7	32.1	32.4
LnGrp LOS	E	C		E	D	E	E	D	C	E	C	C
Approach Vol, veh/h		746			1530			1963			728	
Approach Delay, s/veh		46.3			52.1			45.9			39.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	48.8	24.3	46.0	15.0	44.7	12.3	58.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	38.0	25.0	42.0	11.0	36.0	16.0	51.0
Max Q Clear Time (g_c+I1), s	6.9	11.4	19.4	23.7	11.0	42.7	8.0	45.7
Green Ext Time (p_c), s	0.1	13.2	0.9	11.5	0.0	0.0	0.3	4.3

Intersection Summary	
HCM 2010 Ctrl Delay	46.9
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	673	17	65	1461	555	11	125	64	163	78	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		80	150		0	75		160	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		760			700			315			411	
Travel Time (s)		13.0			11.9			7.2			9.3	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0		11.0	20.0	20.0	11.0	20.0	
Total Split (s)	11.0	78.0	78.0	15.0	82.0		11.0	20.0	20.0	17.0	26.0	
Total Split (%)	8.5%	60.0%	60.0%	11.5%	63.1%		8.5%	15.4%	15.4%	13.1%	20.0%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Box Springs Bl. & Eastridge Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	66	673	17	65	1461	555	11	125	64	163	78	4
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	72	732	18	71	1588	603	12	136	70	177	85	4
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	1	2	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	91	2134	955	90	1541	550	34	229	195	177	703	33
Arrive On Green	0.05	0.60	0.60	0.07	0.80	0.80	0.02	0.12	0.12	0.10	0.20	0.20
Sat Flow, veh/h	1774	3539	1583	1774	2558	913	1774	1863	1583	1774	3443	161
Grp Volume(v), veh/h	72	732	18	71	1067	1124	12	136	70	177	43	46
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1702	1774	1863	1583	1774	1770	1834
Q Serve(g_s), s	5.2	13.5	0.6	5.1	78.3	78.3	0.9	9.0	5.3	13.0	2.6	2.6
Cycle Q Clear(g_c), s	5.2	13.5	0.6	5.1	78.3	78.3	0.9	9.0	5.3	13.0	2.6	2.6
Prop In Lane	1.00		1.00	1.00		0.54	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	91	2134	955	90	1066	1025	34	229	195	177	361	374
V/C Ratio(X)	0.79	0.34	0.02	0.79	1.00	1.10	0.36	0.59	0.36	1.00	0.12	0.12
Avail Cap(c_a), veh/h	96	2134	955	150	1066	1025	96	229	195	177	361	374
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.0	12.9	10.4	59.9	12.9	12.9	63.0	53.9	52.3	58.5	42.2	42.2
Incr Delay (d2), s/veh	33.6	0.4	0.0	13.9	27.9	58.1	6.3	10.8	5.1	66.9	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	6.6	0.3	2.9	45.2	52.0	0.5	5.3	2.6	9.6	1.3	1.4
LnGrp Delay(d),s/veh	94.6	13.4	10.4	73.8	40.8	71.0	69.3	64.7	57.4	125.3	42.9	42.9
LnGrp LOS	F	B	B	E	F	F	E	E	E	F	D	D
Approach Vol, veh/h		822			2262			218			266	
Approach Delay, s/veh		20.4			56.8			62.6			97.8	
Approach LOS		C			E			E			F	

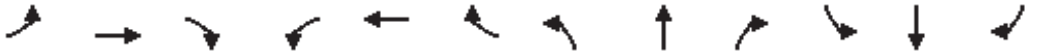
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	82.4	6.5	30.5	10.7	82.3	17.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	74.0	7.0	22.0	7.0	78.0	13.0	16.0
Max Q Clear Time (g_c+I1), s	7.1	15.5	2.9	4.6	7.2	80.3	15.0	11.0
Green Ext Time (p_c), s	0.0	46.3	0.0	1.3	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	51.9
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	88	725	0	486	1450	0	344	0	0	337	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	275		0	0		0	0		0
Storage Lanes	0		0	0		0	2		0	2		0
Taper Length (ft)	90			190			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		241			359			784			672	
Travel Time (s)		4.1			6.1			15.3			13.1	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot			Prot		
Protected Phases	5	2		1	6		3			7		
Permitted Phases												
Detector Phase	5	2		1	6		3			7		
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0			7.0		
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0			11.0		
Total Split (s)	18.0	69.0		34.0	85.0		27.0			27.0		
Total Split (%)	13.8%	53.1%		26.2%	65.4%		20.8%			20.8%		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5			3.5		
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5			0.5		
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0			0.0		
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0			4.0		
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		None			None		

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 68 (52%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: I-215 SB/NB Ramps & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	88	725	0	486	1450	0	344	0	0	337	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	0	0	1863	0	0
Adj Flow Rate, veh/h	96	788	0	528	1576	0	374	0	0	366	0	0
Adj No. of Lanes	1	2	0	2	2	0	2	0	0	2	0	0
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
Percent Heavy Veh, %	2	2	0	2	2	0	2	0	0	2	0	0
Cap, veh/h	119	2132	0	611	2523	0	440	0	0	440	0	0
Arrive On Green	0.09	0.80	0.00	0.06	0.24	0.00	0.13	0.00	0.00	0.13	0.00	0.00
Sat Flow, veh/h	1774	3632	0	3442	3632	0	3442	374		3442	366	
Grp Volume(v), veh/h	96	788	0	528	1576	0	374	63.7		366	62.3	
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1721	1770	0	1721	E		1721	E	
Q Serve(g_s), s	6.9	8.2	0.0	19.8	51.9	0.0	13.8			13.5		
Cycle Q Clear(g_c), s	6.9	8.2	0.0	19.8	51.9	0.0	13.8			13.5		
Prop In Lane	1.00		0.00	1.00		0.00	1.00			1.00		
Lane Grp Cap(c), veh/h	119	2132	0	611	2523	0	440			440		
V/C Ratio(X)	0.81	0.37	0.00	0.86	0.62	0.00	0.85			0.83		
Avail Cap(c_a), veh/h	191	2132	0	794	2523	0	609			609		
HCM Platoon Ratio	1.33	1.33	1.00	0.33	0.33	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.95	0.95	0.00	1.00			1.00		
Uniform Delay (d), s/veh	58.4	5.9	0.0	59.6	34.1	0.0	55.5			55.3		
Incr Delay (d2), s/veh	12.3	0.5	0.0	7.6	1.1	0.0	8.2			6.9		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	3.8	4.0	0.0	10.1	25.9	0.0	7.1			6.8		
LnGrp Delay(d),s/veh	70.7	6.4	0.0	67.2	35.2	0.0	63.7			62.3		
LnGrp LOS	E	A		E	D		E			E		
Approach Vol, veh/h		884			2104							
Approach Delay, s/veh		13.4			43.3							
Approach LOS		B			D							

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3		5	6	7	
Phs Duration (G+Y+Rc), s	27.1	82.3	20.6		12.7	96.7	20.6	
Change Period (Y+Rc), s	4.0	4.0	4.0		4.0	4.0	4.0	
Max Green Setting (Gmax), s	30.0	65.0	23.0		14.0	81.0	23.0	
Max Q Clear Time (g_c+I1), s	21.8	10.2	15.8		8.9	53.9	15.5	
Green Ext Time (p_c), s	1.3	31.3	0.8		0.1	19.8	0.8	

Intersection Summary	
HCM 2010 Ctrl Delay	40.1
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	813	87	0	1794	0	0	0	0	0	0	287
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		700			241			458			364	
Travel Time (s)		11.9			4.1			8.9			7.1	
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
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	17.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	813	87	0	1794	0	0	0	0	0	0	287
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	1082515456		-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	884	95	0	1950	0	0	0	0	0	0	312

Major/Minor	Major1			Major2						Minor2		
Conflicting Flow All	1950	0	-	884	0	0				2303	2834	975
Stage 1	-	-	-	-	-	-				1950	1950	-
Stage 2	-	-	-	-	-	-				353	884	-
Critical Hdwy	4.14	-	-	5.34	-	-				6.29	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-				5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-				6.04	5.54	-
Follow-up Hdwy	2.22	-	-	3.12	-	-				3.67	4.02	3.32
Pot Cap-1 Maneuver	296	-	0	445	-	-				46	17	~ 251
Stage 1	-	-	0	-	-	-				96	109	-
Stage 2	-	-	0	-	-	-				646	362	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	296	-	-	445	-	-				46	0	~ 251
Mov Cap-2 Maneuver	-	-	-	-	-	-				84	0	-
Stage 1	-	-	-	-	-	-				96	0	-
Stage 2	-	-	-	-	-	-				646	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	178.9
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	296	-	445	-	-	251
HCM Lane V/C Ratio	-	-	-	-	-	1.243
HCM Control Delay (s)	0	-	0	-	-	178.9
HCM Lane LOS	A	-	A	-	-	F
HCM 95th %tile Q(veh)	0	-	0	-	-	15.3

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	0	1794	0	0	287
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50			0	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	60				60	
Right Turn on Red				Yes		Yes
Link Speed (mph)		40	40		30	
Link Distance (ft)		174	120		486	
Travel Time (s)		3.0	2.0		11.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type			NA			Prot
Protected Phases			6			7
Permitted Phases						
Detector Phase			6			7
Switch Phase						
Minimum Initial (s)			7.0			7.0
Minimum Split (s)			20.0			11.0
Total Split (s)			96.0			34.0
Total Split (%)			73.8%			26.2%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			0.5			0.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.0			4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 31: Eastridge Av. & I-215 SB Ramps (W)

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	0	1794	0	0	287
Number			6	16	7	14
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	0	0	1863
Adj Flow Rate, veh/h			1950	0	0	312
Adj No. of Lanes			2	0	0	1
Peak Hour Factor			0.92	0.92	0.92	0.92
Percent Heavy Veh, %			2	0	0	2
Cap, veh/h			2505	0	0	0
Arrive On Green			0.71	0.00	0.00	0.00
Sat Flow, veh/h			3725	0	0	
Grp Volume(v), veh/h			1950	0	0.0	
Grp Sat Flow(s),veh/h/ln			1770	0		
Q Serve(g_s), s			46.6	0.0		
Cycle Q Clear(g_c), s			46.6	0.0		
Prop In Lane				0.00		
Lane Grp Cap(c), veh/h			2505	0		
V/C Ratio(X)			0.78	0.00		
Avail Cap(c_a), veh/h			2505	0		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	0.00		
Uniform Delay (d), s/veh			12.4	0.0		
Incr Delay (d2), s/veh			2.5	0.0		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			23.3	0.0		
LnGrp Delay(d),s/veh			14.8	0.0		
LnGrp LOS			B			
Approach Vol, veh/h			1950			
Approach Delay, s/veh			14.8			
Approach LOS			B			

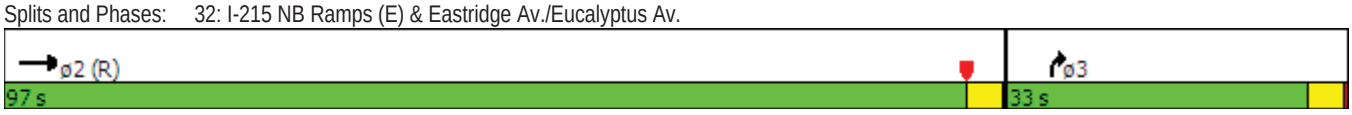
Timer	1	2	3	4	5	6	7	8
Assigned Phs						6		
Phs Duration (G+Y+Rc), s						96.0		
Change Period (Y+Rc), s						4.0		
Max Green Setting (Gmax), s						92.0		
Max Q Clear Time (g_c+I1), s						48.6		
Green Ext Time (p_c), s						24.2		

Intersection Summary	
HCM 2010 Ctrl Delay	14.8
HCM 2010 LOS	B

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1062	0	0	0	0	429
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Right Turn on Red		Yes				Yes
Link Speed (mph)	30			40	30	
Link Distance (ft)	100			131	592	
Travel Time (s)	2.3			2.2	13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA					Prot
Protected Phases	2					3
Permitted Phases						
Detector Phase	2					3
Switch Phase						
Minimum Initial (s)	7.0					7.0
Minimum Split (s)	20.0					11.0
Total Split (s)	97.0					33.0
Total Split (%)	74.6%					25.4%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	0.5					0.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	4.0					4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max					None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	

Splits and Phases: 32: I-215 NB Ramps (E) & Eastridge Av./Eucalyptus Av.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	1062	0	0	0	0	429
Number	2	12			3	18
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)		1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0			0	1863
Adj Flow Rate, veh/h	1154	0			0	466
Adj No. of Lanes	2	0			0	2
Peak Hour Factor	0.92	0.92			0.92	0.92
Percent Heavy Veh, %	2	0			0	2
Cap, veh/h	3430	0			0	0
Arrive On Green	0.97	0.00			0.00	0.00
Sat Flow, veh/h	3725	0			0	
Grp Volume(v), veh/h	1154	0			0.0	
Grp Sat Flow(s),veh/h/ln	1770	0				
Q Serve(g_s), s	1.9	0.0				
Cycle Q Clear(g_c), s	1.9	0.0				
Prop In Lane		0.00				
Lane Grp Cap(c), veh/h	3430	0				
V/C Ratio(X)	0.34	0.00				
Avail Cap(c_a), veh/h	3430	0				
HCM Platoon Ratio	1.00	1.00				
Upstream Filter(I)	1.00	0.00				
Uniform Delay (d), s/veh	0.1	0.0				
Incr Delay (d2), s/veh	0.3	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile BackOfQ(50%),veh/ln	0.9	0.0				
LnGrp Delay(d),s/veh	0.4	0.0				
LnGrp LOS	A					
Approach Vol, veh/h	1154					
Approach Delay, s/veh	0.4					
Approach LOS	A					

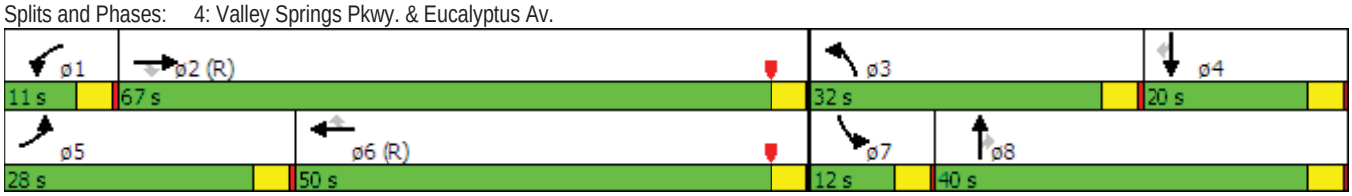
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		130.0						
Change Period (Y+Rc), s		4.0						
Max Green Setting (Gmax), s		93.0						
Max Q Clear Time (g_c+I1), s		3.9						
Green Ext Time (p_c), s		12.2						

Intersection Summary	
HCM 2010 Ctrl Delay	0.4
HCM 2010 LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	726	704	61	24	1388	103	449	481	145	40	53	522
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	1		1	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0
Total Split (s)	28.0	67.0	67.0	11.0	50.0	50.0	32.0	40.0	40.0	12.0	20.0	20.0
Total Split (%)	21.5%	51.5%	51.5%	8.5%	38.5%	38.5%	24.6%	30.8%	30.8%	9.2%	15.4%	15.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	Max	None	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	726	704	61	24	1388	103	449	481	145	40	53	522
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	789	765	66	26	1509	112	488	523	158	43	58	567
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	635	1790	801	58	1252	560	382	1048	469	75	229	343
Arrive On Green	0.31	0.84	0.84	0.03	0.35	0.35	0.22	0.30	0.30	0.04	0.12	0.12
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	1774	3539	1583	1774	1863	2787
Grp Volume(v), veh/h	789	765	66	26	1509	112	488	523	158	43	58	567
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1774	1770	1583	1774	1863	1393
Q Serve(g_s), s	24.0	6.8	0.9	1.9	46.0	6.4	28.0	15.9	10.1	3.1	3.7	16.0
Cycle Q Clear(g_c), s	24.0	6.8	0.9	1.9	46.0	6.4	28.0	15.9	10.1	3.1	3.7	16.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	635	1790	801	58	1252	560	382	1048	469	75	229	343
V/C Ratio(X)	1.24	0.43	0.08	0.45	1.20	0.20	1.28	0.50	0.34	0.57	0.25	1.65
Avail Cap(c_a), veh/h	635	1790	801	96	1252	560	382	1048	469	109	229	343
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.85	0.32	0.32	0.32	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	45.0	5.5	5.1	61.7	42.0	29.2	51.0	37.8	35.8	61.1	51.6	57.0
Incr Delay (d2), s/veh	120.1	0.6	0.2	1.7	94.8	0.3	143.6	1.7	1.9	6.5	2.6	306.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.9	3.3	0.4	0.9	38.9	2.8	28.9	8.0	4.7	1.7	2.1	20.7
LnGrp Delay(d),s/veh	165.0	6.2	5.2	63.4	136.8	29.5	194.6	39.5	37.7	67.6	54.2	363.5
LnGrp LOS	F	A	A	E	F	C	F	D	D	E	D	F
Approach Vol, veh/h		1620			1647			1169			668	
Approach Delay, s/veh		83.5			128.4			104.0			317.6	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	69.7	32.0	20.0	28.0	50.0	9.5	42.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	63.0	28.0	16.0	24.0	46.0	8.0	36.0
Max Q Clear Time (g_c+I1), s	3.9	8.8	30.0	18.0	26.0	48.0	5.1	17.9
Green Ext Time (p_c), s	0.0	30.9	0.0	0.0	0.0	0.0	0.0	6.6

Intersection Summary	
HCM 2010 Ctrl Delay	133.3
HCM 2010 LOS	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	726	704	61	24	1388	103	449	481	145	40	53	522
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	2		0	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6						4
Detector Phase	5	2	2	1	6	6	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	11.0	11.0
Total Split (s)	34.0	73.0	73.0	13.0	52.0	52.0	31.0	29.0		15.0	13.0	34.0
Total Split (%)	26.2%	56.2%	56.2%	10.0%	40.0%	40.0%	23.8%	22.3%		11.5%	10.0%	26.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max		None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	726	704	61	24	1388	103	449	481	145	40	53	522
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	789	765	66	26	1509	112	488	523	158	43	58	567
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	794	2157	965	58	1456	651	570	516	155	75	129	836
Arrive On Green	0.39	1.00	1.00	0.03	0.41	0.41	0.17	0.19	0.19	0.04	0.07	0.07
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	3442	2683	807	1774	1863	2787
Grp Volume(v), veh/h	789	765	66	26	1509	112	488	344	337	43	58	567
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1721	1770	1720	1774	1863	1393
Q Serve(g_s), s	29.7	0.0	0.0	1.9	53.5	4.8	17.9	25.0	25.0	3.1	3.9	9.0
Cycle Q Clear(g_c), s	29.7	0.0	0.0	1.9	53.5	4.8	17.9	25.0	25.0	3.1	3.9	9.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.47	1.00		1.00
Lane Grp Cap(c), veh/h	794	2157	965	58	1456	651	570	340	331	75	129	836
V/C Ratio(X)	0.99	0.35	0.07	0.45	1.04	0.17	0.86	1.01	1.02	0.57	0.45	0.68
Avail Cap(c_a), veh/h	794	2157	965	123	1456	651	715	340	331	150	129	836
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.85	0.32	0.32	0.32	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	39.9	0.0	0.0	61.7	38.3	16.4	52.7	52.5	52.5	61.1	58.1	24.6
Incr Delay (d2), s/veh	27.8	0.4	0.1	1.7	24.0	0.2	8.4	51.7	54.2	6.5	10.8	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.1	0.1	0.0	0.9	30.9	2.1	9.2	17.1	16.8	1.7	2.4	8.7
LnGrp Delay(d),s/veh	67.7	0.4	0.1	63.4	62.3	16.6	61.1	104.2	106.8	67.6	68.9	28.9
LnGrp LOS	E	A	A	E	F	B	E	F	F	E	E	C
Approach Vol, veh/h		1620			1647			1169			668	
Approach Delay, s/veh		33.2			59.2			87.0			34.9	
Approach LOS		C			E			F			C	

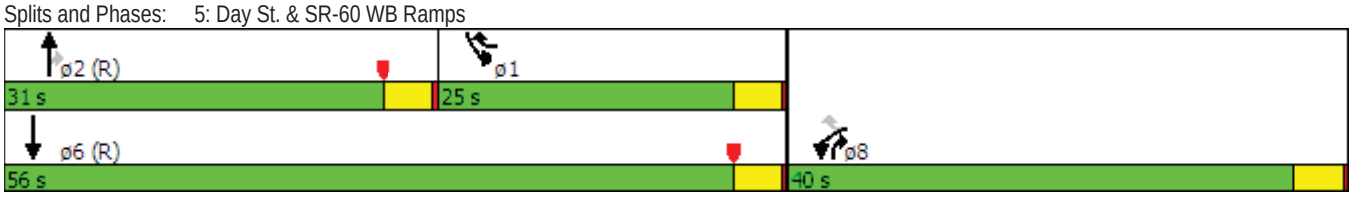
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	83.2	25.5	13.0	34.0	57.5	9.5	29.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	69.0	27.0	9.0	30.0	48.0	11.0	25.0
Max Q Clear Time (g_c+I1), s	3.9	2.0	19.9	11.0	31.7	55.5	5.1	27.0
Green Ext Time (p_c), s	0.0	34.3	1.2	0.0	0.0	0.0	1.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	54.1
HCM 2010 LOS	D

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	637	251	418	286	135	613
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		175	200	
Storage Lanes	2	1		1	1	
Taper Length (ft)	60				80	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		40			40
Link Distance (ft)	307		957			795
Travel Time (s)	6.0		16.3			13.6
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	40.0	25.0	31.0	40.0	25.0	56.0
Total Split (%)	41.7%	26.0%	32.3%	41.7%	26.0%	58.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 27 (28%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: Day St. & SR-60 WB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	637	251	418	286	135	613
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	657	259	431	295	139	632
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	808	940	995	817	637	2414
Arrive On Green	0.23	0.23	0.09	0.09	0.36	0.68
Sat Flow, veh/h	3442	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	657	259	431	295	139	632
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1770
Q Serve(g_s), s	17.3	0.0	11.0	11.6	5.2	6.6
Cycle Q Clear(g_c), s	17.3	0.0	11.0	11.6	5.2	6.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	808	940	995	817	637	2414
V/C Ratio(X)	0.81	0.28	0.43	0.36	0.22	0.26
Avail Cap(c_a), veh/h	1291	1162	995	817	637	2414
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.94	0.94	1.00	1.00
Uniform Delay (d), s/veh	34.7	9.5	36.3	17.8	21.4	5.9
Incr Delay (d2), s/veh	2.2	0.2	1.3	1.2	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	3.4	5.6	7.9	2.6	3.3
LnGrp Delay(d),s/veh	36.9	9.6	37.6	18.9	21.6	6.2
LnGrp LOS	D	A	D	B	C	A
Approach Vol, veh/h	916		726			771
Approach Delay, s/veh	29.2		30.0			9.0
Approach LOS	C		C			A

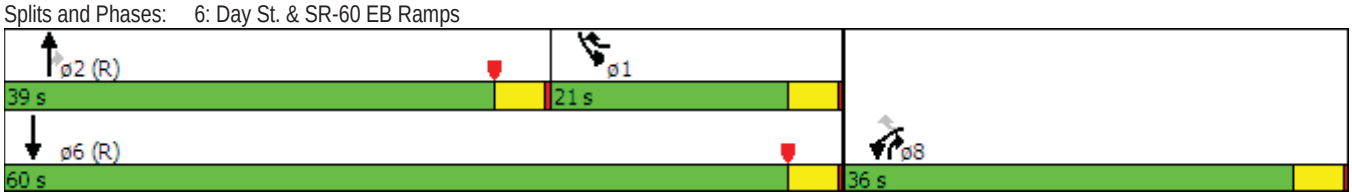
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	38.5	31.0				69.5		26.5
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	21.0	27.0				52.0		36.0
Max Q Clear Time (g_c+I1), s	7.2	13.6				8.6		19.3
Green Ext Time (p_c), s	3.7	3.1				5.0		3.2

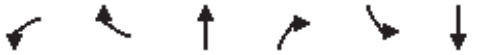
Intersection Summary	
HCM 2010 Ctrl Delay	23.0
HCM 2010 LOS	C

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	585	88	616	517	117	1133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	200		0	425	
Storage Lanes	2	0		1	1	
Taper Length (ft)	60				60	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		40			40
Link Distance (ft)	263		524			957
Travel Time (s)	5.1		8.9			16.3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	36.0	21.0	39.0	36.0	21.0	60.0
Total Split (%)	37.5%	21.9%	40.6%	37.5%	21.9%	62.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 90 (94%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Day St. & SR-60 EB Ramps





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	585	88	616	517	117	1133
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	597	90	629	528	119	1156
Adj No. of Lanes	2	1	2	1	1	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	722	808	1290	909	533	3595
Arrive On Green	0.21	0.21	0.12	0.12	0.10	0.23
Sat Flow, veh/h	3442	1583	3632	1583	1774	5253
Grp Volume(v), veh/h	597	90	629	528	119	1156
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1695
Q Serve(g_s), s	15.9	0.0	15.9	21.2	5.9	18.1
Cycle Q Clear(g_c), s	15.9	0.0	15.9	21.2	5.9	18.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	722	808	1290	909	533	3595
V/C Ratio(X)	0.83	0.11	0.49	0.58	0.22	0.32
Avail Cap(c_a), veh/h	1147	1004	1290	909	533	3595
HCM Platoon Ratio	1.00	1.00	0.33	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	0.89	0.89	0.85	0.85
Uniform Delay (d), s/veh	36.3	12.2	33.8	18.3	32.9	17.7
Incr Delay (d2), s/veh	2.8	0.1	1.2	2.4	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	1.2	8.0	14.5	3.0	8.6
LnGrp Delay(d),s/veh	39.1	12.3	35.0	20.7	33.1	17.9
LnGrp LOS	D	B	D	C	C	B
Approach Vol, veh/h	687		1157			1275
Approach Delay, s/veh	35.6		28.5			19.3
Approach LOS	D		C			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	32.9	39.0				71.9		24.1
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	17.0	35.0				56.0		32.0
Max Q Clear Time (g_c+I1), s	7.9	23.2				20.1		17.9
Green Ext Time (p_c), s	5.1	4.8				10.1		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	26.3
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	316	34	38	34	46	112	70	705	58	175	1139	318
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	145		0	165		0	170		200
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	95			100			120			80		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		1120			404			728			524	
Travel Time (s)		19.1			7.9			12.4			8.9	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												19%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	21.0	30.0	30.0	11.0	20.0	20.0	14.0	31.0		24.0	41.0	21.0
Total Split (%)	21.9%	31.3%	31.3%	11.5%	20.8%	20.8%	14.6%	32.3%		25.0%	42.7%	21.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead		Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 13 (14%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Day St. & Cyn. Springs Pkwy.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	316	34	38	34	46	112	70	705	58	175	1139	318
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	326	35	39	35	47	115	72	727	60	180	1215	300
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	4	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	410	275	234	78	136	115	110	1347	111	639	4315	1106
Arrive On Green	0.12	0.15	0.15	0.04	0.07	0.07	0.02	0.09	0.09	0.12	0.19	0.19
Sat Flow, veh/h	3442	1863	1583	1774	1863	1583	1774	4790	393	1774	7451	1583
Grp Volume(v), veh/h	326	35	39	35	47	115	72	513	274	180	1215	300
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1863	1583	1774	1695	1793	1774	1863	1583
Q Serve(g_s), s	8.8	1.6	2.1	1.8	2.3	3.6	3.9	13.9	14.0	8.9	13.4	11.3
Cycle Q Clear(g_c), s	8.8	1.6	2.1	1.8	2.3	3.6	3.9	13.9	14.0	8.9	13.4	11.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	410	275	234	78	136	115	110	953	504	639	4315	1106
V/C Ratio(X)	0.79	0.13	0.17	0.45	0.35	1.00	0.65	0.54	0.54	0.28	0.28	0.27
Avail Cap(c_a), veh/h	609	504	429	129	310	264	185	953	504	639	4315	1106
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	0.98	0.98	0.98	0.88	0.88	0.88
Uniform Delay (d), s/veh	41.1	35.5	35.7	44.7	42.3	12.1	46.0	37.6	37.6	31.0	21.8	11.7
Incr Delay (d2), s/veh	4.0	0.2	0.3	3.9	1.5	38.2	6.2	2.1	4.1	0.2	0.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.8	0.9	1.0	1.2	2.8	2.1	6.8	7.5	4.4	7.0	5.1
LnGrp Delay(d),s/veh	45.1	35.7	36.0	48.7	43.8	50.3	52.2	39.7	41.7	31.2	21.9	12.2
LnGrp LOS	D	D	D	D	D	D	D	D	D	C	C	B
Approach Vol, veh/h		400			197			859			1695	
Approach Delay, s/veh		43.4			48.5			41.4			21.2	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	38.6	31.0	8.2	18.2	10.0	59.6	15.4	11.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	27.0	7.0	26.0	10.0	37.0	17.0	16.0
Max Q Clear Time (g_c+I1), s	10.9	16.0	3.8	4.1	5.9	15.4	10.8	5.6
Green Ext Time (p_c), s	5.3	3.6	0.0	0.8	0.0	10.5	0.6	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	31.2
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	59	56	22	103	70	146	702	41	66	964	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		50	200		0	130		50	190		0
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	60			120			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		938			519			1025			728	
Travel Time (s)		16.0			10.1			17.5			12.4	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	14.0	24.0	24.0	13.0	23.0	23.0	16.0	46.0	46.0	13.0	43.0	14.0
Total Split (%)	14.6%	25.0%	25.0%	13.5%	24.0%	24.0%	16.7%	47.9%	47.9%	13.5%	44.8%	14.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 73 (76%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Day St. & Campus Pkwy.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	59	59	56	22	103	70	146	702	41	66	964	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	60	60	57	22	104	71	147	709	41	67	974	152
Adj No. of Lanes	2	1	1	1	2	1	2	3	1	2	3	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	200	188	160	57	265	119	246	3252	1012	209	3197	1088
Arrive On Green	0.06	0.10	0.10	0.03	0.07	0.07	0.14	1.00	1.00	0.02	0.21	0.21
Sat Flow, veh/h	3442	1863	1583	1774	3539	1583	3442	5085	1583	3442	5085	1583
Grp Volume(v), veh/h	60	60	57	22	104	71	147	709	41	67	974	152
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1770	1583	1721	1695	1583	1721	1695	1583
Q Serve(g_s), s	1.6	2.9	3.2	1.2	2.7	4.2	3.8	0.0	0.0	1.8	15.6	6.4
Cycle Q Clear(g_c), s	1.6	2.9	3.2	1.2	2.7	4.2	3.8	0.0	0.0	1.8	15.6	6.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	200	188	160	57	265	119	246	3252	1012	209	3197	1088
V/C Ratio(X)	0.30	0.32	0.36	0.38	0.39	0.60	0.60	0.22	0.04	0.32	0.30	0.14
Avail Cap(c_a), veh/h	359	388	330	166	700	313	430	3252	1012	323	3197	1088
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.93	0.93	0.93
Uniform Delay (d), s/veh	43.3	40.1	40.3	45.5	42.3	43.0	39.8	0.0	0.0	45.1	20.3	12.2
Incr Delay (d2), s/veh	0.8	1.0	1.3	4.1	0.9	4.8	2.2	0.1	0.1	0.8	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.5	1.5	0.6	1.3	2.0	1.9	0.0	0.0	0.9	7.4	2.9
LnGrp Delay(d),s/veh	44.2	41.1	41.6	49.7	43.3	47.8	42.1	0.1	0.1	45.9	20.5	12.4
LnGrp LOS	D	D	D	D	D	D	D	A	A	D	C	B
Approach Vol, veh/h		177			197			897			1193	
Approach Delay, s/veh		42.3			45.6			7.0			20.9	
Approach LOS		D			D			A			C	

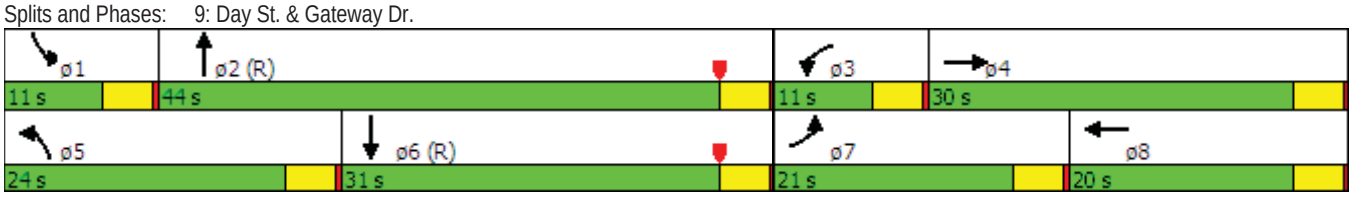
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	65.4	7.1	13.7	10.9	64.4	9.6	11.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	42.0	9.0	20.0	12.0	39.0	10.0	19.0
Max Q Clear Time (g_c+I1), s	3.8	2.0	3.2	5.2	5.8	17.6	3.6	6.2
Green Ext Time (p_c), s	0.1	17.0	0.0	1.1	0.2	12.4	0.1	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	19.4
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	133	46	66	37	110	108	177	597	51	85	515	336
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	100		0	190		400	260		0
Storage Lanes	1		0	1		0	1		1	2		0
Taper Length (ft)	0			120			60			165		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		318			585			592			1025	
Travel Time (s)		5.4			11.4			10.1			17.5	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	21.0	30.0		11.0	20.0		24.0	44.0		11.0	31.0	
Total Split (%)	21.9%	31.3%		11.5%	20.8%		25.0%	45.8%		11.5%	32.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

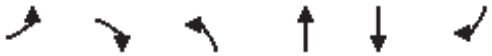
Splits and Phases: 9: Day St. & Gateway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	133	46	66	37	110	108	177	597	51	85	515	336
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	134	46	67	37	111	109	179	603	52	86	520	339
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	167	260	233	81	175	156	218	2744	235	226	1755	820
Arrive On Green	0.09	0.15	0.15	0.05	0.10	0.10	0.04	0.19	0.19	0.02	0.17	0.17
Sat Flow, veh/h	1774	1770	1583	1774	1771	1583	1774	4773	408	3442	3390	1583
Grp Volume(v), veh/h	134	46	67	37	111	109	179	427	228	86	520	339
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1695	1791	1721	1695	1583
Q Serve(g_s), s	7.1	2.2	3.6	2.0	5.8	6.4	9.6	10.2	10.3	2.4	12.9	18.3
Cycle Q Clear(g_c), s	7.1	2.2	3.6	2.0	5.8	6.4	9.6	10.2	10.3	2.4	12.9	18.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	167	260	233	81	175	156	218	1949	1030	226	1755	820
V/C Ratio(X)	0.80	0.18	0.29	0.46	0.63	0.70	0.82	0.22	0.22	0.38	0.30	0.41
Avail Cap(c_a), veh/h	314	479	429	129	295	264	370	1949	1030	251	1755	820
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	0.96	0.96
Uniform Delay (d), s/veh	42.6	35.9	36.5	44.6	41.6	41.9	45.0	20.7	20.7	45.0	24.5	26.8
Incr Delay (d2), s/veh	8.7	0.3	0.7	4.0	3.8	5.5	7.5	0.3	0.5	1.0	0.4	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	1.1	1.6	1.0	3.0	3.0	5.2	4.9	5.3	1.2	6.2	8.4
LnGrp Delay(d),s/veh	51.3	36.2	37.1	48.6	45.4	47.4	52.5	20.9	21.2	46.1	24.9	28.3
LnGrp LOS	D	D	D	D	D	D	D	C	C	D	C	C
Approach Vol, veh/h		247			257			834			945	
Approach Delay, s/veh		44.6			46.7			27.8			28.1	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	59.2	8.4	18.1	15.8	53.7	13.0	13.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	40.0	7.0	26.0	20.0	27.0	17.0	16.0
Max Q Clear Time (g_c+I1), s	4.4	12.3	4.0	5.6	11.6	20.3	9.1	8.4
Green Ext Time (p_c), s	0.0	11.3	0.0	1.8	0.3	4.5	0.2	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	31.8
HCM 2010 LOS	C



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	8	7	46	930	626	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	80			0
Storage Lanes	1	0	1			0
Taper Length (ft)	60		30			
Link Speed (mph)	30			40	40	
Link Distance (ft)	364			180	592	
Travel Time (s)	8.3			3.1	10.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

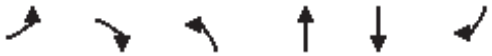
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	8	7	46	930	626	23
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	-	80	-	-	-
Veh in Median Storage, #	1	-	-	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	9	8	50	1011	680	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1298	353	705	0	-	0
Stage 1	693	-	-	-	-	-
Stage 2	605	-	-	-	-	-
Critical Hdwy	6.29	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	183	549	542	-	-	-
Stage 1	381	-	-	-	-	-
Stage 2	493	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	166	549	542	-	-	-
Mov Cap-2 Maneuver	263	-	-	-	-	-
Stage 1	381	-	-	-	-	-
Stage 2	448	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.9	0.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	542	-	347	-	-
HCM Lane V/C Ratio	0.092	-	0.047	-	-
HCM Control Delay (s)	12.3	-	15.9	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.3	-	0.1	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	7	14	22	968	597	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	25			0
Storage Lanes	1	0	1			0
Taper Length (ft)	60		25			
Link Speed (mph)	30			40	40	
Link Distance (ft)	364			453	180	
Travel Time (s)	8.3			7.7	3.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	7	14	22	968	597	36
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	-	25	-	-	-
Veh in Median Storage, #	1	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	15	24	1041	642	39

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1229	340	681	0	-	0
Stage 1	661	-	-	-	-	-
Stage 2	568	-	-	-	-	-
Critical Hdwy	6.29	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	201	560	556	-	-	-
Stage 1	398	-	-	-	-	-
Stage 2	514	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	192	560	556	-	-	-
Mov Cap-2 Maneuver	287	-	-	-	-	-
Stage 1	398	-	-	-	-	-
Stage 2	492	-	-	-	-	-

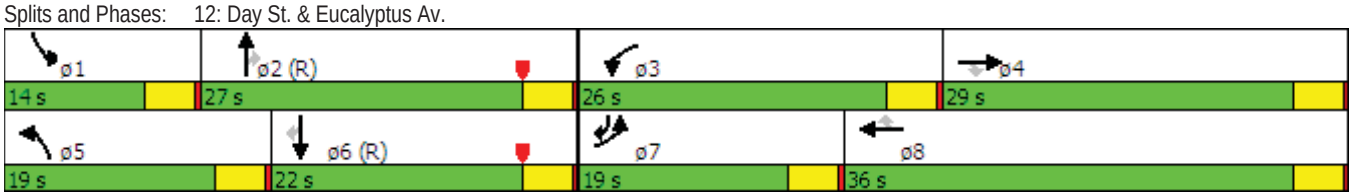
Approach	EB	NB	SB
HCM Control Delay, s	13.9	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	556	-	425	-	-
HCM Lane V/C Ratio	0.043	-	0.053	-	-
HCM Control Delay (s)	11.8	-	13.9	-	-
HCM Lane LOS	B	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	249	617	91	307	1100	141	261	516	238	90	287	196
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		50	175		0	100		100	200		0
Storage Lanes	1		1	1		1	1		2	1		1
Taper Length (ft)	100			75			80			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			40	
Link Distance (ft)		2104			1174			390			453	
Travel Time (s)		35.9			20.0			7.6			7.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	19.0	29.0	29.0	26.0	36.0	36.0	19.0	27.0	27.0	14.0	22.0	19.0
Total Split (%)	19.8%	30.2%	30.2%	27.1%	37.5%	37.5%	19.8%	28.1%	28.1%	14.6%	22.9%	19.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 13 (14%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Day St. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	249	617	91	307	1100	141	261	516	238	90	287	196
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	262	649	96	323	1158	148	275	543	251	95	302	206
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	1019	456	358	1180	528	277	975	436	121	664	544
Arrive On Green	0.16	0.29	0.29	0.20	0.33	0.33	0.16	0.28	0.28	0.07	0.19	0.19
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	262	649	96	323	1158	148	275	543	251	95	302	206
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	14.0	15.3	4.4	17.1	31.1	6.6	14.9	12.6	13.1	5.1	7.3	9.4
Cycle Q Clear(g_c), s	14.0	15.3	4.4	17.1	31.1	6.6	14.9	12.6	13.1	5.1	7.3	9.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	1019	456	358	1180	528	277	975	436	121	664	544
V/C Ratio(X)	0.95	0.64	0.21	0.90	0.98	0.28	0.99	0.56	0.58	0.79	0.46	0.38
Avail Cap(c_a), veh/h	277	1019	456	407	1180	528	277	975	436	185	664	544
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	29.8	25.9	37.4	31.7	23.5	40.4	29.8	29.9	44.0	34.6	23.8
Incr Delay (d2), s/veh	37.5	1.2	0.2	21.4	21.8	0.3	51.8	2.3	5.4	11.6	2.2	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.7	7.7	2.0	10.5	18.7	2.9	11.2	6.5	6.3	2.9	3.8	4.4
LnGrp Delay(d),s/veh	77.6	31.0	26.1	58.8	53.5	23.8	92.2	32.0	35.4	55.6	36.9	25.8
LnGrp LOS	E	C	C	E	D	C	F	C	D	E	D	C
Approach Vol, veh/h		1007			1629			1069			603	
Approach Delay, s/veh		42.7			51.8			48.3			36.0	
Approach LOS		D			D			D			D	

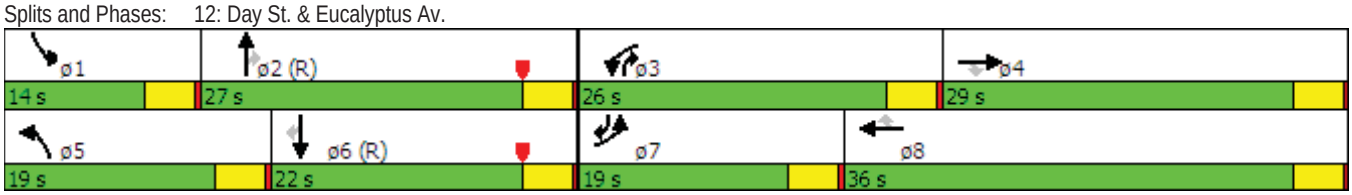
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	30.5	23.4	31.6	19.0	22.0	19.0	36.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	23.0	22.0	25.0	15.0	18.0	15.0	32.0
Max Q Clear Time (g_c+I1), s	7.1	15.1	19.1	17.3	16.9	11.4	16.0	33.1
Green Ext Time (p_c), s	0.0	4.2	0.3	6.1	0.0	3.7	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	46.6
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	249	617	91	307	1100	141	261	516	238	90	287	196
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		50	175		0	100		100	200		0
Storage Lanes	1		1	1		1	1		2	1		1
Taper Length (ft)	100			75			80			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			40	
Link Distance (ft)		2104			1174			390			453	
Travel Time (s)		35.9			20.0			7.6			7.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	11.0
Total Split (s)	19.0	29.0	29.0	26.0	36.0	36.0	19.0	27.0	26.0	14.0	22.0	19.0
Total Split (%)	19.8%	30.2%	30.2%	27.1%	37.5%	37.5%	19.8%	28.1%	27.1%	14.6%	22.9%	19.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 13 (14%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Day St. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	249	617	91	307	1100	141	261	516	238	90	287	196
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	262	649	96	323	1158	148	275	543	251	95	302	206
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	1019	456	358	1180	528	277	975	756	121	664	544
Arrive On Green	0.16	0.29	0.29	0.20	0.33	0.33	0.16	0.28	0.28	0.07	0.19	0.19
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	262	649	96	323	1158	148	275	543	251	95	302	206
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	14.0	15.3	4.4	17.1	31.1	6.6	14.9	12.6	9.5	5.1	7.3	9.4
Cycle Q Clear(g_c), s	14.0	15.3	4.4	17.1	31.1	6.6	14.9	12.6	9.5	5.1	7.3	9.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	1019	456	358	1180	528	277	975	756	121	664	544
V/C Ratio(X)	0.95	0.64	0.21	0.90	0.98	0.28	0.99	0.56	0.33	0.79	0.46	0.38
Avail Cap(c_a), veh/h	277	1019	456	407	1180	528	277	975	756	185	664	544
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	29.8	25.9	37.4	31.7	23.5	40.4	29.8	15.6	44.0	34.6	23.8
Incr Delay (d2), s/veh	37.9	1.2	0.2	21.4	21.8	0.3	51.8	2.3	1.2	11.6	2.2	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	7.7	2.0	10.5	18.7	2.9	11.2	6.5	4.4	2.9	3.8	4.4
LnGrp Delay(d),s/veh	78.0	31.0	26.1	58.8	53.5	23.8	92.2	32.0	16.8	55.6	36.9	25.8
LnGrp LOS	E	C	C	E	D	C	F	C	B	E	D	C
Approach Vol, veh/h		1007			1629			1069			603	
Approach Delay, s/veh		42.8			51.8			43.9			36.0	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	30.5	23.4	31.6	19.0	22.0	19.0	36.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	23.0	22.0	25.0	15.0	18.0	15.0	32.0
Max Q Clear Time (g_c+I1), s	7.1	14.6	19.1	17.3	16.9	11.4	16.0	33.1
Green Ext Time (p_c), s	0.0	4.4	0.3	6.1	0.0	3.7	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	45.6
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	37	138	64	151	217	356	44	641	132	216	484	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	95		95	80		0	100		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	60			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			25			35	
Link Distance (ft)		861			839			1320			2260	
Travel Time (s)		16.8			16.3			36.0			44.0	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	11.0	20.0		13.0	22.0	22.0	11.0	46.0		17.0	52.0	
Total Split (%)	11.5%	20.8%		13.5%	22.9%	22.9%	11.5%	47.9%		17.7%	54.2%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Day St. & Cottonwood Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	37	138	64	151	217	356	44	641	132	216	484	27
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	40	150	70	164	236	387	48	697	143	235	526	29
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	175	82	166	356	303	93	689	141	240	947	52
Arrive On Green	0.05	0.15	0.15	0.09	0.19	0.19	0.05	0.46	0.46	0.14	0.54	0.54
Sat Flow, veh/h	1774	1203	561	1774	1863	1583	1774	1501	308	1774	1749	96
Grp Volume(v), veh/h	40	0	220	164	236	387	48	0	840	235	0	555
Grp Sat Flow(s),veh/h/ln	1774	0	1764	1774	1863	1583	1774	0	1808	1774	0	1846
Q Serve(g_s), s	2.1	0.0	11.7	8.9	11.3	18.4	2.5	0.0	44.0	12.7	0.0	18.9
Cycle Q Clear(g_c), s	2.1	0.0	11.7	8.9	11.3	18.4	2.5	0.0	44.0	12.7	0.0	18.9
Prop In Lane	1.00		0.32	1.00		1.00	1.00		0.17	1.00		0.05
Lane Grp Cap(c), veh/h	85	0	256	166	356	303	93	0	830	240	0	1000
V/C Ratio(X)	0.47	0.00	0.86	0.99	0.66	1.28	0.51	0.00	1.01	0.98	0.00	0.56
Avail Cap(c_a), veh/h	129	0	294	166	356	303	129	0	830	240	0	1000
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.5	0.0	40.1	43.4	36.0	38.8	44.3	0.0	26.0	41.4	0.0	14.4
Incr Delay (d2), s/veh	4.0	0.0	19.7	65.5	4.5	148.2	4.3	0.0	34.3	51.8	0.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	7.1	7.4	6.2	20.5	1.4	0.0	29.8	9.7	0.0	10.2
LnGrp Delay(d),s/veh	48.5	0.0	59.8	108.9	40.5	187.0	48.6	0.0	60.3	93.1	0.0	16.6
LnGrp LOS	D		E	F	D	F	D		F	F		B
Approach Vol, veh/h		260			787			888			790	
Approach Delay, s/veh		58.0			126.8			59.7			39.4	
Approach LOS		E			F			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	48.0	13.0	18.0	9.1	56.0	8.6	22.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	42.0	9.0	16.0	7.0	48.0	7.0	18.0
Max Q Clear Time (g_c+I1), s	14.7	46.0	10.9	13.7	4.5	20.9	4.1	20.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.0	12.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	73.0
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	37	138	64	151	217	356	44	641	132	216	484	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		100	95		95	80		100	100		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	60			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			25			35	
Link Distance (ft)		861			839			811			2260	
Travel Time (s)		16.8			16.3			22.1			44.0	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8			2			
Detector Phase	7	4	4	3	8	1	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	20.0	11.0	20.0	
Total Split (s)	11.0	20.0	20.0	14.0	23.0	18.0	11.0	44.0	44.0	18.0	51.0	
Total Split (%)	11.5%	20.8%	20.8%	14.6%	24.0%	18.8%	11.5%	45.8%	45.8%	18.8%	53.1%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Day St. & Cottonwood Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	37	138	64	151	217	356	44	641	132	216	484	27
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	40	150	70	164	236	387	48	697	143	235	526	29
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	264	224	185	369	544	93	823	699	259	936	52
Arrive On Green	0.05	0.14	0.14	0.10	0.20	0.20	0.05	0.44	0.44	0.15	0.53	0.53
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	1749	96
Grp Volume(v), veh/h	40	150	70	164	236	387	48	697	143	235	0	555
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	0	1846
Q Serve(g_s), s	2.1	7.2	3.8	8.8	11.2	19.0	2.5	32.0	5.3	12.5	0.0	19.2
Cycle Q Clear(g_c), s	2.1	7.2	3.8	8.8	11.2	19.0	2.5	32.0	5.3	12.5	0.0	19.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	85	264	224	185	369	544	93	823	699	259	0	987
V/C Ratio(X)	0.47	0.57	0.31	0.89	0.64	0.71	0.51	0.85	0.20	0.91	0.00	0.56
Avail Cap(c_a), veh/h	129	310	264	185	369	544	129	823	699	259	0	987
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.5	38.5	37.0	42.4	35.4	27.4	44.3	23.9	16.4	40.4	0.0	14.8
Incr Delay (d2), s/veh	4.0	1.9	0.8	36.7	3.7	4.3	4.3	10.5	0.7	32.9	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.8	1.7	6.2	6.1	9.6	1.4	18.9	2.5	8.5	0.0	10.3
LnGrp Delay(d),s/veh	48.5	40.4	37.8	79.1	39.1	31.7	48.6	34.4	17.1	73.2	0.0	17.2
LnGrp LOS	D	D	D	E	D	C	D	C	B	E		B
Approach Vol, veh/h		260			787			888			790	
Approach Delay, s/veh		40.9			43.8			32.4			33.8	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	46.4	14.0	17.6	9.1	55.4	8.6	23.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	40.0	10.0	16.0	7.0	47.0	7.0	19.0
Max Q Clear Time (g_c+I1), s	14.5	34.0	10.8	9.2	4.5	21.2	4.1	21.0
Green Ext Time (p_c), s	0.0	4.0	0.0	2.3	0.0	10.7	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	36.9
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	29	18	9	24	63	7	777	1	23	637	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		861			839			634			1320	
Travel Time (s)		19.6			19.1			17.3			36.0	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	53.8
Intersection LOS	F

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	20	29	18	0	9	24	63	0	7	777	1
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	22	32	20	0	10	26	68	0	8	845	1
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	11.6	11.2	58.6
HCM LOS	B	B	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	1%	41%	0%	27%	0%	3%
Vol Thru, %	99%	59%	0%	73%	0%	95%
Vol Right, %	0%	0%	100%	0%	100%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	785	49	18	33	63	669
LT Vol	7	20	0	9	0	23
Through Vol	777	29	0	24	0	637
RT Vol	1	0	18	0	63	9
Lane Flow Rate	853	53	20	36	68	727
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	1	0.121	0.04	0.08	0.137	1
Departure Headway (Hd)	5.541	8.209	7.306	8.049	7.213	5.481
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	657	436	489	445	497	654
Service Time	3.572	5.967	5.063	5.794	4.958	3.57
HCM Lane V/C Ratio	1.298	0.122	0.041	0.081	0.137	1.112
HCM Control Delay	58.6	12.1	10.4	11.5	11.1	58.6
HCM Lane LOS	F	B	B	B	B	F
HCM 95th-tile Q	15.6	0.4	0.1	0.3	0.5	15.6

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	23	637	9
Peak Hour Factor	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	25	692	10
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	58.6
HCM LOS	F

Lane

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	29	18	9	24	63	7	777	1	23	637	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	100		0	100		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		861			839			634			509	
Travel Time (s)		19.6			19.1			17.3			13.9	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0		20.0	20.0	
Total Split (s)	27.0	27.0	27.0	27.0	27.0	27.0	69.0	69.0		69.0	69.0	
Total Split (%)	28.1%	28.1%	28.1%	28.1%	28.1%	28.1%	71.9%	71.9%		71.9%	71.9%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0			0.0	
Total Lost Time (s)		4.0	4.0		4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	C-Max	C-Max		C-Max	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	

Splits and Phases: 14: Day St. & Bay Av/Bay Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	29	18	9	24	63	7	777	1	23	637	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	22	32	20	10	26	68	8	845	1	25	692	10
Adj No. of Lanes	0	1	1	0	1	1	0	2	0	0	2	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	85	114	67	108	114	46	2979	4	105	2772	40
Arrive On Green	0.07	0.07	0.07	0.07	0.07	0.07	0.84	0.84	0.84	0.84	0.84	0.84
Sat Flow, veh/h	477	1177	1583	270	1489	1583	10	3529	4	76	3283	47
Grp Volume(v), veh/h	54	0	20	36	0	68	446	0	408	368	0	359
Grp Sat Flow(s),veh/h/ln	1655	0	1583	1759	0	1583	1848	0	1694	1720	0	1687
Q Serve(g_s), s	1.0	0.0	1.1	0.0	0.0	4.0	0.0	0.0	4.7	0.0	0.0	4.0
Cycle Q Clear(g_c), s	2.8	0.0	1.1	1.8	0.0	4.0	4.7	0.0	4.7	3.7	0.0	4.0
Prop In Lane	0.41		1.00	0.28		1.00	0.02		0.00	0.07		0.03
Lane Grp Cap(c), veh/h	172	0	114	175	0	114	1599	0	1431	1492	0	1424
V/C Ratio(X)	0.31	0.00	0.17	0.21	0.00	0.59	0.28	0.00	0.29	0.25	0.00	0.25
Avail Cap(c_a), veh/h	437	0	379	457	0	379	1599	0	1431	1492	0	1424
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.6	0.0	41.8	42.1	0.0	43.2	1.5	0.0	1.5	1.4	0.0	1.5
Incr Delay (d2), s/veh	1.0	0.0	0.7	0.6	0.0	4.8	0.4	0.0	0.5	0.4	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.5	0.9	0.0	1.9	2.5	0.0	2.4	2.0	0.0	2.0
LnGrp Delay(d),s/veh	43.6	0.0	42.6	42.7	0.0	48.0	2.0	0.0	2.0	1.8	0.0	1.9
LnGrp LOS	D		D	D		D	A		A	A		A
Approach Vol, veh/h		74			104			854			727	
Approach Delay, s/veh		43.3			46.2			2.0			1.9	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		85.1		10.9		85.1		10.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		65.0		23.0		65.0		23.0
Max Q Clear Time (g_c+I1), s		6.7		4.8		6.0		6.0
Green Ext Time (p_c), s		16.7		0.7		16.7		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	6.3
HCM 2010 LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	296	1226	191	171	1671	125	100	309	109	99	434	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	245		0	220		75	50		50	200		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	100			120			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		861			839			831			716	
Travel Time (s)		13.0			12.7			16.2			19.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		
Detector Phase	5	2		1	6	6	8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (s)	18.0	47.0		17.0	46.0	46.0	32.0	32.0	32.0	32.0	32.0	
Total Split (%)	18.8%	49.0%		17.7%	47.9%	47.9%	33.3%	33.3%	33.3%	33.3%	33.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max		None	C-Max	C-Max	Max	Max	Max	Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 42 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 15: Day St. & Alessandro Bl.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	296	1226	191	171	1671	125	100	309	109	99	434	154
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	315	1304	203	182	1778	133	106	329	116	105	462	164
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	2053	320	215	1548	693	75	543	462	206	383	136
Arrive On Green	0.15	0.46	0.46	0.12	0.44	0.44	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1774	4440	691	1774	3539	1583	796	1863	1583	941	1314	466
Grp Volume(v), veh/h	315	996	511	182	1778	133	106	329	116	105	0	626
Grp Sat Flow(s),veh/h/ln	1774	1695	1741	1774	1770	1583	796	1863	1583	941	0	1780
Q Serve(g_s), s	14.0	21.5	21.5	9.6	42.0	5.0	0.0	14.6	5.4	10.4	0.0	28.0
Cycle Q Clear(g_c), s	14.0	21.5	21.5	9.6	42.0	5.0	28.0	14.6	5.4	25.0	0.0	28.0
Prop In Lane	1.00		0.40	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	259	1567	805	215	1548	693	75	543	462	206	0	519
V/C Ratio(X)	1.22	0.64	0.64	0.85	1.15	0.19	1.41	0.61	0.25	0.51	0.00	1.21
Avail Cap(c_a), veh/h	259	1567	805	240	1548	693	75	543	462	206	0	519
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.0	19.6	19.6	41.3	27.0	16.6	48.0	29.2	26.0	40.0	0.0	34.0
Incr Delay (d2), s/veh	127.7	2.0	3.8	21.9	74.8	0.6	247.6	4.9	1.3	8.7	0.0	109.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.0	10.4	11.1	6.0	36.5	2.3	7.1	8.2	2.5	3.2	0.0	29.5
LnGrp Delay(d),s/veh	168.7	21.6	23.5	63.2	101.8	17.2	295.6	34.2	27.3	48.7	0.0	143.6
LnGrp LOS	F	C	C	E	F	B	F	C	C	D		F
Approach Vol, veh/h		1822			2093			551			731	
Approach Delay, s/veh		47.6			93.0			83.0			130.0	
Approach LOS		D			F			F			F	

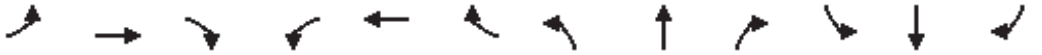
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.6	48.4		32.0	18.0	46.0		32.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	13.0	43.0		28.0	14.0	42.0		28.0
Max Q Clear Time (g_c+I1), s	11.6	23.5		30.0	16.0	44.0		30.0
Green Ext Time (p_c), s	0.1	18.0		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	81.2
HCM 2010 LOS	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	296	1226	191	171	1671	125	100	309	109	99	434	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	245		50	220		75	50		50	200		100
Storage Lanes	2		0	2		0	1		0	0		1
Taper Length (ft)	100			120			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		861			839			831			716	
Travel Time (s)		13.0			12.7			16.2			19.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0		11.0	20.0		20.0	20.0		20.0	20.0	20.0
Total Split (s)	15.0	46.0		13.0	44.0		37.0	37.0		37.0	37.0	37.0
Total Split (%)	15.6%	47.9%		13.5%	45.8%		38.5%	38.5%		38.5%	38.5%	38.5%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		Max	Max		Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 15: Day St. & Alessandro Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	296	1226	191	171	1671	125	100	309	109	99	434	154
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	315	1304	203	182	1778	133	106	329	116	105	462	164
Adj No. of Lanes	2	3	0	2	3	0	1	2	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	382	2034	317	252	2030	151	176	887	307	306	640	544
Arrive On Green	0.11	0.46	0.46	0.07	0.42	0.42	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	3442	4440	691	3442	4829	360	796	2580	894	941	1863	1583
Grp Volume(v), veh/h	315	996	511	182	1247	664	106	224	221	105	462	164
Grp Sat Flow(s),veh/h/ln	1721	1695	1741	1721	1695	1799	796	1770	1705	941	1863	1583
Q Serve(g_s), s	8.6	21.6	21.6	5.0	32.4	32.5	12.2	9.1	9.4	9.1	20.8	7.3
Cycle Q Clear(g_c), s	8.6	21.6	21.6	5.0	32.4	32.5	33.0	9.1	9.4	18.5	20.8	7.3
Prop In Lane	1.00		0.40	1.00		0.20	1.00		0.52	1.00		1.00
Lane Grp Cap(c), veh/h	382	1553	798	252	1425	756	176	608	586	306	640	544
V/C Ratio(X)	0.83	0.64	0.64	0.72	0.88	0.88	0.60	0.37	0.38	0.34	0.72	0.30
Avail Cap(c_a), veh/h	394	1553	798	323	1425	756	176	608	586	306	640	544
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.8	20.0	20.0	43.5	25.5	25.6	42.2	23.7	23.8	30.7	27.5	23.1
Incr Delay (d2), s/veh	13.1	2.0	3.9	5.7	7.8	13.7	14.3	1.7	1.8	3.0	6.9	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	10.5	11.2	2.5	16.6	18.9	3.5	4.7	4.7	2.6	11.9	3.4
LnGrp Delay(d),s/veh	54.8	22.0	23.9	49.2	33.3	39.3	56.4	25.4	25.6	33.8	34.4	24.5
LnGrp LOS	D	C	C	D	C	D	E	C	C	C	C	C
Approach Vol, veh/h		1822			2093			551			731	
Approach Delay, s/veh		28.2			36.6			31.4			32.1	
Approach LOS		C			D			C			C	

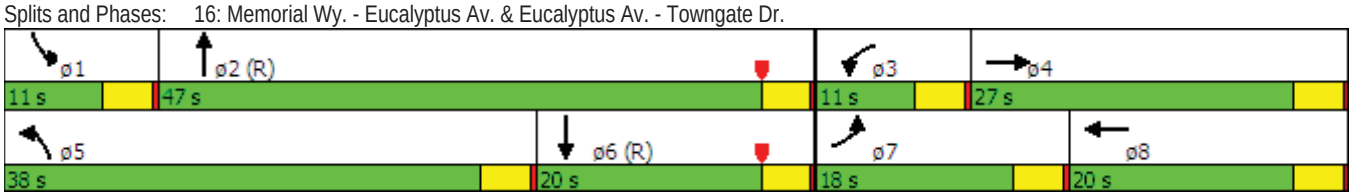
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.0	48.0		37.0	14.6	44.4		37.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.0	42.0		33.0	11.0	40.0		33.0
Max Q Clear Time (g_c+I1), s	7.0	23.6		22.8	10.6	34.5		35.0
Green Ext Time (p_c), s	0.1	16.9		5.3	0.0	5.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	32.5
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	232	402	337	10	539	34	565	174	17	16	89	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		0	150		0	200		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	18.0	27.0		11.0	20.0		38.0	47.0		11.0	20.0	
Total Split (%)	18.8%	28.1%		11.5%	20.8%		39.6%	49.0%		11.5%	20.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	232	402	337	10	539	34	565	174	17	16	89	330
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	252	437	366	11	586	37	614	189	18	17	97	359
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	930	434	33	719	45	628	1681	158	47	330	295
Arrive On Green	0.15	0.27	0.27	0.02	0.15	0.15	0.35	0.51	0.51	0.03	0.19	0.19
Sat Flow, veh/h	1774	3390	1583	1774	4892	307	1774	3270	308	1774	1770	1583
Grp Volume(v), veh/h	252	437	366	11	405	218	614	101	106	17	97	359
Grp Sat Flow(s),veh/h/ln	1774	1695	1583	1774	1695	1809	1774	1770	1808	1774	1770	1583
Q Serve(g_s), s	13.6	10.3	20.9	0.6	11.1	11.2	32.8	2.8	2.9	0.9	4.5	17.9
Cycle Q Clear(g_c), s	13.6	10.3	20.9	0.6	11.1	11.2	32.8	2.8	2.9	0.9	4.5	17.9
Prop In Lane	1.00		1.00	1.00		0.17	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	259	930	434	33	498	266	628	910	930	47	330	295
V/C Ratio(X)	0.97	0.47	0.84	0.33	0.81	0.82	0.98	0.11	0.11	0.36	0.29	1.22
Avail Cap(c_a), veh/h	259	930	434	129	565	301	628	910	930	129	330	295
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.8	29.0	32.9	46.5	39.7	39.7	30.6	12.0	12.0	45.9	33.6	39.1
Incr Delay (d2), s/veh	48.6	0.4	14.0	5.8	8.0	14.9	30.1	0.2	0.2	4.6	2.3	124.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	4.8	10.8	0.3	5.7	6.7	21.3	1.4	1.5	0.5	2.4	18.0
LnGrp Delay(d),s/veh	89.4	29.4	46.9	52.4	47.7	54.6	60.7	12.3	12.3	50.5	35.9	163.2
LnGrp LOS	F	C	D	D	D	D	E	B	B	D	D	F
Approach Vol, veh/h		1055			634			821			473	
Approach Delay, s/veh		49.8			50.1			48.5			133.0	
Approach LOS		D			D			D			F	

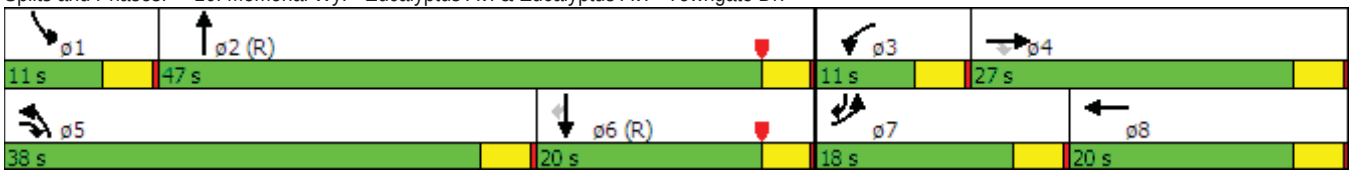
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	53.3	5.8	30.3	38.0	21.9	18.0	18.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	43.0	7.0	23.0	34.0	16.0	14.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	4.9	2.6	22.9	34.8	19.9	15.6	13.2
Green Ext Time (p_c), s	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	62.7
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	232	402	337	10	539	34	565	174	17	16	89	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		0	150		0	200		0	200		0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4	5	3	8		5	2		1	6	7
Permitted Phases			4									6
Detector Phase	7	4	5	3	8		5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	11.0	11.0	20.0		11.0	20.0		11.0	20.0	11.0
Total Split (s)	18.0	27.0	38.0	11.0	20.0		38.0	47.0		11.0	20.0	18.0
Total Split (%)	18.8%	28.1%	39.6%	11.5%	20.8%		39.6%	49.0%		11.5%	20.8%	18.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	232	402	337	10	539	34	565	174	17	16	89	330
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	252	437	366	11	586	37	614	189	18	17	97	359
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	1	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	969	994	33	716	45	628	1682	159	47	348	527
Arrive On Green	0.15	0.27	0.27	0.02	0.15	0.15	0.35	0.51	0.51	0.03	0.19	0.19
Sat Flow, veh/h	1774	3539	1583	1774	4892	307	1774	3270	308	1774	1863	1583
Grp Volume(v), veh/h	252	437	366	11	405	218	614	101	106	17	97	359
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1695	1809	1774	1770	1808	1774	1863	1583
Q Serve(g_s), s	13.6	9.8	10.7	0.6	11.1	11.2	32.8	2.8	2.9	0.9	4.3	17.9
Cycle Q Clear(g_c), s	13.6	9.8	10.7	0.6	11.1	11.2	32.8	2.8	2.9	0.9	4.3	17.9
Prop In Lane	1.00		1.00	1.00		0.17	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	259	969	994	33	496	265	628	910	930	47	348	527
V/C Ratio(X)	0.97	0.45	0.37	0.33	0.82	0.82	0.98	0.11	0.11	0.36	0.28	0.68
Avail Cap(c_a), veh/h	259	969	994	129	565	301	628	910	930	129	348	527
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.8	28.9	8.6	46.5	39.7	39.8	30.6	12.0	12.0	45.9	33.5	27.6
Incr Delay (d2), s/veh	48.6	0.3	0.2	5.8	8.1	15.1	30.1	0.2	0.2	4.6	2.0	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	4.8	4.7	0.3	5.7	6.7	21.3	1.4	1.5	0.5	2.4	9.2
LnGrp Delay(d),s/veh	89.4	29.2	8.9	52.4	47.8	54.9	60.7	12.3	12.3	50.5	35.5	34.6
LnGrp LOS	F	C	A	D	D	D	E	B	B	D	D	C
Approach Vol, veh/h		1055			634			821			473	
Approach Delay, s/veh		36.5			50.3			48.5			35.4	
Approach LOS		D			D			D			D	

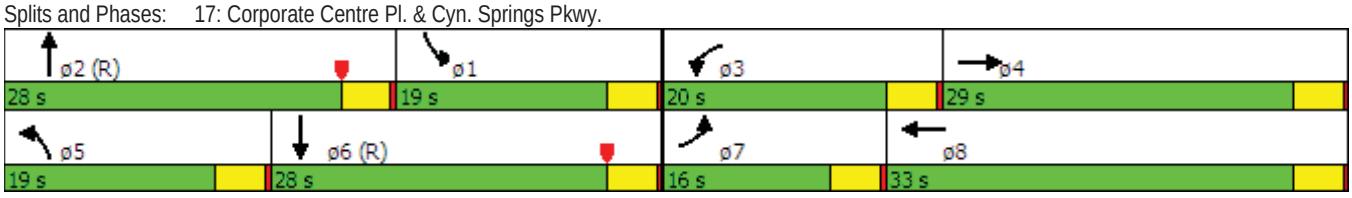
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	53.4	5.8	30.3	38.0	21.9	18.0	18.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	43.0	7.0	23.0	34.0	16.0	14.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	4.9	2.6	12.7	34.8	19.9	15.6	13.2
Green Ext Time (p_c), s	0.0	3.0	0.0	5.5	0.0	0.0	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	42.6
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	218	25	36	308	27	27	27	34	28	13	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	175		0	130		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			90			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		476			1120			987			205	
Travel Time (s)		8.1			19.1			16.8			4.7	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	16.0	29.0		20.0	33.0		19.0	28.0		19.0	28.0	
Total Split (%)	16.7%	30.2%		20.8%	34.4%		19.8%	29.2%		19.8%	29.2%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 14 (15%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 17: Corporate Centre Pl. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	9	218	25	36	308	27	27	27	34	28	13	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	10	237	27	39	335	29	29	29	37	30	14	13
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	494	55	84	651	55	70	442	396	763	570	530
Arrive On Green	0.02	0.11	0.11	0.02	0.04	0.04	0.04	0.25	0.25	0.43	0.64	0.64
Sat Flow, veh/h	1774	4645	517	1774	4774	407	1774	1770	1583	1774	890	827
Grp Volume(v), veh/h	10	171	93	39	236	128	29	29	37	30	0	27
Grp Sat Flow(s),veh/h/ln	1774	1695	1772	1774	1695	1791	1774	1770	1583	1774	0	1717
Q Serve(g_s), s	0.5	4.6	4.7	2.1	6.5	6.7	1.5	1.2	1.7	0.9	0.0	0.6
Cycle Q Clear(g_c), s	0.5	4.6	4.7	2.1	6.5	6.7	1.5	1.2	1.7	0.9	0.0	0.6
Prop In Lane	1.00		0.29	1.00		0.23	1.00		1.00	1.00		0.48
Lane Grp Cap(c), veh/h	30	360	188	84	462	244	70	442	396	763	0	1100
V/C Ratio(X)	0.33	0.48	0.49	0.47	0.51	0.52	0.42	0.07	0.09	0.04	0.00	0.02
Avail Cap(c_a), veh/h	222	883	461	296	1024	541	277	442	396	763	0	1100
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.96	0.96	0.96	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	46.6	40.4	40.5	46.1	42.7	42.8	45.0	27.4	27.6	15.9	0.0	6.3
Incr Delay (d2), s/veh	6.2	1.0	2.0	3.9	0.8	1.7	3.9	0.3	0.5	0.0	0.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.2	2.4	1.1	3.1	3.4	0.8	0.6	0.8	0.5	0.0	0.3
LnGrp Delay(d),s/veh	52.8	41.4	42.4	49.9	43.6	44.5	49.0	27.7	28.1	15.9	0.0	6.3
LnGrp LOS	D	D	D	D	D	D	D	C	C	B		A
Approach Vol, veh/h		274			403			95			57	
Approach Delay, s/veh		42.1			44.5			34.4			11.4	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	45.3	28.0	8.5	14.2	7.8	65.5	5.6	17.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	24.0	16.0	25.0	15.0	24.0	12.0	29.0
Max Q Clear Time (g_c+I1), s	2.9	3.7	4.1	6.7	3.5	2.6	2.5	8.7
Green Ext Time (p_c), s	0.1	0.2	0.0	3.5	0.0	0.2	0.0	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	40.3
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	70	4	79	104	43	16	51	29	15	27	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	170		0	100		0	130		0	135		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			45			60			60		
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		474			710			623			987	
Travel Time (s)		8.1			12.1			10.6			16.8	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	12	70	4	0	79	104	43	0	16	51	29
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	13	76	4	0	86	113	47	0	17	55	32
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	3
HCM Control Delay	8.7	8.8	8.6
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	37%	0%	100%	85%	0%	100%	45%	0%	100%
Vol Right, %	0%	0%	63%	0%	0%	15%	0%	0%	55%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	16	34	46	12	47	27	79	69	78	15	18
LT Vol	16	0	0	12	0	0	79	0	0	15	0
Through Vol	0	34	17	0	47	23	0	69	35	0	18
RT Vol	0	0	29	0	0	4	0	0	43	0	0
Lane Flow Rate	17	37	50	13	51	30	86	75	84	16	20
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.029	0.057	0.072	0.022	0.078	0.045	0.137	0.11	0.114	0.028	0.031
Departure Headway (Hd)	6.099	5.599	5.157	6.031	5.531	5.428	5.754	5.254	4.866	6.133	5.633
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	585	637	691	591	645	657	622	681	734	582	633
Service Time	3.856	3.356	2.915	3.789	3.289	3.186	3.501	3.001	2.613	3.892	3.392
HCM Lane V/C Ratio	0.029	0.058	0.072	0.022	0.079	0.046	0.138	0.11	0.114	0.027	0.032
HCM Control Delay	9	8.7	8.3	8.9	8.8	8.4	9.4	8.7	8.2	9.1	8.6
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.2	0.1	0.3	0.1	0.5	0.4	0.4	0.1	0.1

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	15	27	39
Peak Hour Factor	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	16	29	42
Number of Lanes	0	1	2	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	8.5
HCM LOS	A

Lane	SBLn3

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	87	0	0	110	3	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	40			40	30	
Link Distance (ft)	135			597	203	
Travel Time (s)	2.3			10.2	4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	87	0	0	110	3	9
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	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	95	0	0	120	3	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	95	0	155	47
Stage 1	-	-	-	-	95	-
Stage 2	-	-	-	-	60	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1497	-	821	1012
Stage 1	-	-	-	-	918	-
Stage 2	-	-	-	-	955	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1497	-	821	1012
Mov Cap-2 Maneuver	-	-	-	-	801	-
Stage 1	-	-	-	-	918	-
Stage 2	-	-	-	-	955	-

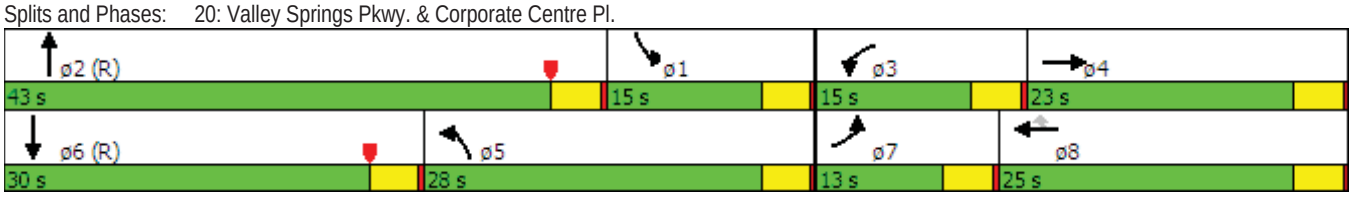
Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	801	1012	-	-	1497	-
HCM Lane V/C Ratio	0.004	0.01	-	-	-	-
HCM Control Delay (s)	9.5	8.6	-	-	0	-
HCM Lane LOS	A	A	-	-	A	-
HCM 95th %tile Q(veh)	0	0	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	12	37	34	69	5	131	399	48	29	356	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		70	140		50	150		0	120		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			40			40			40	
Link Distance (ft)		327			603			402			804	
Travel Time (s)		7.4			10.3			6.9			13.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	13.0	23.0		15.0	25.0	25.0	28.0	43.0		15.0	30.0	
Total Split (%)	13.5%	24.0%		15.6%	26.0%	26.0%	29.2%	44.8%		15.6%	31.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 15 (16%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Valley Springs Pkwy. & Corporate Centre Pl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	9	12	37	34	69	5	131	399	48	29	356	22
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	10	13	40	37	74	5	141	429	52	31	383	24
Adj No. of Lanes	1	1	0	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.93	0.93	0.93	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	2	2	2	2	2	2	2
Cap, veh/h	30	29	88	81	354	158	790	1872	223	550	1326	82
Arrive On Green	0.02	0.07	0.07	0.05	0.10	0.10	0.89	0.81	0.81	0.31	0.27	0.27
Sat Flow, veh/h	1774	403	1241	1774	3539	1583	1774	4607	549	1774	4896	304
Grp Volume(v), veh/h	10	0	53	37	74	5	141	314	167	31	264	143
Grp Sat Flow(s),veh/h/ln	1774	0	1644	1774	1770	1583	1774	1695	1766	1774	1695	1809
Q Serve(g_s), s	0.5	0.0	3.0	2.0	1.8	0.2	1.0	2.0	2.1	1.2	5.9	6.0
Cycle Q Clear(g_c), s	0.5	0.0	3.0	2.0	1.8	0.2	1.0	2.0	2.1	1.2	5.9	6.0
Prop In Lane	1.00		0.75	1.00		1.00	1.00		0.31	1.00		0.17
Lane Grp Cap(c), veh/h	30	0	117	81	354	158	790	1377	717	550	918	490
V/C Ratio(X)	0.33	0.00	0.45	0.46	0.21	0.03	0.18	0.23	0.23	0.06	0.29	0.29
Avail Cap(c_a), veh/h	166	0	325	203	774	346	790	1377	717	550	918	490
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	0.0	42.8	44.6	39.7	12.4	3.0	5.5	5.5	23.3	27.7	27.7
Incr Delay (d2), s/veh	6.2	0.0	2.7	4.0	0.3	0.1	0.1	0.4	0.8	0.0	0.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	1.4	1.0	0.9	0.1	0.5	0.9	1.1	0.6	2.9	3.2
LnGrp Delay(d),s/veh	52.8	0.0	45.5	48.6	40.0	12.4	3.1	5.9	6.3	23.3	28.5	29.2
LnGrp LOS	D		D	D	D	B	A	A	A	C	C	C
Approach Vol, veh/h		63			116			622			438	
Approach Delay, s/veh		46.7			41.6			5.4			28.3	
Approach LOS		D			D			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	33.8	43.0	8.4	10.8	46.8	30.0	5.6	13.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	39.0	11.0	19.0	24.0	26.0	9.0	21.0
Max Q Clear Time (g_c+I1), s	3.2	4.1	4.0	5.0	3.0	8.0	2.5	3.8
Green Ext Time (p_c), s	0.3	3.1	0.0	0.5	0.4	2.2	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	19.0
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	0	15	14	0	4	22	571	7	2	413	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	25		0	75		50
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	60			60			10			80		
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		252			253			418			402	
Travel Time (s)		5.7			5.8			7.1			6.9	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	0	15	14	0	4	22	571	7	2	413	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	0	16	15	0	4	24	621	8	2	449	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	756	1136	231	856	1138	314	462	0	0	628	0	0
Stage 1	460	460	-	672	672	-	-	-	-	-	-	-
Stage 2	296	676	-	184	466	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	354	201	657	310	200	582	706	-	-	589	-	-
Stage 1	466	564	-	335	453	-	-	-	-	-	-	-
Stage 2	631	451	-	735	561	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	337	190	657	290	189	582	706	-	-	589	-	-
Mov Cap-2 Maneuver	337	190	-	290	189	-	-	-	-	-	-	-
Stage 1	442	562	-	318	429	-	-	-	-	-	-	-
Stage 2	594	428	-	714	559	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.6	16.7	0.6	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	706	-	-	567	326	589	-	-
HCM Lane V/C Ratio	0.034	-	-	0.035	0.06	0.004	-	-
HCM Control Delay (s)	10.3	0.2	-	11.6	16.7	11.1	-	-
HCM Lane LOS	B	A	-	B	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.2	0	-	-

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (vph)	174	48	0	552	418	63	379
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	180		0	115	
Storage Lanes	1	1	1		0	1	
Taper Length (ft)	60		100			120	
Right Turn on Red		Yes			Yes		
Link Speed (mph)	40			40			40
Link Distance (ft)	609			576			418
Travel Time (s)	10.4			9.8			7.1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)							
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	3		5	2		1	6
Permitted Phases		8					
Detector Phase	3	8	5	2		1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	11.0	20.0	11.0	20.0		11.0	20.0
Total Split (s)	30.0	30.0	11.0	47.0		19.0	55.0
Total Split (%)	31.3%	31.3%	11.5%	49.0%		19.8%	57.3%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead	Lag		Lead	Lag
Lead-Lag Optimize?			Yes	Yes		Yes	Yes
Recall Mode	None	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 57 (59%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 22: Valley Springs Pkwy. & Gateway Dr.

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	174	48	0	552	418	63	379
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1900	1863	1863
Adj Flow Rate, veh/h	183	51		581	440	66	399
Adj No. of Lanes	1	1		3	0	1	3
Peak Hour Factor	0.95	0.95		0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	225	201		2332	1089	107	4017
Arrive On Green	0.13	0.13		0.23	0.23	0.02	0.26
Sat Flow, veh/h	1774	1583		3558	1583	1774	5253
Grp Volume(v), veh/h	183	51		581	440	66	399
Grp Sat Flow(s),veh/h/ln	1774	1583		1695	1583	1774	1695
Q Serve(g_s), s	9.6	2.8		13.5	22.7	3.5	5.7
Cycle Q Clear(g_c), s	9.6	2.8		13.5	22.7	3.5	5.7
Prop In Lane	1.00	1.00			1.00	1.00	
Lane Grp Cap(c), veh/h	225	201		2332	1089	107	4017
V/C Ratio(X)	0.81	0.25		0.25	0.40	0.62	0.10
Avail Cap(c_a), veh/h	480	429		2332	1089	277	4017
HCM Platoon Ratio	1.00	1.00		0.33	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00		0.92	0.92	1.00	1.00
Uniform Delay (d), s/veh	40.8	37.8		16.8	20.4	45.9	9.6
Incr Delay (d2), s/veh	7.0	0.7		0.2	1.0	5.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	1.3		6.4	10.3	1.9	2.7
LnGrp Delay(d),s/veh	47.8	38.5		17.0	21.4	51.6	9.6
LnGrp LOS	D	D		B	C	D	A
Approach Vol, veh/h	234			1021			465
Approach Delay, s/veh	45.8			18.9			15.6
Approach LOS	D			B			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.8	70.0				79.8		16.2
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	15.0	43.0				51.0		26.0
Max Q Clear Time (g_c+I1), s	5.5	24.7				7.7		11.6
Green Ext Time (p_c), s	0.1	8.9				12.5		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	21.7
HCM 2010 LOS	C

Notes

User approved ignoring U-Turning movement.

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (vph)	108	14	0	955	356	45	507
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	195		100	150	
Storage Lanes	1	1	1		0	1	
Taper Length (ft)	60		100			80	
Right Turn on Red		Yes			Yes		
Link Speed (mph)	30			40			40
Link Distance (ft)	400			560			576
Travel Time (s)	9.1			9.5			9.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)							
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	8		5	2		1	6
Permitted Phases		8					
Detector Phase	8	8	5	2		1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	20.0	20.0	11.0	20.0		11.0	20.0
Total Split (s)	26.0	26.0	11.0	55.0		15.0	59.0
Total Split (%)	27.1%	27.1%	11.5%	57.3%		15.6%	61.5%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead	Lag		Lead	Lag
Lead-Lag Optimize?			Yes	Yes		Yes	Yes
Recall Mode	None	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 45 (47%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 23: Valley Springs Pkwy. & Dwy. 5

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	108	14	0	955	356	45	507
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1900	1863	1863
Adj Flow Rate, veh/h	117	15		1038	387	49	551
Adj No. of Lanes	1	1		3	0	1	3
Peak Hour Factor	0.92	0.92		0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	152	135		2688	1002	94	4227
Arrive On Green	0.09	0.09		0.74	0.74	0.11	1.00
Sat Flow, veh/h	1774	1583		3819	1361	1774	5253
Grp Volume(v), veh/h	117	15		964	461	49	551
Grp Sat Flow(s),veh/h/ln	1774	1583		1695	1623	1774	1695
Q Serve(g_s), s	6.2	0.8		10.1	10.1	2.5	0.0
Cycle Q Clear(g_c), s	6.2	0.8		10.1	10.1	2.5	0.0
Prop In Lane	1.00	1.00			0.84	1.00	
Lane Grp Cap(c), veh/h	152	135		2496	1195	94	4227
V/C Ratio(X)	0.77	0.11		0.39	0.39	0.52	0.13
Avail Cap(c_a), veh/h	407	363		2496	1195	203	4227
HCM Platoon Ratio	1.00	1.00		1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00		0.34	0.34	0.97	0.97
Uniform Delay (d), s/veh	43.0	40.5		4.7	4.7	41.7	0.0
Incr Delay (d2), s/veh	8.0	0.4		0.2	0.3	4.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.4		4.7	4.6	1.3	0.0
LnGrp Delay(d),s/veh	51.0	40.9		4.8	5.0	46.0	0.1
LnGrp LOS	D	D		A	A	D	A
Approach Vol, veh/h	132			1425			600
Approach Delay, s/veh	49.8			4.9			3.8
Approach LOS	D			A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.1	74.7				83.8		12.2
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	11.0	51.0				55.0		22.0
Max Q Clear Time (g_c+I1), s	4.5	12.1				2.0		8.2
Green Ext Time (p_c), s	0.0	19.3				21.9		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	7.3
HCM 2010 LOS	A

Notes

User approved ignoring U-Turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	349	7	5	225	13	2	1	2	12	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		609			244			257			287	
Travel Time (s)		10.4			4.2			5.8			6.5	
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
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	13	349	7	5	225	13	2	1	2	12	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	379	8	5	245	14	2	1	2	13	1	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	259	0	0	387	0	0	545	681	193	481	678	129
Stage 1	-	-	-	-	-	-	411	411	-	263	263	-
Stage 2	-	-	-	-	-	-	134	270	-	218	415	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1303	-	-	1168	-	-	421	371	816	468	373	897
Stage 1	-	-	-	-	-	-	589	593	-	719	689	-
Stage 2	-	-	-	-	-	-	855	685	-	764	591	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1303	-	-	1168	-	-	415	365	816	460	367	897
Mov Cap-2 Maneuver	-	-	-	-	-	-	415	365	-	460	367	-
Stage 1	-	-	-	-	-	-	583	587	-	711	686	-
Stage 2	-	-	-	-	-	-	850	682	-	752	585	-

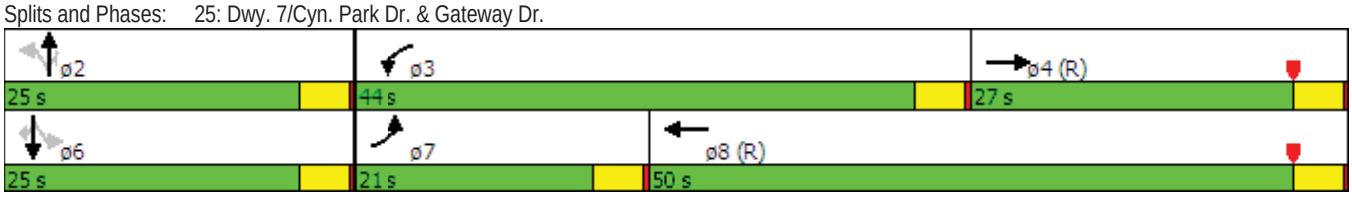
Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.2	12.3	13.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	500	1303	-	-	1168	-	-	451
HCM Lane V/C Ratio	0.011	0.011	-	-	0.005	-	-	0.031
HCM Control Delay (s)	12.3	7.8	-	-	8.1	-	-	13.2
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	77	190	18	169	295	30	5	12	51	24	36	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	150		0	100		0	150		0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		428			394			265			189	
Travel Time (s)		7.3			6.7			6.0			3.2	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0		11.0	20.0		20.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	21.0	27.0		44.0	50.0		25.0	25.0	25.0	25.0	25.0	25.0
Total Split (%)	21.9%	28.1%		45.8%	52.1%		26.0%	26.0%	26.0%	26.0%	26.0%	26.0%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		Max	Max	Max	Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 25: Dwy. 7/Cyn. Park Dr. & Gateway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	77	190	18	169	295	30	5	12	51	24	36	46
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	80	198	19	176	307	31	5	12	53	25	38	48
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	1747	166	215	1923	193	339	407	346	359	407	346
Arrive On Green	0.06	0.53	0.53	0.12	0.59	0.59	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1774	3267	310	1774	3249	326	1306	1863	1583	1331	1863	1583
Grp Volume(v), veh/h	80	106	111	176	166	172	5	12	53	25	38	48
Grp Sat Flow(s),veh/h/ln	1774	1770	1808	1774	1770	1805	1306	1863	1583	1331	1863	1583
Q Serve(g_s), s	4.2	2.9	2.9	9.3	4.1	4.1	0.3	0.5	2.6	1.4	1.6	2.3
Cycle Q Clear(g_c), s	4.2	2.9	2.9	9.3	4.1	4.1	1.9	0.5	2.6	1.9	1.6	2.3
Prop In Lane	1.00		0.17	1.00		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	114	947	967	215	1048	1069	339	407	346	359	407	346
V/C Ratio(X)	0.70	0.11	0.11	0.82	0.16	0.16	0.01	0.03	0.15	0.07	0.09	0.14
Avail Cap(c_a), veh/h	314	947	967	739	1048	1069	339	407	346	359	407	346
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.0	11.0	11.1	41.1	8.8	8.8	30.6	29.5	30.3	30.2	29.9	30.2
Incr Delay (d2), s/veh	7.6	0.2	0.2	7.4	0.3	0.3	0.1	0.1	0.9	0.4	0.5	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	1.5	1.5	5.0	2.1	2.1	0.1	0.3	1.2	0.6	0.9	1.1
LnGrp Delay(d),s/veh	51.6	11.3	11.3	48.6	9.1	9.2	30.7	29.6	31.2	30.6	30.4	31.0
LnGrp LOS	D	B	B	D	A	A	C	C	C	C	C	C
Approach Vol, veh/h		297			514			70			111	
Approach Delay, s/veh		22.2			22.6			30.9			30.7	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		25.0	15.7	55.3		25.0	10.2	60.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		21.0	40.0	23.0		21.0	17.0	46.0
Max Q Clear Time (g_c+I1), s		4.6	11.3	4.9		4.3	6.2	6.1
Green Ext Time (p_c), s		0.5	0.5	2.8		0.5	0.1	3.2

Intersection Summary	
HCM 2010 Ctrl Delay	24.0
HCM 2010 LOS	C

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	1	232	510	1	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	25			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	0				60	
Link Speed (mph)		40	40		30	
Link Distance (ft)		394	226		243	
Travel Time (s)		6.7	3.9		5.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	1	232	510	1	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	25	-	-	-	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	1	252	554	1	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	555	0	-	0	683	278
Stage 1	-	-	-	-	555	-
Stage 2	-	-	-	-	128	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1011	-	-	-	383	719
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	884	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1011	-	-	-	383	719
Mov Cap-2 Maneuver	-	-	-	-	458	-
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	883	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1011	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	-	-
HCM Control Delay (s)	8.6	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	211	19	102	509	13	1	0	27	7	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	25		0	25		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	1			0			60			60		
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		226			318			265			243	
Travel Time (s)		3.9			5.4			6.0			5.5	
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
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	211	19	102	509	13	1	0	27	7	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	229	21	111	553	14	1	0	29	8	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	567	0	0	250	0	0	744	1035	125	903	1039	284
Stage 1	-	-	-	-	-	-	246	246	-	782	782	-
Stage 2	-	-	-	-	-	-	498	789	-	121	257	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1001	-	-	1313	-	-	303	230	902	232	229	713
Stage 1	-	-	-	-	-	-	736	701	-	353	403	-
Stage 2	-	-	-	-	-	-	523	400	-	870	694	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1001	-	-	1313	-	-	282	210	902	209	209	713
Mov Cap-2 Maneuver	-	-	-	-	-	-	282	210	-	209	209	-
Stage 1	-	-	-	-	-	-	734	699	-	352	369	-
Stage 2	-	-	-	-	-	-	478	366	-	839	692	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.3	9.5	21.3
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	836	1001	-	-	1313	-	-	229
HCM Lane V/C Ratio	0.036	0.003	-	-	0.084	-	-	0.038
HCM Control Delay (s)	9.5	8.6	-	-	8	-	-	21.3
HCM Lane LOS	A	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0.3	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	69	39	88	201	35	18	20	39	15	35	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		50	110		100	100		50	0		50
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		710			938			284			207	
Travel Time (s)		12.1			16.0			4.8			4.7	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	5	69	39	0	88	201	35	0	18	20	39
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	5	75	42	0	96	218	38	0	20	22	42
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	2	3
HCM Control Delay	8.7	9.2	8.8
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	30%	0%
Vol Thru, %	0%	100%	15%	0%	100%	37%	0%	100%	66%	70%	0%
Vol Right, %	0%	0%	85%	0%	0%	63%	0%	0%	34%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	13	46	5	46	62	88	134	102	50	5
LT Vol	18	0	0	5	0	0	88	0	0	15	0
Through Vol	0	13	7	0	46	23	0	134	67	35	0
RT Vol	0	0	39	0	0	39	0	0	35	0	5
Lane Flow Rate	20	14	50	5	50	67	96	146	111	54	5
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.035	0.024	0.073	0.009	0.078	0.097	0.152	0.211	0.153	0.091	0.008
Departure Headway (Hd)	6.359	5.86	5.262	6.14	5.639	5.197	5.715	5.214	4.973	6.044	5.194
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	560	607	676	580	631	685	626	685	717	589	683
Service Time	4.131	3.631	3.034	3.911	3.41	2.968	3.472	2.971	2.73	3.819	2.969
HCM Lane V/C Ratio	0.036	0.023	0.074	0.009	0.079	0.098	0.153	0.213	0.155	0.092	0.007
HCM Control Delay	9.4	8.8	8.5	9	8.9	8.5	9.5	9.4	8.6	9.4	8
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0.2	0	0.3	0.3	0.5	0.8	0.5	0.3	0

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	15	35	5
Peak Hour Factor	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	16	38	5
Number of Lanes	0	0	1	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	9.3
HCM LOS	A

Lane

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	1	2	117	0	0	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		40			40
Link Distance (ft)	223		216			336
Travel Time (s)	5.1		3.7			5.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	1	2	117	0	0	108
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	1	2	127	0	0	117

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	186	64	0	0	127	0
Stage 1	127	-	-	-	-	-
Stage 2	59	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	786	987	-	-	1457	-
Stage 1	885	-	-	-	-	-
Stage 2	956	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	786	987	-	-	1457	-
Mov Cap-2 Maneuver	775	-	-	-	-	-
Stage 1	885	-	-	-	-	-
Stage 2	956	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	905	1457	-
HCM Lane V/C Ratio	-	-	0.004	-	-
HCM Control Delay (s)	-	-	9	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	1	4	117	2	8	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	25	
Storage Lanes	1	0		0	1	
Taper Length (ft)	60				25	
Link Speed (mph)	30		40			40
Link Distance (ft)	223		336			284
Travel Time (s)	5.1		5.7			4.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	1	4	117	2	8	107
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	-	-	-	25	-
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	1	4	127	2	9	116

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	204	65	0	0	129	0
Stage 1	128	-	-	-	-	-
Stage 2	76	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	766	986	-	-	1454	-
Stage 1	884	-	-	-	-	-
Stage 2	938	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	761	986	-	-	1454	-
Mov Cap-2 Maneuver	760	-	-	-	-	-
Stage 1	884	-	-	-	-	-
Stage 2	932	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	0.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	931	1454	-
HCM Lane V/C Ratio	-	-	0.006	0.006	-
HCM Control Delay (s)	-	-	8.9	7.5	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	0	0	117	2	3	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	25	
Storage Lanes	1	0		0	1	
Taper Length (ft)	60				25	
Link Speed (mph)	30		40			40
Link Distance (ft)	219		189			216
Travel Time (s)	5.0		3.2			3.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	0	117	2	3	106
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	-	-	-	25	-
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	127	2	3	115

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	192	65	0	0	129	0
Stage 1	128	-	-	-	-	-
Stage 2	64	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	779	986	-	-	1454	-
Stage 1	884	-	-	-	-	-
Stage 2	951	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	777	986	-	-	1454	-
Mov Cap-2 Maneuver	769	-	-	-	-	-
Stage 1	884	-	-	-	-	-
Stage 2	949	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1454	-
HCM Lane V/C Ratio	-	-	-	0.002	-
HCM Control Delay (s)	-	-	0	7.5	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	247	116	137	209	34	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	50		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			60		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	244			428	257	
Travel Time (s)	4.2			7.3	5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	247	116	137	209	34	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	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	268	126	149	227	37	45

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	395	0	743	197
Stage 1	-	-	-	-	332	-
Stage 2	-	-	-	-	411	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1160	-	351	811
Stage 1	-	-	-	-	699	-
Stage 2	-	-	-	-	638	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1160	-	306	811
Mov Cap-2 Maneuver	-	-	-	-	419	-
Stage 1	-	-	-	-	699	-
Stage 2	-	-	-	-	556	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.4	12.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	569	-	-	1160	-
HCM Lane V/C Ratio	0.143	-	-	0.128	-
HCM Control Delay (s)	12.4	-	-	8.6	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	0.4	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	87	2	5	108	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	25		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	493			135	181	
Travel Time (s)	8.4			2.3	4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	87	2	5	108	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	-	-	25	-	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	95	2	5	117	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	97	0	166	48
Stage 1	-	-	-	-	96	-
Stage 2	-	-	-	-	70	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1494	-	808	1011
Stage 1	-	-	-	-	917	-
Stage 2	-	-	-	-	945	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1494	-	805	1011
Mov Cap-2 Maneuver	-	-	-	-	791	-
Stage 1	-	-	-	-	917	-
Stage 2	-	-	-	-	942	-

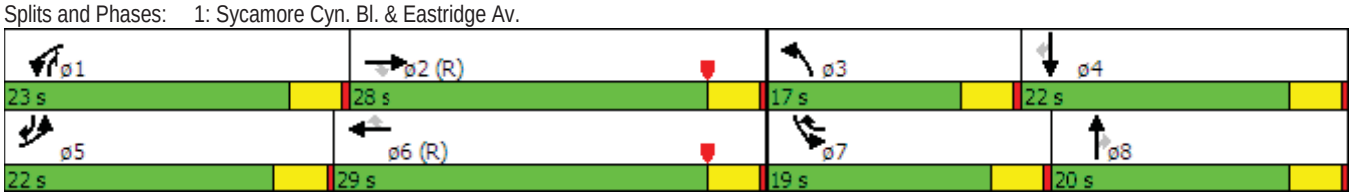
Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1494	-
HCM Lane V/C Ratio	-	-	-	0.004	-
HCM Control Delay (s)	0	-	-	7.4	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	441	890	424	513	564	308	268	288	147	385	410	256
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	240		150	310		200	360		320	275		110
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	120			120			120			200		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			45			45	
Link Distance (ft)		910			577			817			952	
Travel Time (s)		15.5			9.8			12.4			14.4	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	11.0	11.0	20.0	11.0
Total Split (s)	22.0	28.0	28.0	23.0	29.0	19.0	17.0	20.0	23.0	19.0	22.0	22.0
Total Split (%)	24.4%	31.1%	31.1%	25.6%	32.2%	21.1%	18.9%	22.2%	25.6%	21.1%	24.4%	24.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	Max	None	None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 84 (93%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Sycamore Cyn. Bl. & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	441	890	424	513	564	308	268	288	147	385	410	256
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	479	967	0	558	613	335	291	313	160	418	446	278
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	2	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	567	1592	496	643	1185	759	373	629	577	498	758	600
Arrive On Green	0.16	0.31	0.00	0.19	0.33	0.33	0.11	0.18	0.18	0.14	0.21	0.21
Sat Flow, veh/h	3442	5085	1583	3442	3539	1583	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	479	967	0	558	613	335	291	313	160	418	446	278
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1770	1583	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	12.2	14.5	0.0	14.2	12.5	12.6	7.4	7.2	6.4	10.6	10.2	11.9
Cycle Q Clear(g_c), s	12.2	14.5	0.0	14.2	12.5	12.6	7.4	7.2	6.4	10.6	10.2	11.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	567	1592	496	643	1185	759	373	629	577	498	758	600
V/C Ratio(X)	0.84	0.61	0.00	0.87	0.52	0.44	0.78	0.50	0.28	0.84	0.59	0.46
Avail Cap(c_a), veh/h	688	1592	496	727	1185	759	497	629	577	574	758	600
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.5	26.2	0.0	35.5	24.1	15.5	39.1	33.4	20.2	37.5	31.8	21.0
Incr Delay (d2), s/veh	8.1	1.7	0.0	10.0	1.6	1.9	5.7	2.8	1.2	9.6	3.3	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	7.1	0.0	7.6	6.4	5.9	3.8	3.8	3.0	5.7	5.3	5.6
LnGrp Delay(d),s/veh	44.5	28.0	0.0	45.5	25.7	17.3	44.8	36.2	21.4	47.1	35.1	23.6
LnGrp LOS	D	C		D	C	B	D	D	C	D	D	C
Approach Vol, veh/h		1446			1506			764			1142	
Approach Delay, s/veh		33.4			31.2			36.4			36.7	
Approach LOS		C			C			D			D	

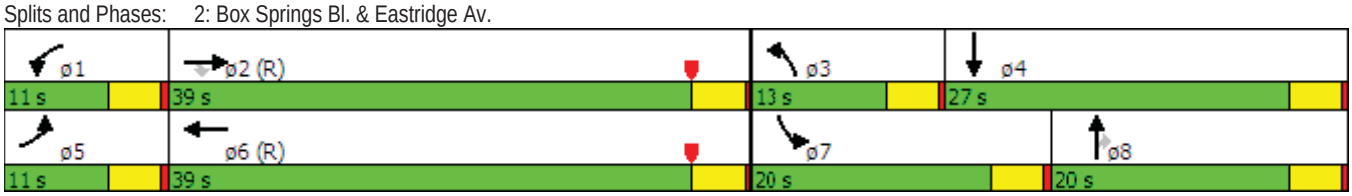
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.8	32.2	13.7	23.3	18.8	34.1	17.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	24.0	13.0	18.0	18.0	25.0	15.0	16.0
Max Q Clear Time (g_c+I1), s	16.2	16.5	9.4	13.9	14.2	14.6	12.6	9.2
Green Ext Time (p_c), s	0.6	5.6	0.3	2.3	0.7	7.4	0.4	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	34.0
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	1404	3	45	1346	219	20	96	40	323	141	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		80	150		0	75		160	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		760			700			315			411	
Travel Time (s)		13.0			11.9			7.2			9.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0		11.0	20.0	20.0	11.0	20.0	
Total Split (s)	11.0	39.0	39.0	11.0	39.0		13.0	20.0	20.0	20.0	27.0	
Total Split (%)	12.2%	43.3%	43.3%	12.2%	43.3%		14.4%	22.2%	22.2%	22.2%	30.0%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Box Springs Bl. & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	13	1404	3	45	1346	219	20	96	40	323	141	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	13	1447	3	46	1388	226	21	99	41	333	145	41
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	38	1464	655	94	1359	219	56	331	281	315	889	244
Arrive On Green	0.02	0.41	0.41	0.11	0.89	0.89	0.03	0.18	0.18	0.18	0.32	0.32
Sat Flow, veh/h	1774	3539	1583	1774	3054	491	1774	1863	1583	1774	2746	753
Grp Volume(v), veh/h	13	1447	3	46	797	817	21	99	41	333	92	94
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1776	1774	1863	1583	1774	1770	1730
Q Serve(g_s), s	0.7	36.5	0.1	2.2	40.1	40.1	1.0	4.2	2.0	16.0	3.3	3.5
Cycle Q Clear(g_c), s	0.7	36.5	0.1	2.2	40.1	40.1	1.0	4.2	2.0	16.0	3.3	3.5
Prop In Lane	1.00		1.00	1.00		0.28	1.00		1.00	1.00		0.44
Lane Grp Cap(c), veh/h	38	1464	655	94	788	790	56	331	281	315	573	560
V/C Ratio(X)	0.34	0.99	0.00	0.49	1.01	1.03	0.37	0.30	0.15	1.06	0.16	0.17
Avail Cap(c_a), veh/h	138	1464	655	138	788	790	177	331	281	315	573	560
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.4	26.2	15.5	39.1	4.9	4.9	42.7	32.1	31.2	37.0	21.7	21.8
Incr Delay (d2), s/veh	5.1	21.0	0.0	3.9	35.1	40.8	4.0	2.3	1.1	66.1	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	22.0	0.0	1.2	23.4	25.2	0.6	2.4	0.9	13.6	1.7	1.8
LnGrp Delay(d),s/veh	48.5	47.2	15.5	42.9	40.1	45.8	46.7	34.4	32.3	103.1	22.3	22.4
LnGrp LOS	D	D	B	D	F	F	D	C	C	F	C	C
Approach Vol, veh/h		1463			1660			161			519	
Approach Delay, s/veh		47.1			43.0			35.5			74.2	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	41.2	6.9	33.1	5.9	44.1	20.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	35.0	9.0	23.0	7.0	35.0	16.0	16.0
Max Q Clear Time (g_c+I1), s	4.2	38.5	3.0	5.5	2.7	42.1	18.0	6.2
Green Ext Time (p_c), s	0.0	0.0	0.0	1.6	0.0	0.0	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	48.5
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	188	1399	0	952	1109	0	162	0	0	793	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	275		0	0		0	0		0
Storage Lanes	0		0	0		0	2		0	2		0
Taper Length (ft)	90			190			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		241			359			784			672	
Travel Time (s)		4.1			6.1			15.3			13.1	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot			Prot		
Protected Phases	5	2		1	6		3			7		
Permitted Phases												
Detector Phase	5	2		1	6		3			7		
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0			7.0		
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0			11.0		
Total Split (s)	22.0	36.0		28.0	42.0		26.0			26.0		
Total Split (%)	24.4%	40.0%		31.1%	46.7%		28.9%			28.9%		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5			3.5		
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5			0.5		
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0			0.0		
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0			4.0		
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		None			None		

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 3 (3%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: I-215 SB/NB Ramps & Eastridge Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	188	1399	0	952	1109	0	162	0	0	793	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0	1863	0	0	1863	0	0
Adj Flow Rate, veh/h	194	1442	0	981	1143	0	167	0	0	818	0	0
Adj No. of Lanes	1	2	0	2	2	0	2	0	0	2	0	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0	2	2	0	2	0	0	2	0	0
Cap, veh/h	228	1258	0	918	1748	0	841	0	0	841	0	0
Arrive On Green	0.26	0.71	0.00	0.53	0.99	0.00	0.24	0.00	0.00	0.24	0.00	0.00
Sat Flow, veh/h	1774	3632	0	3442	3632	0	3442	167		3442	818	
Grp Volume(v), veh/h	194	1442	0	981	1143	0	167	27.1		818	58.0	
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1721	1770	0	1721	C		1721	E	
Q Serve(g_s), s	9.4	32.0	0.0	24.0	1.0	0.0	3.5			21.2		
Cycle Q Clear(g_c), s	9.4	32.0	0.0	24.0	1.0	0.0	3.5			21.2		
Prop In Lane	1.00		0.00	1.00		0.00	1.00			1.00		
Lane Grp Cap(c), veh/h	228	1258	0	918	1748	0	841			841		
V/C Ratio(X)	0.85	1.15	0.00	1.07	0.65	0.00	0.20			0.97		
Avail Cap(c_a), veh/h	355	1258	0	918	1748	0	841			841		
HCM Platoon Ratio	2.00	2.00	1.00	2.00	2.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.95	0.95	0.00	1.00			1.00		
Uniform Delay (d), s/veh	32.6	13.0	0.0	21.0	0.3	0.0	27.0			33.7		
Incr Delay (d2), s/veh	11.3	75.4	0.0	49.3	1.8	0.0	0.1			24.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	5.2	27.9	0.0	17.2	0.6	0.0	1.7			12.8		
LnGrp Delay(d),s/veh	44.0	88.4	0.0	70.3	2.1	0.0	27.1			58.0		
LnGrp LOS	D	F		F	A		C			E		
Approach Vol, veh/h		1636			2124							
Approach Delay, s/veh		83.2			33.6							
Approach LOS		F			C							

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3		5	6	7	
Phs Duration (G+Y+Rc), s	28.0	36.0	26.0		15.5	48.5	26.0	
Change Period (Y+Rc), s	4.0	4.0	4.0		4.0	4.0	4.0	
Max Green Setting (Gmax), s	24.0	32.0	22.0		18.0	38.0	22.0	
Max Q Clear Time (g_c+I1), s	26.0	34.0	5.5		11.4	3.0	23.2	
Green Ext Time (p_c), s	0.0	0.0	0.4		0.3	25.7	0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	54.7
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1587	180	0	1271	0	0	0	0	0	0	339
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		700			241			458			364	
Travel Time (s)		11.9			4.1			8.9			7.1	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	1587	180	0	1271	0	0	0	0	0	0	339
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	108	25	154	56	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1636	186	0	1310	0	0	0	0	0	0	349

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	1310	0	-	1636	0	0	1964	2946	655
Stage 1	-	-	-	-	-	-	1310	1310	-
Stage 2	-	-	-	-	-	-	654	1636	-
Critical Hdwy	4.14	-	-	5.34	-	-	6.29	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.04	5.54	-
Follow-up Hdwy	2.22	-	-	3.12	-	-	3.67	4.02	3.32
Pot Cap-1 Maneuver	524	-	0	191	-	-	73	15	409
Stage 1	-	-	0	-	-	-	212	227	-
Stage 2	-	-	0	-	-	-	449	157	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	524	-	-	191	-	-	73	0	409
Mov Cap-2 Maneuver	-	-	-	-	-	-	159	0	-
Stage 1	-	-	-	-	-	-	212	0	-
Stage 2	-	-	-	-	-	-	449	0	-

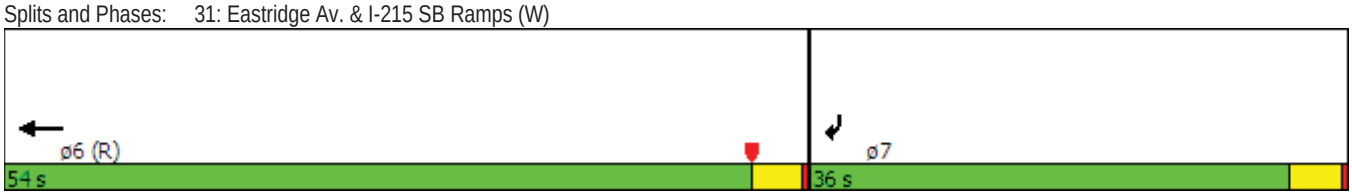
Approach	EB	WB	SB
HCM Control Delay, s	0	0	47.8
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	524	-	191	-	-	409
HCM Lane V/C Ratio	-	-	-	-	-	0.854
HCM Control Delay (s)	0	-	0	-	-	47.8
HCM Lane LOS	A	-	A	-	-	E
HCM 95th %tile Q(veh)	0	-	0	-	-	8.3

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	0	1271	0	0	339
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50			0	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	60				60	
Right Turn on Red				Yes		Yes
Link Speed (mph)		40	40		30	
Link Distance (ft)		174	120		486	
Travel Time (s)		3.0	2.0		11.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Turn Type			NA			Prot
Protected Phases			6			7
Permitted Phases						
Detector Phase			6			7
Switch Phase						
Minimum Initial (s)			7.0			7.0
Minimum Split (s)			20.0			11.0
Total Split (s)			54.0			36.0
Total Split (%)			60.0%			40.0%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			0.5			0.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.0			4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 35 (39%), Referenced to phase 6:WBT, Start of Yellow	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	

Splits and Phases: 31: Eastridge Av. & I-215 SB Ramps (W)



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	0	1271	0	0	339
Number			6	16	7	14
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)				1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln			1863	0	0	1863
Adj Flow Rate, veh/h			1310	0	0	349
Adj No. of Lanes			2	0	0	1
Peak Hour Factor			0.97	0.97	0.97	0.97
Percent Heavy Veh, %			2	0	0	2
Cap, veh/h			1966	0	0	0
Arrive On Green			0.56	0.00	0.00	0.00
Sat Flow, veh/h			3725	0	0	
Grp Volume(v), veh/h			1310	0	0.0	
Grp Sat Flow(s),veh/h/ln			1770	0		
Q Serve(g_s), s			23.5	0.0		
Cycle Q Clear(g_c), s			23.5	0.0		
Prop In Lane				0.00		
Lane Grp Cap(c), veh/h			1966	0		
V/C Ratio(X)			0.67	0.00		
Avail Cap(c_a), veh/h			1966	0		
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	0.00		
Uniform Delay (d), s/veh			14.1	0.0		
Incr Delay (d2), s/veh			1.8	0.0		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			11.8	0.0		
LnGrp Delay(d),s/veh			15.9	0.0		
LnGrp LOS			B			
Approach Vol, veh/h			1310			
Approach Delay, s/veh			15.9			
Approach LOS			B			

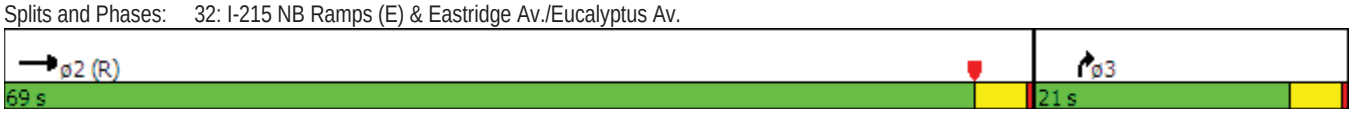
Timer	1	2	3	4	5	6	7	8
Assigned Phs						6		
Phs Duration (G+Y+Rc), s						54.0		
Change Period (Y+Rc), s						4.0		
Max Green Setting (Gmax), s						50.0		
Max Q Clear Time (g_c+I1), s						25.5		
Green Ext Time (p_c), s						10.3		

Intersection Summary	
HCM 2010 Ctrl Delay	15.9
HCM 2010 LOS	B

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	2192	0	0	0	0	727
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Right Turn on Red		Yes				Yes
Link Speed (mph)	30			40	30	
Link Distance (ft)	100			131	592	
Travel Time (s)	2.3			2.2	13.5	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA					Prot
Protected Phases	2					3
Permitted Phases						
Detector Phase	2					3
Switch Phase						
Minimum Initial (s)	7.0					7.0
Minimum Split (s)	20.0					11.0
Total Split (s)	69.0					21.0
Total Split (%)	76.7%					23.3%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	0.5					0.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	4.0					4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max					None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 36 (40%), Referenced to phase 2:EBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 32: I-215 NB Ramps (E) & Eastridge Av./Eucalyptus Av.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	2192	0	0	0	0	727
Number	2	12			3	18
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)		1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0			0	1863
Adj Flow Rate, veh/h	2260	0			0	749
Adj No. of Lanes	2	0			0	2
Peak Hour Factor	0.97	0.97			0.97	0.97
Percent Heavy Veh, %	2	0			0	2
Cap, veh/h	3382	0			0	0
Arrive On Green	0.96	0.00			0.00	0.00
Sat Flow, veh/h	3725	0			0	
Grp Volume(v), veh/h	2260	0			0.0	
Grp Sat Flow(s),veh/h/ln	1770	0				
Q Serve(g_s), s	7.1	0.0				
Cycle Q Clear(g_c), s	7.1	0.0				
Prop In Lane		0.00				
Lane Grp Cap(c), veh/h	3382	0				
V/C Ratio(X)	0.67	0.00				
Avail Cap(c_a), veh/h	3382	0				
HCM Platoon Ratio	1.00	1.00				
Upstream Filter(I)	1.00	0.00				
Uniform Delay (d), s/veh	0.2	0.0				
Incr Delay (d2), s/veh	1.1	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile BackOfQ(50%),veh/ln	3.3	0.0				
LnGrp Delay(d),s/veh	1.3	0.0				
LnGrp LOS	A					
Approach Vol, veh/h	2260					
Approach Delay, s/veh	1.3					
Approach LOS	A					

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		90.0						
Change Period (Y+Rc), s		4.0						
Max Green Setting (Gmax), s		65.0						
Max Q Clear Time (g_c+I1), s		9.1						
Green Ext Time (p_c), s		38.2						

Intersection Summary	
HCM 2010 Ctrl Delay	1.3
HCM 2010 LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	916	1705	298	41	1147	90	115	195	55	146	260	1391
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	1		1	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0
Total Split (s)	24.0	44.0	44.0	11.0	31.0	31.0	11.0	20.0	20.0	15.0	24.0	24.0
Total Split (%)	26.7%	48.9%	48.9%	12.2%	34.4%	34.4%	12.2%	22.2%	22.2%	16.7%	26.7%	26.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	Max	None	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	916	1705	298	41	1147	90	115	195	55	146	260	1391
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	954	1776	310	43	1195	94	120	203	57	152	271	1449
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	765	1667	746	91	1062	475	138	689	308	187	414	619
Arrive On Green	0.44	0.94	0.94	0.02	0.10	0.10	0.08	0.19	0.19	0.03	0.07	0.07
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	1774	3539	1583	1774	1863	2787
Grp Volume(v), veh/h	954	1776	310	43	1195	94	120	203	57	152	271	1449
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1774	1770	1583	1774	1863	1393
Q Serve(g_s), s	20.0	42.4	1.7	2.2	27.0	3.5	6.0	4.4	2.7	7.7	12.7	12.0
Cycle Q Clear(g_c), s	20.0	42.4	1.7	2.2	27.0	3.5	6.0	4.4	2.7	7.7	12.7	12.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	765	1667	746	91	1062	475	138	689	308	187	414	619
V/C Ratio(X)	1.25	1.07	0.42	0.47	1.13	0.20	0.87	0.29	0.19	0.81	0.65	2.34
Avail Cap(c_a), veh/h	765	1667	746	138	1062	475	138	689	308	217	414	619
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.12	0.12	0.12	0.65	0.65	0.65	1.00	1.00	1.00	0.77	0.77	0.77
Uniform Delay (d), s/veh	25.0	2.6	1.4	43.0	40.5	16.0	41.0	31.0	30.3	42.6	38.3	15.0
Incr Delay (d2), s/veh	112.7	31.4	0.2	2.5	65.0	0.6	40.8	1.1	1.3	14.5	6.1	606.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.3	20.2	0.7	1.1	22.8	1.6	4.5	2.2	1.3	4.5	7.3	56.8
LnGrp Delay(d),s/veh	137.7	34.0	1.6	45.5	105.6	16.6	81.9	32.1	31.6	57.1	44.4	621.8
LnGrp LOS	F	F	A	D	F	B	F	C	C	E	D	F
Approach Vol, veh/h		3040			1332			380			1872	
Approach Delay, s/veh		63.2			97.4			47.7			492.4	
Approach LOS		E			F			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	46.4	11.0	24.0	24.0	31.0	13.5	21.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	40.0	7.0	20.0	20.0	27.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	4.2	44.4	8.0	14.7	22.0	29.0	9.7	6.4
Green Ext Time (p_c), s	0.0	0.0	0.0	3.9	0.0	0.0	0.0	6.5

Intersection Summary	
HCM 2010 Ctrl Delay	190.5
HCM 2010 LOS	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	916	1705	298	41	1147	90	115	195	55	146	260	1391
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		360	100		30	150		50	140		0
Storage Lanes	2		1	1		1	2		0	1		2
Taper Length (ft)	200			80			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		615			2104			825			560	
Travel Time (s)		10.5			35.9			18.8			9.5	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6						4
Detector Phase	5	2	2	1	6	6	3	8		7	4	5
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	27.0	48.0	48.0	11.0	32.0	32.0	11.0	20.0		11.0	20.0	27.0
Total Split (%)	30.0%	53.3%	53.3%	12.2%	35.6%	35.6%	12.2%	22.2%		12.2%	22.2%	30.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max		None	Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Valley Springs Pkwy. & Eucalyptus Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	916	1705	298	41	1147	90	115	195	55	146	260	1391
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	954	1776	310	43	1195	94	120	203	57	152	271	1449
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	1	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	880	1824	816	91	1101	493	268	488	134	138	331	1208
Arrive On Green	0.51	1.00	1.00	0.10	0.62	0.62	0.08	0.18	0.18	0.03	0.06	0.06
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	3442	2747	752	1774	1863	2787
Grp Volume(v), veh/h	954	1776	310	43	1195	94	120	129	131	152	271	1449
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1721	1770	1730	1774	1863	1393
Q Serve(g_s), s	23.0	0.0	0.0	2.1	28.0	1.7	3.0	5.8	6.1	7.0	12.9	16.0
Cycle Q Clear(g_c), s	23.0	0.0	0.0	2.1	28.0	1.7	3.0	5.8	6.1	7.0	12.9	16.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.43	1.00		1.00
Lane Grp Cap(c), veh/h	880	1824	816	91	1101	493	268	315	308	138	331	1208
V/C Ratio(X)	1.08	0.97	0.38	0.47	1.09	0.19	0.45	0.41	0.43	1.10	0.82	1.20
Avail Cap(c_a), veh/h	880	1824	816	138	1101	493	268	315	308	138	331	1208
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.12	0.12	0.12	0.65	0.65	0.65	1.00	1.00	1.00	0.77	0.77	0.77
Uniform Delay (d), s/veh	22.0	0.0	0.0	39.2	17.0	7.0	39.7	32.8	32.9	43.8	40.9	13.1
Incr Delay (d2), s/veh	40.9	3.3	0.2	2.5	49.0	0.6	1.2	3.9	4.3	96.9	15.8	96.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.5	0.8	0.0	1.1	20.6	0.8	1.5	3.2	3.2	7.2	8.1	28.0
LnGrp Delay(d),s/veh	62.9	3.3	0.2	41.7	66.0	7.5	40.8	36.7	37.2	140.8	56.7	109.5
LnGrp LOS	F	A	A	D	F	A	D	D	D	F	E	F
Approach Vol, veh/h		3040			1332			380			1872	
Approach Delay, s/veh		21.7			61.1			38.2			104.4	
Approach LOS		C			E			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	50.4	11.0	20.0	27.0	32.0	11.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	44.0	7.0	16.0	23.0	28.0	7.0	16.0
Max Q Clear Time (g_c+I1), s	4.1	2.0	5.0	18.0	25.0	30.0	9.0	8.1
Green Ext Time (p_c), s	0.0	35.7	0.2	0.0	0.0	0.0	0.0	0.8

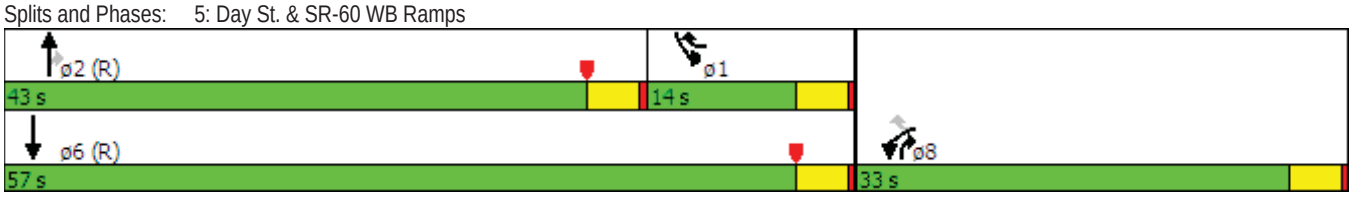
Intersection Summary	
HCM 2010 Ctrl Delay	53.9
HCM 2010 LOS	D

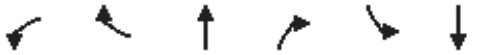
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	674	155	959	678	82	739
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		175	200	
Storage Lanes	2	1		1	1	
Taper Length (ft)	60				80	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	30		40			40
Link Distance (ft)	307		957			795
Travel Time (s)	7.0		16.3			13.6
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	33.0	14.0	43.0	33.0	14.0	57.0
Total Split (%)	36.7%	15.6%	47.8%	36.7%	15.6%	63.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 49 (54%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 5: Day St. & SR-60 WB Ramps





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	674	155	959	678	82	739
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	695	160	989	699	85	762
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	831	686	1534	1068	340	2370
Arrive On Green	0.24	0.24	0.58	0.58	0.19	0.67
Sat Flow, veh/h	3442	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	695	160	989	699	85	762
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1770
Q Serve(g_s), s	17.3	0.0	17.0	23.4	3.7	8.2
Cycle Q Clear(g_c), s	17.3	0.0	17.0	23.4	3.7	8.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	831	686	1534	1068	340	2370
V/C Ratio(X)	0.84	0.23	0.64	0.65	0.25	0.32
Avail Cap(c_a), veh/h	1109	814	1534	1068	340	2370
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.50	0.50	1.00	1.00
Uniform Delay (d), s/veh	32.4	16.1	14.4	6.4	30.9	6.3
Incr Delay (d2), s/veh	4.3	0.2	1.0	1.6	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	2.5	8.4	17.7	1.8	4.0
LnGrp Delay(d),s/veh	36.8	16.2	15.4	8.0	31.3	6.6
LnGrp LOS	D	B	B	A	C	A
Approach Vol, veh/h	855		1688			847
Approach Delay, s/veh	32.9		12.3			9.1
Approach LOS	C		B			A

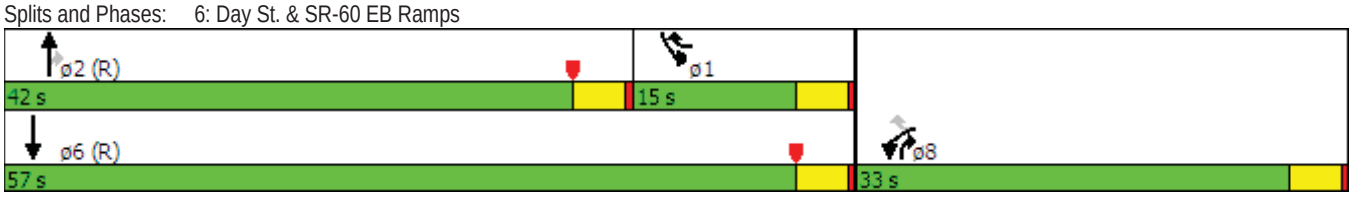
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	21.3	43.0				64.3		25.7
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	10.0	39.0				53.0		29.0
Max Q Clear Time (g_c+I1), s	5.7	25.4				10.2		19.3
Green Ext Time (p_c), s	2.0	7.8				6.0		2.5

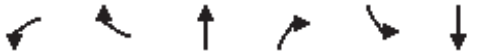
Intersection Summary	
HCM 2010 Ctrl Delay	16.7
HCM 2010 LOS	B

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	786	315	1322	1072	169	1244
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	200		0	425	
Storage Lanes	2	0		1	1	
Taper Length (ft)	60				60	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	35		40			40
Link Distance (ft)	263		524			957
Travel Time (s)	5.1		8.9			16.3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)						
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	8	1	2	8	1	6
Permitted Phases		8		2		
Detector Phase	8	1	2	8	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	11.0	20.0	20.0	11.0	20.0
Total Split (s)	33.0	15.0	42.0	33.0	15.0	57.0
Total Split (%)	36.7%	16.7%	46.7%	36.7%	16.7%	63.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 33 (37%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Day St. & SR-60 EB Ramps





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	786	315	1322	1072	169	1244
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	802	321	1349	1094	172	1269
Adj No. of Lanes	2	1	2	1	1	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	940	704	1494	1101	304	3245
Arrive On Green	0.27	0.27	0.14	0.14	0.23	0.85
Sat Flow, veh/h	3442	1583	3632	1583	1774	5253
Grp Volume(v), veh/h	802	321	1349	1094	172	1269
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1695
Q Serve(g_s), s	19.9	0.0	33.8	36.6	7.7	5.1
Cycle Q Clear(g_c), s	19.9	0.0	33.8	36.6	7.7	5.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	940	704	1494	1101	304	3245
V/C Ratio(X)	0.85	0.46	0.90	0.99	0.57	0.39
Avail Cap(c_a), veh/h	1109	782	1494	1101	304	3245
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	0.24	0.24	0.84	0.84
Uniform Delay (d), s/veh	31.0	17.4	36.9	14.5	31.8	2.9
Incr Delay (d2), s/veh	5.8	0.5	2.5	11.9	2.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	5.6	17.1	30.9	4.0	2.4
LnGrp Delay(d),s/veh	36.8	17.9	39.4	26.4	33.8	3.1
LnGrp LOS	D	B	D	C	C	A
Approach Vol, veh/h	1123		2443			1441
Approach Delay, s/veh	31.4		33.6			6.8
Approach LOS	C		C			A

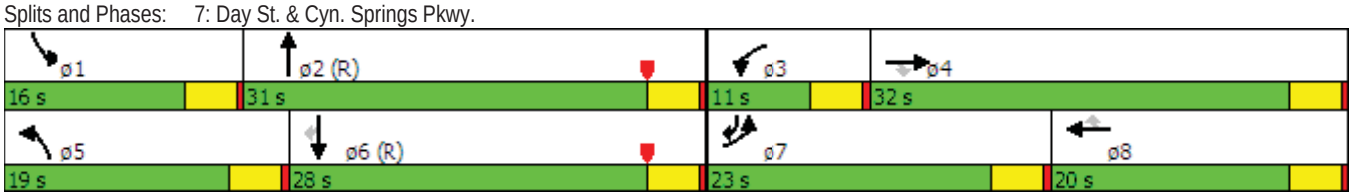
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	19.4	42.0				61.4		28.6
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	11.0	38.0				53.0		29.0
Max Q Clear Time (g_c+I1), s	9.7	38.6				7.1		21.9
Green Ext Time (p_c), s	1.0	0.0				12.4		2.7

Intersection Summary	
HCM 2010 Ctrl Delay	25.4
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	725	132	175	51	89	245	229	1424	64	223	1074	564
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	145		0	165		0	170		200
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	95			100			120			80		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		1120			404			728			524	
Travel Time (s)		19.1			7.9			12.4			8.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												48%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	23.0	32.0	32.0	11.0	20.0	20.0	19.0	31.0		16.0	28.0	23.0
Total Split (%)	25.6%	35.6%	35.6%	12.2%	22.2%	22.2%	21.1%	34.4%		17.8%	31.1%	25.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 35 (39%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Day St. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	725	132	175	51	89	245	229	1424	64	223	1074	564
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	740	135	179	52	91	250	234	1453	65	228	1064	598
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	727	617	525	100	329	280	273	1502	67	237	1569	1557
Arrive On Green	0.21	0.33	0.33	0.06	0.18	0.18	0.05	0.10	0.10	0.04	0.09	0.09
Sat Flow, veh/h	3442	1863	1583	1774	1863	1583	1774	4990	223	1774	5588	3167
Grp Volume(v), veh/h	740	135	179	52	91	250	234	987	531	228	1064	598
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1863	1583	1774	1695	1823	1774	1863	1583
Q Serve(g_s), s	19.0	4.7	7.7	2.6	3.8	13.9	11.8	26.1	26.1	11.5	16.6	11.6
Cycle Q Clear(g_c), s	19.0	4.7	7.7	2.6	3.8	13.9	11.8	26.1	26.1	11.5	16.6	11.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	727	617	525	100	329	280	273	1020	549	237	1569	1557
V/C Ratio(X)	1.02	0.22	0.34	0.52	0.28	0.89	0.86	0.97	0.97	0.96	0.68	0.38
Avail Cap(c_a), veh/h	727	617	525	138	331	281	296	1020	549	237	1569	1557
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33
Upstream Filter(I)	0.77	0.77	0.77	1.00	1.00	1.00	0.79	0.79	0.79	0.82	0.82	0.82
Uniform Delay (d), s/veh	35.5	21.7	22.7	41.3	32.1	36.2	41.7	40.1	40.1	42.8	36.9	18.4
Incr Delay (d2), s/veh	34.0	0.1	0.3	4.1	0.5	28.0	16.8	18.3	26.9	43.2	2.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.4	2.4	3.4	1.4	2.0	8.2	7.1	14.9	17.3	8.5	8.9	5.2
LnGrp Delay(d),s/veh	69.5	21.8	23.0	45.3	32.5	64.2	58.5	58.4	67.0	86.0	38.9	19.0
LnGrp LOS	F	C	C	D	C	E	E	E	E	F	D	B
Approach Vol, veh/h		1054			393			1752			1890	
Approach Delay, s/veh		55.5			54.4			61.0			38.3	
Approach LOS		E			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	31.1	9.1	33.8	17.8	29.3	23.0	19.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	27.0	7.0	28.0	15.0	24.0	19.0	16.0
Max Q Clear Time (g_c+I1), s	13.5	28.1	4.6	9.7	13.8	18.6	21.0	15.9
Green Ext Time (p_c), s	0.0	0.0	0.0	2.5	0.1	5.1	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	50.9
HCM 2010 LOS	D

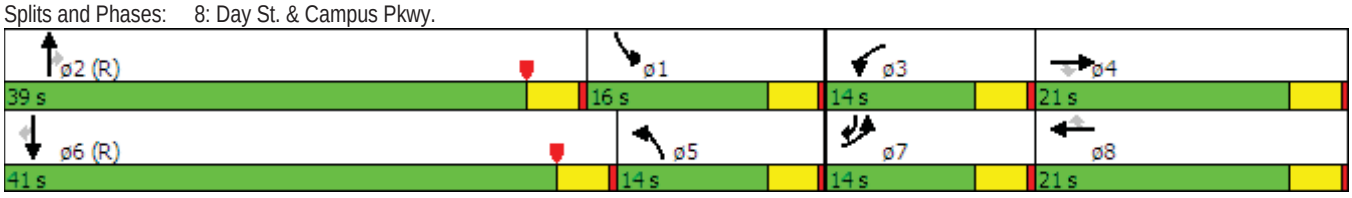
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	213	107	190	91	209	267	210	1238	102	275	965	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		50	200		0	130		50	190		0
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	60			120			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		938			519			1025			728	
Travel Time (s)		16.0			10.1			17.5			12.4	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	14.0	21.0	21.0	14.0	21.0	21.0	14.0	39.0	39.0	16.0	41.0	14.0
Total Split (%)	15.6%	23.3%	23.3%	15.6%	23.3%	23.3%	15.6%	43.3%	43.3%	17.8%	45.6%	15.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 76 (84%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Day St. & Campus Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	213	107	190	91	209	267	210	1238	102	275	965	67
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	222	111	198	95	218	278	219	1290	106	286	1005	70
Adj No. of Lanes	2	1	1	1	2	1	2	3	1	2	3	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	298	279	237	125	474	212	656	1978	616	732	2091	788
Arrive On Green	0.09	0.15	0.15	0.07	0.13	0.13	0.06	0.13	0.13	0.07	0.14	0.14
Sat Flow, veh/h	3442	1863	1583	1774	3539	1583	3442	5085	1583	3442	5085	1583
Grp Volume(v), veh/h	222	111	198	95	218	278	219	1290	106	286	1005	70
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1770	1583	1721	1695	1583	1721	1695	1583
Q Serve(g_s), s	5.7	4.8	7.3	4.7	5.1	7.9	5.5	21.7	4.0	7.1	16.4	1.1
Cycle Q Clear(g_c), s	5.7	4.8	7.3	4.7	5.1	7.9	5.5	21.7	4.0	7.1	16.4	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	298	279	237	125	474	212	656	1978	616	732	2091	788
V/C Ratio(X)	0.74	0.40	0.83	0.76	0.46	1.31	0.33	0.65	0.17	0.39	0.48	0.09
Avail Cap(c_a), veh/h	382	352	299	197	669	299	656	1978	616	732	2091	788
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.74	0.74	0.74	0.70	0.70	0.70
Uniform Delay (d), s/veh	40.1	34.6	16.7	41.1	36.0	16.6	36.7	33.4	14.4	36.3	30.0	6.1
Incr Delay (d2), s/veh	5.7	0.9	14.9	9.0	0.7	166.9	0.2	1.3	0.5	0.2	0.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	2.6	4.2	2.6	2.6	13.2	2.6	10.4	1.8	3.4	7.8	0.7
LnGrp Delay(d),s/veh	45.9	35.5	31.6	50.1	36.7	183.4	36.9	34.7	14.8	36.5	30.6	6.3
LnGrp LOS	D	D	C	D	D	F	D	C	B	D	C	A
Approach Vol, veh/h		531			591			1615			1361	
Approach Delay, s/veh		38.4			107.9			33.7			30.6	
Approach LOS		D			F			C			C	

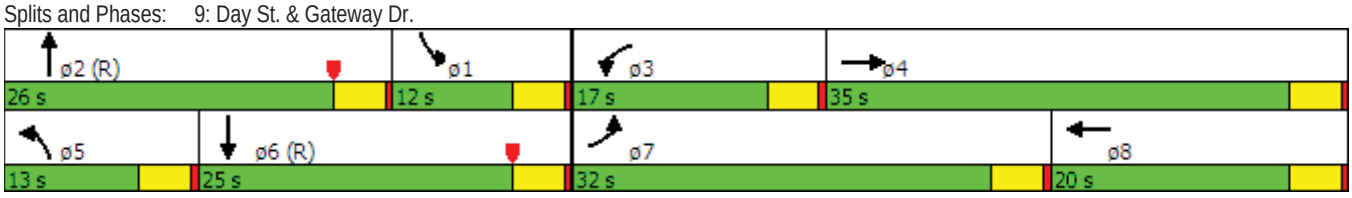
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.2	39.0	10.3	17.5	21.2	41.0	11.8	16.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	35.0	10.0	17.0	10.0	37.0	10.0	17.0
Max Q Clear Time (g_c+I1), s	9.1	23.7	6.7	9.3	7.5	18.4	7.7	9.9
Green Ext Time (p_c), s	0.6	6.5	0.1	2.3	0.5	6.7	0.2	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	44.0
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	419	142	192	128	121	197	122	746	129	221	726	174
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	100		0	190		400	260		0
Storage Lanes	1		0	1		0	1		1	2		0
Taper Length (ft)	0			120			60			165		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		318			585			592			1025	
Travel Time (s)		5.4			11.4			10.1			17.5	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	32.0	35.0		17.0	20.0		13.0	26.0		12.0	25.0	
Total Split (%)	35.6%	38.9%		18.9%	22.2%		14.4%	28.9%		13.3%	27.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 81 (90%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

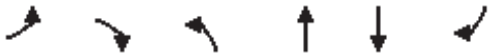
Splits and Phases: 9: Day St. & Gateway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	419	142	192	128	121	197	122	746	129	221	726	174
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	428	145	196	131	123	201	124	761	132	226	741	178
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	475	589	527	164	279	249	152	1068	184	525	1277	304
Arrive On Green	0.09	0.11	0.11	0.09	0.16	0.16	0.17	0.49	0.49	0.05	0.10	0.10
Sat Flow, veh/h	1774	1770	1583	1774	1770	1583	1774	4369	751	3442	4105	976
Grp Volume(v), veh/h	428	145	196	131	123	201	124	589	304	226	611	308
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1695	1730	1721	1695	1691
Q Serve(g_s), s	21.5	6.7	10.3	6.5	5.7	11.0	6.1	12.3	12.5	5.7	15.5	15.7
Cycle Q Clear(g_c), s	21.5	6.7	10.3	6.5	5.7	11.0	6.1	12.3	12.5	5.7	15.5	15.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.43	1.00		0.58
Lane Grp Cap(c), veh/h	475	589	527	164	279	249	152	829	423	525	1055	526
V/C Ratio(X)	0.90	0.25	0.37	0.80	0.44	0.81	0.81	0.71	0.72	0.43	0.58	0.59
Avail Cap(c_a), veh/h	552	610	545	256	315	281	177	829	423	525	1055	526
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	0.90	0.90
Uniform Delay (d), s/veh	39.8	29.7	31.3	40.0	34.3	36.6	36.6	20.5	20.6	38.9	34.8	34.8
Incr Delay (d2), s/veh	16.3	0.2	0.4	9.3	1.1	14.3	21.8	5.1	10.1	0.5	2.1	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.7	3.3	4.6	3.6	2.9	5.8	3.9	6.2	6.9	2.8	7.6	8.0
LnGrp Delay(d),s/veh	56.1	29.9	31.7	49.4	35.4	50.8	58.4	25.6	30.6	39.5	36.9	39.1
LnGrp LOS	E	C	C	D	D	D	E	C	C	D	D	D
Approach Vol, veh/h		769			455			1017			1145	
Approach Delay, s/veh		45.0			46.3			31.1			38.0	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.7	26.0	12.3	34.0	11.7	32.0	28.1	18.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	22.0	13.0	31.0	9.0	21.0	28.0	16.0
Max Q Clear Time (g_c+I1), s	7.7	14.5	8.5	12.3	8.1	17.7	23.5	13.0
Green Ext Time (p_c), s	0.0	3.2	0.1	3.8	0.0	2.0	0.6	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	38.6
HCM 2010 LOS	D



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	41	36	24	1163	1074	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	80			0
Storage Lanes	1	0	1			0
Taper Length (ft)	60		30			
Link Speed (mph)	30			40	40	
Link Distance (ft)	364			180	592	
Travel Time (s)	8.3			3.1	10.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

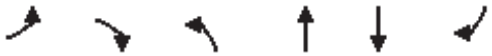
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	41	36	24	1163	1074	12
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	-	80	-	-	-
Veh in Median Storage, #	1	-	-	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	45	39	26	1264	1167	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1858	590	1180	0	-	0
Stage 1	1174	-	-	-	-	-
Stage 2	684	-	-	-	-	-
Critical Hdwy	6.29	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	85	386	320	-	-	-
Stage 1	193	-	-	-	-	-
Stage 2	449	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	78	386	320	-	-	-
Mov Cap-2 Maneuver	149	-	-	-	-	-
Stage 1	193	-	-	-	-	-
Stage 2	413	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	33.3	0.3	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	320	-	209	-	-
HCM Lane V/C Ratio	0.082	-	0.4	-	-
HCM Control Delay (s)	17.2	-	33.3	-	-
HCM Lane LOS	C	-	D	-	-
HCM 95th %tile Q(veh)	0.3	-	1.8	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	12	35	2	1175	1105	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	25			0
Storage Lanes	1	0	1			0
Taper Length (ft)	60		25			
Link Speed (mph)	30			40	40	
Link Distance (ft)	364			453	180	
Travel Time (s)	8.3			7.7	3.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	12	35	2	1175	1105	5
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	-	25	-	-	-
Veh in Median Storage, #	1	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	38	2	1263	1188	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1827	597	1194	0	-	0
Stage 1	1191	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Critical Hdwy	6.29	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	89	382	315	-	-	-
Stage 1	188	-	-	-	-	-
Stage 2	475	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	88	382	315	-	-	-
Mov Cap-2 Maneuver	153	-	-	-	-	-
Stage 1	188	-	-	-	-	-
Stage 2	472	-	-	-	-	-

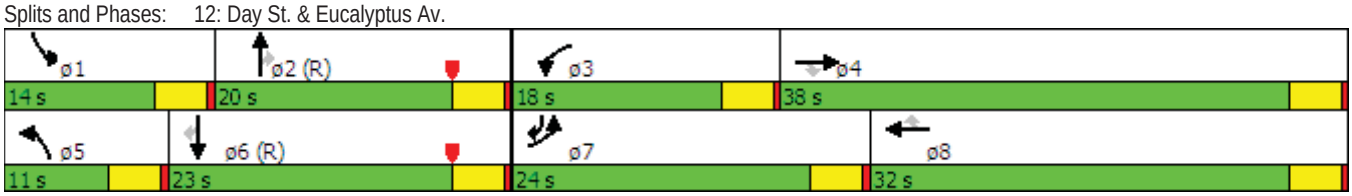
Approach	EB	NB	SB
HCM Control Delay, s	20.9	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	315	-	276	-	-
HCM Lane V/C Ratio	0.007	-	0.183	-	-
HCM Control Delay (s)	16.5	-	20.9	-	-
HCM Lane LOS	C	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.7	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	299	1332	217	266	853	164	105	541	392	184	582	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		50	175		0	100		100	200		0
Storage Lanes	1		1	1		1	1		2	1		1
Taper Length (ft)	100			75			80			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			40	
Link Distance (ft)		2104			1174			390			453	
Travel Time (s)		35.9			20.0			7.6			7.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	24.0	38.0	38.0	18.0	32.0	32.0	11.0	20.0	20.0	14.0	23.0	24.0
Total Split (%)	26.7%	42.2%	42.2%	20.0%	35.6%	35.6%	12.2%	22.2%	22.2%	15.6%	25.6%	26.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 50 (56%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Day St. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	299	1332	217	266	853	164	105	541	392	184	582	335
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	315	1402	228	280	898	173	111	569	413	194	613	353
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	354	1337	598	276	1182	529	138	629	281	197	747	650
Arrive On Green	0.13	0.25	0.25	0.16	0.33	0.33	0.08	0.18	0.18	0.11	0.21	0.21
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	315	1402	228	280	898	173	111	569	413	194	613	353
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	15.7	34.0	10.7	14.0	20.4	7.4	5.5	14.2	16.0	9.8	14.9	15.2
Cycle Q Clear(g_c), s	15.7	34.0	10.7	14.0	20.4	7.4	5.5	14.2	16.0	9.8	14.9	15.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	354	1337	598	276	1182	529	138	629	281	197	747	650
V/C Ratio(X)	0.89	1.05	0.38	1.01	0.76	0.33	0.80	0.90	1.47	0.98	0.82	0.54
Avail Cap(c_a), veh/h	394	1337	598	276	1182	529	138	629	281	197	747	650
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.16	0.16	0.16	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	33.6	24.9	38.0	26.7	22.4	40.8	36.3	37.0	39.9	33.9	20.1
Incr Delay (d2), s/veh	4.2	25.8	0.1	58.0	2.9	0.4	28.2	18.8	228.7	59.3	9.8	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	21.4	4.7	11.3	10.5	3.3	3.8	8.5	24.8	8.0	8.3	7.2
LnGrp Delay(d),s/veh	42.2	59.4	25.0	96.1	29.7	22.8	69.0	55.1	265.7	99.3	43.7	23.4
LnGrp LOS	D	F	C	F	C	C	E	E	F	F	D	C
Approach Vol, veh/h		1945			1351			1093			1160	
Approach Delay, s/veh		52.6			42.5			136.1			46.8	
Approach LOS		D			D			F			D	

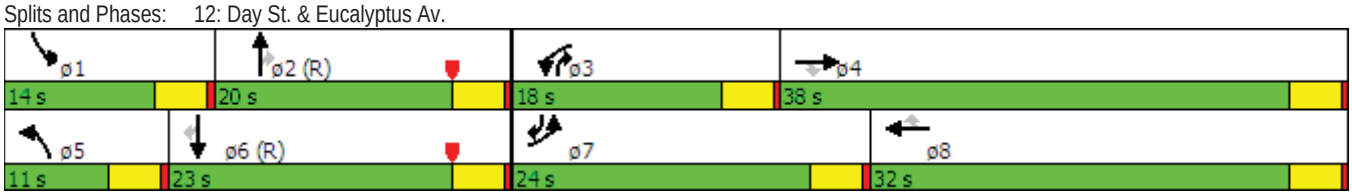
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	20.0	18.0	38.0	11.0	23.0	21.9	34.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	16.0	14.0	34.0	7.0	19.0	20.0	28.0
Max Q Clear Time (g_c+I1), s	11.8	18.0	16.0	36.0	7.5	17.2	17.7	22.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	1.5	0.2	5.2

Intersection Summary	
HCM 2010 Ctrl Delay	65.4
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	299	1332	217	266	853	164	105	541	392	184	582	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		50	175		0	100		100	200		0
Storage Lanes	1		1	1		1	1		2	1		1
Taper Length (ft)	100			75			80			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			40	
Link Distance (ft)		2104			1174			390			453	
Travel Time (s)		35.9			20.0			7.6			7.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	11.0
Total Split (s)	24.0	38.0	38.0	18.0	32.0	32.0	11.0	20.0	18.0	14.0	23.0	24.0
Total Split (%)	26.7%	42.2%	42.2%	20.0%	35.6%	35.6%	12.2%	22.2%	20.0%	15.6%	25.6%	26.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 12: Day St. & Eucalyptus Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	299	1332	217	266	853	164	105	541	392	184	582	335
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	315	1402	228	280	898	173	111	569	413	194	613	353
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	356	1337	598	276	1177	527	138	629	528	197	747	652
Arrive On Green	0.07	0.12	0.12	0.16	0.33	0.33	0.08	0.18	0.18	0.11	0.21	0.21
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	315	1402	228	280	898	173	111	569	413	194	613	353
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	15.9	34.0	11.9	14.0	20.4	7.4	5.5	14.2	16.0	9.8	14.9	15.2
Cycle Q Clear(g_c), s	15.9	34.0	11.9	14.0	20.4	7.4	5.5	14.2	16.0	9.8	14.9	15.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	356	1337	598	276	1177	527	138	629	528	197	747	652
V/C Ratio(X)	0.88	1.05	0.38	1.01	0.76	0.33	0.80	0.90	0.78	0.98	0.82	0.54
Avail Cap(c_a), veh/h	394	1337	598	276	1177	527	138	629	528	197	747	652
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.21	0.21	0.21	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.0	39.4	29.7	38.0	26.9	22.5	40.8	36.3	27.1	39.9	33.9	20.0
Incr Delay (d2), s/veh	5.2	26.9	0.1	58.0	3.0	0.4	28.2	18.8	11.0	59.3	9.8	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	21.6	5.2	11.3	10.5	3.3	3.8	8.5	10.8	8.0	8.3	7.1
LnGrp Delay(d),s/veh	46.1	66.3	29.8	96.1	29.9	22.9	69.0	55.1	38.1	99.3	43.7	23.2
LnGrp LOS	D	F	C	F	C	C	E	E	D	F	D	C
Approach Vol, veh/h		1945			1351			1093			1160	
Approach Delay, s/veh		58.8			42.7			50.1			46.8	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	20.0	18.0	38.0	11.0	23.0	22.1	33.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	16.0	14.0	34.0	7.0	19.0	20.0	28.0
Max Q Clear Time (g_c+I1), s	11.8	18.0	16.0	36.0	7.5	17.2	17.9	22.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	1.5	0.2	5.1

Intersection Summary	
HCM 2010 Ctrl Delay	50.6
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	140	57	226	232	402	86	704	119	281	631	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	95		95	80		0	100		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	60			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			25			35	
Link Distance (ft)		861			839			1320			2260	
Travel Time (s)		16.8			16.3			36.0			44.0	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	11.0	20.0		14.0	23.0	23.0	11.0	39.0		17.0	45.0	
Total Split (%)	12.2%	22.2%		15.6%	25.6%	25.6%	12.2%	43.3%		18.9%	50.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 35 (39%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Day St. & Cottonwood Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	26	140	57	226	232	402	86	704	119	281	631	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	28	152	62	246	252	437	93	765	129	305	686	27
Adj No. of Lanes	1	1	0	1	1	1	1	1	0	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	181	74	197	402	341	124	658	111	256	885	35
Arrive On Green	0.04	0.14	0.14	0.11	0.22	0.22	0.07	0.42	0.42	0.14	0.50	0.50
Sat Flow, veh/h	1774	1259	513	1774	1863	1583	1774	1554	262	1774	1780	70
Grp Volume(v), veh/h	28	0	214	246	252	437	93	0	894	305	0	713
Grp Sat Flow(s),veh/h/ln	1774	0	1772	1774	1863	1583	1774	0	1816	1774	0	1850
Q Serve(g_s), s	1.4	0.0	10.6	10.0	11.0	19.4	4.6	0.0	38.1	13.0	0.0	28.4
Cycle Q Clear(g_c), s	1.4	0.0	10.6	10.0	11.0	19.4	4.6	0.0	38.1	13.0	0.0	28.4
Prop In Lane	1.00		0.29	1.00		1.00	1.00		0.14	1.00		0.04
Lane Grp Cap(c), veh/h	69	0	255	197	402	341	124	0	768	256	0	920
V/C Ratio(X)	0.40	0.00	0.84	1.25	0.63	1.28	0.75	0.00	1.16	1.19	0.00	0.77
Avail Cap(c_a), veh/h	138	0	315	197	402	341	138	0	768	256	0	920
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.2	0.0	37.5	40.0	32.0	35.3	41.1	0.0	26.0	38.5	0.0	18.5
Incr Delay (d2), s/veh	3.7	0.0	15.3	146.6	3.1	146.7	18.0	0.0	87.6	117.6	0.0	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	6.3	12.9	6.0	22.4	2.9	0.0	37.7	14.7	0.0	16.1
LnGrp Delay(d),s/veh	45.9	0.0	52.8	186.6	35.1	182.0	59.1	0.0	113.5	156.1	0.0	24.8
LnGrp LOS	D		D	F	D	F	E		F	F		C
Approach Vol, veh/h		242			935			987			1018	
Approach Delay, s/veh		52.0			143.6			108.4			64.2	
Approach LOS		D			F			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	42.1	14.0	16.9	10.3	48.8	7.5	23.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	35.0	10.0	16.0	7.0	41.0	7.0	19.0
Max Q Clear Time (g_c+I1), s	15.0	40.1	12.0	12.6	6.6	30.4	3.4	21.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.0	7.7	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	100.3
HCM 2010 LOS	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	140	57	226	232	402	86	704	119	281	631	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		100	95		95	80		100	100		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	60			100			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		35			35			25			35	
Link Distance (ft)		861			839			811			2260	
Travel Time (s)		16.8			16.3			22.1			44.0	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8			2			
Detector Phase	7	4	4	3	8	1	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	20.0	11.0	20.0	
Total Split (s)	11.0	20.0	20.0	15.0	24.0	18.0	11.0	37.0	37.0	18.0	44.0	
Total Split (%)	12.2%	22.2%	22.2%	16.7%	26.7%	20.0%	12.2%	41.1%	41.1%	20.0%	48.9%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	

Splits and Phases: 13: Day St. & Cottonwood Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	26	140	57	226	232	402	86	704	119	281	631	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	28	152	62	246	252	437	93	765	129	305	686	27
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	199	170	243	387	575	124	787	669	276	904	36
Arrive On Green	0.04	0.11	0.11	0.14	0.21	0.21	0.07	0.42	0.42	0.16	0.51	0.51
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	1780	70
Grp Volume(v), veh/h	28	152	62	246	252	437	93	765	129	305	0	713
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1863	1583	1774	0	1850
Q Serve(g_s), s	1.4	7.1	2.7	12.3	11.2	16.0	4.6	36.2	2.8	14.0	0.0	27.8
Cycle Q Clear(g_c), s	1.4	7.1	2.7	12.3	11.2	16.0	4.6	36.2	2.8	14.0	0.0	27.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	65	199	170	243	387	575	124	787	669	276	0	940
V/C Ratio(X)	0.43	0.76	0.37	1.01	0.65	0.76	0.75	0.97	0.19	1.11	0.00	0.76
Avail Cap(c_a), veh/h	138	331	281	243	414	598	138	787	669	276	0	940
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.5	39.1	25.2	38.8	32.7	14.0	41.1	25.5	6.1	38.0	0.0	17.7
Incr Delay (d2), s/veh	4.5	5.9	1.3	60.7	3.3	5.4	18.0	26.0	0.6	85.4	0.0	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	4.0	1.2	10.1	6.1	7.8	2.9	24.2	1.3	13.4	0.0	15.6
LnGrp Delay(d),s/veh	47.0	45.0	26.5	99.6	35.9	19.4	59.1	51.4	6.7	123.4	0.0	23.5
LnGrp LOS	D	D	C	F	D	B	E	D	A	F		C
Approach Vol, veh/h		242			935			987			1018	
Approach Delay, s/veh		40.5			44.9			46.3			53.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	42.0	16.3	13.6	10.3	49.7	7.3	22.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	33.0	11.0	16.0	7.0	40.0	7.0	20.0
Max Q Clear Time (g_c+I1), s	16.0	38.2	14.3	9.1	6.6	29.8	3.4	18.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.5	0.0	7.1	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	47.7
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	14	45	15	9	24	26	14	901	7	37	823	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		861			839			634			1320	
Travel Time (s)		19.6			19.1			17.3			36.0	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	54.7
Intersection LOS	F

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	14	45	15	0	9	24	26	0	14	901	7
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	15	49	16	0	10	26	28	0	15	979	8
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	11.7	11	57.9
HCM LOS	B	B	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	2%	24%	0%	27%	0%	4%
Vol Thru, %	98%	76%	0%	73%	0%	94%
Vol Right, %	1%	0%	100%	0%	100%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	922	59	15	33	26	880
LT Vol	14	14	0	9	0	37
Through Vol	901	45	0	24	0	823
RT Vol	7	0	15	0	26	20
Lane Flow Rate	1002	64	16	36	28	957
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	1	0.143	0.033	0.081	0.057	1
Departure Headway (Hd)	5.401	8.015	7.197	8.11	7.274	5.397
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	681	450	499	444	494	679
Service Time	3.434	5.729	4.911	5.826	4.99	3.43
HCM Lane V/C Ratio	1.471	0.142	0.032	0.081	0.057	1.409
HCM Control Delay	57.9	12.1	10.2	11.5	10.4	57.9
HCM Lane LOS	F	B	B	B	B	F
HCM 95th-tile Q	15.8	0.5	0.1	0.3	0.2	15.8

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	37	823	20
Peak Hour Factor	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	40	895	22
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	57.9
HCM LOS	F

Lane

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	14	45	15	9	24	26	14	901	7	37	823	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		50	100		0	100		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		861			839			634			509	
Travel Time (s)		19.6			19.1			17.3			13.9	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0		20.0	20.0	
Total Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	66.0	66.0		66.0	66.0	
Total Split (%)	26.7%	26.7%	26.7%	26.7%	26.7%	26.7%	73.3%	73.3%		73.3%	73.3%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0			0.0	
Total Lost Time (s)		4.0	4.0		4.0	4.0		4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	C-Max	C-Max		C-Max	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	

Splits and Phases: 14: Day St. & Bay Av/Bay Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	14	45	15	9	24	26	14	901	7	37	823	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	15	49	16	10	26	28	15	979	8	40	895	22
Adj No. of Lanes	0	1	1	0	1	1	0	2	0	0	2	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	59	98	142	62	107	142	58	2845	23	121	2595	63
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.82	0.82	0.82	0.82	0.82	0.82
Sat Flow, veh/h	108	1095	1583	124	1202	1583	20	3463	28	95	3157	77
Grp Volume(v), veh/h	64	0	16	36	0	28	520	0	482	474	0	483
Grp Sat Flow(s),veh/h/ln	1203	0	1583	1327	0	1583	1821	0	1690	1647	0	1682
Q Serve(g_s), s	0.1	0.0	0.8	0.0	0.0	1.5	0.0	0.0	6.4	0.0	0.0	6.5
Cycle Q Clear(g_c), s	6.0	0.0	0.8	5.9	0.0	1.5	6.2	0.0	6.4	5.5	0.0	6.5
Prop In Lane	0.23		1.00	0.28		1.00	0.03		0.02	0.08		0.05
Lane Grp Cap(c), veh/h	157	0	142	170	0	142	1537	0	1389	1397	0	1382
V/C Ratio(X)	0.41	0.00	0.11	0.21	0.00	0.20	0.34	0.00	0.35	0.34	0.00	0.35
Avail Cap(c_a), veh/h	384	0	352	392	0	352	1537	0	1389	1397	0	1382
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.7	0.0	37.7	38.1	0.0	38.0	2.0	0.0	2.0	1.9	0.0	2.0
Incr Delay (d2), s/veh	1.7	0.0	0.3	0.6	0.0	0.7	0.6	0.0	0.7	0.7	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.4	0.9	0.0	0.7	3.3	0.0	3.2	3.0	0.0	3.2
LnGrp Delay(d),s/veh	40.4	0.0	38.0	38.7	0.0	38.7	2.6	0.0	2.7	2.6	0.0	2.7
LnGrp LOS	D		D	D		D	A		A	A		A
Approach Vol, veh/h		80			64			1002			957	
Approach Delay, s/veh		39.9			38.7			2.6			2.6	
Approach LOS		D			D			A			A	

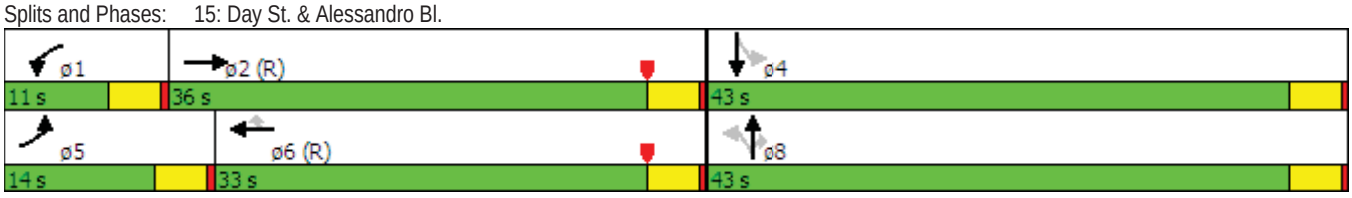
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		77.9		12.1		77.9		12.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		62.0		20.0		62.0		20.0
Max Q Clear Time (g_c+I1), s		8.4		8.0		8.5		7.9
Green Ext Time (p_c), s		24.1		0.4		24.1		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	5.2
HCM 2010 LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	255	2195	121	107	1324	146	163	469	166	246	390	232
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	245		0	220		75	50		50	200		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	100			120			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		861			839			831			716	
Travel Time (s)		13.0			12.7			16.2			19.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		
Detector Phase	5	2		1	6	6	8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Total Split (s)	14.0	36.0		11.0	33.0	33.0	43.0	43.0	43.0	43.0	43.0	
Total Split (%)	15.6%	40.0%		12.2%	36.7%	36.7%	47.8%	47.8%	47.8%	47.8%	47.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max		None	C-Max	C-Max	Max	Max	Max	Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 35 (39%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	

Splits and Phases: 15: Day St. & Alessandro Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	255	2195	121	107	1324	146	163	469	166	246	390	232
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	271	2335	129	114	1409	155	173	499	177	262	415	247
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	1755	96	138	1140	510	148	807	686	252	475	283
Arrive On Green	0.11	0.36	0.36	0.08	0.32	0.32	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	1774	4935	270	1774	3539	1583	770	1863	1583	760	1096	652
Grp Volume(v), veh/h	271	1598	866	114	1409	155	173	499	177	262	0	662
Grp Sat Flow(s),veh/h/ln	1774	1695	1815	1774	1770	1583	770	1863	1583	760	0	1748
Q Serve(g_s), s	10.0	32.0	32.0	5.7	29.0	6.6	7.9	18.7	6.4	20.3	0.0	31.1
Cycle Q Clear(g_c), s	10.0	32.0	32.0	5.7	29.0	6.6	39.0	18.7	6.4	39.0	0.0	31.1
Prop In Lane	1.00		0.15	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	197	1205	645	138	1140	510	148	807	686	252	0	757
V/C Ratio(X)	1.37	1.33	1.34	0.83	1.24	0.30	1.17	0.62	0.26	1.04	0.00	0.87
Avail Cap(c_a), veh/h	197	1205	645	138	1140	510	148	807	686	252	0	757
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.0	29.0	29.0	40.9	30.5	22.9	43.2	19.7	16.3	38.1	0.0	23.3
Incr Delay (d2), s/veh	197.3	152.4	164.1	32.0	113.7	1.5	127.8	3.5	0.9	67.8	0.0	13.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.7	40.4	45.4	4.0	32.1	3.1	8.9	10.4	3.0	11.0	0.0	17.7
LnGrp Delay(d),s/veh	237.3	181.4	193.1	72.9	144.2	24.4	171.0	23.3	17.2	105.8	0.0	36.6
LnGrp LOS	F	F	F	E	F	C	F	C	B	F		D
Approach Vol, veh/h		2735			1678			849			924	
Approach Delay, s/veh		190.7			128.3			52.1			56.2	
Approach LOS		F			F			D			E	

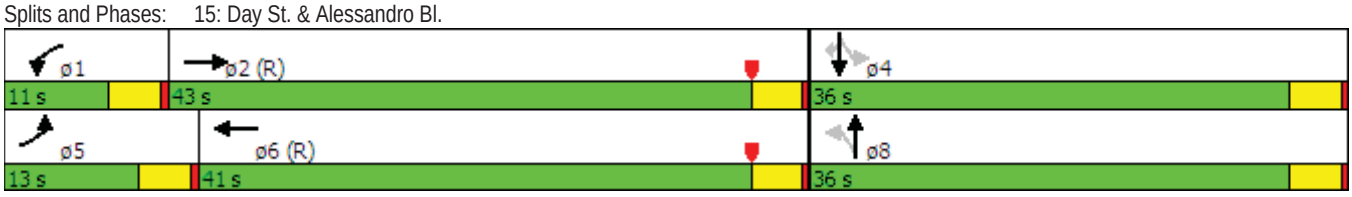
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.0	36.0		43.0	14.0	33.0		43.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	32.0		39.0	10.0	29.0		39.0
Max Q Clear Time (g_c+I1), s	7.7	34.0		41.0	12.0	31.0		41.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	134.6
HCM 2010 LOS	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	255	2195	121	107	1324	146	163	469	166	246	390	232
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	245		0	220		75	50		50	200		100
Storage Lanes	2		0	2		0	1		0	0		1
Taper Length (ft)	100			120			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			35			25	
Link Distance (ft)		861			839			831			716	
Travel Time (s)		13.0			12.7			16.2			19.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		4
Detector Phase	5	2		1	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0		11.0	20.0		20.0	20.0		20.0	20.0	20.0
Total Split (s)	13.0	43.0		11.0	41.0		36.0	36.0		36.0	36.0	36.0
Total Split (%)	14.4%	47.8%		12.2%	45.6%		40.0%	40.0%		40.0%	40.0%	40.0%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		Max	Max		Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	

Splits and Phases: 15: Day St. & Alessandro Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	255	2195	121	107	1324	146	163	469	166	246	390	232
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	271	2335	129	114	1409	155	173	499	177	262	415	247
Adj No. of Lanes	2	3	0	2	3	0	1	2	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	341	2161	118	252	1916	211	212	913	322	231	662	563
Arrive On Green	0.10	0.44	0.44	0.07	0.41	0.41	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	3442	4935	270	3442	4651	512	770	2567	906	760	1863	1583
Grp Volume(v), veh/h	271	1598	866	114	1027	537	173	343	333	262	415	247
Grp Sat Flow(s),veh/h/ln	1721	1695	1815	1721	1695	1772	770	1770	1703	760	1863	1583
Q Serve(g_s), s	6.9	39.4	39.4	2.9	23.0	23.0	15.4	14.0	14.1	17.9	16.6	10.7
Cycle Q Clear(g_c), s	6.9	39.4	39.4	2.9	23.0	23.0	32.0	14.0	14.1	32.0	16.6	10.7
Prop In Lane	1.00		0.15	1.00		0.29	1.00		0.53	1.00		1.00
Lane Grp Cap(c), veh/h	341	1484	795	252	1397	730	212	629	605	231	662	563
V/C Ratio(X)	0.79	1.08	1.09	0.45	0.74	0.74	0.82	0.55	0.55	1.13	0.63	0.44
Avail Cap(c_a), veh/h	344	1484	795	268	1397	730	212	629	605	231	662	563
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.6	25.3	25.3	40.0	22.3	22.3	39.2	23.2	23.2	39.1	24.0	22.1
Incr Delay (d2), s/veh	12.0	47.0	59.2	1.3	3.5	6.5	28.4	3.4	3.6	99.7	4.4	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	28.0	32.7	1.4	11.4	12.5	5.9	7.4	7.2	12.1	9.3	5.1
LnGrp Delay(d),s/veh	51.6	72.3	84.5	41.2	25.8	28.8	67.6	26.6	26.8	138.9	28.5	24.6
LnGrp LOS	D	F	F	D	C	C	E	C	C	F	C	C
Approach Vol, veh/h		2735			1678			849			924	
Approach Delay, s/veh		74.1			27.8			35.0			58.8	
Approach LOS		E			C			D			E	

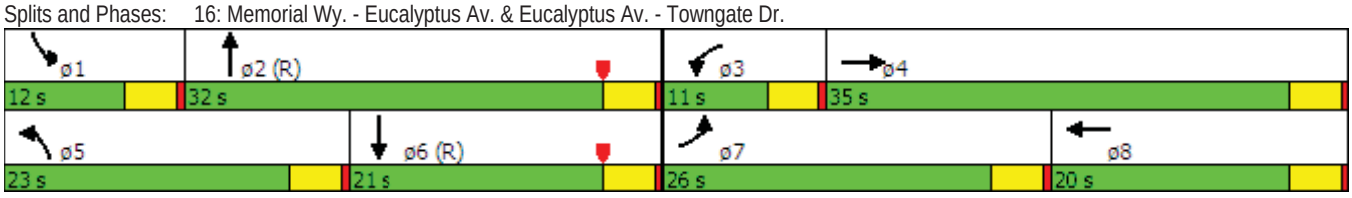
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.6	43.4		36.0	12.9	41.1		36.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	39.0		32.0	9.0	37.0		32.0
Max Q Clear Time (g_c+I1), s	4.9	41.4		34.0	8.9	25.0		34.0
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	11.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	53.9
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	473	680	629	30	543	69	420	290	22	58	296	319
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		0	150		0	200		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	26.0	35.0		11.0	20.0		23.0	32.0		12.0	21.0	
Total Split (%)	28.9%	38.9%		12.2%	22.2%		25.6%	35.6%		13.3%	23.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 35 (39%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	473	680	629	30	543	69	420	290	22	58	296	319
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	503	723	669	32	578	73	447	309	23	62	315	339
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	434	1207	564	76	708	88	375	1210	90	109	375	336
Arrive On Green	0.24	0.36	0.36	0.04	0.15	0.15	0.21	0.36	0.36	0.06	0.21	0.21
Sat Flow, veh/h	1774	3390	1583	1774	4581	571	1774	3341	247	1774	1770	1583
Grp Volume(v), veh/h	503	723	669	32	426	225	447	163	169	62	315	339
Grp Sat Flow(s),veh/h/ln	1774	1695	1583	1774	1695	1762	1774	1770	1819	1774	1770	1583
Q Serve(g_s), s	22.0	15.7	32.0	1.6	10.9	11.1	19.0	5.8	5.9	3.1	15.4	19.1
Cycle Q Clear(g_c), s	22.0	15.7	32.0	1.6	10.9	11.1	19.0	5.8	5.9	3.1	15.4	19.1
Prop In Lane	1.00		1.00	1.00		0.32	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	434	1207	564	76	524	272	375	641	659	109	375	336
V/C Ratio(X)	1.16	0.60	1.19	0.42	0.81	0.83	1.19	0.25	0.26	0.57	0.84	1.01
Avail Cap(c_a), veh/h	434	1207	564	138	603	313	375	641	659	158	375	336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	23.7	29.0	42.0	36.8	36.9	35.5	20.2	20.2	41.1	34.0	35.5
Incr Delay (d2), s/veh	94.8	0.8	100.9	3.7	7.4	14.8	110.5	1.0	0.9	4.6	19.6	51.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.1	7.5	29.7	0.9	5.6	6.6	20.8	3.0	3.1	1.6	9.6	13.1
LnGrp Delay(d),s/veh	128.8	24.5	129.8	45.7	44.2	51.7	146.0	21.1	21.1	45.7	53.6	86.9
LnGrp LOS	F	C	F	D	D	D	F	C	C	D	D	F
Approach Vol, veh/h		1895			683			779			716	
Approach Delay, s/veh		89.4			46.8			92.8			68.7	
Approach LOS		F			D			F			E	

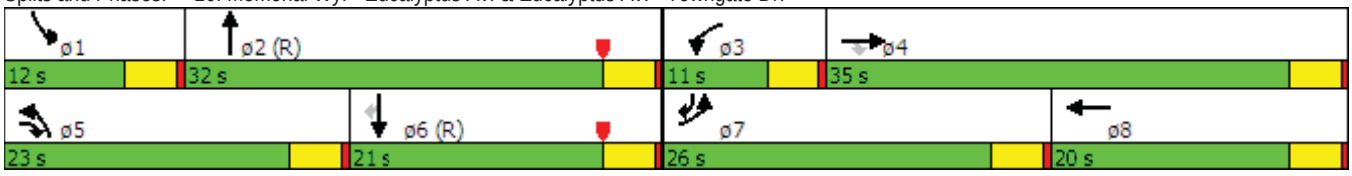
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	36.6	7.9	36.0	23.0	23.1	26.0	17.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	28.0	7.0	31.0	19.0	17.0	22.0	16.0
Max Q Clear Time (g_c+I1), s	5.1	7.9	3.6	34.0	21.0	21.1	24.0	13.1
Green Ext Time (p_c), s	0.0	5.8	0.0	0.0	0.0	0.0	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	79.2
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	473	680	629	30	543	69	420	290	22	58	296	319
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		0	150		0	200		0	200		0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4	5	3	8		5	2		1	6	7
Permitted Phases			4									6
Detector Phase	7	4	5	3	8		5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	11.0	11.0	20.0		11.0	20.0		11.0	20.0	11.0
Total Split (s)	26.0	35.0	23.0	11.0	20.0		23.0	32.0		12.0	21.0	26.0
Total Split (%)	28.9%	38.9%	25.6%	12.2%	22.2%		25.6%	35.6%		13.3%	23.3%	28.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	473	680	629	30	543	69	420	290	22	58	296	319
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	503	723	669	32	578	73	447	309	23	62	315	339
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	434	1259	898	76	706	88	375	1211	90	109	396	724
Arrive On Green	0.24	0.36	0.36	0.04	0.15	0.15	0.21	0.36	0.36	0.06	0.21	0.21
Sat Flow, veh/h	1774	3539	1583	1774	4581	571	1774	3341	247	1774	1863	1583
Grp Volume(v), veh/h	503	723	669	32	426	225	447	163	169	62	315	339
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1695	1762	1774	1770	1819	1774	1863	1583
Q Serve(g_s), s	22.0	14.9	28.5	1.6	10.9	11.2	19.0	5.8	5.9	3.1	14.4	13.3
Cycle Q Clear(g_c), s	22.0	14.9	28.5	1.6	10.9	11.2	19.0	5.8	5.9	3.1	14.4	13.3
Prop In Lane	1.00		1.00	1.00		0.32	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	434	1259	898	76	523	272	375	641	659	109	396	724
V/C Ratio(X)	1.16	0.57	0.75	0.42	0.82	0.83	1.19	0.25	0.26	0.57	0.80	0.47
Avail Cap(c_a), veh/h	434	1259	898	138	603	313	375	641	659	158	396	724
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	23.5	14.6	42.0	36.8	36.9	35.5	20.1	20.2	41.1	33.6	16.9
Incr Delay (d2), s/veh	94.8	0.6	3.4	3.7	7.5	15.0	110.5	1.0	0.9	4.6	15.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.1	7.3	13.1	0.9	5.7	6.6	20.8	3.0	3.1	1.6	9.1	6.3
LnGrp Delay(d),s/veh	128.8	24.1	18.0	45.7	44.3	51.9	146.0	21.1	21.1	45.7	48.8	19.1
LnGrp LOS	F	C	B	D	D	D	F	C	C	D	D	B
Approach Vol, veh/h		1895			683			779			716	
Approach Delay, s/veh		49.8			46.9			92.7			34.4	
Approach LOS		D			D			F			C	

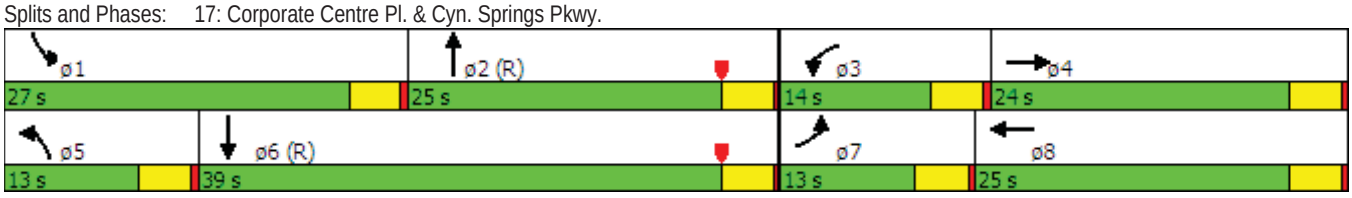
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	36.6	7.9	36.0	23.0	23.1	26.0	17.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	28.0	7.0	31.0	19.0	17.0	22.0	16.0
Max Q Clear Time (g_c+I1), s	5.1	7.9	3.6	30.5	21.0	16.4	24.0	13.2
Green Ext Time (p_c), s	0.0	4.8	0.0	0.4	0.0	0.3	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	54.8
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	48	439	54	58	494	107	40	67	63	181	61	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		0	175		0	130		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			90			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		476			1120			987			205	
Travel Time (s)		8.1			19.1			16.8			4.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	13.0	24.0		14.0	25.0		13.0	25.0		27.0	39.0	
Total Split (%)	14.4%	26.7%		15.6%	27.8%		14.4%	27.8%		30.0%	43.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 60 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 17: Corporate Centre Pl. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	48	439	54	58	494	107	40	67	63	181	61	39
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	51	462	57	61	520	113	42	71	66	191	64	41
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	858	104	108	804	171	90	815	679	231	557	357
Arrive On Green	0.06	0.19	0.19	0.02	0.06	0.06	0.05	0.44	0.44	0.13	0.52	0.52
Sat Flow, veh/h	1774	4597	558	1774	4202	893	1774	1834	1529	1774	1062	680
Grp Volume(v), veh/h	51	339	180	61	417	216	42	68	69	191	0	105
Grp Sat Flow(s),veh/h/ln	1774	1695	1764	1774	1695	1705	1774	1770	1593	1774	0	1743
Q Serve(g_s), s	2.5	8.1	8.3	3.1	10.8	11.1	2.1	2.0	2.3	9.4	0.0	2.7
Cycle Q Clear(g_c), s	2.5	8.1	8.3	3.1	10.8	11.1	2.1	2.0	2.3	9.4	0.0	2.7
Prop In Lane	1.00		0.32	1.00		0.52	1.00		0.96	1.00		0.39
Lane Grp Cap(c), veh/h	99	633	329	108	649	326	90	786	708	231	0	913
V/C Ratio(X)	0.51	0.54	0.55	0.57	0.64	0.66	0.47	0.09	0.10	0.83	0.00	0.11
Avail Cap(c_a), veh/h	177	753	392	197	791	398	177	786	708	453	0	913
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.85	0.85	0.85	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.3	33.1	33.2	42.9	39.2	39.3	41.5	14.4	14.5	38.1	0.0	10.8
Incr Delay (d2), s/veh	4.0	0.7	1.4	3.9	1.1	2.5	3.8	0.2	0.3	7.3	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	3.9	4.2	1.6	5.2	5.5	1.1	1.0	1.0	5.1	0.0	1.4
LnGrp Delay(d),s/veh	45.3	33.8	34.6	46.8	40.3	41.8	45.3	14.7	14.8	45.4	0.0	11.1
LnGrp LOS	D	C	C	D	D	D	D	B	B	D		B
Approach Vol, veh/h		570			694			179			296	
Approach Delay, s/veh		35.1			41.3			21.9			33.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	44.0	9.5	20.8	8.6	51.2	9.0	21.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	21.0	10.0	20.0	9.0	35.0	9.0	21.0
Max Q Clear Time (g_c+I1), s	11.4	4.3	5.1	10.3	4.1	4.7	4.5	13.1
Green Ext Time (p_c), s	0.4	1.2	0.0	4.7	0.0	1.4	0.0	4.1

Intersection Summary	
HCM 2010 Ctrl Delay	35.9
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	186	21	124	174	88	9	82	79	47	95	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	170		0	100		0	130		0	135		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	60			45			60			60		
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		474			710			623			987	
Travel Time (s)		8.1			12.1			10.6			16.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	11.1
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	24	186	21	0	124	174	88	0	9	82	79
Peak Hour Factor	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	26	200	23	0	133	187	95	0	10	88	85
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	3
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	3	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	3	3
HCM Control Delay	11.2	11.3	10.8
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	26%	0%	100%	75%	0%	100%	40%	0%	100%
Vol Right, %	0%	0%	74%	0%	0%	25%	0%	0%	60%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	9	55	106	24	124	83	124	116	146	47	63
LT Vol	9	0	0	24	0	0	124	0	0	47	0
Through Vol	0	55	27	0	124	62	0	116	58	0	63
RT Vol	0	0	79	0	0	21	0	0	88	0	0
Lane Flow Rate	10	59	114	26	133	89	133	125	157	51	68
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.02	0.114	0.205	0.052	0.249	0.162	0.256	0.222	0.261	0.104	0.131
Departure Headway (Hd)	7.476	6.976	6.456	7.218	6.718	6.541	6.903	6.403	5.981	7.411	6.911
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	477	511	553	494	532	546	519	559	598	482	516
Service Time	5.251	4.751	4.231	4.989	4.489	4.312	4.667	4.167	3.745	5.186	4.686
HCM Lane V/C Ratio	0.021	0.115	0.206	0.053	0.25	0.163	0.256	0.224	0.263	0.106	0.132
HCM Control Delay	10.4	10.7	10.9	10.4	11.7	10.6	12	11	10.9	11.1	10.7
HCM Lane LOS	B	B	B	B	B	B	B	B	B	B	B
HCM 95th-tile Q	0.1	0.4	0.8	0.2	1	0.6	1	0.8	1	0.3	0.4

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	47	95	50
Peak Hour Factor	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	51	102	54
Number of Lanes	0	1	2	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	10.7
HCM LOS	B

Lane	SBLn3

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	163	0	0	240	3	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	50		0	0
Storage Lanes		0	0		1	1
Taper Length (ft)			40		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	135			597	203	
Travel Time (s)	2.3			10.2	4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	163	0	0	240	3	8
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	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	177	0	0	261	3	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	177	0	307	89
Stage 1	-	-	-	-	177	-
Stage 2	-	-	-	-	130	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1396	-	661	951
Stage 1	-	-	-	-	836	-
Stage 2	-	-	-	-	882	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1396	-	661	951
Mov Cap-2 Maneuver	-	-	-	-	693	-
Stage 1	-	-	-	-	836	-
Stage 2	-	-	-	-	882	-

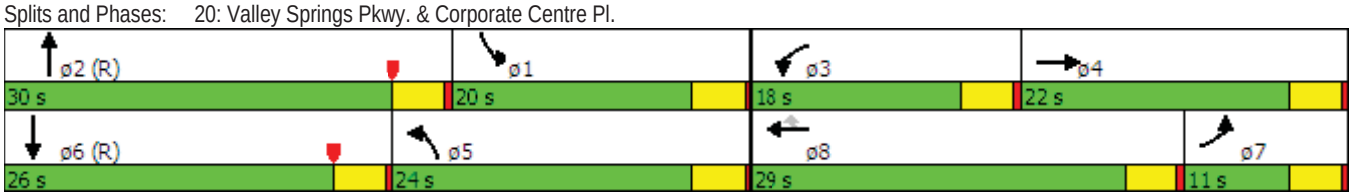
Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	693	951	-	-	1396	-
HCM Lane V/C Ratio	0.005	0.009	-	-	-	-
HCM Control Delay (s)	10.2	8.8	-	-	0	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0	0	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	46	120	118	91	25	201	649	76	44	610	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		70	140		50	150		0	120		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			40			40			40	
Link Distance (ft)		327			603			402			804	
Travel Time (s)		7.4			10.3			6.9			13.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Detector Phase	7	4		3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0		11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	11.0	22.0		18.0	29.0	29.0	24.0	30.0		20.0	26.0	
Total Split (%)	12.2%	24.4%		20.0%	32.2%	32.2%	26.7%	33.3%		22.2%	28.9%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 35 (39%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Valley Springs Pkwy. & Corporate Centre Pl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	36	46	120	118	91	25	201	649	76	44	610	34
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	37	47	124	122	94	26	207	669	78	45	629	35
Adj No. of Lanes	1	1	0	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	243	58	153	154	275	123	644	1336	154	565	1206	67
Arrive On Green	0.14	0.13	0.13	0.09	0.08	0.08	0.73	0.58	0.58	0.32	0.24	0.24
Sat Flow, veh/h	1774	454	1198	1774	3539	1583	1774	4624	534	1774	4932	273
Grp Volume(v), veh/h	37	0	171	122	94	26	207	489	258	45	431	233
Grp Sat Flow(s),veh/h/ln	1774	0	1651	1774	1770	1583	1774	1695	1768	1774	1695	1815
Q Serve(g_s), s	1.7	0.0	9.1	6.1	2.3	1.4	3.8	7.7	7.8	1.6	9.9	10.0
Cycle Q Clear(g_c), s	1.7	0.0	9.1	6.1	2.3	1.4	3.8	7.7	7.8	1.6	9.9	10.0
Prop In Lane	1.00		0.73	1.00		1.00	1.00		0.30	1.00		0.15
Lane Grp Cap(c), veh/h	243	0	211	154	275	123	644	979	511	565	829	444
V/C Ratio(X)	0.15	0.00	0.81	0.79	0.34	0.21	0.32	0.50	0.51	0.08	0.52	0.52
Avail Cap(c_a), veh/h	243	0	330	276	983	440	644	979	511	565	829	444
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	0.0	38.2	40.3	39.3	38.9	8.4	15.1	15.2	21.4	29.4	29.5
Incr Delay (d2), s/veh	0.3	0.0	8.0	8.8	0.7	0.8	0.3	1.8	3.5	0.1	2.3	4.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	4.6	3.4	1.1	0.6	1.8	3.8	4.2	0.8	4.9	5.5
LnGrp Delay(d),s/veh	34.5	0.0	46.2	49.1	40.0	39.8	8.7	17.0	18.7	21.5	31.8	33.9
LnGrp LOS	C		D	D	D	D	A	B	B	C	C	C
Approach Vol, veh/h		208			242			954			709	
Approach Delay, s/veh		44.1			44.6			15.6			31.8	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.7	30.0	11.8	15.5	36.7	26.0	16.3	11.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	26.0	14.0	18.0	20.0	22.0	7.0	25.0
Max Q Clear Time (g_c+I1), s	3.6	9.8	8.1	11.1	5.8	12.0	3.7	4.3
Green Ext Time (p_c), s	0.5	4.1	0.1	0.5	0.6	2.8	0.3	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	27.2
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	0	34	13	0	4	20	910	14	4	827	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	25		0	75		50
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	60			60			10			80		
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		252			253			418			402	
Travel Time (s)		5.7			5.8			7.1			6.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	12	0	34	13	0	4	20	910	14	4	827	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	35	13	0	4	20	929	14	4	844	17

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1273	1845	431	1323	1846	471	861	0	0	943	0	0
Stage 1	861	861	-	977	977	-	-	-	-	-	-	-
Stage 2	412	984	-	346	869	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	176	74	489	164	74	461	457	-	-	417	-	-
Stage 1	248	371	-	207	327	-	-	-	-	-	-	-
Stage 2	538	325	-	589	367	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	161	67	489	141	67	461	457	-	-	417	-	-
Mov Cap-2 Maneuver	161	67	-	141	67	-	-	-	-	-	-	-
Stage 1	225	367	-	188	297	-	-	-	-	-	-	-
Stage 2	484	295	-	542	363	-	-	-	-	-	-	-

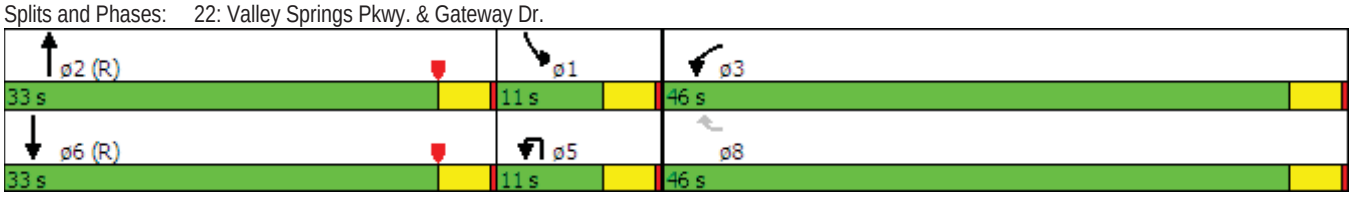
Approach	EB	WB	NB	SB
HCM Control Delay, s	18.2	28.7	0.7	0.1
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	457	-	-	319	169	417	-	-
HCM Lane V/C Ratio	0.045	-	-	0.147	0.103	0.01	-	-
HCM Control Delay (s)	13.2	0.4	-	18.2	28.7	13.7	-	-
HCM Lane LOS	B	A	-	C	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.3	0	-	-

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (vph)	553	96	0	848	226	50	824
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	180		0	115	
Storage Lanes	1	1	1		0	1	
Taper Length (ft)	60		100			120	
Right Turn on Red		Yes			Yes		
Link Speed (mph)	40			40			40
Link Distance (ft)	609			576			418
Travel Time (s)	10.4			9.8			7.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)							
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	3		5	2		1	6
Permitted Phases		8					
Detector Phase	3	8	5	2		1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	11.0	20.0	11.0	20.0		11.0	20.0
Total Split (s)	46.0	46.0	11.0	33.0		11.0	33.0
Total Split (%)	51.1%	51.1%	12.2%	36.7%		12.2%	36.7%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lag	Lead		Lag	Lead
Lead-Lag Optimize?			Yes	Yes		Yes	Yes
Recall Mode	None	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 35 (39%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 22: Valley Springs Pkwy. & Gateway Dr.



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	553	96	0	848	226	50	824
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1900	1863	1863
Adj Flow Rate, veh/h	601	104		922	246	54	896
Adj No. of Lanes	1	1		3	0	1	3
Peak Hour Factor	0.92	0.92		0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	652	582		1289	343	314	2765
Arrive On Green	0.37	0.37		0.11	0.11	0.35	1.00
Sat Flow, veh/h	1774	1583		4169	1064	1774	5253
Grp Volume(v), veh/h	601	104		781	387	54	896
Grp Sat Flow(s),veh/h/ln	1774	1583		1695	1675	1774	1695
Q Serve(g_s), s	29.2	4.0		20.0	20.1	1.9	0.0
Cycle Q Clear(g_c), s	29.2	4.0		20.0	20.1	1.9	0.0
Prop In Lane	1.00	1.00			0.64	1.00	
Lane Grp Cap(c), veh/h	652	582		1092	540	314	2765
V/C Ratio(X)	0.92	0.18		0.71	0.72	0.17	0.32
Avail Cap(c_a), veh/h	828	739		1092	540	314	2765
HCM Platoon Ratio	1.00	1.00		0.33	0.33	2.00	2.00
Upstream Filter(I)	1.00	1.00		0.87	0.87	1.00	1.00
Uniform Delay (d), s/veh	27.2	19.3		36.2	36.3	24.5	0.0
Incr Delay (d2), s/veh	13.5	0.1		3.5	7.0	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.6	1.8		9.9	10.4	0.9	0.1
LnGrp Delay(d),s/veh	40.7	19.4		39.7	43.3	24.8	0.3
LnGrp LOS	D	B		D	D	C	A
Approach Vol, veh/h	705			1168			950
Approach Delay, s/veh	37.6			40.9			1.7
Approach LOS	D			D			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	19.9	33.0				52.9		37.1
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	7.0	29.0				29.0		42.0
Max Q Clear Time (g_c+I1), s	3.9	22.1				2.0		31.2
Green Ext Time (p_c), s	0.0	3.9				6.5		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	26.9
HCM 2010 LOS	C

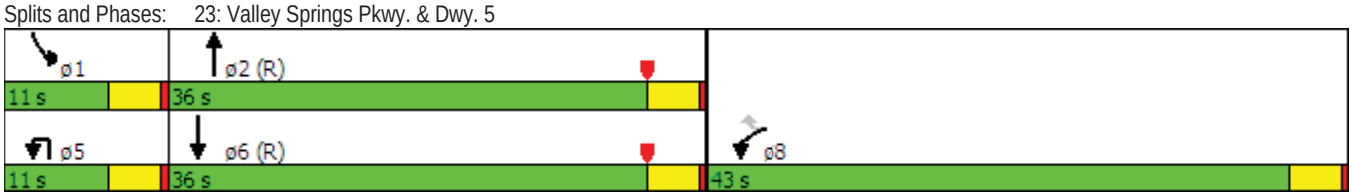
Notes

User approved ignoring U-Turning movement.

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (vph)	446	57	0	1017	185	24	1351
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	195		100	150	
Storage Lanes	1	1	1		0	1	
Taper Length (ft)	60		100			80	
Right Turn on Red		Yes			Yes		
Link Speed (mph)	30			40			40
Link Distance (ft)	400			560			576
Travel Time (s)	9.1			9.5			9.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)							
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	8		5	2		1	6
Permitted Phases		8					
Detector Phase	8	8	5	2		1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	20.0	20.0	11.0	20.0		11.0	20.0
Total Split (s)	43.0	43.0	11.0	36.0		11.0	36.0
Total Split (%)	47.8%	47.8%	12.2%	40.0%		12.2%	40.0%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead	Lag		Lead	Lag
Lead-Lag Optimize?			Yes	Yes		Yes	Yes
Recall Mode	None	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 16 (18%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 23: Valley Springs Pkwy. & Dwy. 5



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	446	57	0	1017	185	24	1351
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1900	1863	1863
Adj Flow Rate, veh/h	485	62		1105	201	26	1468
Adj No. of Lanes	1	1		3	0	1	3
Peak Hour Factor	0.92	0.92		0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	536	478		2282	415	66	3097
Arrive On Green	0.30	0.30		0.17	0.17	0.05	0.81
Sat Flow, veh/h	1774	1583		4495	787	1774	5253
Grp Volume(v), veh/h	485	62		866	440	26	1468
Grp Sat Flow(s),veh/h/ln	1774	1583		1695	1724	1774	1695
Q Serve(g_s), s	23.6	2.6		20.7	20.7	1.3	8.0
Cycle Q Clear(g_c), s	23.6	2.6		20.7	20.7	1.3	8.0
Prop In Lane	1.00	1.00			0.46	1.00	
Lane Grp Cap(c), veh/h	536	478		1788	909	66	3097
V/C Ratio(X)	0.90	0.13		0.48	0.48	0.39	0.47
Avail Cap(c_a), veh/h	769	686		1788	909	138	3097
HCM Platoon Ratio	1.00	1.00		0.33	0.33	1.33	1.33
Upstream Filter(I)	1.00	1.00		0.09	0.09	0.82	0.82
Uniform Delay (d), s/veh	30.2	22.8		26.1	26.1	41.8	4.1
Incr Delay (d2), s/veh	10.8	0.1		0.1	0.2	3.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.2	1.1		9.8	10.0	0.7	3.7
LnGrp Delay(d),s/veh	40.9	22.9		26.2	26.3	44.9	4.5
LnGrp LOS	D	C		C	C	D	A
Approach Vol, veh/h	547			1306			1494
Approach Delay, s/veh	38.9			26.2			5.2
Approach LOS	D			C			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.3	51.5				58.8		31.2
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	7.0	32.0				32.0		39.0
Max Q Clear Time (g_c+I1), s	3.3	22.7				10.0		25.6
Green Ext Time (p_c), s	0.0	8.4				18.2		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	18.9
HCM 2010 LOS	B

Notes

User approved ignoring U-Turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	290	4	3	525	28	9	1	7	24	1	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		609			244			257			287	
Travel Time (s)		10.4			4.2			5.8			6.5	
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	11	290	4	3	525	28	9	1	7	24	1	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	74	74	74	74	74	74	74	74	74	74	74	74
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	392	5	4	709	38	12	1	9	32	1	31

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	747	0	0	397	0	0	788	1179	199	962	1163	374
Stage 1	-	-	-	-	-	-	424	424	-	736	736	-
Stage 2	-	-	-	-	-	-	364	755	-	226	427	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	857	-	-	1158	-	-	282	189	809	210	193	623
Stage 1	-	-	-	-	-	-	578	585	-	377	423	-
Stage 2	-	-	-	-	-	-	627	415	-	756	584	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	857	-	-	1158	-	-	262	185	809	203	189	623
Mov Cap-2 Maneuver	-	-	-	-	-	-	262	185	-	203	189	-
Stage 1	-	-	-	-	-	-	568	575	-	370	422	-
Stage 2	-	-	-	-	-	-	592	414	-	732	574	-

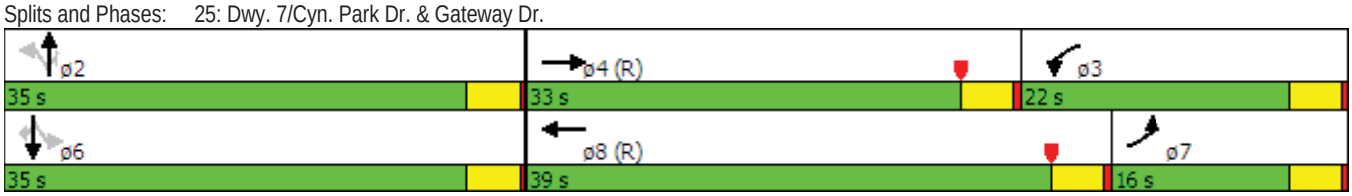
Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0	16	20.3
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	351	857	-	-	1158	-	-	299
HCM Lane V/C Ratio	0.065	0.017	-	-	0.004	-	-	0.217
HCM Control Delay (s)	16	9.3	-	-	8.1	-	-	20.3
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	385	9	88	291	47	23	46	212	49	20	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	150		0	100		0	150		0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			40	
Link Distance (ft)		428			394			265			189	
Travel Time (s)		7.3			6.7			6.0			3.2	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0		11.0	20.0		20.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	16.0	33.0		22.0	39.0		35.0	35.0	35.0	35.0	35.0	35.0
Total Split (%)	17.8%	36.7%		24.4%	43.3%		38.9%	38.9%	38.9%	38.9%	38.9%	38.9%
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	C-Max		None	C-Max		Max	Max	Max	Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 25: Dwy. 7/Cyn. Park Dr. & Gateway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	38	385	9	88	291	47	23	46	212	49	20	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	41	418	10	96	316	51	25	50	230	53	22	180
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	237	1138	27	355	1189	190	476	642	545	437	642	545
Arrive On Green	0.13	0.32	0.32	0.20	0.39	0.39	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1774	3533	84	1774	3058	488	1175	1863	1583	1095	1863	1583
Grp Volume(v), veh/h	41	209	219	96	181	186	25	50	230	53	22	180
Grp Sat Flow(s),veh/h/ln	1774	1770	1848	1774	1770	1777	1175	1863	1583	1095	1863	1583
Q Serve(g_s), s	1.8	8.2	8.2	4.1	6.3	6.4	1.3	1.6	10.0	3.1	0.7	7.6
Cycle Q Clear(g_c), s	1.8	8.2	8.2	4.1	6.3	6.4	2.0	1.6	10.0	4.7	0.7	7.6
Prop In Lane	1.00		0.05	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	237	570	595	355	688	691	476	642	545	437	642	545
V/C Ratio(X)	0.17	0.37	0.37	0.27	0.26	0.27	0.05	0.08	0.42	0.12	0.03	0.33
Avail Cap(c_a), veh/h	237	570	595	355	688	691	476	642	545	437	642	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.6	23.4	23.5	30.4	18.7	18.8	20.2	19.9	22.6	21.5	19.6	21.8
Incr Delay (d2), s/veh	0.3	1.8	1.7	0.4	0.9	1.0	0.2	0.2	2.4	0.6	0.1	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	4.3	4.5	2.1	3.3	3.3	0.5	0.9	4.7	1.0	0.4	3.5
LnGrp Delay(d),s/veh	34.9	25.3	25.2	30.9	19.7	19.7	20.4	20.1	25.0	22.0	19.7	23.4
LnGrp LOS	C	C	C	C	B	B	C	C	C	C	B	C
Approach Vol, veh/h		469			463			305			255	
Approach Delay, s/veh		26.1			22.0			23.8			22.8	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		35.0	22.0	33.0		35.0	16.0	39.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0	18.0	29.0		31.0	12.0	35.0
Max Q Clear Time (g_c+I1), s		12.0	6.1	10.2		9.6	3.8	8.4
Green Ext Time (p_c), s		2.0	0.2	2.2		2.0	0.2	2.0

Intersection Summary	
HCM 2010 Ctrl Delay	23.8
HCM 2010 LOS	C

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	1	691	391	1	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	25			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	0				60	
Link Speed (mph)		40	40		30	
Link Distance (ft)		394	226		243	
Travel Time (s)		6.7	3.9		5.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	1	691	391	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	25	-	-	-	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	1	751	425	1	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	426	0	-	0	804	213
Stage 1	-	-	-	-	426	-
Stage 2	-	-	-	-	378	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1130	-	-	-	321	792
Stage 1	-	-	-	-	627	-
Stage 2	-	-	-	-	663	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1130	-	-	-	321	792
Mov Cap-2 Maneuver	-	-	-	-	440	-
Stage 1	-	-	-	-	627	-
Stage 2	-	-	-	-	662	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1130	-	-	-	566
HCM Lane V/C Ratio	0.001	-	-	-	0.004
HCM Control Delay (s)	8.2	-	-	-	11.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	683	5	18	384	17	5	0	55	16	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	25		0	25		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	1			0			60			60		
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		226			318			265			243	
Travel Time (s)		3.9			5.4			6.0			5.5	
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
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	683	5	18	384	17	5	0	55	16	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	25	-	-	25	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	711	5	19	400	18	5	0	57	17	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	418	0	0	717	0	0	958	1175	358	808	1169	209
Stage 1	-	-	-	-	-	-	720	720	-	446	446	-
Stage 2	-	-	-	-	-	-	238	455	-	362	723	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1138	-	-	880	-	-	212	190	638	272	192	797
Stage 1	-	-	-	-	-	-	385	430	-	561	572	-
Stage 2	-	-	-	-	-	-	744	567	-	629	429	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1138	-	-	880	-	-	207	185	638	243	187	797
Mov Cap-2 Maneuver	-	-	-	-	-	-	207	185	-	243	187	-
Stage 1	-	-	-	-	-	-	384	429	-	560	560	-
Stage 2	-	-	-	-	-	-	725	555	-	571	428	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	12.5	19.2
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	544	1138	-	-	880	-	-	273
HCM Lane V/C Ratio	0.115	0.003	-	-	0.021	-	-	0.072
HCM Control Delay (s)	12.5	8.2	-	-	9.2	-	-	19.2
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	251	44	148	317	66	50	42	55	37	40	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		50	110		100	100		50	0		50
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	60			60			60			60		
Link Speed (mph)		40			40			40			30	
Link Distance (ft)		710			938			284			207	
Travel Time (s)		12.1			16.0			4.8			4.7	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	11.8
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	17	251	44	0	148	317	66	0	50	42	55
Peak Hour Factor	0.92	0.98	0.98	0.98	0.92	0.98	0.98	0.98	0.92	0.98	0.98	0.98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	17	256	45	0	151	323	67	0	51	43	56
Number of Lanes	0	1	2	0	0	1	2	0	0	1	2	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	3	3	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	3	3
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	3	2	3
HCM Control Delay	11.8	12.1	10.7
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	48%	0%
Vol Thru, %	0%	100%	20%	0%	100%	66%	0%	100%	62%	52%	0%
Vol Right, %	0%	0%	80%	0%	0%	34%	0%	0%	38%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	50	28	69	17	167	128	148	211	172	77	17
LT Vol	50	0	0	17	0	0	148	0	0	37	0
Through Vol	0	28	14	0	167	84	0	211	106	40	0
RT Vol	0	0	55	0	0	44	0	0	66	0	17
Lane Flow Rate	51	29	70	17	171	130	151	216	175	79	17
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.109	0.057	0.13	0.034	0.315	0.232	0.283	0.374	0.29	0.164	0.032
Departure Headway (Hd)	7.712	7.21	6.65	7.148	6.644	6.401	6.74	6.237	5.966	7.513	6.572
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	463	494	536	499	540	559	532	576	601	475	541
Service Time	5.496	4.994	4.433	4.917	4.413	4.17	4.5	3.997	3.726	5.293	4.353
HCM Lane V/C Ratio	0.11	0.059	0.131	0.034	0.317	0.233	0.284	0.375	0.291	0.166	0.031
HCM Control Delay	11.4	10.4	10.4	10.2	12.5	11.1	12.2	12.7	11.2	11.8	9.6
HCM Lane LOS	B	B	B	B	B	B	B	B	B	B	A
HCM 95th-tile Q	0.4	0.2	0.4	0.1	1.3	0.9	1.2	1.7	1.2	0.6	0.1

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	37	40	17
Peak Hour Factor	0.92	0.98	0.98	0.98
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	38	41	17
Number of Lanes	0	0	1	1

Approach	SB
Opposing Approach	NB
Opposing Lanes	3
Conflicting Approach Left	WB
Conflicting Lanes Left	3
Conflicting Approach Right	EB
Conflicting Lanes Right	3
HCM Control Delay	11.4
HCM LOS	B

Lane

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	2	4	130	0	0	237
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		40			40
Link Distance (ft)	223		216			336
Travel Time (s)	5.1		3.7			5.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	2	4	130	0	0	237
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	2	4	141	0	0	258

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	270	71	0	0	141	0
Stage 1	141	-	-	-	-	-
Stage 2	129	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	697	977	-	-	1440	-
Stage 1	871	-	-	-	-	-
Stage 2	883	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	697	977	-	-	1440	-
Mov Cap-2 Maneuver	718	-	-	-	-	-
Stage 1	871	-	-	-	-	-
Stage 2	883	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	872	1440	-
HCM Lane V/C Ratio	-	-	0.007	-	-
HCM Control Delay (s)	-	-	9.2	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	2	9	132	2	10	235
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	25	
Storage Lanes	1	0		0	1	
Taper Length (ft)	60				25	
Link Speed (mph)	30		40			40
Link Distance (ft)	223		336			284
Travel Time (s)	5.1		5.7			4.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	2	9	132	2	10	235
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	-	-	-	25	-
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	2	10	143	2	11	255

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	294	73	0	0	146	0
Stage 1	145	-	-	-	-	-
Stage 2	149	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	673	974	-	-	1434	-
Stage 1	867	-	-	-	-	-
Stage 2	863	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	668	974	-	-	1434	-
Mov Cap-2 Maneuver	698	-	-	-	-	-
Stage 1	867	-	-	-	-	-
Stage 2	856	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	909	1434	-
HCM Lane V/C Ratio	-	-	0.013	0.008	-
HCM Control Delay (s)	-	-	9	7.5	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	0	0	130	2	4	235
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	25	
Storage Lanes	1	0		0	1	
Taper Length (ft)	60				25	
Link Speed (mph)	30		40			40
Link Distance (ft)	212		189			216
Travel Time (s)	4.8		3.2			3.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	0	0	130	2	4	235
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	-	-	-	25	-
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	141	2	4	255

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	278	72	0	0	143	0
Stage 1	142	-	-	-	-	-
Stage 2	136	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	689	975	-	-	1437	-
Stage 1	870	-	-	-	-	-
Stage 2	876	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	687	975	-	-	1437	-
Mov Cap-2 Maneuver	712	-	-	-	-	-
Stage 1	870	-	-	-	-	-
Stage 2	874	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1437	-
HCM Lane V/C Ratio	-	-	-	0.003	-
HCM Control Delay (s)	-	-	0	7.5	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	261	60	71	411	145	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	50		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			60		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	244			428	257	
Travel Time (s)	4.2			7.3	5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	5.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	261	60	71	411	145	171
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	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	284	65	77	447	158	186

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	349	0	694	174
Stage 1	-	-	-	-	316	-
Stage 2	-	-	-	-	378	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1207	-	377	839
Stage 1	-	-	-	-	712	-
Stage 2	-	-	-	-	663	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1207	-	353	839
Mov Cap-2 Maneuver	-	-	-	-	462	-
Stage 1	-	-	-	-	712	-
Stage 2	-	-	-	-	621	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	18.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	610	-	-	1207	-
HCM Lane V/C Ratio	0.563	-	-	0.064	-
HCM Control Delay (s)	18.2	-	-	8.2	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	3.5	-	-	0.2	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	163	3	9	234	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	25		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		60	
Link Speed (mph)	40			40	30	
Link Distance (ft)	493			135	181	
Travel Time (s)	8.4			2.3	4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	163	3	9	234	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	-	-	25	-	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	177	3	10	254	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	180	0	326	90
Stage 1	-	-	-	-	179	-
Stage 2	-	-	-	-	147	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1393	-	643	950
Stage 1	-	-	-	-	834	-
Stage 2	-	-	-	-	865	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1393	-	638	950
Mov Cap-2 Maneuver	-	-	-	-	677	-
Stage 1	-	-	-	-	834	-
Stage 2	-	-	-	-	859	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1393	-
HCM Lane V/C Ratio	-	-	-	0.007	-
HCM Control Delay (s)	0	-	-	7.6	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection: 2: Box Springs Bl. & Eastridge Av.

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	TR	L	T	R	L	T
Maximum Queue (ft)	112	343	224	57	164	327	451	31	170	79	148	214
Average Queue (ft)	83	212	138	16	65	238	354	11	109	32	119	126
95th Queue (ft)	161	361	230	72	163	356	474	33	192	100	166	250
Link Distance (ft)		672	672			620	620		216			322
Upstream Blk Time (%)									0	0		
Queuing Penalty (veh)									0	0		
Storage Bay Dist (ft)	90			80	150			75		160	90	
Storage Blk Time (%)	4	17	14			10			34		39	2
Queuing Penalty (veh)	12	11	2			7			26		15	3

Intersection: 2: Box Springs Bl. & Eastridge Av.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	52
Average Queue (ft)	13
95th Queue (ft)	74
Link Distance (ft)	322
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: I-215 SB/NB Ramps & Eastridge Av.

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	
Directions Served	L	T	T	L	L	T	T	L	L	L	L	
Maximum Queue (ft)	125	147	89	170	192	275	285	287	295	315	250	
Average Queue (ft)	72	107	58	125	150	205	234	177	191	241	171	
95th Queue (ft)	133	177	127	193	210	316	346	338	347	361	314	
Link Distance (ft)	114	114	114	233	233	233	233	718	718	602	602	
Upstream Blk Time (%)	7	9	1		0	5	13					
Queuing Penalty (veh)	18	25	2		0	25	65					
Storage Bay Dist (ft)												
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 4: Valley Springs Pkwy. & Eucalyptus Av.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	L	T
Maximum Queue (ft)	399	497	540	257	27	71	770	846	58	210	266	570
Average Queue (ft)	276	392	235	120	10	22	548	594	25	156	213	377
95th Queue (ft)	486	557	591	297	31	83	845	914	68	252	299	702
Link Distance (ft)			540	540			1982	1982				762
Upstream Blk Time (%)			7									
Queuing Penalty (veh)			49									
Storage Bay Dist (ft)	300	300			360	100			30	150	150	
Storage Blk Time (%)	6	37					59	63	3	12	30	12
Queuing Penalty (veh)	21	131					14	65	22	28	73	53

Intersection: 4: Valley Springs Pkwy. & Eucalyptus Av.

Movement	NB	SB	SB	SB	SB
Directions Served	TR	L	T	R	R
Maximum Queue (ft)	632	49	68	233	68
Average Queue (ft)	478	26	41	148	33
95th Queue (ft)	746	58	80	327	171
Link Distance (ft)	762		450	450	450
Upstream Blk Time (%)	1				
Queuing Penalty (veh)	0				
Storage Bay Dist (ft)		140			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 5: Day St. & SR-60 WB Ramps

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	T	R	L	T	T
Maximum Queue (ft)	208	226	68	65	72	104	137	130	120
Average Queue (ft)	152	167	37	33	38	52	83	81	75
95th Queue (ft)	214	244	68	76	82	113	152	152	141
Link Distance (ft)	227	227	227	877	877			755	755
Upstream Blk Time (%)	0	2							
Queuing Penalty (veh)	1	5							
Storage Bay Dist (ft)						175	200		
Storage Blk Time (%)								0	
Queuing Penalty (veh)								0	

Intersection: 6: Day St. & SR-60 EB Ramps

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	L	R	T	T	R	L	T	T	T
Maximum Queue (ft)	169	178	30	124	177	108	117	72	106	97
Average Queue (ft)	128	154	16	80	124	57	79	42	48	60
95th Queue (ft)	196	201	38	141	194	127	137	94	113	111
Link Distance (ft)	170	170	170	403	403	403		877	877	
Upstream Blk Time (%)	0	6								
Queuing Penalty (veh)	0	14								
Storage Bay Dist (ft)							425			105
Storage Blk Time (%)									0	0
Queuing Penalty (veh)									1	1

Intersection: 7: Day St. & Cyn. Springs Pkwy.

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	L	T	R	L	T	R	L	T	T	TR	L
Maximum Queue (ft)	189	245	44	30	47	68	65	76	77	101	141	160
Average Queue (ft)	77	163	22	15	23	39	43	45	36	61	81	107
95th Queue (ft)	190	266	52	35	59	82	73	95	96	120	163	184
Link Distance (ft)		981	981	981		340	340		608	608	608	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	180				145			165				170
Storage Blk Time (%)	0	14										1
Queuing Penalty (veh)	0	22										3

Intersection: 7: Day St. & Cyn. Springs Pkwy.

Movement	SB	SB	SB	SB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	101	90	116	77	34
Average Queue (ft)	54	53	74	36	16
95th Queue (ft)	110	102	141	88	44
Link Distance (ft)	403	403	403	403	403
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)	0				
Queuing Penalty (veh)	0				

Intersection: 8: Day St. & Campus Pkwy.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	R	L	T	T	R	L	L	T	T
Maximum Queue (ft)	19	65	70	52	31	90	30	41	75	68	48	64
Average Queue (ft)	6	32	34	24	17	61	15	24	40	45	26	32
95th Queue (ft)	31	69	76	64	43	110	38	44	87	79	58	71
Link Distance (ft)		816	816			445	445	445			915	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			50	200				130	130		
Storage Blk Time (%)			8	1					0			
Queuing Penalty (veh)			4	1					0			

Intersection: 8: Day St. & Campus Pkwy.

Movement	NB	NB	SB	SB	SB	SB	SB	SB
Directions Served	T	R	L	L	T	T	T	R
Maximum Queue (ft)	90	18	5	61	43	28	68	13
Average Queue (ft)	48	6	1	36	13	8	22	5
95th Queue (ft)	94	25	10	70	43	29	76	15
Link Distance (ft)	915				608	608	608	608
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		50	190	190				
Storage Blk Time (%)	8	0						
Queuing Penalty (veh)	3	0						

Intersection: 9: Day St. & Gateway Dr.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	TR	L	L
Maximum Queue (ft)	134	35	78	58	85	90	144	119	130	146	42	70
Average Queue (ft)	83	13	52	35	58	49	92	76	86	86	21	48
95th Queue (ft)	149	40	87	69	94	92	160	136	141	158	50	84
Link Distance (ft)		226	226		519	519		511	511			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			100			190			400	260	260
Storage Blk Time (%)					1		0					
Queuing Penalty (veh)					0		1					

Intersection: 9: Day St. & Gateway Dr.

Movement	SB	SB	SB
Directions Served	T	T	TR
Maximum Queue (ft)	112	133	254
Average Queue (ft)	78	56	166
95th Queue (ft)	125	153	288
Link Distance (ft)	915	915	915
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 10: Day St. & Dwy. 1

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	30	34
Average Queue (ft)	11	15
95th Queue (ft)	34	41
Link Distance (ft)	302	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		80
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: Day St. & Dwy. 2

Movement	EB	SB	SB	SB
Directions Served	R	T	T	TR
Maximum Queue (ft)	12	71	46	63
Average Queue (ft)	2	58	28	41
95th Queue (ft)	17	81	56	65
Link Distance (ft)	303	116	116	116
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 12: Day St. & Eucalyptus Av.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	T	T	R	L	T	T	R
Maximum Queue (ft)	173	225	235	110	250	448	428	54	174	250	188	140
Average Queue (ft)	131	150	159	53	228	376	366	33	144	162	135	65
95th Queue (ft)	199	266	279	133	314	526	507	65	196	267	229	145
Link Distance (ft)		1982	1982			1088	1088	1088		304		
Upstream Blk Time (%)										0		
Queuing Penalty (veh)										3		
Storage Bay Dist (ft)	100			50	175				100		100	100
Storage Blk Time (%)	23	17	41	0	23	40			31	25	24	0
Queuing Penalty (veh)	70	43	38	0	125	124			233	193	127	2

Intersection: 12: Day St. & Eucalyptus Av.

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	103	195	106	68
Average Queue (ft)	71	136	44	40
95th Queue (ft)	120	221	117	85
Link Distance (ft)		352	352	352
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	200			
Storage Blk Time (%)		3		
Queuing Penalty (veh)		2		

Intersection: 13: Day St. & Cottonwood Av.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	TR
Maximum Queue (ft)	60	165	84	179	248	164	112	379	160	159	222
Average Queue (ft)	31	111	45	117	130	113	54	287	104	122	128
95th Queue (ft)	76	199	110	196	262	207	124	503	210	194	260
Link Distance (ft)		827			792			736			2171
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	100		100	95		95	80		100	100	
Storage Blk Time (%)	0	17	0	35	8	15	2	39		27	6
Queuing Penalty (veh)	0	17	1	198	43	54	12	69		138	14

Intersection: 31: I-215 SB Ramps/I-215 SB Ramps (W) & Eastridge Av.

Movement	EB	WB	WB	SB
Directions Served	T	T	T	R
Maximum Queue (ft)	30	132	148	295
Average Queue (ft)	9	103	114	211
95th Queue (ft)	48	163	178	323
Link Distance (ft)	620	114	114	312
Upstream Blk Time (%)		9	13	2
Queuing Penalty (veh)		77	113	0
Storage Bay Dist (ft)				
Storage Blk Time (%)	1			
Queuing Penalty (veh)	2			

Intersection: 32: I-215 NB Ramps (E)/I-215 NB Ramps & Eastridge Av./Eucalyptus Av.

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	T	T	T	R	R
Maximum Queue (ft)	211	165	16	66	284	210
Average Queue (ft)	169	113	3	24	204	120
95th Queue (ft)	255	189	27	86	320	240
Link Distance (ft)	233	233	540	540	352	352
Upstream Blk Time (%)	0				1	
Queuing Penalty (veh)	0				0	
Storage Bay Dist (ft)						
Storage Blk Time (%)			1			
Queuing Penalty (veh)			5			

Zone Summary

Zone wide Queuing Penalty: 2428

Intersection: 2: Box Springs Bl. & Eastridge Av.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	T	L	T	TR	L	T	R	L	T	TR
Maximum Queue (ft)	52	398	392	35	231	214	31	108	42	149	400	252
Average Queue (ft)	17	266	248	18	152	155	13	69	19	148	319	122
95th Queue (ft)	67	441	418	42	260	232	36	118	47	152	476	336
Link Distance (ft)		672	672		620	620		216			322	322
Upstream Blk Time (%)											25	0
Queuing Penalty (veh)											0	0
Storage Bay Dist (ft)	90			150			75		160	90		
Storage Blk Time (%)		34	30		7			11		73	3	
Queuing Penalty (veh)		4	1		3			6		51	9	

Intersection: 2: Box Springs Bl. & Eastridge Av.

Movement	B70	B70
Directions Served	T	T
Maximum Queue (ft)	106	38
Average Queue (ft)	33	8
95th Queue (ft)	134	69
Link Distance (ft)	257	257
Upstream Blk Time (%)	1	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: I-215 SB/NB Ramps & Eastridge Av.

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	L	L	T	T	L	L	L	L
Maximum Queue (ft)	130	175	176	272	284	171	179	85	70	606	579
Average Queue (ft)	90	169	159	217	243	124	130	58	39	537	491
95th Queue (ft)	155	181	204	318	333	186	191	93	80	716	705
Link Distance (ft)	114	114	114	233	233	233	233	718	718	602	602
Upstream Blk Time (%)	6	61	54	14	23	0	0			32	16
Queuing Penalty (veh)	34	324	288	72	120	2	0			0	0
Storage Bay Dist (ft)											
Storage Blk Time (%)											
Queuing Penalty (veh)											

Intersection: 4: Valley Springs Pkwy. & Eucalyptus Av.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	L	T
Maximum Queue (ft)	216	265	224	223	62	148	486	467	55	78	64	71
Average Queue (ft)	164	206	166	175	39	45	373	327	28	47	40	43
95th Queue (ft)	237	286	254	249	69	148	553	554	70	87	79	77
Link Distance (ft)			540	540			1982	1982				762
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	300	300			360	100			30	150	150	
Storage Blk Time (%)	0	1				0	59	64	2			
Queuing Penalty (veh)	1	5				0	24	57	11			

Intersection: 4: Valley Springs Pkwy. & Eucalyptus Av.

Movement	NB	SB	SB	SB	SB
Directions Served	TR	L	T	R	R
Maximum Queue (ft)	124	177	421	463	452
Average Queue (ft)	75	133	231	396	284
95th Queue (ft)	142	260	460	553	572
Link Distance (ft)	762		450	450	450
Upstream Blk Time (%)			1	18	2
Queuing Penalty (veh)			4	109	10
Storage Bay Dist (ft)		140			
Storage Blk Time (%)		25	10		
Queuing Penalty (veh)		66	14		

Intersection: 5: Day St. & SR-60 WB Ramps

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	T	R	L	T	T
Maximum Queue (ft)	242	242	78	110	108	119	104	141	102
Average Queue (ft)	182	176	38	67	70	78	58	94	67
95th Queue (ft)	272	267	80	119	121	147	111	160	115
Link Distance (ft)	227	227	227	877	877			755	755
Upstream Blk Time (%)	15	12							
Queuing Penalty (veh)	40	34							
Storage Bay Dist (ft)						175	200		
Storage Blk Time (%)						0			
Queuing Penalty (veh)						0			

Intersection: 6: Day St. & SR-60 EB Ramps

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	L	R	T	T	R	L	T	T	T
Maximum Queue (ft)	178	182	140	242	300	248	193	138	79	100
Average Queue (ft)	156	174	99	166	223	187	132	76	41	62
95th Queue (ft)	203	187	154	278	332	267	214	146	87	110
Link Distance (ft)	170	170	170	403	403	403		877	877	
Upstream Blk Time (%)	6	26	0							
Queuing Penalty (veh)	20	96	1							
Storage Bay Dist (ft)							425			105
Storage Blk Time (%)									0	2
Queuing Penalty (veh)									0	6

Intersection: 7: Day St. & Cyn. Springs Pkwy.

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	L	T	R	L	T	R	L	T	T	TR	L
Maximum Queue (ft)	275	780	478	90	72	101	190	174	352	458	475	236
Average Queue (ft)	266	680	236	45	40	66	133	127	147	241	291	175
95th Queue (ft)	331	850	635	92	83	118	210	194	373	492	552	287
Link Distance (ft)		981	981	981		340	340		608	608	608	
Upstream Blk Time (%)										0	0	
Queuing Penalty (veh)										0	3	
Storage Bay Dist (ft)	180				145			165				170
Storage Blk Time (%)	9	79				0		5	0			20
Queuing Penalty (veh)	34	286				0		22	1			53

Intersection: 7: Day St. & Cyn. Springs Pkwy.

Movement	SB	SB	SB	SB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	321	214	179	96	85
Average Queue (ft)	222	133	118	71	56
95th Queue (ft)	349	227	211	110	91
Link Distance (ft)	403	403	403	403	403
Upstream Blk Time (%)	1				
Queuing Penalty (veh)	5				
Storage Bay Dist (ft)					
Storage Blk Time (%)	16				
Queuing Penalty (veh)	36				

Intersection: 8: Day St. & Campus Pkwy.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	R	L	T	T	R	L	L	T	T
Maximum Queue (ft)	108	146	102	83	95	94	68	140	87	93	140	200
Average Queue (ft)	45	95	63	53	51	70	42	87	48	60	100	127
95th Queue (ft)	106	165	129	106	103	103	83	165	101	104	154	211
Link Distance (ft)		816	816			445	445	445			915	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			50	200				130	130		
Storage Blk Time (%)		0	22	3						0	1	
Queuing Penalty (veh)		0	41	4						0	3	

Intersection: 8: Day St. & Campus Pkwy.

Movement	NB	NB	SB	SB	SB	SB	SB	SB
Directions Served	T	R	L	L	T	T	T	R
Maximum Queue (ft)	201	93	120	126	221	197	211	25
Average Queue (ft)	142	41	74	95	175	152	162	10
95th Queue (ft)	220	109	137	141	256	217	245	29
Link Distance (ft)	915				608	608	608	608
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		50	190	190				
Storage Blk Time (%)	31	0			11			
Queuing Penalty (veh)	32	1			31			

Intersection: 9: Day St. & Gateway Dr.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	TR	L	L
Maximum Queue (ft)	198	254	129	124	79	140	111	164	167	222	100	118
Average Queue (ft)	171	115	92	77	55	87	72	110	115	137	62	81
95th Queue (ft)	225	285	149	132	91	164	124	184	189	247	116	125
Link Distance (ft)		226	226		519	519		511	511			
Upstream Blk Time (%)		5										
Queuing Penalty (veh)		20										
Storage Bay Dist (ft)	200			100			190			400	260	260
Storage Blk Time (%)	8	2		7	0			1				
Queuing Penalty (veh)	6	7		4	0			2				

Intersection: 9: Day St. & Gateway Dr.

Movement	SB	SB	SB
Directions Served	T	T	TR
Maximum Queue (ft)	225	153	228
Average Queue (ft)	159	92	150
95th Queue (ft)	268	189	256
Link Distance (ft)	915	915	915
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)	0		
Queuing Penalty (veh)	1		

Intersection: 10: Day St. & Dwy. 1

Movement	EB	NB	SB	SB	SB
Directions Served	LR	L	T	T	TR
Maximum Queue (ft)	87	30	317	219	53
Average Queue (ft)	54	13	124	65	17
95th Queue (ft)	109	37	390	288	75
Link Distance (ft)	302		511	511	511
Upstream Blk Time (%)			0	0	
Queuing Penalty (veh)			0	0	
Storage Bay Dist (ft)		80			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 11: Day St. & Dwy. 2

Movement	EB	SB	SB	SB
Directions Served	R	T	T	TR
Maximum Queue (ft)	43	128	120	87
Average Queue (ft)	24	98	75	60
95th Queue (ft)	54	146	143	95
Link Distance (ft)	303	116	116	116
Upstream Blk Time (%)		20	6	2
Queuing Penalty (veh)		71	23	8
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 12: Day St. & Eucalyptus Av.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	T	T	R	L	T	T	R
Maximum Queue (ft)	199	434	427	110	247	313	268	68	129	240	206	177
Average Queue (ft)	170	339	347	80	204	232	213	40	75	145	144	125
95th Queue (ft)	241	494	476	149	289	342	290	76	140	245	245	208
Link Distance (ft)		1982	1982			1088	1088	1088		304		
Upstream Blk Time (%)										0		
Queuing Penalty (veh)										1		
Storage Bay Dist (ft)	100			50	175				100		100	100
Storage Blk Time (%)	20	39	51	1	21	21			4	28	30	12
Queuing Penalty (veh)	130	118	111	4	89	55			37	211	112	47

Intersection: 12: Day St. & Eucalyptus Av.

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	319	363	340	155
Average Queue (ft)	158	280	218	102
95th Queue (ft)	348	437	438	183
Link Distance (ft)		352	352	352
Upstream Blk Time (%)		22	12	
Queuing Penalty (veh)		82	42	
Storage Bay Dist (ft)	200			
Storage Blk Time (%)		52		
Queuing Penalty (veh)		96		

Intersection: 13: Day St. & Cottonwood Av.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	B52	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	T	L	TR
Maximum Queue (ft)	91	150	96	188	334	187	112	694	160	76	154	276
Average Queue (ft)	35	101	34	138	178	118	69	501	107	24	125	162
95th Queue (ft)	95	166	103	216	368	197	137	817	215	149	173	304
Link Distance (ft)		827			792			736		440		2171
Upstream Blk Time (%)								6				
Queuing Penalty (veh)								56				
Storage Bay Dist (ft)	100		100	95		95	80		100		100	
Storage Blk Time (%)	0	13		31	16	10	3	56			32	9
Queuing Penalty (veh)	1	11		198	98	44	22	115			213	26

Intersection: 31: I-215 SB Ramps/I-215 SB Ramps (W) & Eastridge Av.

Movement	EB	EB	EB	WB	WB	SB
Directions Served	T	T	TR	T	T	R
Maximum Queue (ft)	109	610	607	112	110	246
Average Queue (ft)	59	380	363	84	76	175
95th Queue (ft)	146	737	744	122	121	263
Link Distance (ft)		620	620	114	114	312
Upstream Blk Time (%)		1	0	1	1	1
Queuing Penalty (veh)		7	4	6	3	0
Storage Bay Dist (ft)	50					
Storage Blk Time (%)	1	55				
Queuing Penalty (veh)	4	291				

Intersection: 32: I-215 NB Ramps (E)/I-215 NB Ramps & Eastridge Av./Eucalyptus Av.

Movement	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	T	T	T	R	R
Maximum Queue (ft)	220	210	38	71	59	344	294
Average Queue (ft)	196	188	10	18	12	278	198
95th Queue (ft)	226	223	53	89	107	387	331
Link Distance (ft)	233	233			540	352	352
Upstream Blk Time (%)	0	0				3	0
Queuing Penalty (veh)	2	1				0	0
Storage Bay Dist (ft)			5	5			
Storage Blk Time (%)			3	6			
Queuing Penalty (veh)			17	33			

Zone Summary

Zone wide Queuing Penalty: 4393

APPENDIX 7.3:

GENERAL PLAN BUILDOUT WITHOUT PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **GPBO NP Conditions - Weekday AM Peak Hour**

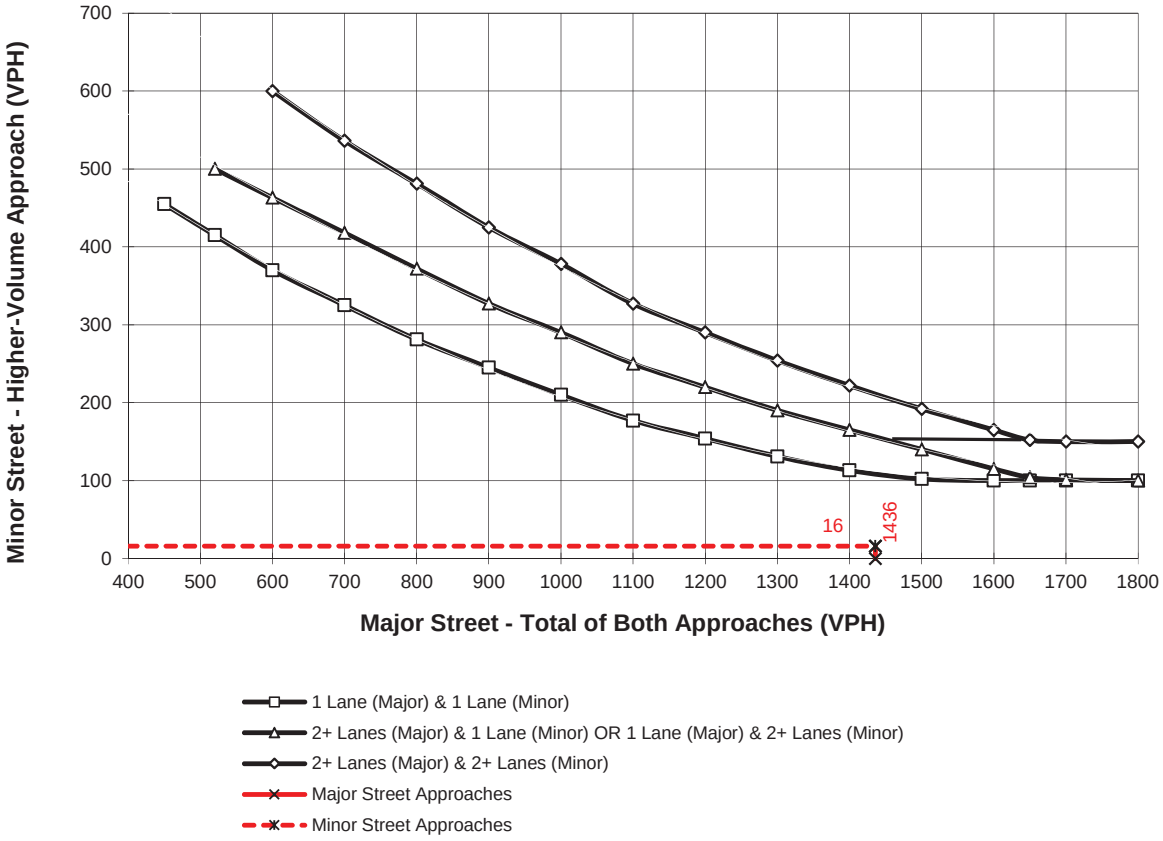
Major Street Name = **Day St.**

Total of Both Approaches (VPH) = **1,436**
Number of Approach Lanes on Major Street = **3**

Minor Street Name = **Dwy. 2**

High Volume Approach (VPH) = **16**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **GPBO NP Conditions - Weekday PM Peak Hour**

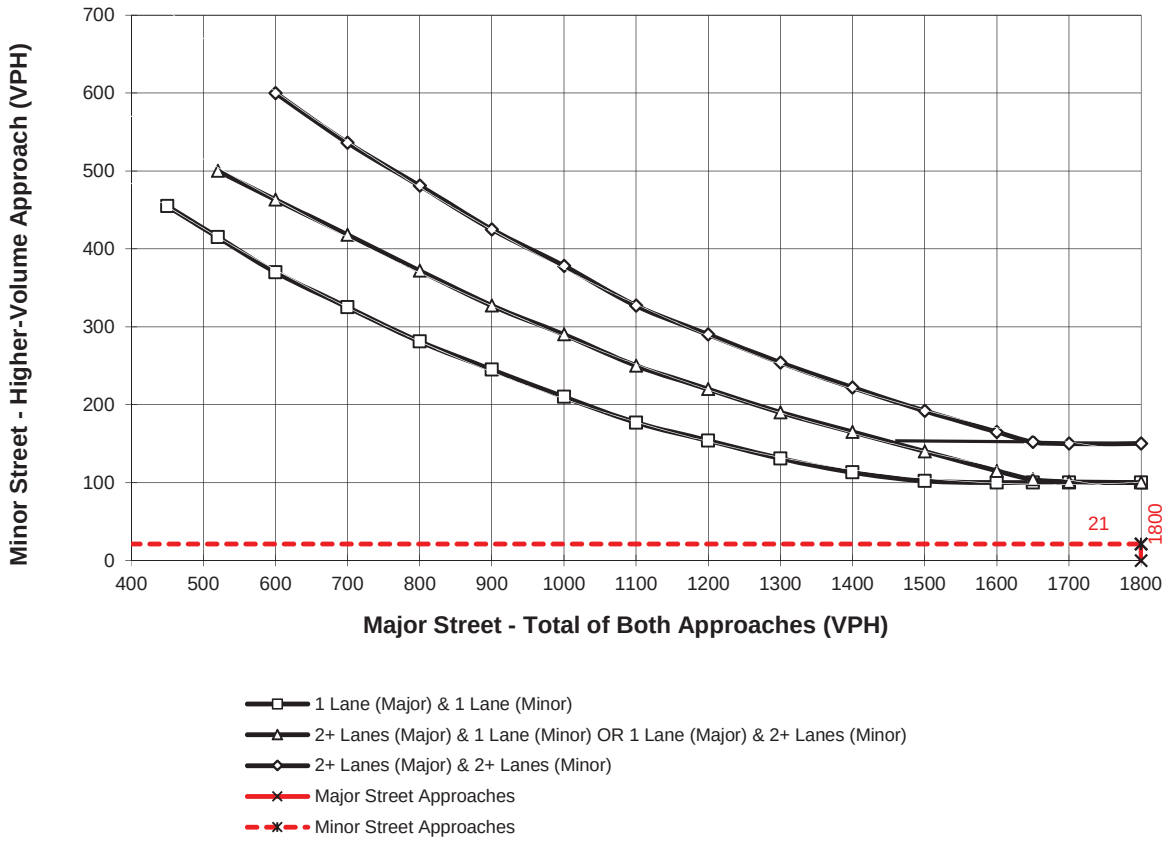
Major Street Name = **Day St.**

Total of Both Approaches (VPH) = **2,046**
Number of Approach Lanes on Major Street = **3**

Minor Street Name = **Dwy. 2**

High Volume Approach (VPH) = **21**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

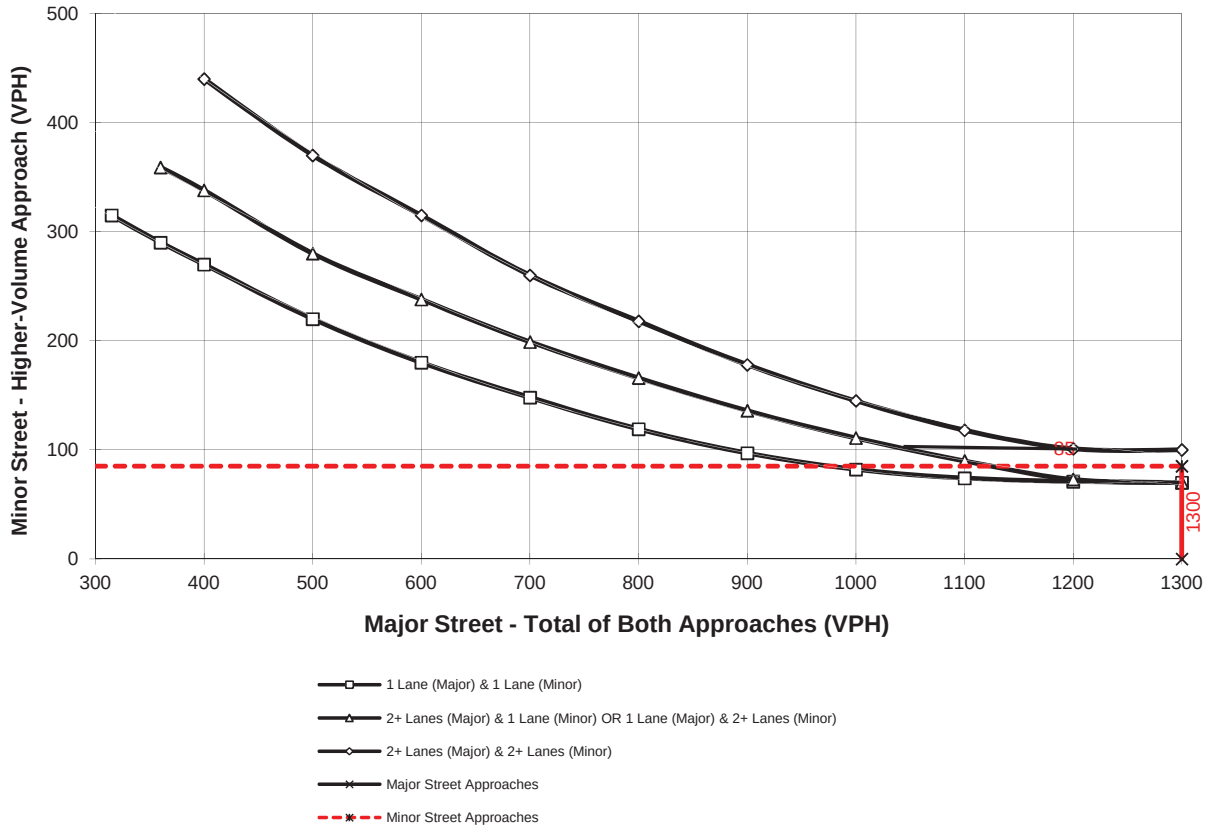
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **GPBO NP Conditions - Weekday AM Peak Hour**

Major Street Name = **Day St.**
Total of Both Approaches (VPH) = **1,391**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Bay Av.**
High Volume Approach (VPH) = **85**
Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

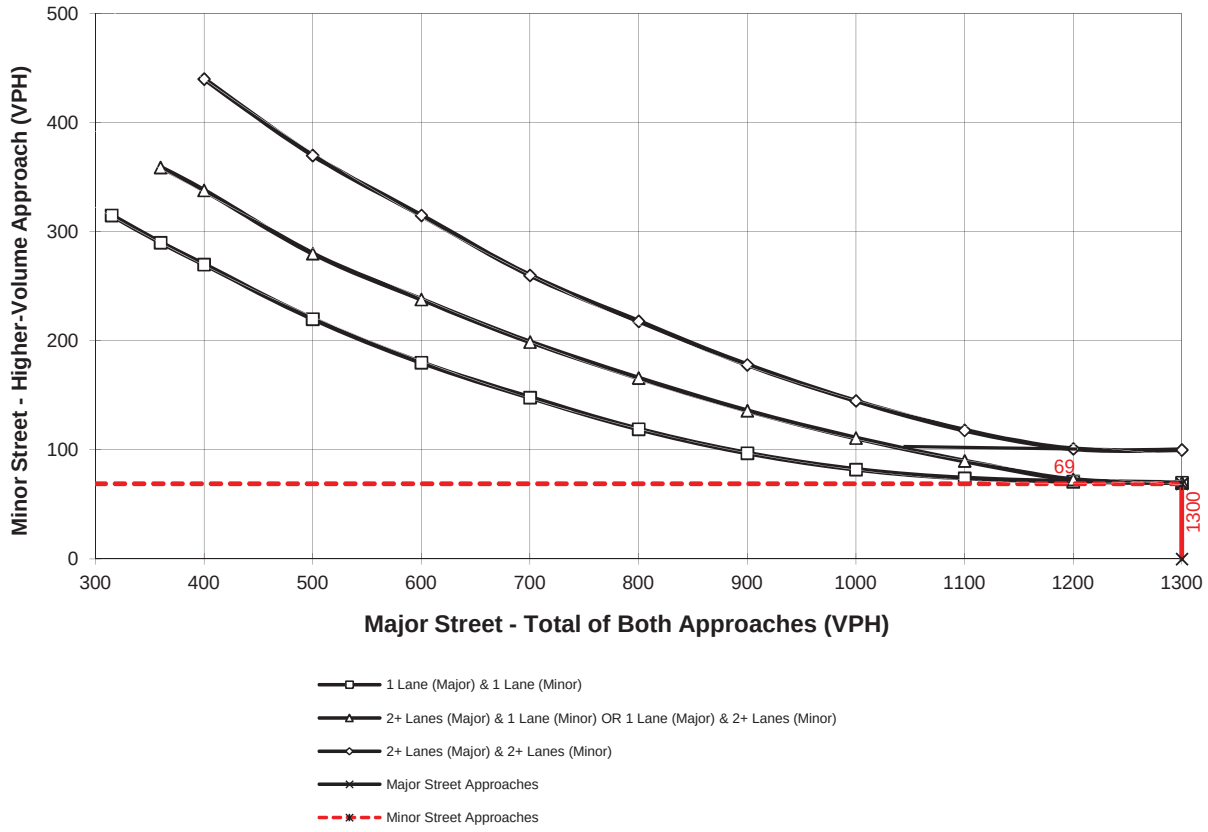
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **GPBO NP Conditions - Weekday PM Peak Hour**

Major Street Name = **Day St.**
Total of Both Approaches (VPH) = **1,699**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Bay Av.**
High Volume Approach (VPH) = **69**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

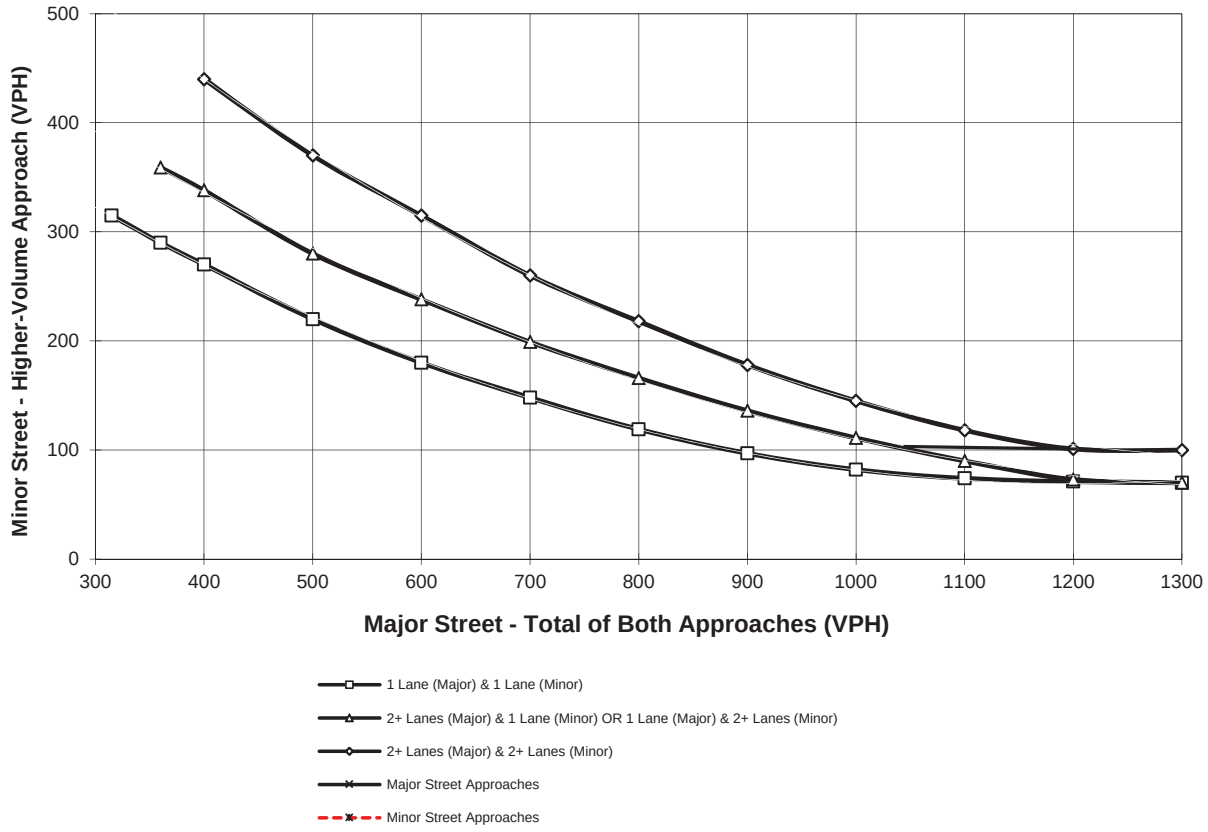
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **GPBO NP Conditions - Weekday AM Peak Hour**

Major Street Name = **Campus Pkwy.**
Total of Both Approaches (VPH) = **291**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Corporate Centre Pl.**
High Volume Approach (VPH) = **84**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

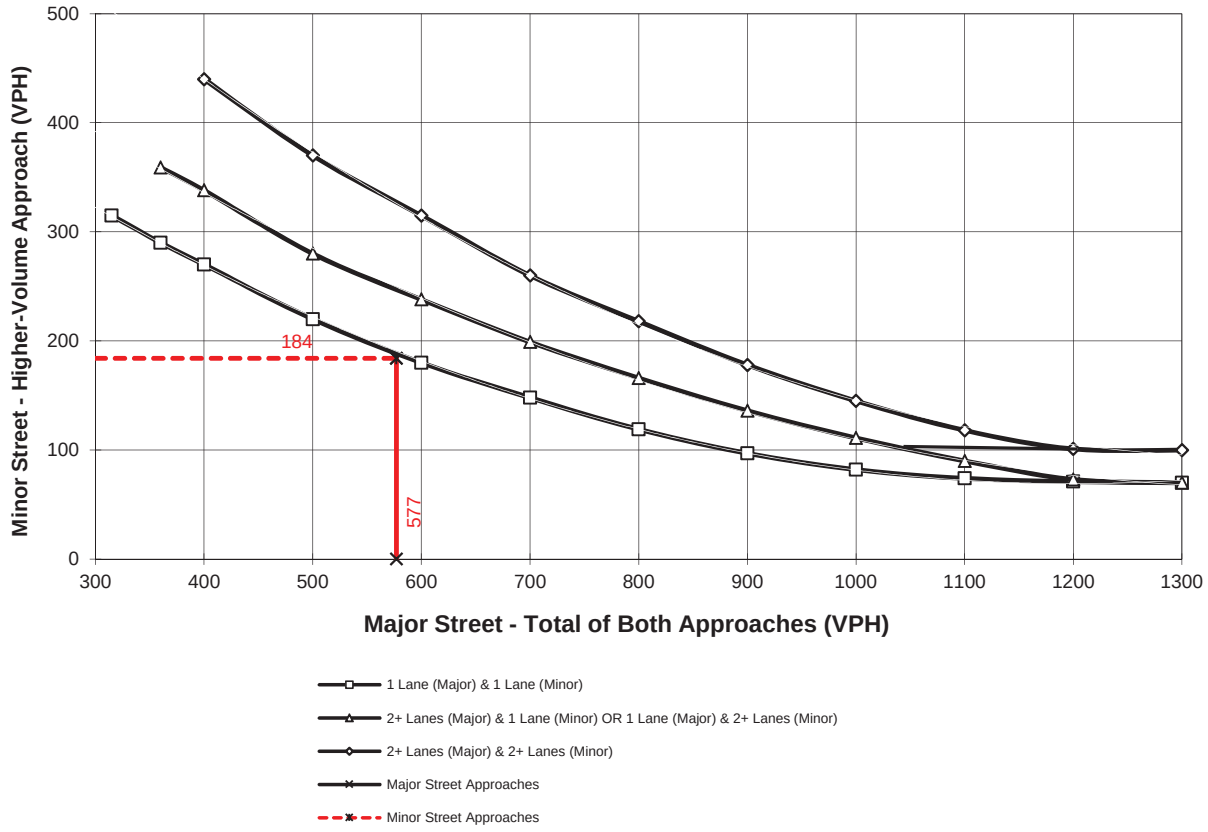
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **GPBO NP Conditions - Weekday PM Peak Hour**

Major Street Name = **Campus Pkwy.**
Total of Both Approaches (VPH) = **577**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Corporate Centre Pl.**
High Volume Approach (VPH) = **184**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

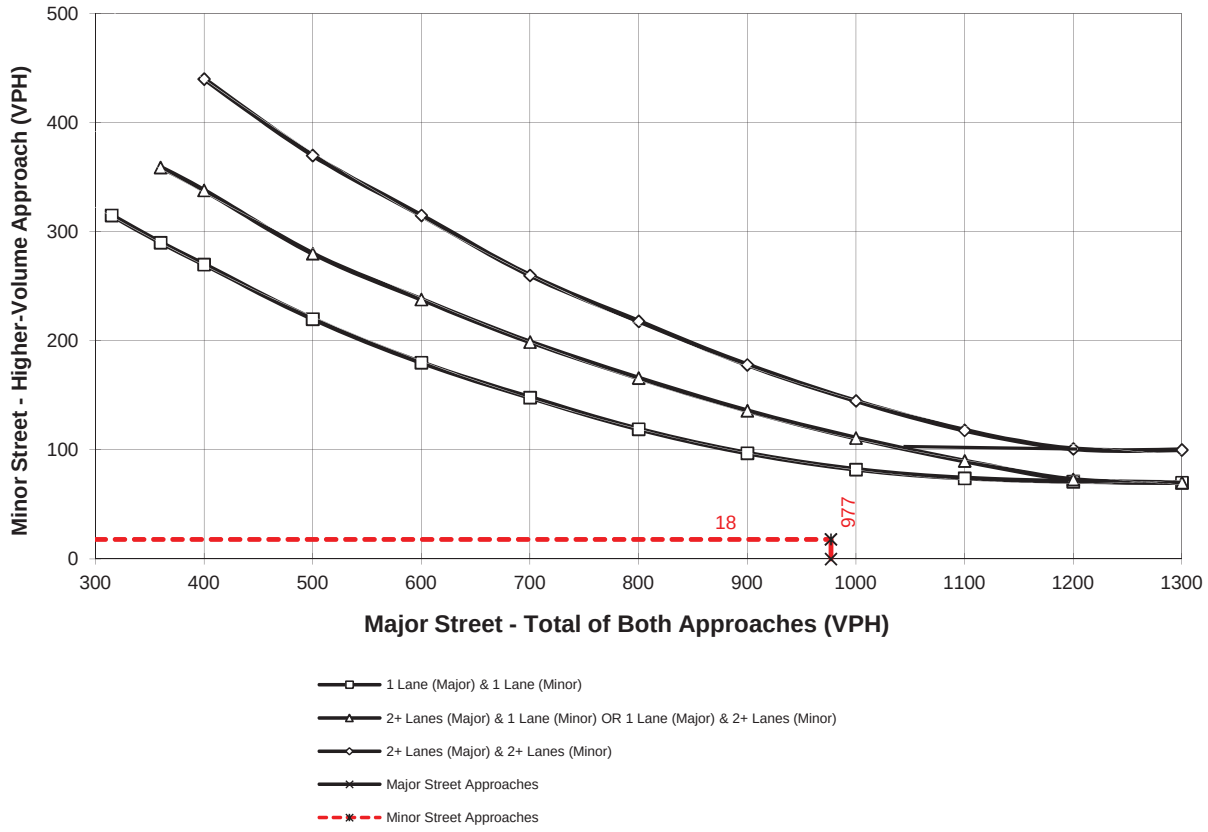
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **GPBO NP Conditions - Weekday AM Peak Hour**

Major Street Name = **Valley Springs Pkwy.**
Total of Both Approaches (VPH) = **977**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 4**
High Volume Approach (VPH) = **18**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

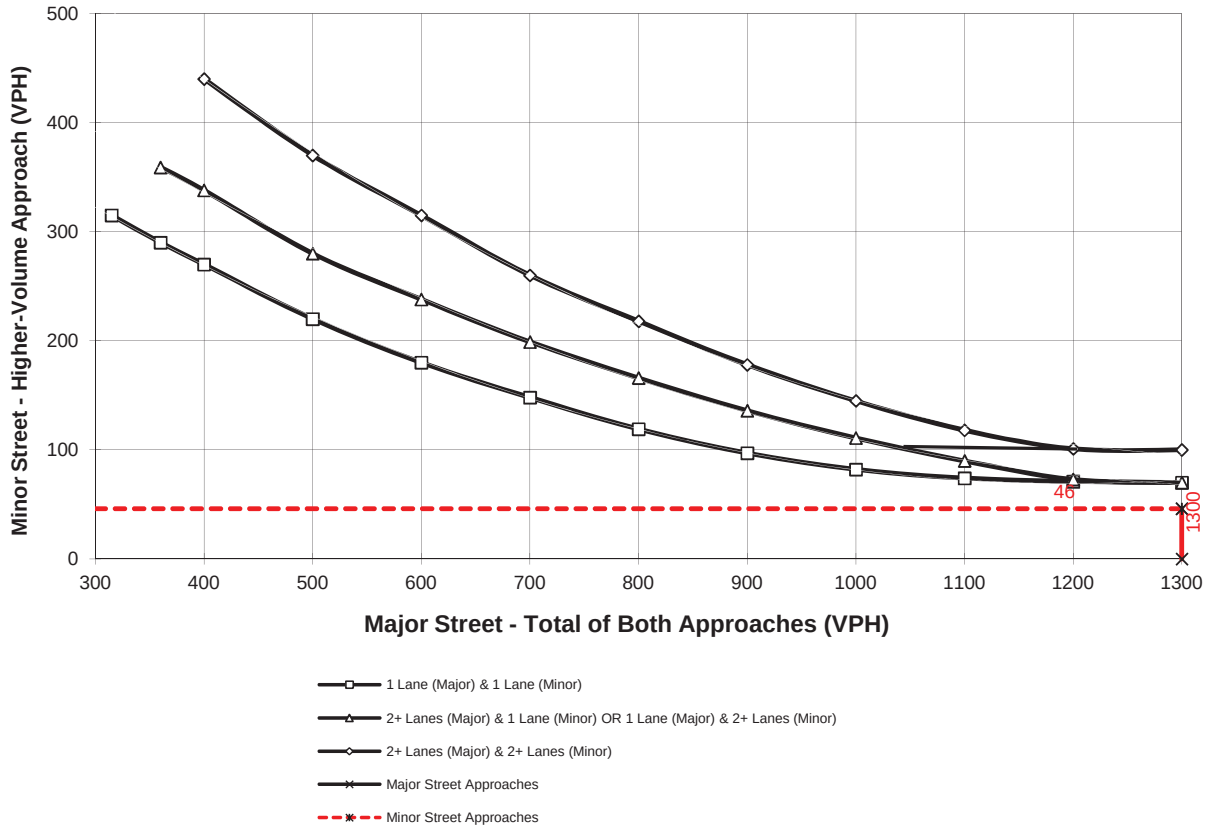
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **GPBO NP Conditions - Weekday PM Peak Hour**

Major Street Name = **Valley Springs Pkwy.**
Total of Both Approaches (VPH) = **1,717**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 4**
High Volume Approach (VPH) = **46**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **GPBO NP Conditions - Weekday AM Peak Hour**

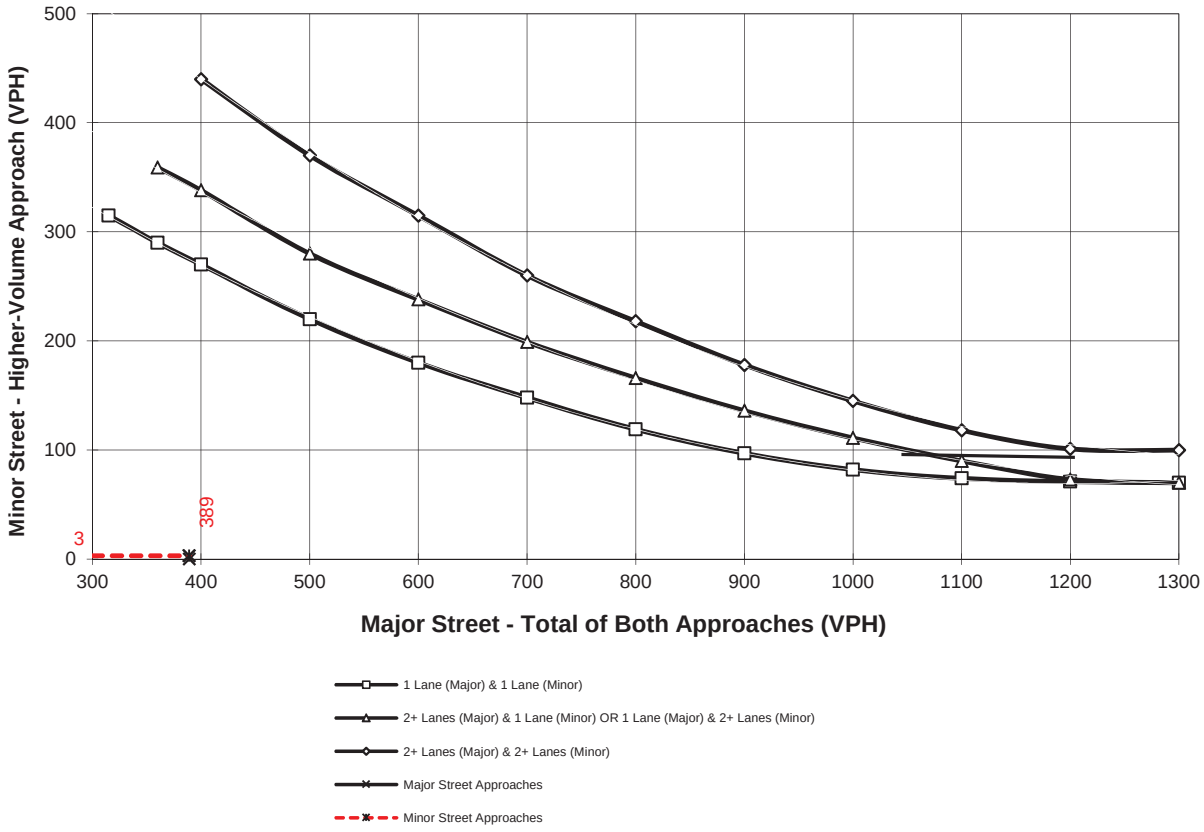
Major Street Name = **Gateway Dr.**

Total of Both Approaches (VPH) = **389**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 6**

High Volume Approach (VPH) = **3**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **GPBO NP Conditions - Weekday PM Peak Hour**

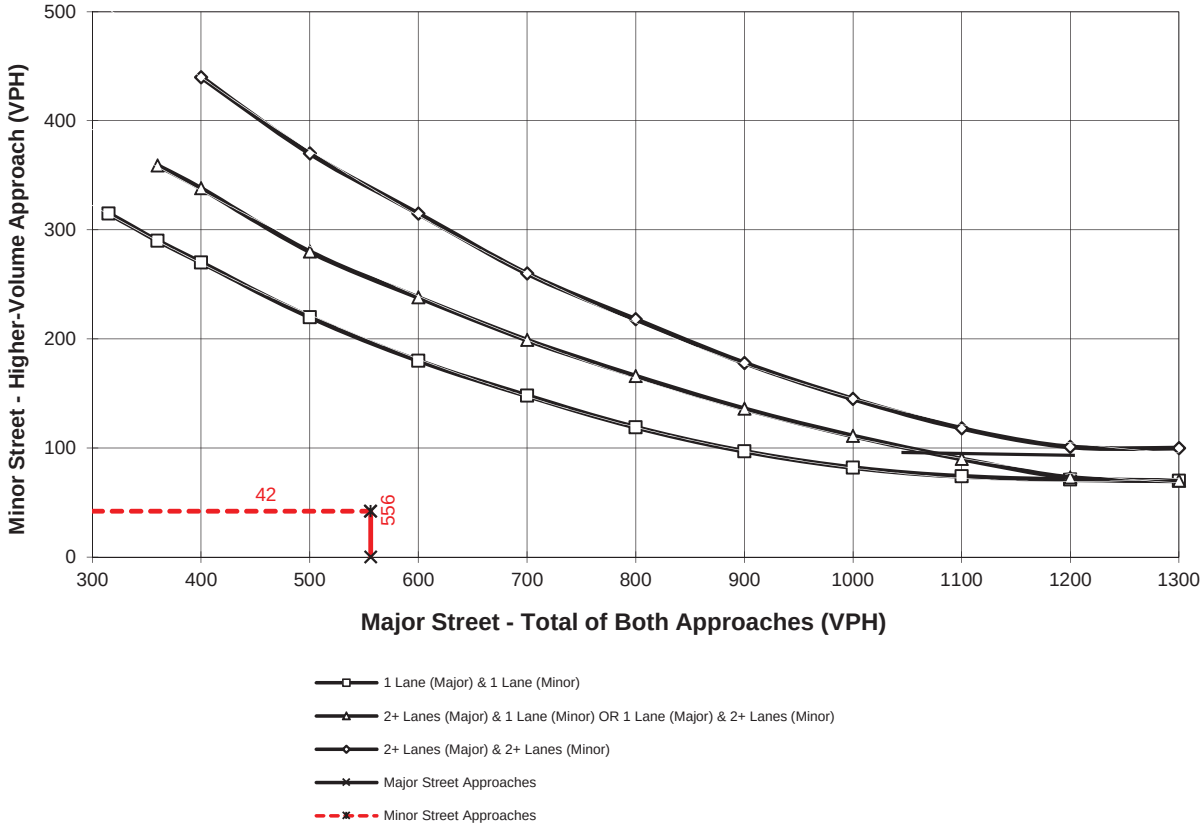
Major Street Name = **Gateway Dr.**

Total of Both Approaches (VPH) = **556**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 6**

High Volume Approach (VPH) = **42**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

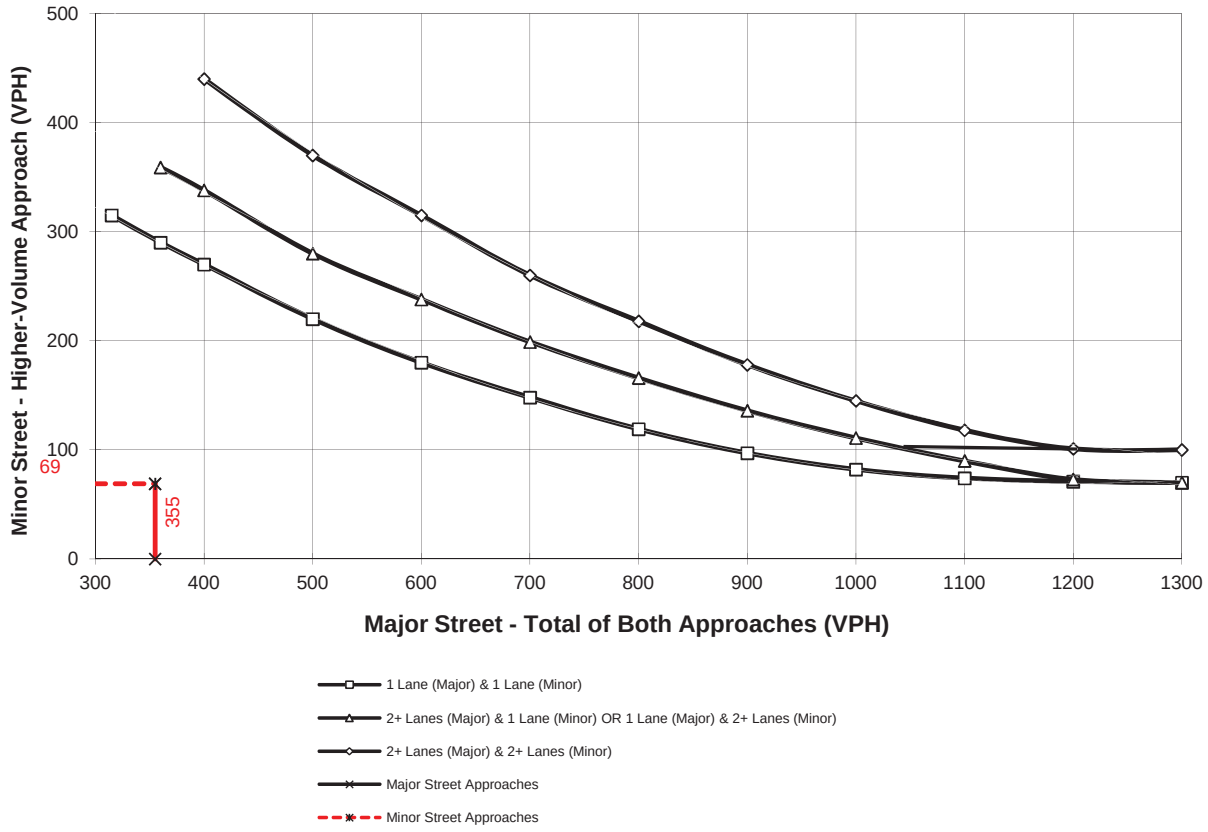
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **GPBO NP Conditions - Weekday AM Peak Hour**

Major Street Name = **Gateway Dr.** Total of Both Approaches (VPH) = **355**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Canyon Park Dr. - Dwy. 7** High Volume Approach (VPH) = **69**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

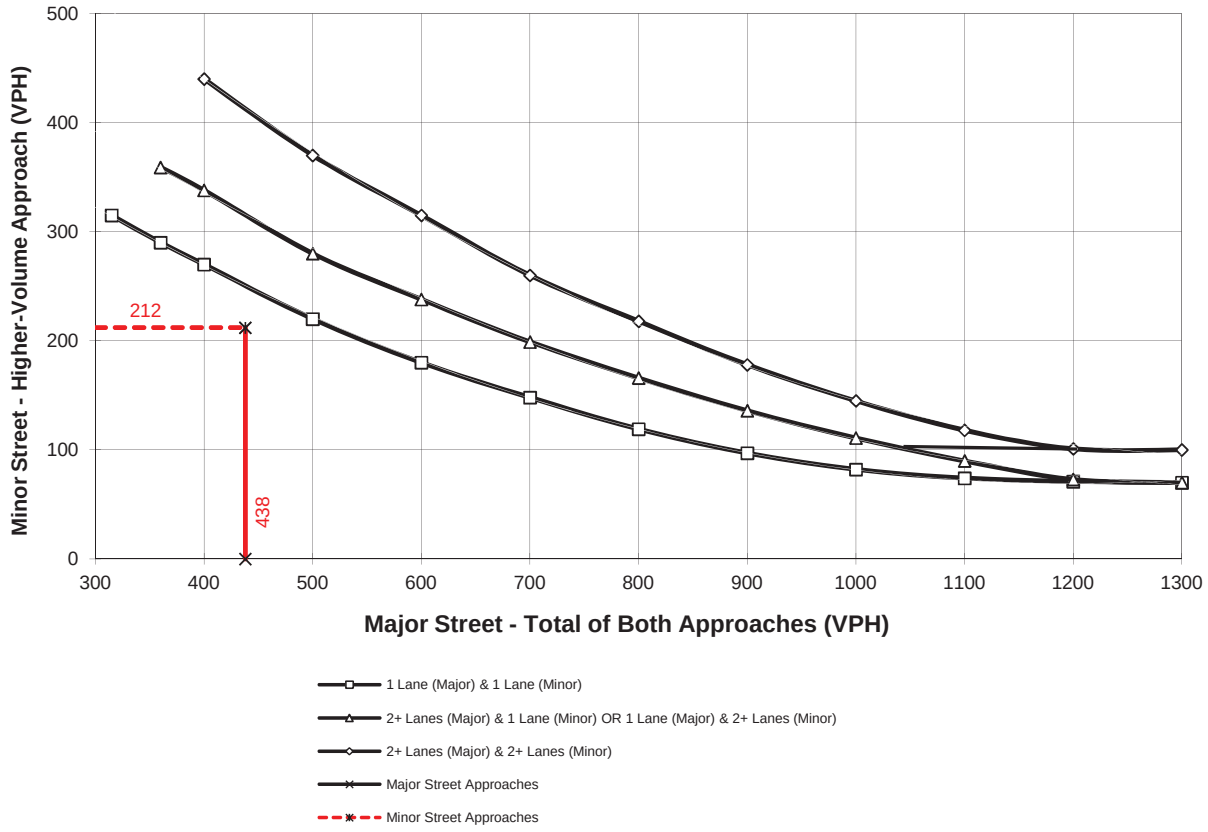
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **GPBO NP Conditions - Weekday PM Peak Hour**

Major Street Name = **Gateway Dr.** Total of Both Approaches (VPH) = **438**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Canyon Park Dr. - Dwy. 7** High Volume Approach (VPH) = **212**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

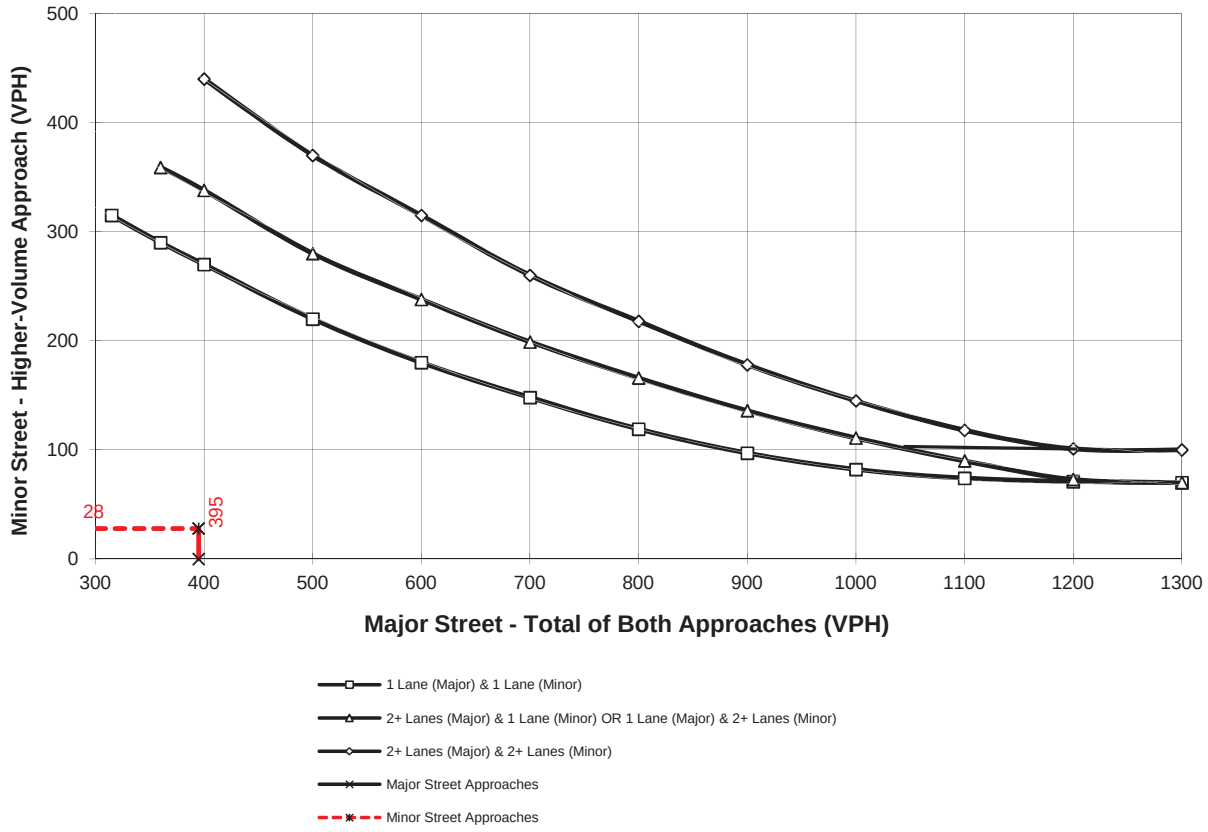
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **GPBO NP Conditions - Weekday AM Peak Hour**

Major Street Name = **Gateway Dr.**
Total of Both Approaches (VPH) = **395**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 9**
High Volume Approach (VPH) = **28**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

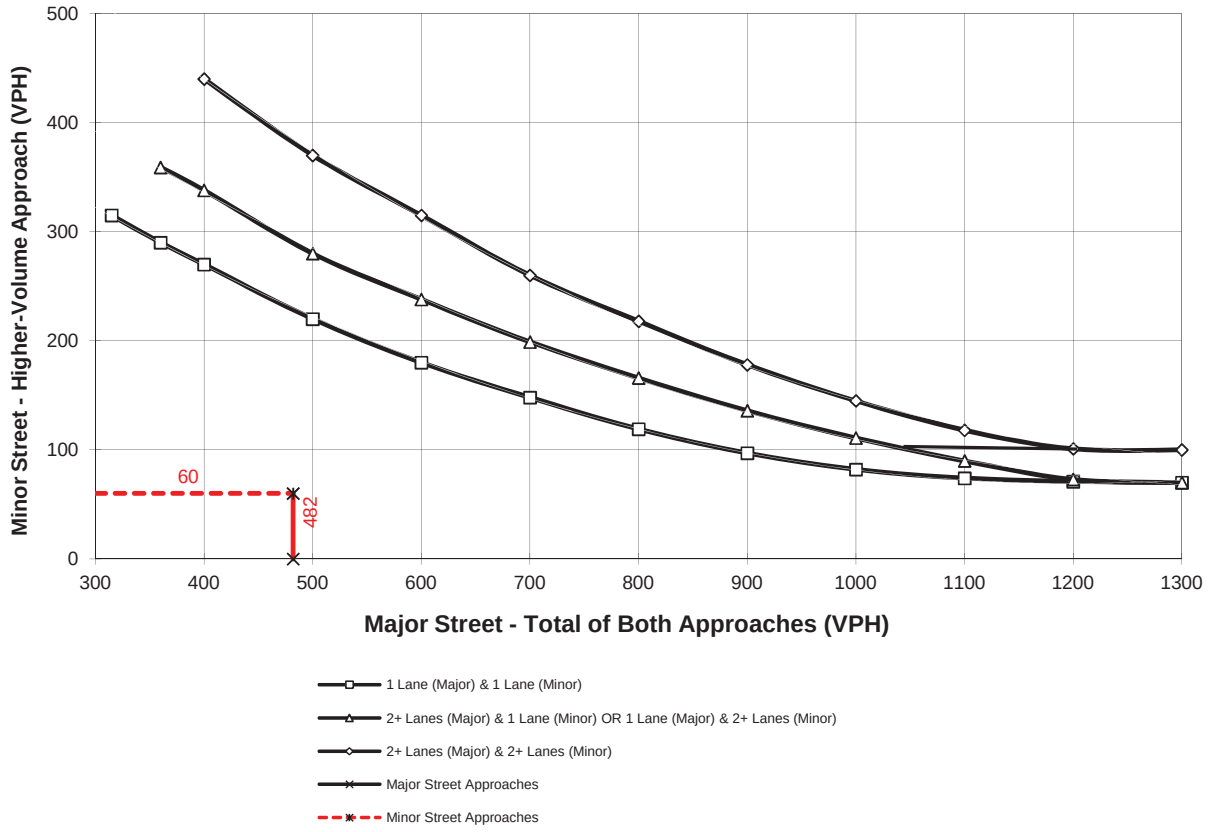
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **GPBO NP Conditions - Weekday PM Peak Hour**

Major Street Name = **Gateway Dr.**
Total of Both Approaches (VPH) = **482**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 9**
High Volume Approach (VPH) = **60**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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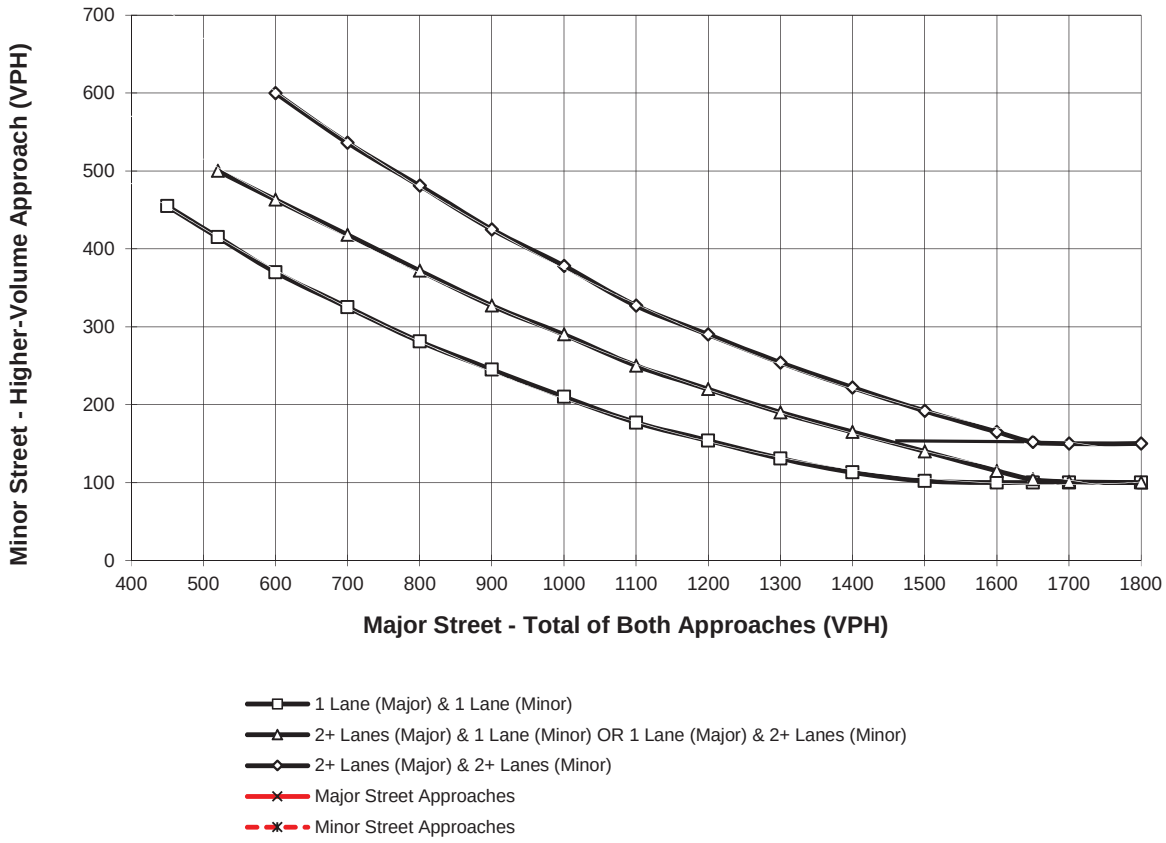
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **GPBO NP Conditions - Weekday AM Peak Hour**

Major Street Name = **Campus Pkwy.** Total of Both Approaches (VPH) = **383**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Canyon Park Dr.** High Volume Approach (VPH) = **60**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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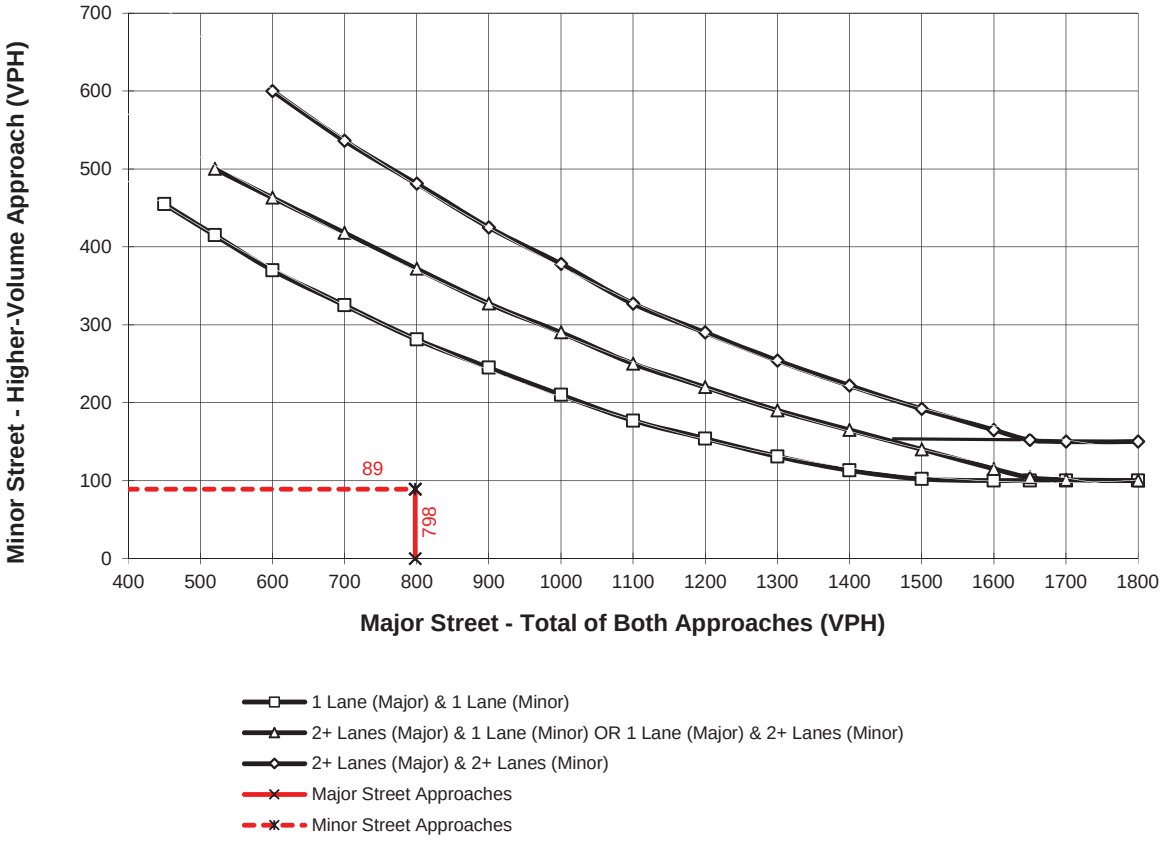
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **GPBO NP Conditions - Weekday PM Peak Hour**

Major Street Name = **Campus Pkwy.**
Total of Both Approaches (VPH) = **798**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Canyon Park Dr.**
High Volume Approach (VPH) = **89**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

APPENDIX 7.4:

GENERAL PLAN BUILDOUT WITH PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

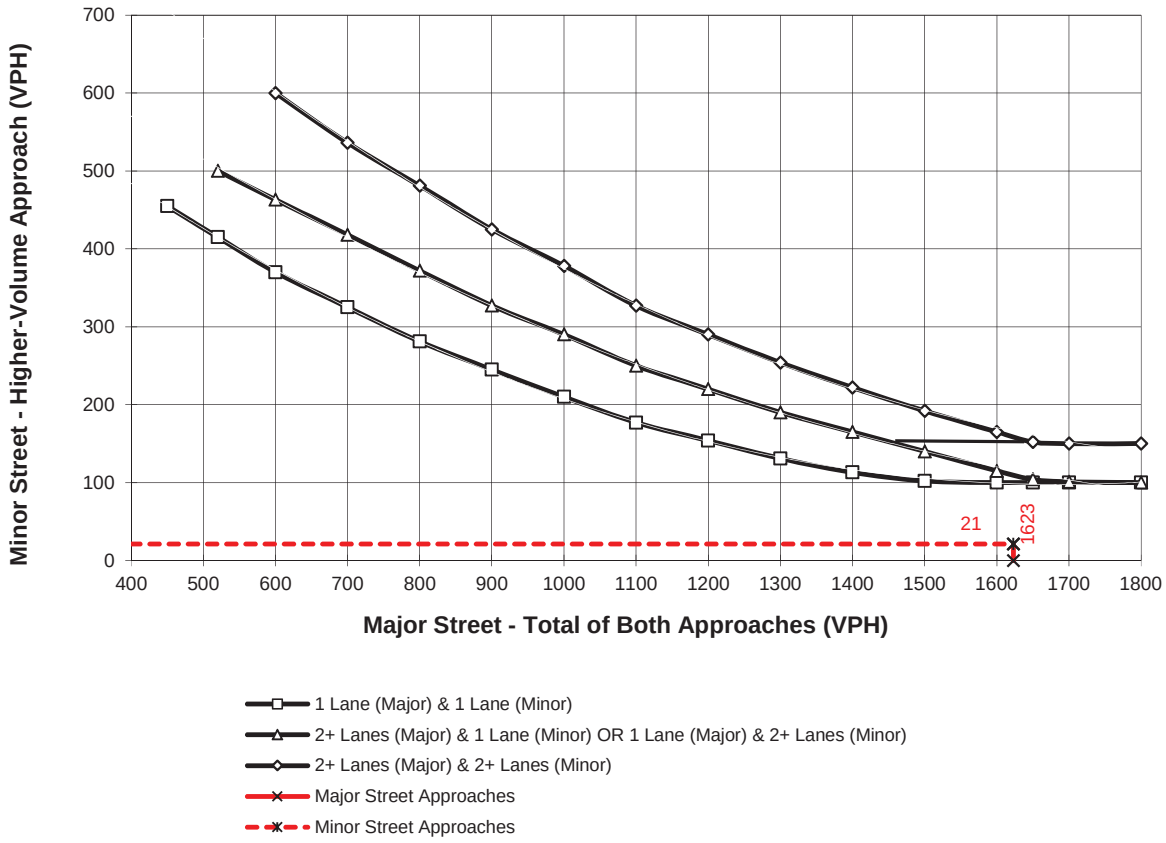
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **General Plan Buildout With Project Conditions - Weekday AM Peak Hour**

Major Street Name = **Day St.**
Total of Both Approaches (VPH) = **1,623**
Number of Approach Lanes on Major Street = **3**

Minor Street Name = **Dwy. 2**
High Volume Approach (VPH) = **21**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **General Plan Buildout With Project Conditions - Weekday PM Peak Hour**

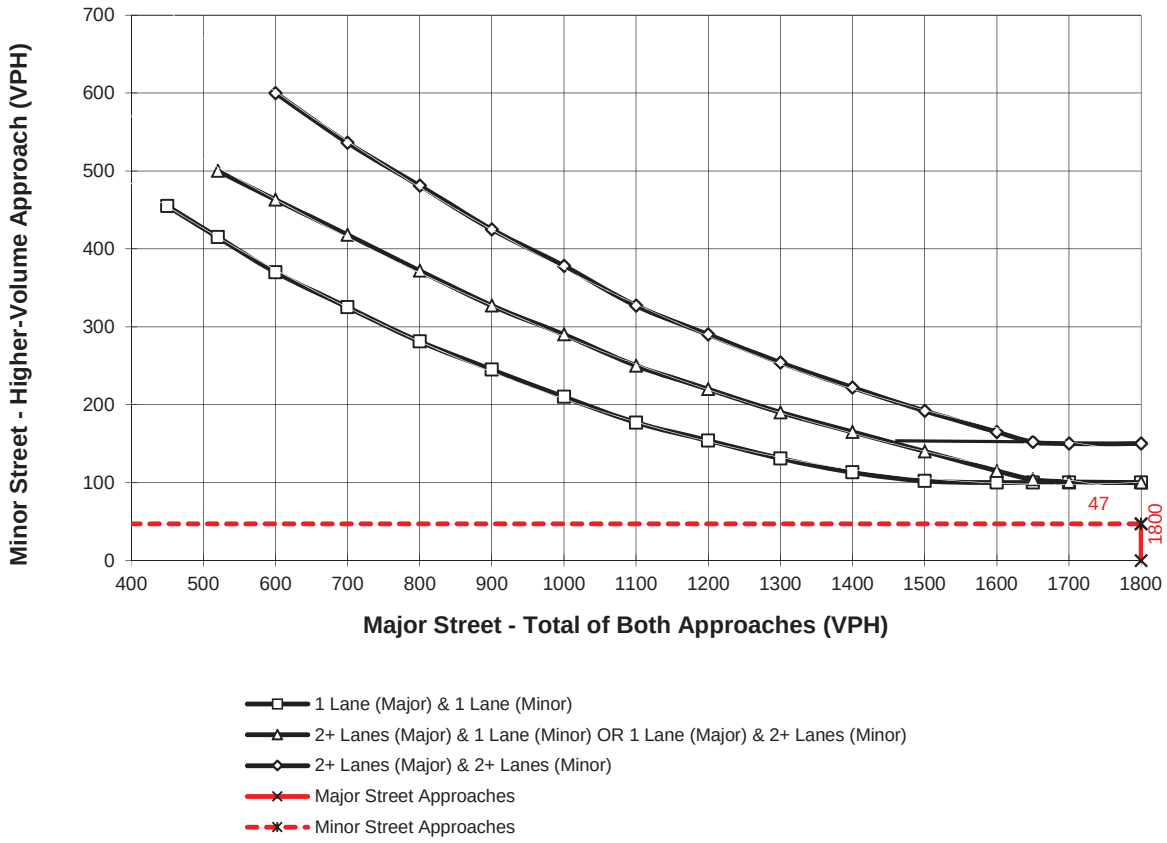
Major Street Name = **Day St.**

Total of Both Approaches (VPH) = **2,287**
Number of Approach Lanes on Major Street = **3**

Minor Street Name = **Dwy. 2**

High Volume Approach (VPH) = **47**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

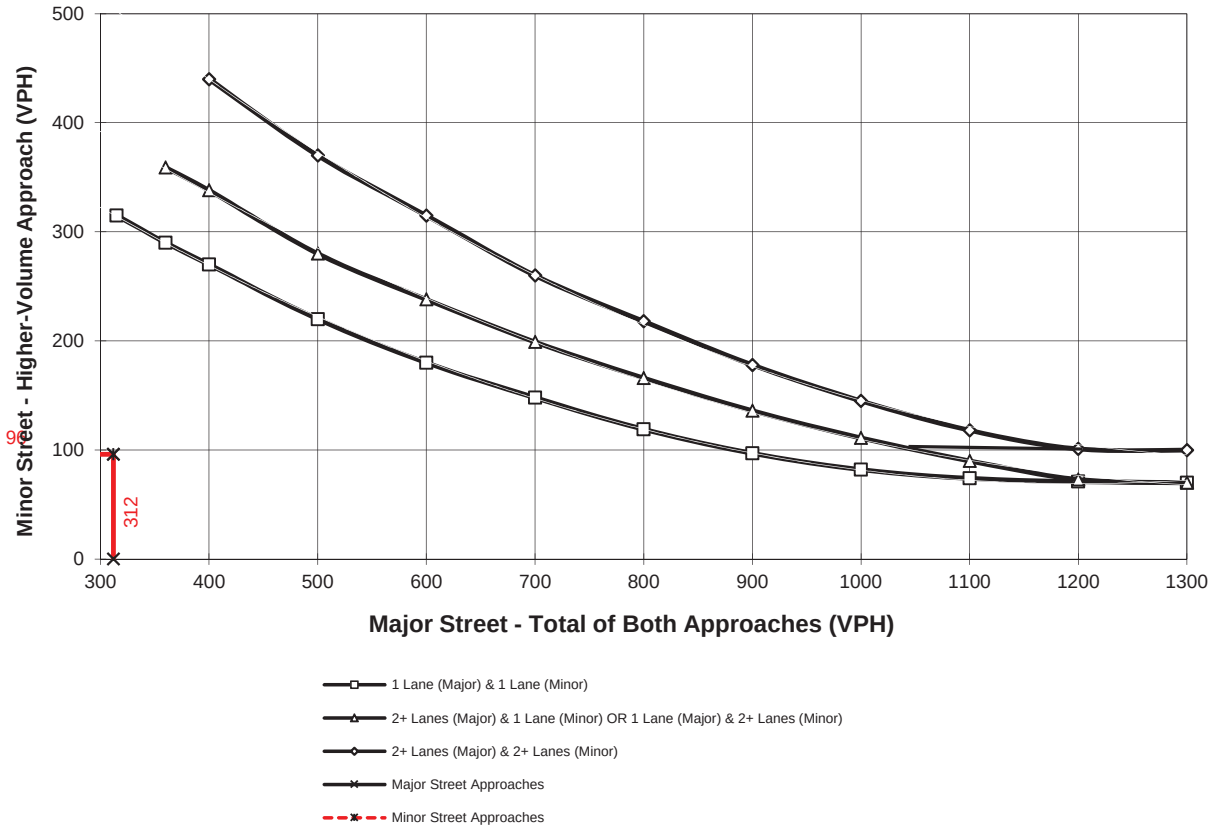
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **GPBO WP Conditions - Weekday AM Peak Hour**

Major Street Name = **Campus Pkwy.**
Total of Both Approaches (VPH) = **312**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Corporate Centre Pl.**
High Volume Approach (VPH) = **96**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

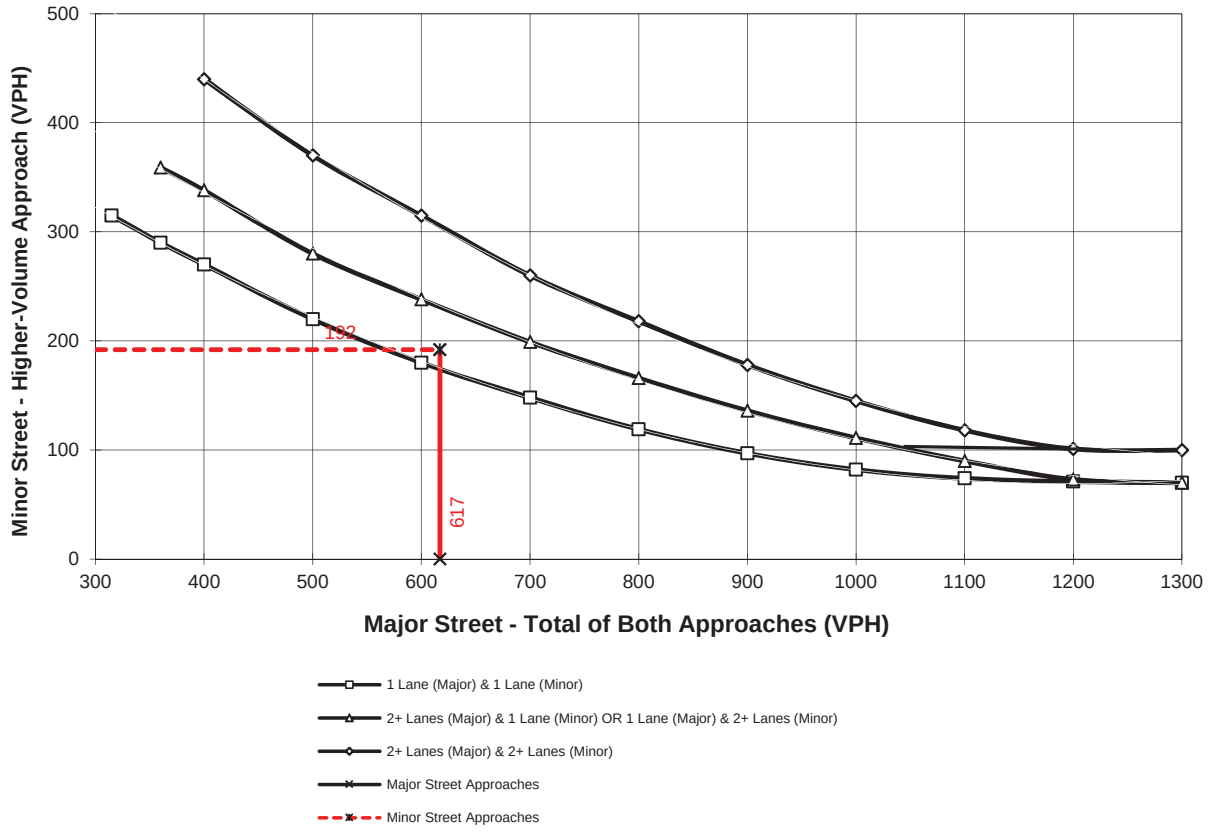
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **GPBO WP Conditions - Weekday PM Peak Hour**

Major Street Name = **Campus Pkwy.**
Total of Both Approaches (VPH) = **617**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Corporate Centre Pl.**
High Volume Approach (VPH) = **192**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

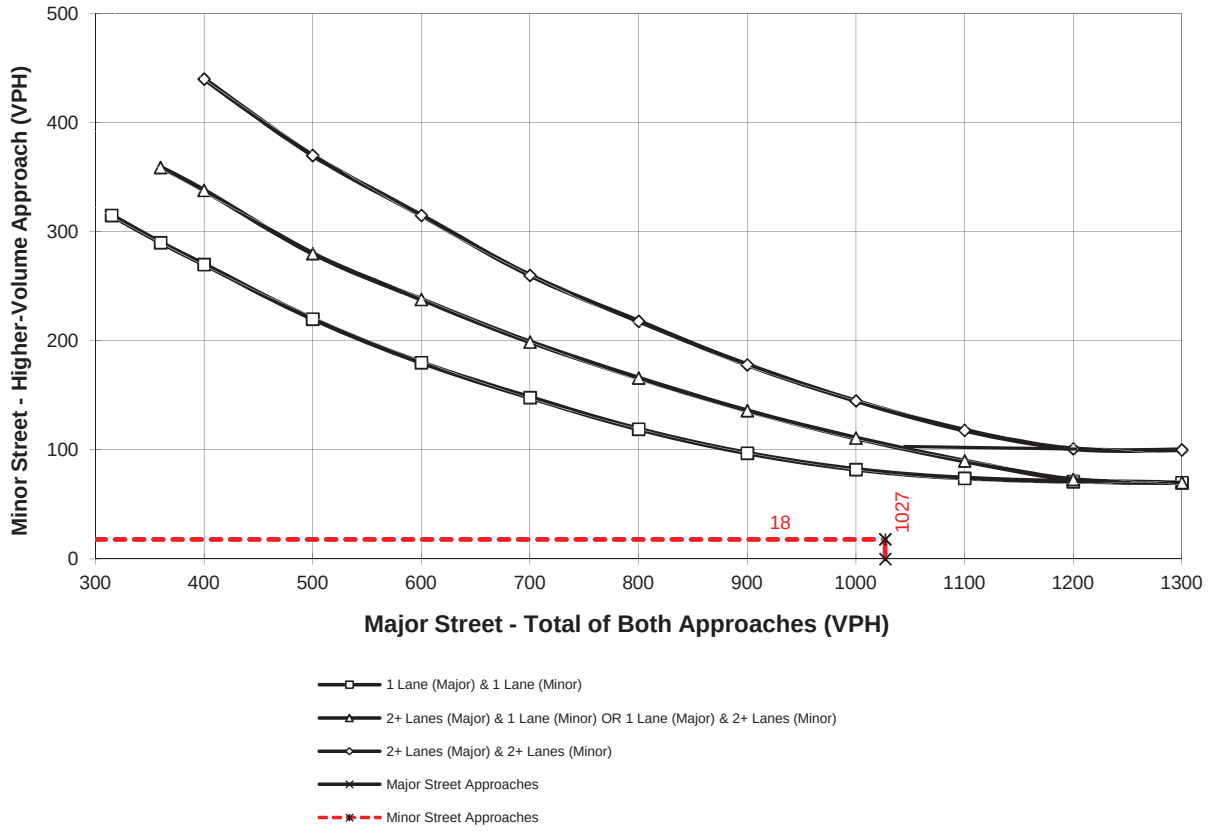
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **GPBO WP Conditions - Weekday AM Peak Hour**

Major Street Name = **Valley Springs Pkwy.**
Total of Both Approaches (VPH) = **1,027**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 4**
High Volume Approach (VPH) = **18**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

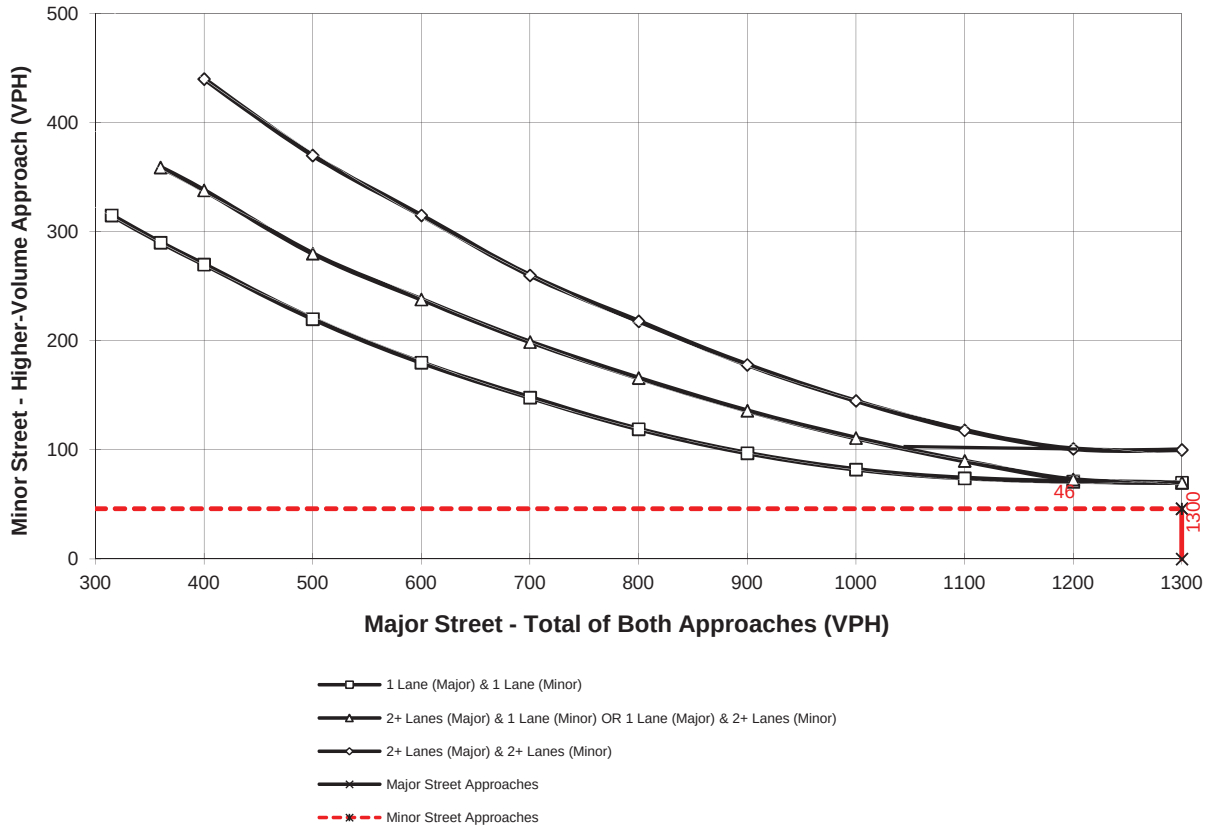
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **GPBO WP Conditions - Weekday PM Peak Hour**

Major Street Name = **Valley Springs Pkwy.**
Total of Both Approaches (VPH) = **1,792**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 4**
High Volume Approach (VPH) = **46**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

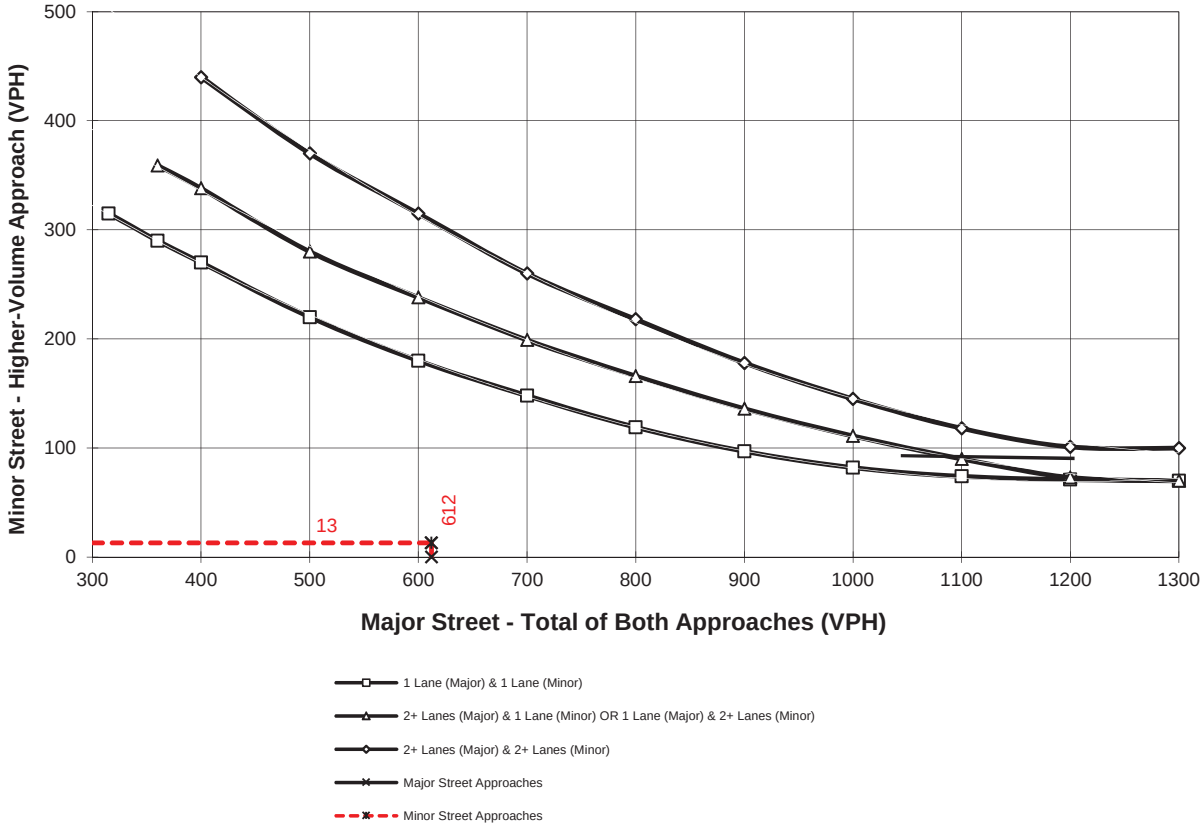
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **GPBO NP Conditions - Weekday AM Peak Hour**

Major Street Name = **Gateway Dr.**
Total of Both Approaches (VPH) = **612**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 6**
High Volume Approach (VPH) = **13**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **GPBO WP Conditions - Weekday PM Peak Hour**

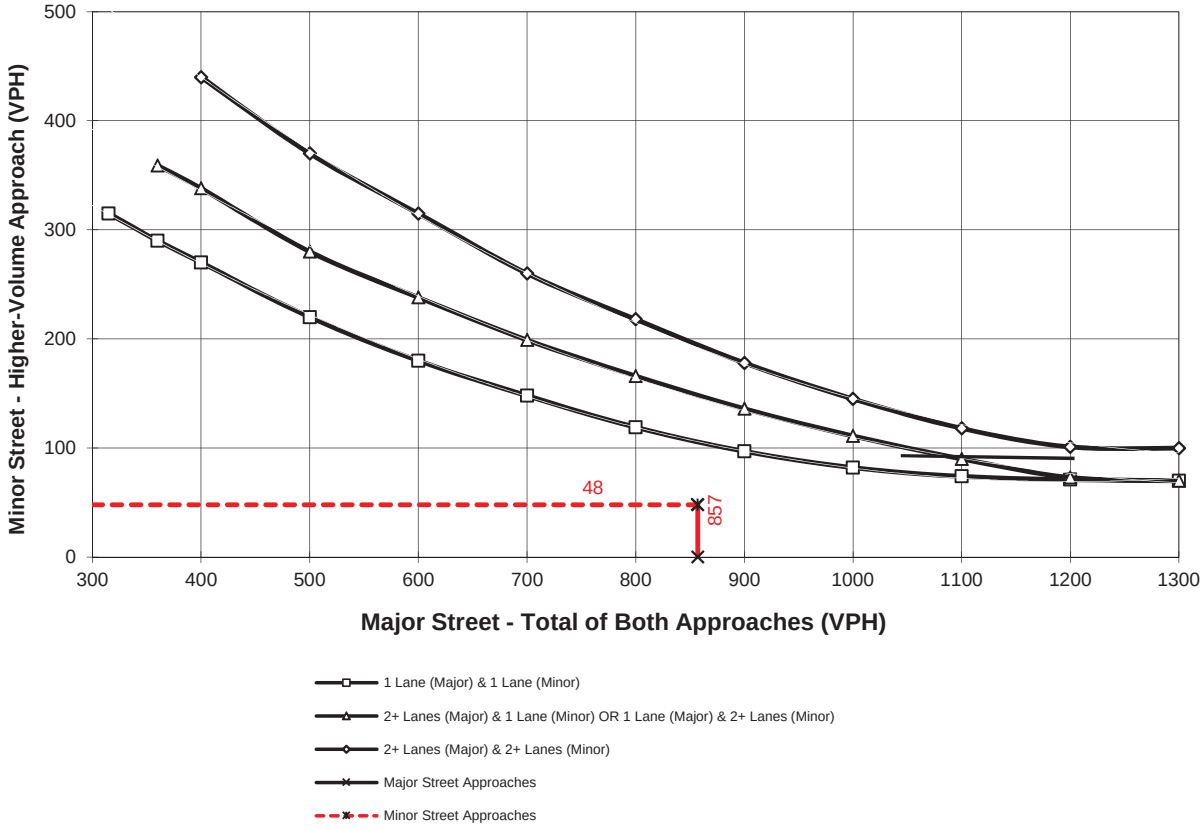
Major Street Name = **Gateway Dr.**

Total of Both Approaches (VPH) = **857**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 6**

High Volume Approach (VPH) = **48**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

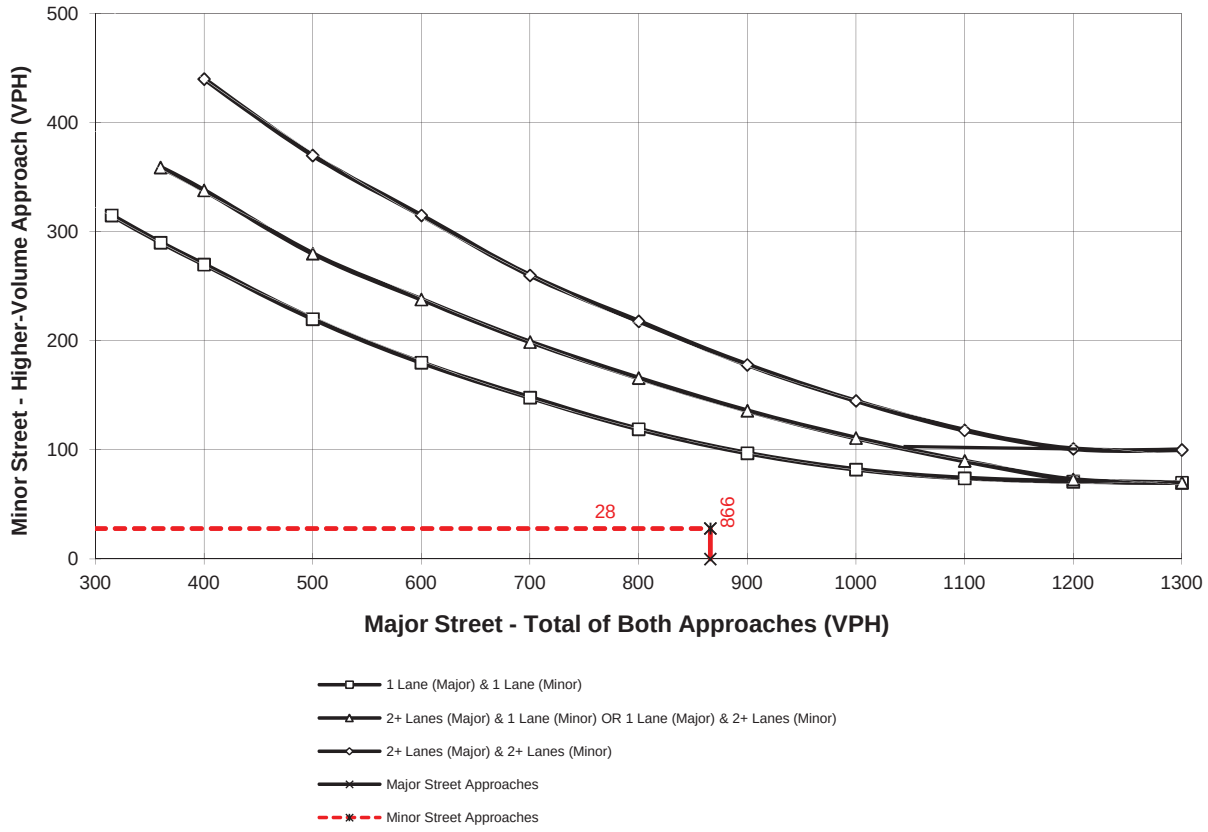
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **GPBO WP Conditions - Weekday AM Peak Hour**

Major Street Name = **Gateway Dr.**
Total of Both Approaches (VPH) = **866**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 9**
High Volume Approach (VPH) = **28**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-3. Warrant 3, Peak Hour

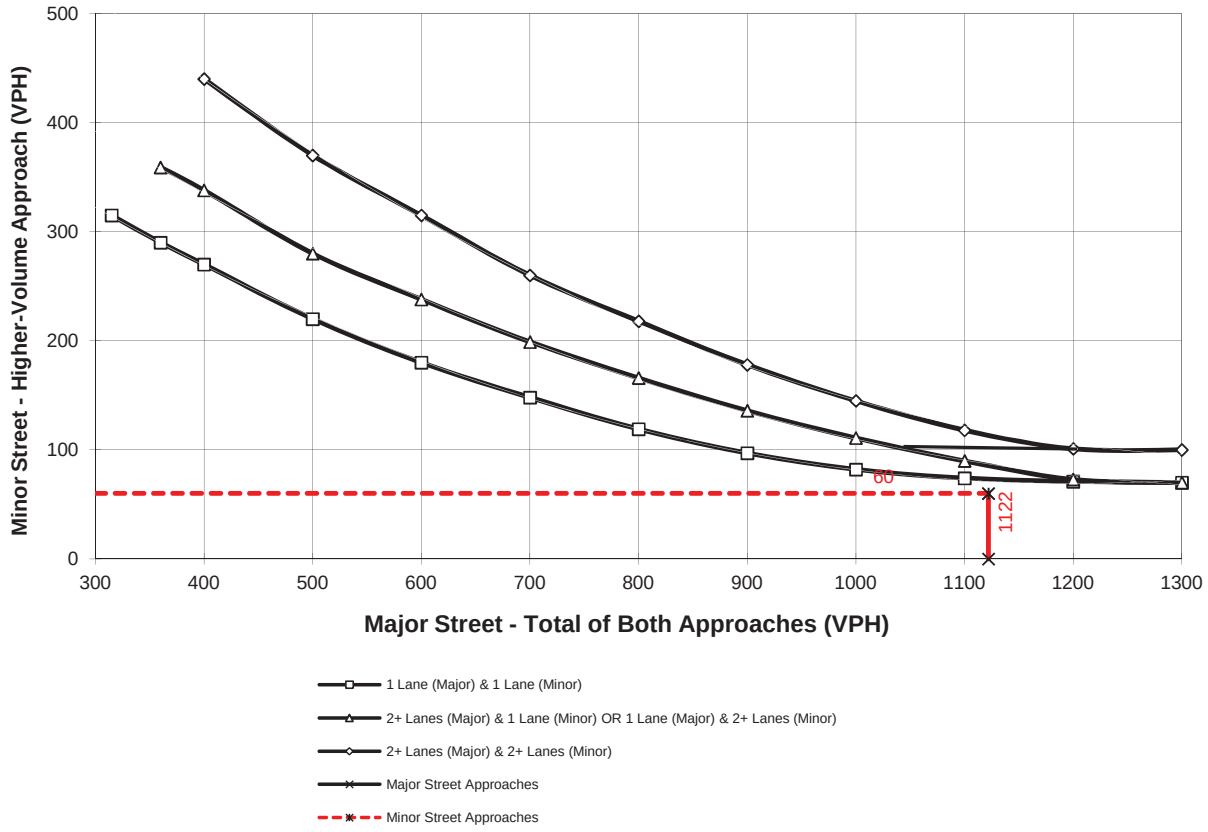
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **GPBO WP Conditions - Weekday PM Peak Hour**

Major Street Name = **Gateway Dr.**
Total of Both Approaches (VPH) = **1,122**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Dwy. 9**
High Volume Approach (VPH) = **60**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

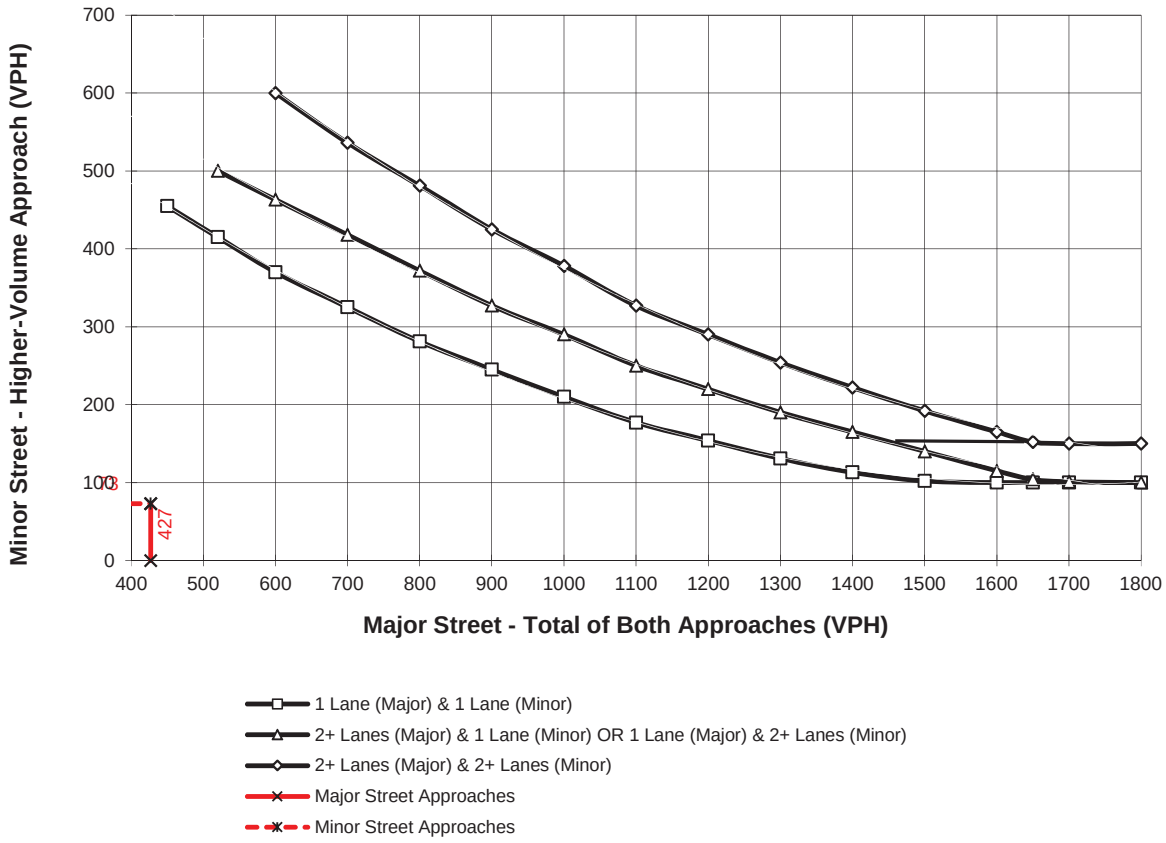
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **General Plan Buildout With Project Conditions - Weekday AM Peak Hour**

Major Street Name = **Campus Pkwy.**
Total of Both Approaches (VPH) = **427**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Canyon Park Dr.**
High Volume Approach (VPH) = **73**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

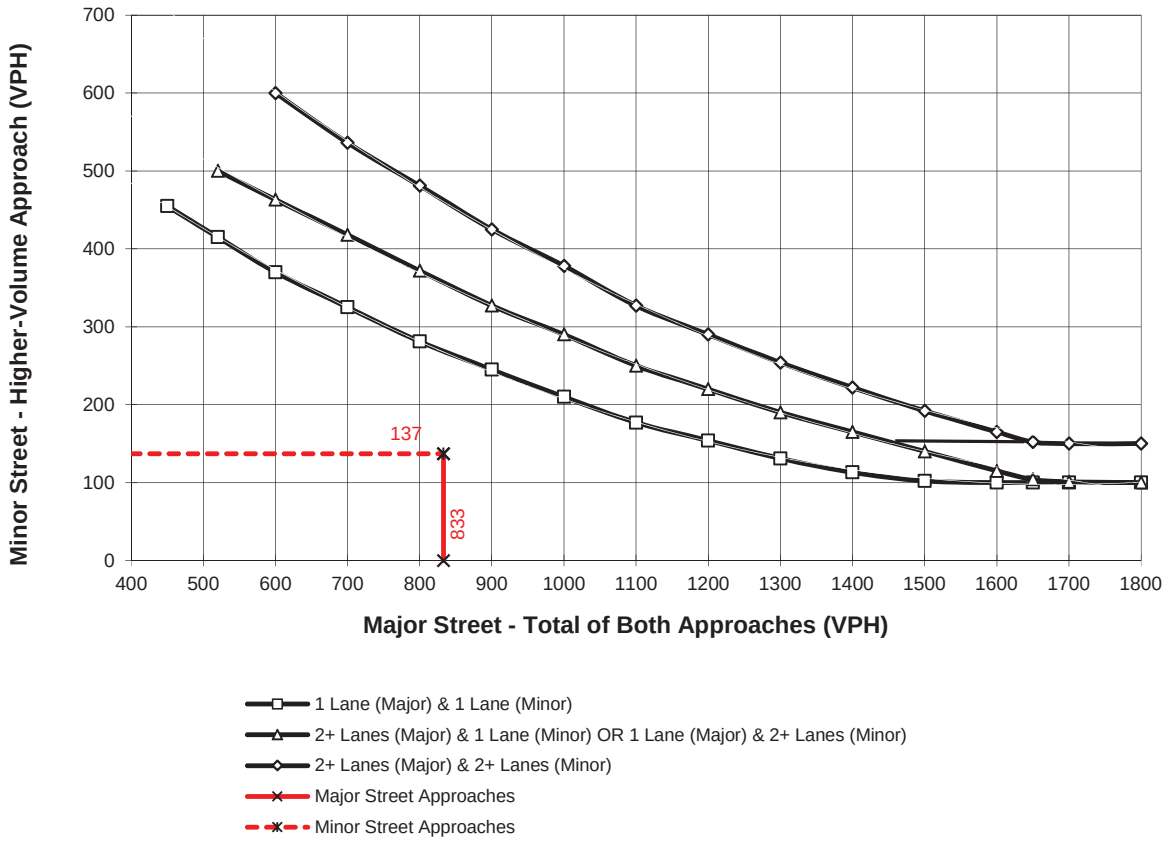
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **General Plan Buildout With Project Conditions - Weekday PM Peak Hour**

Major Street Name = **Campus Pkwy.**
Total of Both Approaches (VPH) = **833**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Canyon Park Dr.**
High Volume Approach (VPH) = **137**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		**GPBO WP**	
				CALC	JC	DATE	01/08/15
Jurisdiction:	**City of Riverside**			CHK		DATE	
Major Street:	**Day Street**			Critical Approach Speed (Major)		40	mph
Minor Street:	**Driveway 1**			Critical Approach Speed (Minor)		35	mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lane **1** lane

Major Street Future ADT = **23,450** vpd Minor Street Future ADT = **600** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. √

or

In built up area of isolated community of < 10,000 population ……

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
	XX				
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach					
Major Street	Minor Street				
1	*1*	8,000	5,600	2,400	1,680
2 + **23,450**	*1* **600**	9,600	6,720 *	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach					
Major Street	Minor Street				
1	*1*	12,000	8,400	1,200	850
2 + **23,450**	*1* **600**	14,400	10,080 *	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 36% **B** 71%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

California MUTCD
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Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM		TRAFFIC CONDITIONS		GPBO WP
				CALC	JC	DATE	01/08/15
Jurisdiction:	**City of Riverside**			CHK		DATE	
Major Street:	**Corporate Centre Place**				Critical Approach Speed (Major)		40 mph
Minor Street:	**Driveway 3**				Critical Approach Speed (Minor)		35 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lane **1** lane

Major Street Future ADT = **4,350** vpd Minor Street Future ADT = **150** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……... [√]

or **RURAL (R)**

In built up area of isolated community of < 10,000 population …… [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
	XX				
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach					
Major Street	Minor Street				
1	*1*	8,000	5,600	2,400	1,680
2 + **4,350**	*1* **150**	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach					
Major Street	Minor Street				
1	*1*	12,000	8,400	1,200	850
2 + **4,350**	*1* **150**	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 9% **B** 18%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

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Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	**GPBO WP**
				CALC JC	DATE 01/08/15
Jurisdiction: **City of Riverside**				CHK	DATE
Major Street: **Gateway Drive**				Critical Approach Speed (Major)	40 mph
Minor Street: **Driveway 8**				Critical Approach Speed (Minor)	35 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lane **1** lane

Major Street Future ADT = **11,900** vpd Minor Street Future ADT = **18** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... √

or

In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Number of lanes for moving traffic on each approach		Minimum Requirements EADT			
			Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Major Street	Minor Street	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume						
Satisfied / Not Satisfied XX	*1*	*1*	8,000	5,600	2,400	1,680
	2 + **11,900**	*1* **18**	9,600	6,720 *	2,400	1,680
	2 +	*2* +	9,600	6,720	3,200	2,240
	1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
Satisfied / Not Satisfied XX	*1*	*1*	12,000	8,400	1,200	850
	2 + **11,900**	*1* **18**	14,400	10,080 *	1,200	850
	2 +	*2* +	14,400	10,080	1,600	1,120
	1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B Satisfied / Not Satisfied XX			2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more	**A** 1%	**B** 2%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	GPBO WP
				CALC JC	DATE 01/08/15
Jurisdiction: **City of Riverside**				CHK	DATE
Major Street: **Canyon Park Drive**				Critical Approach Speed (Major)	40 mph
Minor Street: **Driveway 10**				Critical Approach Speed (Minor)	35 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lane **1** lane

Major Street Future ADT = **4,300** vpd Minor Street Future ADT = **50** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... [√]

or

In built up area of isolated community of < 10,000 population ..... [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / *1*	8,000	5,600	2,400	1,680
2 + **4,300** / *1* **50**	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / *1*	12,000	8,400	1,200	850
2 + **4,300** / *1* **50**	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ..... **A** 3% **B** 6%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

___ DIST	___ CO	___ RTE	___ PM		TRAFFIC CONDITIONS		GPBO WP
				CALC	JC	DATE	01/08/15
Jurisdiction:	City of Riverside			CHK		DATE	
Major Street:	Canyon Park Drive				Critical Approach Speed (Major)		40 mph
Minor Street:	Driveway 11				Critical Approach Speed (Minor)		35 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lane **1** lane

Major Street Future ADT = **4,100** vpd Minor Street Future ADT = **100** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... √

or

In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / *1*	8,000	5,600	2,400	1,680
2 + **4,100** / *1* **100**	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				
Satisfied / Not Satisfied XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / *1*	12,000	8,400	1,200	850
2 + **4,100** / *1* **100**	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ..... **A** 6% **B** 12%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

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APPENDIX 7.5:

GENERAL PLAN BUILDOUT WITHOUT PROJECT CONDITIONS BASIC FREEWAY SEGMENT ANALYSIS WORKSHEETS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*South of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4592*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1789*	pc/h/ln
S	*66.0*	mph
D = v_p / S	*27.1*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4031*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1570*	pc/h/ln
S	*68.4*	mph
D = v_p / S	*22.9*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*North of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4488*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1748*	pc/h/ln
S	*66.5*	mph
D = v_p / S	*26.3*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*North Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5585*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1305*	pc/h/ln
S	*69.9*	mph
D = v_p / S	*18.7*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5127*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1997*	pc/h/ln
S	*62.6*	mph
D = v_p / S	*31.9*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*South of Eucalyptus*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5630*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2193*	pc/h/ln
S	*58.6*	mph
D = v_p / S	*37.4*	pc/mi/ln
LOS	*E*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3824*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1096*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*15.7*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3098*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1184*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*16.9*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3486*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1333*	pc/h/ln
S	*69.8*	mph
D = v_p / S	*19.1*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3739*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*6*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*715*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*10.2*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3163*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*907*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*13.0*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3743*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*858*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*12.3*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*South of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4867*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1896*	pc/h/ln
S	*64.4*	mph
D = v_p / S	*29.4*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4097*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1596*	pc/h/ln
S	*68.2*	mph
D = v_p / S	*23.4*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*North of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4667*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1818*	pc/h/ln
S	*65.6*	mph
D = v_p / S	*27.7*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*North Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6889*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1610*	pc/h/ln
S	*68.1*	mph
D = v_p / S	*23.7*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5849*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2278*	pc/h/ln
S	*56.5*	mph
D = v_p / S	*40.3*	pc/mi/ln
LOS	*E*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*South of Eucalyptus*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6712*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2614*	pc/h/ln
S	*46.8*	mph
D = v_p / S	*55.8*	pc/mi/ln
LOS	*F*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4027*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1154*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*16.5*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information		Site Information	
Analyst	*JC*	Highway/Direction of Travel	*SR-60 WB*
Agency or Company	*Urban Crossroads*	From/To	*Between Ramps*
Date Performed	*01/12/2015*	Jurisdiction	*Caltrans*
Analysis Time Period	*PM Peak Hour*	Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3290*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1258*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*18.0*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3927*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1501*	pc/h/ln
S	*68.9*	mph
D = v_p / S	*21.8*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5938*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*6*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1135*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*16.2*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4893*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1403*	pc/h/ln
S	*69.5*	mph
D = v_p / S	*20.2*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO NP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5929*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1360*	pc/h/ln
S	*69.7*	mph
D = v_p / S	*19.5*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX 7.6:

GENERAL PLAN BUILDOUT WITH PROJECT CONDITIONS BASIC FREEWAY SEGMENT ANALYSIS WORKSHEETS

BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*South of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4804*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1871*	pc/h/ln
S	*64.8*	mph
D = v_p / S	*28.9*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4031*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1570*	pc/h/ln
S	*68.4*	mph
D = v_p / S	*22.9*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*North of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4542*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1769*	pc/h/ln
S	*66.2*	mph
D = v_p / S	*26.7*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*North Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5751*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1344*	pc/h/ln
S	*69.8*	mph
D = v_p / S	*19.3*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5127*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1997*	pc/h/ln
S	*62.6*	mph
D = v_p / S	*31.9*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*South of Eucalyptus*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5700*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2220*	pc/h/ln
S	*57.9*	mph
D = v_p / S	*38.3*	pc/mi/ln
LOS	*E*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3986*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1143*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*16.3*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3098*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1184*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*16.9*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3519*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1345*	pc/h/ln
S	*69.8*	mph
D = v_p / S	*19.3*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3836*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*6*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*733*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*10.5*	pc/mi/ln
LOS	*A*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3163*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*907*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*13.0*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*AM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3797*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*871*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*12.4*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*South of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4986*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1942*	pc/h/ln
S	*63.6*	mph
D = v_p / S	*30.5*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4097*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1596*	pc/h/ln
S	*68.2*	mph
D = v_p / S	*23.4*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 NB*
From/To	*North of Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4877*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1900*	pc/h/ln
S	*64.3*	mph
D = v_p / S	*29.5*	pc/mi/ln
LOS	*D*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*North Eucalyptus Av.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6981*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1631*	pc/h/ln
S	*67.8*	mph
D = v_p / S	*24.0*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5849*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2278*	pc/h/ln
S	*56.5*	mph
D = v_p / S	*40.3*	pc/mi/ln
LOS	*E*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*I-215 SB*
From/To	*South of Eucalyptus*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6981*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*15*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length	*mi*
			Up/Down %	

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.930*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*2719*	pc/h/ln
S	*43.2*	mph
D = v_p / S	*62.9*	pc/mi/ln
LOS	*F*	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h/ln
S	mph
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4119*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1181*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*16.9*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*3290*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1258*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*18.0*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 WB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4050*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*3*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1548*	pc/h/ln
S	*68.6*	mph
D = v_p / S	*22.6*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*West of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*5994*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*6*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1146*	pc/h/ln
S	*70.0*	mph
D = v_p / S	*16.4*	pc/mi/ln
LOS	*B*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*Between Ramps*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*4893*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*4*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1403*	pc/h/ln
S	*69.5*	mph
D = v_p / S	*20.2*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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BASIC FREEWAY SEGMENTS WORKSHEET

General Information

Analyst	*JC*
Agency or Company	*Urban Crossroads*
Date Performed	*01/12/2015*
Analysis Time Period	*PM Peak Hour*

Site Information

Highway/Direction of Travel	*SR-60 EB*
From/To	*East of Day St.*
Jurisdiction	*Caltrans*
Analysis Year	*GPBO WP*

Project Description *Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)*

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	*6134*	veh/h	Peak-Hour Factor, PHF	*0.92*
AADT		veh/day	%Trucks and Buses, P_T	*11*
Peak-Hr Prop. of AADT, K			%RVs, P_R	*0*
Peak-Hr Direction Prop, D			General Terrain:	*Level*
DDHV = AADT x K x D		veh/h	Grade % Length Up/Down %	*mi*

Calculate Flow Adjustments

f_p	*1.00*	E_R	*1.2*
E_T	*1.5*	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	*0.948*

Speed Inputs

Lane Width		ft
Rt-Side Lat. Clearance		ft
Number of Lanes, N	*5*	
Total Ramp Density, TRD		ramps/mi
FFS (measured)	*70.0*	mph
Base free-flow Speed, BFFS		mph

Calc Speed Adj and FFS

f_{LW}		mph
f_{LC}		mph
TRD Adjustment		mph
FFS	*70.0*	mph

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	*1407*	pc/h/ln
S	*69.5*	mph
D = v_p / S	*20.2*	pc/mi/ln
LOS	*C*	

Design (N)

Design (N)

Design LOS		
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)		pc/h/ln
S		mph
D = v_p / S		pc/mi/ln
Required Number of Lanes, N		

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits 11-10, 11-12	f_{LW} - Exhibit 11-8
E_T - Exhibits 11-10, 11-11, 11-13	f_{LC} - Exhibit 11-9
f_p - Page 11-18	TRD - Page 11-11
LOS, S, FFS, v_p - Exhibits 11-2, 11-3	

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APPENDIX 7.7:

GENERAL PLAN BUILDOUT WITHOUT PROJECT CONDITIONS FREEWAY RAMP JUNCTION (MERGE/DIVERGE) ANALYSIS WORKSHEETS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	GPBO NP

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 3	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2400 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 457 veh/h
	Freeway Volume, V_F: 4592	
	Ramp Volume, V_R: 561	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4592	0.92	Level	15	0	0.930	1.00	5366
Ramp	561	0.92	Level	2	0	0.990	1.00	616
UpStream								
DownStream	457	0.92	Level	2	0	0.990	1.00	502

Merge Areas | Diverge Areas

Estimation of v_{12} — Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Estimation of v_{12} — Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.598 using Equation (Exhibit 13-7)

V_{12} = 3454 pc/h

V_3 or V_{av34} 1912 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks — Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Capacity Checks — Diverge Areas

	Actual	Capacity		LOS F?
V_F	5366	Exhibit 13-8	7200	No
$V_{FO} = V_F - V_R$	4750	Exhibit 13-8	7200	No
V_R	616	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	3454	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F) — Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Level of Service Determination (if not F) — Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 32.3 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination — Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Speed Determination — Diverge Areas

D_s = 0.483 (Exhibit 13-12)

S_R = 56.5 mph (Exhibit 13-12)

S_0 = 73.2 mph (Exhibit 13-12)

S = 61.5 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	GPBO NP

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2400 ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = 561 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 4031	
	Ramp Volume, V_R: 457	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4031	0.92	Level	15	0	0.930	1.00	4710
Ramp	457	0.92	Level	2	0	0.990	1.00	502
UpStream	561	0.92	Level	2	0	0.990	1.00	616
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 721.17 (Equation 13-6 or 13-7)

P_{FM} = 0.589 using Equation (Exhibit 13-6)

V_{12} = 2773 pc/h

V_3 or V_{av34} 1937 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 2773 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5212	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3275	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 28.3 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.396 (Exibit 13-11)

S_R= 58.9 mph (Exhibit 13-11)

S_0= 64.8 mph (Exhibit 13-11)

S = 61.0 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	GPBO NP

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2900 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 503 veh/h
	Freeway Volume, V_F: 5585	
	Ramp Volume, V_R: 458	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5585	0.92	Level	15	0	0.930	1.00	6526
Ramp	458	0.92	Level	2	0	0.990	1.00	503
UpStream								
DownStream	503	0.92	Level	2	0	0.990	1.00	552

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R= mph (Exhibit 13-11)

S_0= mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 1815 pc/h

V_3 or V_{av34} 1866 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2219 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5548	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	5045	Exhibit 13-8	9600	No
V_R	503	Exhibit 13-10	4000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1815	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 11.1 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.473 (Exhibit 13-12)

S_R= 56.7 mph (Exhibit 13-12)

S_0= 74.2 mph (Exhibit 13-12)

S = 66.1 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	GPBO NP

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	3	Downstream Adj Ramp	
☑ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☐ No	☑ Off	Acceleration Lane Length, L_A	600	☑ No	☐ Off
L_{up} =	2900 ft	Deceleration Lane Length L_D		L_{down} =	ft
V_u =	458 veh/h	Freeway Volume, V_F	5127	V_D =	veh/h
		Ramp Volume, V_R	503		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	35.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5127	0.92	Level	15	0	0.930	1.00	5991
Ramp	503	0.92	Level	2	0	0.990	1.00	552
UpStream	458	0.92	Level	2	0	0.990	1.00	503
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 1094.80 (Equation 13-6 or 13-7)

P_{FM} = 0.594 using Equation (Exhibit 13-6)

V_{12} = 3560 pc/h

V_3 or V_{av34} 2431 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 3560 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6543	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	4112	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 33.5 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.517 (Exibit 13-11)

S_R= 55.5 mph (Exhibit 13-11)

S_0= 62.7 mph (Exhibit 13-11)

S = 58.0 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	GPBO NP

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 4	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 1400 ft
V_u = veh/h	Deceleration Lane Length L_D: 1000	V_D = 388 veh/h
	Freeway Volume, V_F: 3824	
	Ramp Volume, V_R: 726	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3824	0.92	Level	11	0	0.948	1.00	4385
Ramp	726	0.92	Level	2	0	0.990	1.00	797
UpStream								
DownStream	388	0.92	Level	2	0	0.990	1.00	426

Merge Areas | Diverge Areas

Estimation of v_{12} — Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Estimation of v_{12} — Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2361 pc/h

V_3 or V_{av34} 1012 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks — Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Capacity Checks — Diverge Areas

	Actual	Capacity		LOS F?
V_F	4385	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3588	Exhibit 13-8	9600	No
V_R	797	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2361	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F) — Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Level of Service Determination (if not F) — Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 15.6 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination — Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Speed Determination — Diverge Areas

D_s = 0.500 (Exhibit 13-12)

S_R = 56.0 mph (Exhibit 13-12)

S_0 = 76.7 mph (Exhibit 13-12)

S = 64.0 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	GPBO NP

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 1400 ft	Acceleration Lane Length, L_A: 900	L_{down} = ft
V_u = 726 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3098	
	Ramp Volume, V_R: 388	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3098	0.92	Level	11	0	0.948	1.00	3553
Ramp	388	0.92	Level	2	0	0.990	1.00	426
UpStream	726	0.92	Level	2	0	0.990	1.00	797
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 679.31 (Equation 13-6 or 13-7)

P_{FM} = 0.603 using Equation (Exhibit 13-6)

V_{12} = 2141 pc/h

V_3 or V_{av34} 1412 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 2141 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	3979	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2567	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 19.7 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

M_S = 0.309 (Exibit 13-11)

S_R= 61.4 mph (Exhibit 13-11)

S_0= 66.7 mph (Exhibit 13-11)

S = 63.2 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	GPBO NP

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☑ Yes	☑ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☐ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	180	L_{down} =	2000 ft
V_u =	veh/h	Freeway Volume, V_F	3739	V_D =	580 veh/h
		Ramp Volume, V_R	576		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	35.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3739	0.92	Level	11	0	0.948	1.00	4288
Ramp	576	0.92	Level	2	0	0.990	1.00	632
UpStream								
DownStream	580	0.92	Level	2	0	0.990	1.00	637

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R= mph (Exhibit 13-11)

S_0= mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 1471 pc/h

V_3 or V_{av34} 1194 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1544 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	3860	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3228	Exhibit 13-8	9600	No
V_R	632	Exhibit 13-10	4000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1471	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 13.4 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.485 (Exhibit 13-12)

S_R= 56.4 mph (Exhibit 13-12)

S_0= 76.2 mph (Exhibit 13-12)

S = 66.8 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	GPBO NP

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 4	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2000 ft	Acceleration Lane Length, L_A: 1000	L_{down} = ft
V_u = 576 veh/h	Deceleration Lane Length L_D	V_D = veh/h
	Freeway Volume, V_F: 3163	
	Ramp Volume, V_R: 580	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3163	0.92	Level	11	0	0.948	1.00	3627
Ramp	580	0.92	Level	2	0	0.990	1.00	637
UpStream	576	0.92	Level	2	0	0.990	1.00	632
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 784.70 (Equation 13-6 or 13-7)

P_{FM} = 0.138 using Equation (Exhibit 13-6)

V_{12} = 501 pc/h

V_3 or V_{av34} 1563 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 1450 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4264	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2087	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 15.2 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

M_S = 0.282 (Exibit 13-11)

S_R= 62.1 mph (Exhibit 13-11)

S_0= 67.9 mph (Exhibit 13-11)

S = 64.9 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	GPBO NP

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 3	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2400 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 570 veh/h
	Freeway Volume, V_F: 4867	
	Ramp Volume, V_R: 770	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4867	0.92	Level	15	0	0.930	1.00	5687
Ramp	770	0.92	Level	2	0	0.990	1.00	845
UpStream								
DownStream	570	0.92	Level	2	0	0.990	1.00	626

Merge Areas | Diverge Areas

Estimation of v_{12}

Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.579 using Equation (Exhibit 13-7)

V_{12} = 3648 pc/h

V_3 or V_{av34} 2039 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Diverge Areas

	Actual	Capacity		LOS F?
V_F	5687	Exhibit 13-8	7200	No
$V_{FO} = V_F - V_R$	4842	Exhibit 13-8	7200	No
V_R	845	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	3648	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 34.0 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

D_s = 0.504 (Exhibit 13-12)

S_R = 55.9 mph (Exhibit 13-12)

S_0 = 72.7 mph (Exhibit 13-12)

S = 60.9 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	GPBO NP

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp
☑ Yes ☐ On
☐ No ☑ Off
L_{up} = 2400 ft
V_u = 770 veh/h

Freeway Number of Lanes, N	3
Ramp Number of Lanes, N	1
Acceleration Lane Length, L_A	400
Deceleration Lane Length L_D	
Freeway Volume, V_F	4097
Ramp Volume, V_R	570
Freeway Free-Flow Speed, S_{FF}	70.0
Ramp Free-Flow Speed, S_{FR}	35.0

Downstream Adj Ramp
☐ Yes ☐ On
☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4097	0.92	Level	15	0	0.930	1.00	4787
Ramp	570	0.92	Level	2	0	0.990	1.00	626
UpStream	770	0.92	Level	2	0	0.990	1.00	845
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$
L_{EQ} = 764.18 (Equation 13-6 or 13-7)
P_{FM} = 0.589 using Equation (Exhibit 13-6)
V_{12} = 2818 pc/h
V_3 or V_{av34} 1969 pc/h (Equation 13-14 or 13-17)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No
If Yes,V_{12a} = 2818 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5413	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3444	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$
D_R = 29.5 (pc/mi/ln)
LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.415 (Exibit 13-11)
S_R= 58.4 mph (Exhibit 13-11)
S_0= 64.7 mph (Exhibit 13-11)
S = 60.5 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$
L_{EQ} = (Equation 13-12 or 13-13)
P_{FD} = using Equation (Exhibit 13-7)
V_{12} = pc/h
V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$
D_R = (pc/mi/ln)
LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)
S_R= mph (Exhibit 13-12)
S_0= mph (Exhibit 13-12)
S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	GPBO NP

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2900 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 863 veh/h
	Freeway Volume, V_F: 6889	
	Ramp Volume, V_R: 1040	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6889	0.92	Level	15	0	0.930	1.00	8050
Ramp	1040	0.92	Level	2	0	0.990	1.00	1142
UpStream								
DownStream	863	0.92	Level	2	0	0.990	1.00	947

Merge Areas | Diverge Areas

Estimation of v_{12} — Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Estimation of v_{12} — Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2519 pc/h

V_3 or V_{av34} 1960 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2576 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks — Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Capacity Checks — Diverge Areas

	Actual	Capacity		LOS F?
V_F	6440	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	5298	Exhibit 13-8	9600	No
V_R	1142	Exhibit 13-10	4000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2519	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F) — Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Level of Service Determination (if not F) — Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 14.2 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination — Merge Areas

M_S = (Exibit 13-11)

S_R= mph (Exhibit 13-11)

S_0= mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Speed Determination — Diverge Areas

D_s = 0.531 (Exhibit 13-12)

S_R= 55.1 mph (Exhibit 13-12)

S_0= 73.2 mph (Exhibit 13-12)

S = 64.7 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	GPBO NP

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2900 ft	Acceleration Lane Length, L_A: 600	L_{down} = ft
V_u = 1040 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 5849	
	Ramp Volume, V_R: 863	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5849	0.92	Level	15	0	0.930	1.00	6834
Ramp	863	0.92	Level	2	0	0.990	1.00	947
UpStream	1040	0.92	Level	2	0	0.990	1.00	1142
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 1359.73 (Equation 13-6 or 13-7)

P_{FM} = 0.594 using Equation (Exhibit 13-6)

V_{12} = 4061 pc/h

V_3 or V_{av34} 2773 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☑ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 4134 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	7781	Exhibit 13-8		Yes

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	5081	Exhibit 13-8	4600:All	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 40.9 (pc/mi/ln)

LOS = F (Exhibit 13-2)

Speed Determination

M_S = 0.907 (Exibit 13-11)

S_R= 44.6 mph (Exhibit 13-11)

S_0= 61.1 mph (Exhibit 13-11)

S = 49.2 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	GPBO NP

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 4	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 1400 ft
V_u = veh/h	Deceleration Lane Length L_D: 1000	V_D = 637 veh/h
	Freeway Volume, V_F: 4027	
	Ramp Volume, V_R: 737	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4027	0.92	Level	11	0	0.948	1.00	4618
Ramp	737	0.92	Level	2	0	0.990	1.00	809
UpStream								
DownStream	637	0.92	Level	2	0	0.990	1.00	699

Merge Areas | Diverge Areas

Estimation of v_{12}

Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2470 pc/h

V_3 or V_{av34} 1074 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Diverge Areas

	Actual	Capacity		LOS F?
V_F	4618	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3809	Exhibit 13-8	9600	No
V_R	809	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2470	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 16.5 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

D_s = 0.501 (Exhibit 13-12)

S_R = 56.0 mph (Exhibit 13-12)

S_0 = 76.5 mph (Exhibit 13-12)

S = 64.0 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	GPBO NP

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 1400 ft	Acceleration Lane Length, L_A: 900	L_{down} = ft
V_u = 737 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3290	
	Ramp Volume, V_R: 637	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3290	0.92	Level	11	0	0.948	1.00	3773
Ramp	637	0.92	Level	2	0	0.990	1.00	699
UpStream	737	0.92	Level	2	0	0.990	1.00	809
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 784.81 (Equation 13-6 or 13-7)

P_{FM} = 0.603 using Equation (Exhibit 13-6)

V_{12} = 2274 pc/h

V_3 or V_{av34} 1499 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 2274 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4472	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2973	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 22.7 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.334 (Exibit 13-11)

S_R= 60.6 mph (Exhibit 13-11)

S_0= 66.4 mph (Exhibit 13-11)

S = 62.5 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	GPBO NP

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2000 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 1036 veh/h
	Freeway Volume, V_F: 5938	
	Ramp Volume, V_R: 1045	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5938	0.92	Level	11	0	0.948	1.00	6809
Ramp	1045	0.92	Level	2	0	0.990	1.00	1147
UpStream								
DownStream	1036	0.92	Level	2	0	0.990	1.00	1137

Merge Areas | Diverge Areas

Estimation of v_{12}

Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2354 pc/h

V_3 or V_{av34} 1717 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Diverge Areas

	Actual	Capacity		LOS F?
V_F	5788	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4641	Exhibit 13-8	9600	No
V_R	1147	Exhibit 13-10	4000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2354	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 20.4 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

D_s = 0.531 (Exhibit 13-12)

S_R = 55.1 mph (Exhibit 13-12)

S_0 = 74.0 mph (Exhibit 13-12)

S = 65.0 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	GPBO NP

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 4	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2000 ft	Acceleration Lane Length, L_A: 1000	L_{down} = ft
V_u = 1045 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 4893	
	Ramp Volume, V_R: 1036	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4893	0.92	Level	11	0	0.948	1.00	5611
Ramp	1036	0.92	Level	2	0	0.990	1.00	1137
UpStream	1045	0.92	Level	2	0	0.990	1.00	1147
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = 0.076 using Equation (Exhibit 13-6)

V_{12} = 425 pc/h

V_3 or V_{av34} = 2593 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2244 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6748	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3381	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 25.1 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.366 (Exibit 13-11)

S_R = 59.8 mph (Exhibit 13-11)

S_0 = 65.7 mph (Exhibit 13-11)

S = 62.6 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX 7.8:

GENERAL PLAN BUILDOUT WITH PROJECT CONDITIONS FREEWAY RAMP JUNCTION (MERGE/DIVERGE) ANALYSIS WORKSHEETS

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	GPBO WP

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 3	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2400 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 511 veh/h
	Freeway Volume, V_F: 4804	
	Ramp Volume, V_R: 773	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4804	0.92	Level	15	0	0.930	1.00	5613
Ramp	773	0.92	Level	2	0	0.990	1.00	849
UpStream								
DownStream	511	0.92	Level	2	0	0.990	1.00	561

Merge Areas | Diverge Areas

Estimation of v_{12} — Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Estimation of v_{12} — Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.581 using Equation (Exhibit 13-7)

V_{12} = 3615 pc/h

V_3 or V_{av34} 1998 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks — Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Capacity Checks — Diverge Areas

	Actual	Capacity		LOS F?
V_F	5613	Exhibit 13-8	7200	No
$V_{FO} = V_F - V_R$	4764	Exhibit 13-8	7200	No
V_R	849	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	3615	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F) — Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Level of Service Determination (if not F) — Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 33.7 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination — Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Speed Determination — Diverge Areas

D_s = 0.504 (Exhibit 13-12)

S_R = 55.9 mph (Exhibit 13-12)

S_0 = 72.9 mph (Exhibit 13-12)

S = 60.9 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	GPBO WP

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	3	Downstream Adj Ramp	
☑ Yes	☐ On	Ramp Number of Lanes, N	1	☐ Yes	☐ On
☐ No	☑ Off	Acceleration Lane Length, L_A	400	☑ No	☐ Off
L_{up} =	2400 ft	Deceleration Lane Length L_D		L_{down} =	ft
V_u =	773 veh/h	Freeway Volume, V_F	4031	V_D =	veh/h
		Ramp Volume, V_R	511		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	35.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4031	0.92	Level	15	0	0.930	1.00	4710
Ramp	511	0.92	Level	2	0	0.990	1.00	561
UpStream	773	0.92	Level	2	0	0.990	1.00	849
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 733.79 (Equation 13-6 or 13-7)

P_{FM} = 0.589 using Equation (Exhibit 13-6)

V_{12} = 2773 pc/h

V_3 or V_{av34} 1937 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 2773 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5271	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3334	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 28.7 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.402 (Exibit 13-11)

S_R= 58.7 mph (Exhibit 13-11)

S_0= 64.8 mph (Exhibit 13-11)

S = 60.8 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	GPBO WP

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2900 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 573 veh/h
	Freeway Volume, V_F: 5751	
	Ramp Volume, V_R: 624	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5751	0.92	Level	15	0	0.930	1.00	6720
Ramp	624	0.92	Level	2	0	0.990	1.00	685
UpStream								
DownStream	573	0.92	Level	2	0	0.990	1.00	629

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R= mph (Exhibit 13-11)

S_0= mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 1992 pc/h

V_3 or V_{av34} 1860 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2284 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	5712	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	5027	Exhibit 13-8	9600	No
V_R	685	Exhibit 13-10	4000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1992	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 11.7 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.490 (Exhibit 13-12)

S_R= 56.3 mph (Exhibit 13-12)

S_0= 74.0 mph (Exhibit 13-12)

S = 65.7 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	GPBO WP

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2900 ft	Acceleration Lane Length, L_A: 600	L_{down} = ft
V_u = 624 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 5127	
	Ramp Volume, V_R: 573	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5127	0.92	Level	15	0	0.930	1.00	5991
Ramp	573	0.92	Level	2	0	0.990	1.00	629
UpStream	624	0.92	Level	2	0	0.990	1.00	685
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 1111.28 (Equation 13-6 or 13-7)

P_{FM} = 0.594 using Equation (Exhibit 13-6)

V_{12} = 3560 pc/h

V_3 or V_{av34} 2431 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 3560 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6620	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	4189	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 34.1 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.536 (Exibit 13-11)

S_R= 55.0 mph (Exhibit 13-11)

S_0= 62.7 mph (Exhibit 13-11)

S = 57.6 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	GPBO WP

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 4	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 1400 ft
V_u = veh/h	Deceleration Lane Length L_D: 1000	V_D = 421 veh/h
	Freeway Volume, V_F: 3986	
	Ramp Volume, V_R: 888	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3986	0.92	Level	11	0	0.948	1.00	4571
Ramp	888	0.92	Level	2	0	0.990	1.00	975
UpStream								
DownStream	421	0.92	Level	2	0	0.990	1.00	462

Merge Areas | Diverge Areas

Estimation of v_{12} — Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Estimation of v_{12} — Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2543 pc/h

V_3 or V_{av34} 1014 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks — Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Capacity Checks — Diverge Areas

	Actual	Capacity		LOS F?
V_F	4571	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3596	Exhibit 13-8	9600	No
V_R	975	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2543	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F) — Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Level of Service Determination (if not F) — Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 17.1 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination — Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Speed Determination — Diverge Areas

D_s = 0.516 (Exhibit 13-12)

S_R = 55.6 mph (Exhibit 13-12)

S_0 = 76.7 mph (Exhibit 13-12)

S = 63.3 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	GPBO WP

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 1400 ft	Acceleration Lane Length, L_A: 900	L_{down} = ft
V_u = 888 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3098	
	Ramp Volume, V_R: 421	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	$v = V/PHF \times f_{HV} \times f_p$
Freeway	3098	0.92	Level	11	0	0.948	1.00	3553
Ramp	421	0.92	Level	2	0	0.990	1.00	462
UpStream	888	0.92	Level	2	0	0.990	1.00	975
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 687.01 (Equation 13-6 or 13-7)

P_{FM} = 0.603 using Equation (Exhibit 13-6)

V_{12} = 2141 pc/h

V_3 or V_{av34} 1412 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4015	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2603	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 19.9 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

M_S = 0.311 (Exibit 13-11)

S_R= 61.3 mph (Exhibit 13-11)

S_0= 66.7 mph (Exhibit 13-11)

S = 63.1 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	Existing (2014) Conditions

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Freeway Number of Lanes, N	5	Downstream Adj Ramp	
☐ Yes	☐ On	Ramp Number of Lanes, N	2	☑ Yes	☑ On
☑ No	☐ Off	Acceleration Lane Length, L_A		☐ No	☐ Off
L_{up} =	ft	Deceleration Lane Length L_D	180	L_{down} =	2000 ft
V_u =	veh/h	Freeway Volume, V_F	3836	V_D =	634 veh/h
		Ramp Volume, V_R	673		
		Freeway Free-Flow Speed, S_{FF}	70.0		
		Ramp Free-Flow Speed, S_{FR}	35.0		

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3836	0.92	Level	11	0	0.948	1.00	4399
Ramp	673	0.92	Level	2	0	0.990	1.00	739
UpStream								
DownStream	634	0.92	Level	2	0	0.990	1.00	696

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

M_S = (Exibit 13-11)

S_R= mph (Exhibit 13-11)

S_0= mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 1576 pc/h

V_3 or V_{av34} 1192 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 1584 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	3960	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3221	Exhibit 13-8	9600	No
V_R	739	Exhibit 13-10	4000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1576	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 13.7 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

D_s = 0.495 (Exhibit 13-12)

S_R= 56.2 mph (Exhibit 13-12)

S_0= 76.1 mph (Exhibit 13-12)

S = 66.6 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	GPBO WP

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 4	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2000 ft	Acceleration Lane Length, L_A: 1000	L_{down} = ft
V_u = 673 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3163	
	Ramp Volume, V_R: 634	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	3163	0.92	Level	11	0	0.948	1.00	3627
Ramp	634	0.92	Level	2	0	0.990	1.00	696
UpStream	673	0.92	Level	2	0	0.990	1.00	739
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 797.32 (Equation 13-6 or 13-7)

P_{FM} = 0.131 using Equation (Exhibit 13-6)

V_{12} = 474 pc/h

V_3 or V_{av34} 1576 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 1450 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4323	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	2146	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 15.6 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

M_S = 0.284 (Exibit 13-11)

S_R= 62.0 mph (Exhibit 13-11)

S_0= 67.9 mph (Exhibit 13-11)

S = 64.9 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	GPBO WP

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 3	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2400 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 780 veh/h
	Freeway Volume, V_F: 4986	
	Ramp Volume, V_R: 889	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4986	0.92	Level	15	0	0.930	1.00	5826
Ramp	889	0.92	Level	2	0	0.990	1.00	976
UpStream								
DownStream	780	0.92	Level	2	0	0.990	1.00	856

Merge Areas | Diverge Areas

Estimation of v_{12} — Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Estimation of v_{12} — Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.569 using Equation (Exhibit 13-7)

V_{12} = 3738 pc/h

V_3 or V_{av34} 2088 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks — Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Capacity Checks — Diverge Areas

	Actual	Capacity		LOS F?
V_F	5826	Exhibit 13-8	7200	No
$V_{FO} = V_F - V_R$	4850	Exhibit 13-8	7200	No
V_R	976	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	3738	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F) — Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Level of Service Determination (if not F) — Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 34.8 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination — Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Speed Determination — Diverge Areas

D_s = 0.516 (Exhibit 13-12)

S_R = 55.6 mph (Exhibit 13-12)

S_0 = 72.5 mph (Exhibit 13-12)

S = 60.6 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 NB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	GPBO WP

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2400 ft	Acceleration Lane Length, L_A: 400	L_{down} = ft
V_u = 889 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 4097	
	Ramp Volume, V_R: 780	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4097	0.92	Level	15	0	0.930	1.00	4787
Ramp	780	0.92	Level	2	0	0.990	1.00	856
UpStream	889	0.92	Level	2	0	0.990	1.00	976
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 813.40 (Equation 13-6 or 13-7)

P_{FM} = 0.589 using Equation (Exhibit 13-6)

V_{12} = 2818 pc/h

V_3 or V_{av34} 1969 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes,V_{12a} = 2818 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	5643	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3674	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 31.2 (pc/mi/ln)

LOS = D (Exhibit 13-2)

Speed Determination

M_S = 0.447 (Exibit 13-11)

S_R= 57.5 mph (Exhibit 13-11)

S_0= 64.7 mph (Exhibit 13-11)

S = 59.8 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	GPBO WP

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2900 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 1132 veh/h
	Freeway Volume, V_F: 6981	
	Ramp Volume, V_R: 1132	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	6981	0.92	Level	15	0	0.930	1.00	8157
Ramp	1132	0.92	Level	2	0	0.990	1.00	1243
UpStream								
DownStream	1132	0.92	Level	2	0	0.990	1.00	1243

Merge Areas | Diverge Areas

Estimation of v_{12}

Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2617 pc/h

V_3 or V_{av34} 1954 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Diverge Areas

	Actual	Capacity		LOS F?
V_F	6526	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	5283	Exhibit 13-8	9600	No
V_R	1243	Exhibit 13-10	4000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2617	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 14.5 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

D_s = 0.540 (Exhibit 13-12)

S_R = 54.9 mph (Exhibit 13-12)

S_0 = 73.1 mph (Exhibit 13-12)

S = 64.5 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	I-215 SB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Eucalyptus Av.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	GPBO WP

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp
☑ Yes ☐ On
☐ No ☑ Off
L_{up} = 2900 ft
V_u = 1132 veh/h

Freeway Number of Lanes, N	3
Ramp Number of Lanes, N	1
Acceleration Lane Length, L_A	600
Deceleration Lane Length L_D	
Freeway Volume, V_F	5849
Ramp Volume, V_R	1132
Freeway Free-Flow Speed, S_{FF}	70.0
Ramp Free-Flow Speed, S_{FR}	35.0

Downstream Adj Ramp
☐ Yes ☐ On
☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5849	0.92	Level	15	0	0.930	1.00	6834
Ramp	1132	0.92	Level	2	0	0.990	1.00	1243
UpStream	1132	0.92	Level	2	0	0.990	1.00	1243
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$
L_{EQ} = 1423.08 (Equation 13-6 or 13-7)
P_{FM} = 0.594 using Equation (Exhibit 13-6)
V_{12} = 4061 pc/h
V_3 or V_{av34} 2773 pc/h (Equation 13-14 or 13-17)
Is V_3 or V_{av34} > 2,700 pc/h? ☑ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No
If Yes,V_{12a} = 4134 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	8077	Exhibit 13-8		Yes

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	5377	Exhibit 13-8	4600:All	Yes

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$
D_R = 43.1 (pc/mi/ln)
LOS = F (Exhibit 13-2)

Speed Determination

M_S = 1.123 (Exibit 13-11)
S_R= 38.6 mph (Exhibit 13-11)
S_0= 61.1 mph (Exhibit 13-11)
S = 44.0 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$
L_{EQ} = (Equation 13-12 or 13-13)
P_{FD} = using Equation (Exhibit 13-7)
V_{12} = pc/h
V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes,V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$
D_R = (pc/mi/ln)
LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)
S_R= mph (Exhibit 13-12)
S_0= mph (Exhibit 13-12)
S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	AM Peak Hour	Analysis Year	Existing (2014)

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 4	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 1	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 1400 ft
V_u = veh/h	Deceleration Lane Length L_D: 1000	V_D = 760 veh/h
	Freeway Volume, V_F: 4119	
	Ramp Volume, V_R: 829	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4119	0.92	Level	11	0	0.948	1.00	4723
Ramp	829	0.92	Level	2	0	0.990	1.00	910
UpStream								
DownStream	760	0.92	Level	2	0	0.990	1.00	834

Merge Areas | Diverge Areas

Estimation of v_{12}

Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.436 using Equation (Exhibit 13-7)

V_{12} = 2572 pc/h

V_3 or V_{av34} 1075 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Diverge Areas

	Actual	Capacity		LOS F?
V_F	4723	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	3813	Exhibit 13-8	9600	No
V_R	910	Exhibit 13-10	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2572	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 17.4 (pc/mi/ln)

LOS = B (Exhibit 13-2)

Speed Determination

Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

D_s = 0.510 (Exhibit 13-12)

S_R = 55.7 mph (Exhibit 13-12)

S_0 = 76.5 mph (Exhibit 13-12)

S = 63.6 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 WB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	GPBO WP

Project Description Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 3	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 1400 ft	Acceleration Lane Length, L_A: 900	L_{down} = ft
V_u = 829 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 3290	
	Ramp Volume, V_R: 760	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	$v = V/PHF \times f_{HV} \times f_p$
Freeway	3290	0.92	Level	11	0	0.948	1.00	3773
Ramp	760	0.92	Level	2	0	0.990	1.00	834
UpStream	829	0.92	Level	2	0	0.990	1.00	910
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 813.70 (Equation 13-6 or 13-7)

P_{FM} = 0.603 using Equation (Exhibit 13-6)

V_{12} = 2274 pc/h

V_3 or V_{av34} 1499 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	4607	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3108	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 23.7 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.345 (Exibit 13-11)

S_R= 60.3 mph (Exhibit 13-11)

S_0= 66.4 mph (Exhibit 13-11)

S = 62.2 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R= mph (Exhibit 13-12)

S_0= mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB Off-Ramp
Agency or Company	Urban Crossroad, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	GPBO WP

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☐ Yes ☐ On	Freeway Number of Lanes, N: 5	☑ Yes ☑ On
☑ No ☐ Off	Ramp Number of Lanes, N: 2	☐ No ☐ Off
L_{up} = ft	Acceleration Lane Length, L_A:	L_{down} = 2000 ft
V_u = veh/h	Deceleration Lane Length L_D: 180	V_D = 1241 veh/h
	Freeway Volume, V_F: 5994	
	Ramp Volume, V_R: 1101	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	5994	0.92	Level	11	0	0.948	1.00	6874
Ramp	1101	0.92	Level	2	0	0.990	1.00	1209
UpStream								
DownStream	1241	0.92	Level	2	0	0.990	1.00	1362

Merge Areas | Diverge Areas

Estimation of v_{12}

Merge Areas

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 13-6 or 13-7)

P_{FM} = using Equation (Exhibit 13-6)

V_{12} = pc/h

V_3 or V_{av34} pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Diverge Areas

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = 0.260 using Equation (Exhibit 13-7)

V_{12} = 2414 pc/h

V_3 or V_{av34} 1714 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

Merge Areas

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 13-8		

Diverge Areas

	Actual	Capacity		LOS F?
V_F	5843	Exhibit 13-8	9600	No
$V_{FO} = V_F - V_R$	4634	Exhibit 13-8	9600	No
V_R	1209	Exhibit 13-10	4000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 13-8		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	2414	Exhibit 13-8	4400:All	No

Level of Service Determination (if not F)

Merge Areas

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Diverge Areas

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 20.9 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

Merge Areas

M_S = (Exibit 13-11)

S_R = mph (Exhibit 13-11)

S_0 = mph (Exhibit 13-11)

S = mph (Exhibit 13-13)

Diverge Areas

D_s = 0.537 (Exhibit 13-12)

S_R = 55.0 mph (Exhibit 13-12)

S_0 = 74.0 mph (Exhibit 13-12)

S = 64.7 mph (Exhibit 13-13)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	JC	Freeway/Dir of Travel	SR-60 EB On-Ramp
Agency or Company	Urban Crossroads, Inc.	Junction	Day St.
Date Performed	01/12/2015	Jurisdiction	Caltrans
Analysis Time Period	PM Peak Hour	Analysis Year	GPBO WP

Project Description: Cyn. Springs Healthcare Campus & Senior Living TIA (JN08890)

Inputs

Upstream Adj Ramp		Downstream Adj Ramp
☑ Yes ☐ On	Freeway Number of Lanes, N: 4	☐ Yes ☐ On
☐ No ☑ Off	Ramp Number of Lanes, N: 1	☑ No ☐ Off
L_{up} = 2000 ft	Acceleration Lane Length, L_A: 1000	L_{down} = ft
V_u = 1101 veh/h	Deceleration Lane Length L_D:	V_D = veh/h
	Freeway Volume, V_F: 4893	
	Ramp Volume, V_R: 1241	
	Freeway Free-Flow Speed, S_{FF}: 70.0	
	Ramp Free-Flow Speed, S_{FR}: 35.0	

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	4893	0.92	Level	11	0	0.948	1.00	5611
Ramp	1241	0.92	Level	2	0	0.990	1.00	1362
UpStream	1101	0.92	Level	2	0	0.990	1.00	1209
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = 1364.42 (Equation 13-6 or 13-7)

P_{FM} = 0.048 using Equation (Exhibit 13-6)

V_{12} = 267 pc/h

V_3 or V_{av34} = 2672 pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☑ Yes ☐ No

If Yes, V_{12a} = 2244 pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	6973	Exhibit 13-8		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	3606	Exhibit 13-8	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 26.7 (pc/mi/ln)

LOS = C (Exhibit 13-2)

Speed Determination

M_S = 0.395 (Exibit 13-11)

S_R = 59.0 mph (Exhibit 13-11)

S_0 = 65.7 mph (Exhibit 13-11)

S = 62.0 mph (Exhibit 13-13)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 13-12 or 13-13)

P_{FD} = using Equation (Exhibit 13-7)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 13-14 or 13-17)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 13-16, 13-18, or 13-19)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 13-8		
$V_{FO} = V_F - V_R$		Exhibit 13-8		
V_R		Exhibit 13-10		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 13-8		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 13-2)

Speed Determination

D_s = (Exhibit 13-12)

S_R = mph (Exhibit 13-12)

S_0 = mph (Exhibit 13-12)

S = mph (Exhibit 13-13)

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APPENDIX 9.1:

GENERAL PLAN BUILDOUT WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS TO ADDRESS NON-DEFICIENT INTERSECTIONS

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	66	673	17	65	1461	555	11	125	64	163	78	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		80	150		0	75		160	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		760			700			315			411	
Travel Time (s)		13.0			11.9			7.2			9.3	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0		11.0	20.0	20.0	11.0	20.0	
Total Split (s)	11.0	84.0	84.0	15.0	88.0		11.0	20.0	20.0	11.0	20.0	
Total Split (%)	8.5%	64.6%	64.6%	11.5%	67.7%		8.5%	15.4%	15.4%	8.5%	15.4%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	Max	Max	None	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 20 (15%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Box Springs Bl. & Eastridge Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	66	673	17	65	1461	555	11	125	64	163	78	4
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	72	732	18	71	1588	603	12	136	70	177	85	4
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	2	1	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	91	2297	1028	90	1659	592	34	229	195	185	279	13
Arrive On Green	0.05	0.65	0.65	0.07	0.86	0.86	0.02	0.12	0.12	0.05	0.16	0.16
Sat Flow, veh/h	1774	3539	1583	1774	2558	913	1774	1863	1583	3442	1765	83
Grp Volume(v), veh/h	72	732	18	71	1067	1124	12	136	70	177	0	89
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1702	1774	1863	1583	1721	0	1848
Q Serve(g_s), s	5.2	11.9	0.5	5.1	54.5	84.3	0.9	9.0	5.3	6.7	0.0	5.5
Cycle Q Clear(g_c), s	5.2	11.9	0.5	5.1	54.5	84.3	0.9	9.0	5.3	6.7	0.0	5.5
Prop In Lane	1.00		1.00	1.00		0.54	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	91	2297	1028	90	1148	1104	34	229	195	185	0	292
V/C Ratio(X)	0.79	0.32	0.02	0.79	0.93	1.02	0.36	0.59	0.36	0.96	0.00	0.30
Avail Cap(c_a), veh/h	96	2297	1028	150	1148	1104	96	229	195	185	0	292
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.52	0.52	0.52	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.0	10.1	8.1	59.9	6.9	8.9	63.0	53.9	52.3	61.3	0.0	48.4
Incr Delay (d2), s/veh	33.6	0.4	0.0	7.6	8.5	24.2	6.3	10.8	5.1	53.0	0.0	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	5.9	0.2	2.7	27.8	44.4	0.5	5.3	2.6	4.5	0.0	3.0
LnGrp Delay(d),s/veh	94.6	10.5	8.1	67.6	15.4	33.1	69.3	64.7	57.4	114.4	0.0	51.1
LnGrp LOS	F	B	A	E	B	F	E	E	E	F		D
Approach Vol, veh/h		822			2262			218			266	
Approach Delay, s/veh		17.8			25.8			62.6			93.2	
Approach LOS		B			C			E			F	

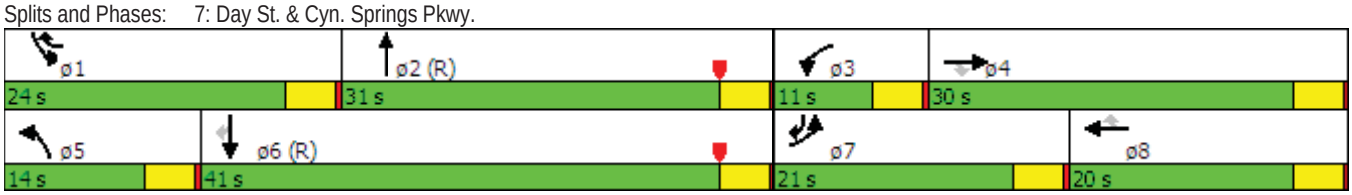
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	88.4	6.5	24.5	10.7	88.3	11.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	80.0	7.0	16.0	7.0	84.0	7.0	16.0
Max Q Clear Time (g_c+I1), s	7.1	13.9	2.9	7.5	7.2	86.3	8.7	11.0
Green Ext Time (p_c), s	0.0	50.8	0.0	0.9	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	31.2
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	316	34	38	34	46	112	70	705	58	175	1139	318
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	145		0	165		0	170		200
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	95			100			120			80		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		1120			404			728			524	
Travel Time (s)		19.1			7.9			12.4			8.9	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												19%
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			20			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	1	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	21.0	30.0	30.0	11.0	20.0	24.0	14.0	31.0		24.0	41.0	21.0
Total Split (%)	21.9%	31.3%	31.3%	11.5%	20.8%	25.0%	14.6%	32.3%		25.0%	42.7%	21.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 53 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Day St. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	316	34	38	34	46	112	70	705	58	175	1139	318
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	326	35	39	35	47	115	72	727	60	180	1215	300
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	4	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	410	304	258	78	164	329	110	2425	199	212	4200	1081
Arrive On Green	0.12	0.16	0.16	0.04	0.09	0.09	0.02	0.17	0.17	0.24	1.00	1.00
Sat Flow, veh/h	3442	1863	1583	1774	1863	1583	1774	4790	393	1774	7451	1583
Grp Volume(v), veh/h	326	35	39	35	47	115	72	513	274	180	1215	300
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1863	1583	1774	1695	1793	1774	1863	1583
Q Serve(g_s), s	8.8	1.5	2.0	1.8	2.3	6.0	3.9	12.7	12.9	9.3	0.0	0.0
Cycle Q Clear(g_c), s	8.8	1.5	2.0	1.8	2.3	6.0	3.9	12.7	12.9	9.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	410	304	258	78	164	329	110	1716	908	212	4200	1081
V/C Ratio(X)	0.79	0.12	0.15	0.45	0.29	0.35	0.65	0.30	0.30	0.85	0.29	0.28
Avail Cap(c_a), veh/h	609	504	429	129	310	453	185	1716	908	370	4200	1081
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.90	0.90	0.90	1.00	1.00	1.00	0.98	0.98	0.98	0.88	0.88	0.88
Uniform Delay (d), s/veh	41.1	34.3	34.5	44.7	40.9	32.5	46.0	25.0	25.1	35.7	0.0	0.0
Incr Delay (d2), s/veh	4.0	0.2	0.2	3.9	0.9	0.6	6.3	0.4	0.8	8.1	0.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.8	0.9	1.0	1.2	2.6	2.1	6.1	6.6	5.0	0.0	0.2
LnGrp Delay(d),s/veh	45.1	34.4	34.7	48.7	41.9	33.1	52.2	25.5	25.9	43.7	0.2	0.6
LnGrp LOS	D	C	C	D	D	C	D	C	C	D	A	A
Approach Vol, veh/h		400			197			859			1695	
Approach Delay, s/veh		43.2			38.0			27.9			4.9	
Approach LOS		D			D			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.5	52.6	8.2	19.7	10.0	58.1	15.4	12.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	27.0	7.0	26.0	10.0	37.0	17.0	16.0
Max Q Clear Time (g_c+I1), s	11.3	14.9	3.8	4.0	5.9	2.0	10.8	8.0
Green Ext Time (p_c), s	0.3	9.5	0.0	0.8	0.0	20.2	0.6	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	18.1
HCM 2010 LOS	B

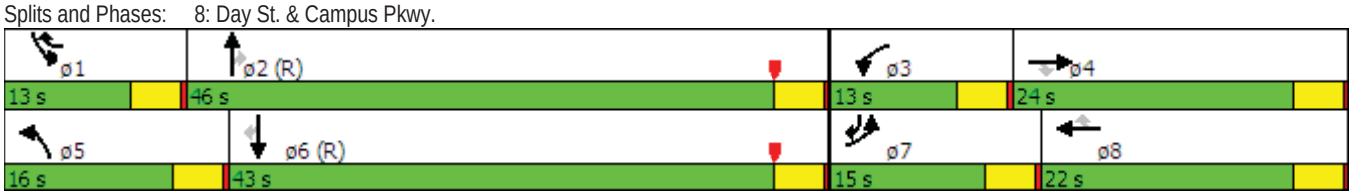
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	59	56	22	103	70	146	702	41	66	964	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		50	200		0	130		50	190		0
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	60			120			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		938			519			1025			728	
Travel Time (s)		16.0			10.1			17.5			12.4	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	1	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	15.0	24.0	24.0	13.0	22.0	13.0	16.0	46.0	46.0	13.0	43.0	15.0
Total Split (%)	15.6%	25.0%	25.0%	13.5%	22.9%	13.5%	16.7%	47.9%	47.9%	13.5%	44.8%	15.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 21 (22%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Day St. & Campus Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	59	59	56	22	103	70	146	702	41	66	964	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	60	60	57	22	104	71	147	709	41	67	974	152
Adj No. of Lanes	2	1	1	1	2	1	2	3	1	2	3	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	200	184	156	57	258	212	246	3262	1016	209	3208	1091
Arrive On Green	0.06	0.10	0.10	0.03	0.07	0.07	0.14	1.00	1.00	0.02	0.21	0.21
Sat Flow, veh/h	3442	1863	1583	1774	3539	1583	3442	5085	1583	3442	5085	1583
Grp Volume(v), veh/h	60	60	57	22	104	71	147	709	41	67	974	152
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1770	1583	1721	1695	1583	1721	1695	1583
Q Serve(g_s), s	1.6	2.9	3.2	1.2	2.7	3.9	3.8	0.0	0.0	1.8	15.5	6.3
Cycle Q Clear(g_c), s	1.6	2.9	3.2	1.2	2.7	3.9	3.8	0.0	0.0	1.8	15.5	6.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	200	184	156	57	258	212	246	3262	1016	209	3208	1091
V/C Ratio(X)	0.30	0.33	0.36	0.38	0.40	0.34	0.60	0.22	0.04	0.32	0.30	0.14
Avail Cap(c_a), veh/h	394	388	330	166	664	393	430	3262	1016	323	3208	1091
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98	0.94	0.94	0.94
Uniform Delay (d), s/veh	43.3	40.3	40.4	45.5	42.5	37.7	39.8	0.0	0.0	45.1	20.2	12.1
Incr Delay (d2), s/veh	0.8	1.0	1.4	4.1	1.0	0.9	2.3	0.1	0.1	0.8	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.5	1.5	0.6	1.4	1.8	1.9	0.0	0.0	0.9	7.4	2.9
LnGrp Delay(d),s/veh	44.2	41.3	41.9	49.7	43.5	38.6	42.1	0.1	0.1	45.9	20.4	12.3
LnGrp LOS	D	D	D	D	D	D	D	A	A	D	C	B
Approach Vol, veh/h		177			197			897			1193	
Approach Delay, s/veh		42.5			42.4			7.0			20.8	
Approach LOS		D			D			A			C	

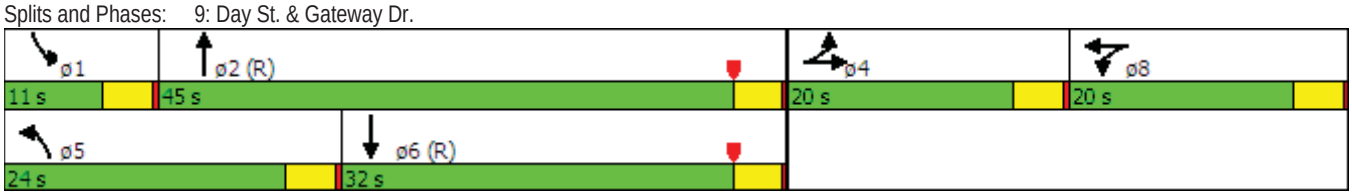
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	65.6	7.1	13.5	10.9	64.6	9.6	11.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	42.0	9.0	20.0	12.0	39.0	11.0	18.0
Max Q Clear Time (g_c+I1), s	3.8	2.0	3.2	5.2	5.8	17.5	3.6	5.9
Green Ext Time (p_c), s	0.1	17.0	0.0	1.1	0.2	12.4	0.1	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	19.1
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	133	46	66	37	110	108	177	597	51	85	515	336
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	100		0	190		400	260		0
Storage Lanes	1		0	1		0	1		1	2		0
Taper Length (ft)	0			120			60			165		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		318			585			592			1025	
Travel Time (s)		5.4			11.4			10.1			17.5	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)	37%											
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	20.0	20.0		20.0	20.0		24.0	45.0		11.0	32.0	
Total Split (%)	20.8%	20.8%		20.8%	20.8%		25.0%	46.9%		11.5%	33.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: Day St. & Gateway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	133	46	66	37	110	108	177	597	51	85	515	336
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	154	18	67	37	111	109	179	603	52	86	520	339
Adj No. of Lanes	2	1	0	1	2	0	1	3	0	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	27	100	169	169	151	217	2839	243	226	1825	852
Arrive On Green	0.08	0.08	0.08	0.10	0.10	0.10	0.08	0.40	0.40	0.13	1.00	1.00
Sat Flow, veh/h	3548	346	1289	1774	1771	1583	1774	4773	408	3442	3390	1583
Grp Volume(v), veh/h	154	0	85	37	111	109	179	427	228	86	520	339
Grp Sat Flow(s),veh/h/ln	1774	0	1635	1774	1770	1583	1774	1695	1791	1721	1695	1583
Q Serve(g_s), s	4.0	0.0	4.9	1.8	5.8	6.4	9.5	7.9	8.0	2.2	0.0	0.0
Cycle Q Clear(g_c), s	4.0	0.0	4.9	1.8	5.8	6.4	9.5	7.9	8.0	2.2	0.0	0.0
Prop In Lane	1.00		0.79	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	276	0	127	169	169	151	217	2016	1065	226	1825	852
V/C Ratio(X)	0.56	0.00	0.67	0.22	0.66	0.72	0.83	0.21	0.21	0.38	0.28	0.40
Avail Cap(c_a), veh/h	591	0	273	296	295	264	370	2016	1065	251	1825	852
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	0.96	0.96
Uniform Delay (d), s/veh	42.7	0.0	43.1	40.1	41.9	42.2	43.1	14.1	14.1	39.9	0.0	0.0
Incr Delay (d2), s/veh	1.8	0.0	6.0	0.6	4.3	6.4	7.8	0.2	0.5	1.0	0.4	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	2.4	0.9	3.0	3.1	5.1	3.8	4.1	1.1	0.1	0.3
LnGrp Delay(d),s/veh	44.5	0.0	49.0	40.8	46.2	48.6	50.8	14.3	14.6	40.9	0.4	1.3
LnGrp LOS	D		D	D	D	D	D	B	B	D	A	A
Approach Vol, veh/h		239			257			834			945	
Approach Delay, s/veh		46.1			46.4			22.2			4.4	
Approach LOS		D			D			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.3	61.1		11.5	15.7	55.7		13.2
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	41.0		16.0	20.0	28.0		16.0
Max Q Clear Time (g_c+I1), s	4.2	10.0		6.9	11.5	2.0		8.4
Green Ext Time (p_c), s	0.0	11.8		0.6	0.3	11.0		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	20.1
HCM 2010 LOS	C

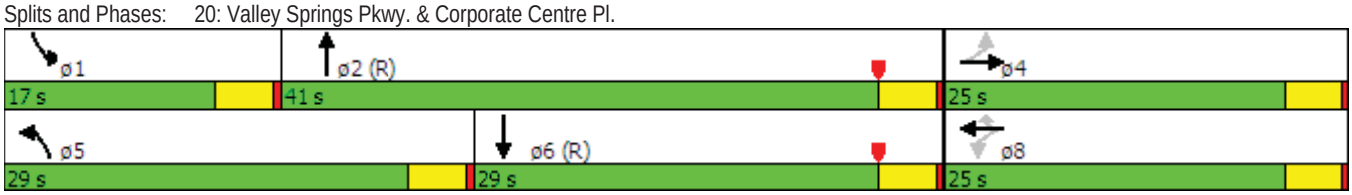
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	12	37	34	69	5	131	399	48	29	356	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		70	140		50	150		0	120		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			40			40			40	
Link Distance (ft)		327			603			402			804	
Travel Time (s)		7.4			10.3			6.9			13.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8						
Detector Phase	4	4		8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	20.0	20.0		20.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	25.0	25.0		25.0	25.0	25.0	29.0	41.0		17.0	29.0	
Total Split (%)	30.1%	30.1%		30.1%	30.1%	30.1%	34.9%	49.4%		20.5%	34.9%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 83	
Actuated Cycle Length: 83	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Valley Springs Pkwy. & Corporate Centre Pl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	9	12	37	34	69	5	131	399	48	29	356	22
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	10	13	40	37	74	5	141	429	52	31	383	24
Adj No. of Lanes	1	1	0	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.93	0.93	0.93	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	2	2	2	2	2	2	2
Cap, veh/h	176	35	109	164	310	139	180	3339	398	76	3263	202
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.72	0.72	0.04	0.67	0.67
Sat Flow, veh/h	1314	403	1241	1346	3539	1583	1774	4607	549	1774	4896	304
Grp Volume(v), veh/h	10	0	53	37	74	5	141	314	167	31	264	143
Grp Sat Flow(s),veh/h/ln	1314	0	1644	1346	1770	1583	1774	1695	1766	1774	1695	1809
Q Serve(g_s), s	0.6	0.0	2.5	2.2	1.6	0.2	6.4	2.3	2.4	1.4	2.3	2.4
Cycle Q Clear(g_c), s	2.2	0.0	2.5	4.7	1.6	0.2	6.4	2.3	2.4	1.4	2.3	2.4
Prop In Lane	1.00		0.75	1.00		1.00	1.00		0.31	1.00		0.17
Lane Grp Cap(c), veh/h	176	0	144	164	310	139	180	2457	1280	76	2260	1206
V/C Ratio(X)	0.06	0.00	0.37	0.23	0.24	0.04	0.79	0.13	0.13	0.41	0.12	0.12
Avail Cap(c_a), veh/h	394	0	416	386	895	401	534	2457	1280	278	2260	1206
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.3	0.0	35.7	37.9	35.3	34.7	36.4	3.5	3.5	38.7	5.0	5.0
Incr Delay (d2), s/veh	0.1	0.0	1.6	0.7	0.4	0.1	7.4	0.1	0.2	3.4	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	1.2	0.9	0.8	0.1	3.5	1.1	1.2	0.8	1.1	1.2
LnGrp Delay(d),s/veh	36.4	0.0	37.3	38.6	35.7	34.8	43.8	3.6	3.7	42.1	5.1	5.2
LnGrp LOS	D		D	D	D	C	D	A	A	D	A	A
Approach Vol, veh/h		63			116			622			438	
Approach Delay, s/veh		37.1			36.6			12.7			7.8	
Approach LOS		D			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	64.2		11.3	12.4	59.3		11.3
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	13.0	37.0		21.0	25.0	25.0		21.0
Max Q Clear Time (g_c+I1), s	3.4	4.4		4.5	8.4	4.4		6.7
Green Ext Time (p_c), s	0.0	5.9		0.7	0.3	5.3		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	14.4
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	0	15	14	0	4	22	571	7	2	413	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	25		0	75		50
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	60			60			10			80		
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		252			253			418			402	
Travel Time (s)		5.7			5.8			7.1			6.9	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	3	0	15	14	0	4	22	571	7	2	413	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	0	16	15	0	4	24	621	8	2	449	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	756	1136	231	856	1138	314	462	0	0	628	0	0
Stage 1	460	460	-	672	672	-	-	-	-	-	-	-
Stage 2	296	676	-	184	466	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	354	201	657	310	200	582	706	-	-	589	-	-
Stage 1	466	564	-	335	453	-	-	-	-	-	-	-
Stage 2	631	451	-	735	561	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	337	190	657	290	189	582	706	-	-	589	-	-
Mov Cap-2 Maneuver	337	190	-	290	189	-	-	-	-	-	-	-
Stage 1	442	562	-	318	429	-	-	-	-	-	-	-
Stage 2	594	428	-	714	559	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.6	16.7	0.6	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	706	-	-	567	326	589	-	-
HCM Lane V/C Ratio	0.034	-	-	0.035	0.06	0.004	-	-
HCM Control Delay (s)	10.3	0.2	-	11.6	16.7	11.1	-	-
HCM Lane LOS	B	A	-	B	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.2	0	-	-

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (vph)	160	48	0	552	372	63	379
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125	0	180		0	115	
Storage Lanes	1	1	1		0	1	
Taper Length (ft)	60		100			120	
Right Turn on Red		Yes			Yes		
Link Speed (mph)	40			40			40
Link Distance (ft)	609			576			418
Travel Time (s)	10.4			9.8			7.1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)							
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Right	Left	Left
Median Width(ft)	24			12			12
Link Offset(ft)	0			0			0
Crosswalk Width(ft)	16			16			16
Two way Left Turn Lane	Yes						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	9		9	15	
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	3		5	2		1	6
Permitted Phases		8					
Detector Phase	3	8	5	2		1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	11.0	20.0	11.0	20.0		11.0	20.0
Total Split (s)	24.0	24.0	11.0	51.0		21.0	61.0
Total Split (%)	25.0%	25.0%	11.5%	53.1%		21.9%	63.5%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead	Lag		Lead	Lag
Lead-Lag Optimize?			Yes	Yes		Yes	Yes
Recall Mode	None	None	None	C-Max		None	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 19 (20%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 22: Valley Springs Pkwy. & Gateway Dr.

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	160	48	0	552	372	63	379
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1900	1863	1863
Adj Flow Rate, veh/h	168	51		581	392	66	399
Adj No. of Lanes	2	1		3	0	1	3
Peak Hour Factor	0.95	0.95		0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	254	117		2511	1173	107	4286
Arrive On Green	0.07	0.07		0.24	0.24	0.06	0.84
Sat Flow, veh/h	3442	1583		3558	1583	1774	5253
Grp Volume(v), veh/h	168	51		581	392	66	399
Grp Sat Flow(s),veh/h/ln	1721	1583		1695	1583	1774	1695
Q Serve(g_s), s	4.6	3.0		13.2	19.6	3.5	1.3
Cycle Q Clear(g_c), s	4.6	3.0		13.2	19.6	3.5	1.3
Prop In Lane	1.00	1.00			1.00	1.00	
Lane Grp Cap(c), veh/h	254	117		2511	1173	107	4286
V/C Ratio(X)	0.66	0.44		0.23	0.33	0.62	0.09
Avail Cap(c_a), veh/h	717	330		2511	1173	314	4286
HCM Platoon Ratio	1.00	1.00		0.33	0.33	1.00	1.00
Upstream Filter(I)	1.00	1.00		0.92	0.92	1.00	1.00
Uniform Delay (d), s/veh	43.3	42.5		14.4	16.8	44.0	1.3
Incr Delay (d2), s/veh	2.9	2.5		0.2	0.7	5.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	1.4		6.3	8.8	1.9	0.6
LnGrp Delay(d),s/veh	46.2	45.1		14.6	17.5	49.7	1.3
LnGrp LOS	D	D		B	B	D	A
Approach Vol, veh/h	219			973			465
Approach Delay, s/veh	45.9			15.8			8.2
Approach LOS	D			B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.8	75.1				84.9		11.1
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	17.0	47.0				57.0		20.0
Max Q Clear Time (g_c+I1), s	5.5	21.6				3.3		6.6
Green Ext Time (p_c), s	0.1	10.1				12.2		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	17.6
HCM 2010 LOS	B

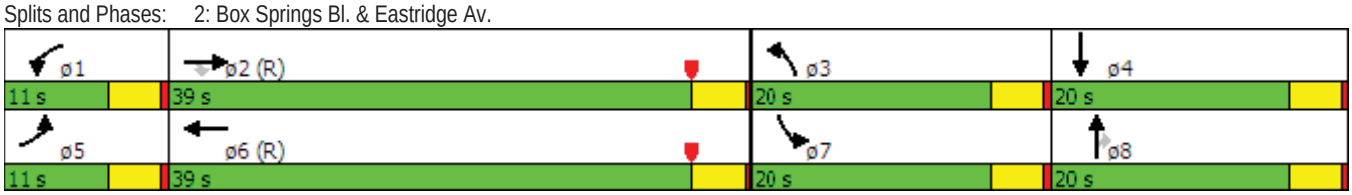
Notes

User approved ignoring U-Turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	1404	3	45	1346	219	20	96	40	323	141	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	90		80	150		0	75		160	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		760			700			315			411	
Travel Time (s)		13.0			11.9			7.2			9.3	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2						8			
Detector Phase	5	2	2	1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0		20.0	20.0	20.0	20.0	20.0	
Total Split (s)	11.0	39.0	39.0	11.0	39.0		20.0	20.0	20.0	20.0	20.0	
Total Split (%)	12.2%	43.3%	43.3%	12.2%	43.3%		22.2%	22.2%	22.2%	22.2%	22.2%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	C-Max	None	C-Max		Max	Max	Max	Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Box Springs Bl. & Eastridge Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	13	1404	3	45	1346	219	20	96	40	323	141	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	13	1447	3	46	1388	226	21	99	41	333	145	41
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	2	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	38	1464	655	94	1359	219	315	331	281	612	248	70
Arrive On Green	0.02	0.41	0.41	0.11	0.89	0.89	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1774	3539	1583	1774	3054	491	1774	1863	1583	3442	1398	395
Grp Volume(v), veh/h	13	1447	3	46	797	817	21	99	41	333	0	186
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1776	1774	1863	1583	1721	0	1793
Q Serve(g_s), s	0.7	36.5	0.1	2.2	40.1	40.1	0.9	4.2	2.0	7.9	0.0	8.6
Cycle Q Clear(g_c), s	0.7	36.5	0.1	2.2	40.1	40.1	0.9	4.2	2.0	7.9	0.0	8.6
Prop In Lane	1.00		1.00	1.00		0.28	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	38	1464	655	94	788	790	315	331	281	612	0	319
V/C Ratio(X)	0.34	0.99	0.00	0.49	1.01	1.03	0.07	0.30	0.15	0.54	0.00	0.58
Avail Cap(c_a), veh/h	138	1464	655	138	788	790	315	331	281	612	0	319
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.73	0.73	0.73	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	43.4	26.2	15.5	39.1	4.9	4.9	30.8	32.1	31.2	33.7	0.0	33.9
Incr Delay (d2), s/veh	5.1	21.0	0.0	2.8	30.4	36.2	0.4	2.3	1.1	3.5	0.0	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	22.0	0.0	1.1	22.4	24.2	0.5	2.4	0.9	4.0	0.0	4.9
LnGrp Delay(d),s/veh	48.5	47.2	15.5	41.9	35.4	41.1	31.2	34.4	32.3	37.1	0.0	41.5
LnGrp LOS	D	D	B	D	F	F	C	C	C	D		D
Approach Vol, veh/h		1463			1660			161			519	
Approach Delay, s/veh		47.1			38.4			33.5			38.7	
Approach LOS		D			D			C			D	

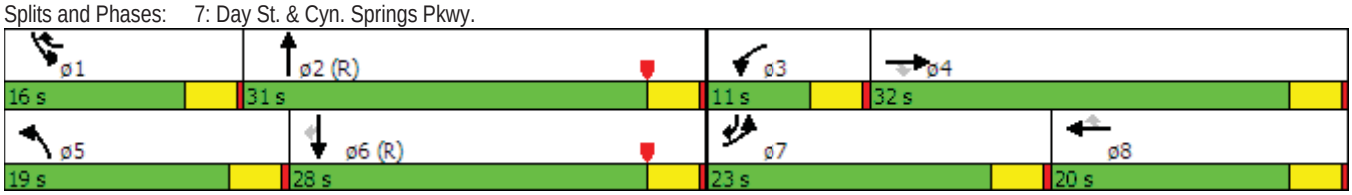
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	41.2	20.0	20.0	5.9	44.1	20.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	35.0	16.0	16.0	7.0	35.0	16.0	16.0
Max Q Clear Time (g_c+I1), s	4.2	38.5	2.9	10.6	2.7	42.1	9.9	6.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.8	0.0	0.0	0.6	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	41.6
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	725	132	175	51	89	245	229	1424	64	223	1074	564
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	145		0	165		0	170		200
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	95			100			120			80		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		1120			404			728			524	
Travel Time (s)		19.1			7.9			12.4			8.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												48%
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			20			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	1	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	23.0	32.0	32.0	11.0	20.0	16.0	19.0	31.0		16.0	28.0	23.0
Total Split (%)	25.6%	35.6%	35.6%	12.2%	22.2%	17.8%	21.1%	34.4%		17.8%	31.1%	25.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 64 (71%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Day St. & Cyn. Springs Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	725	132	175	51	89	245	229	1424	64	223	1074	564
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	740	135	179	52	91	250	234	1453	65	228	1064	598
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	727	585	497	100	297	463	264	1589	71	237	1692	1628
Arrive On Green	0.21	0.31	0.31	0.06	0.16	0.16	0.30	0.64	0.64	0.04	0.10	0.10
Sat Flow, veh/h	3442	1863	1583	1774	1863	1583	1774	4990	223	1774	5588	3167
Grp Volume(v), veh/h	740	135	179	52	91	250	234	987	531	228	1064	598
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1863	1583	1774	1695	1823	1774	1863	1583
Q Serve(g_s), s	19.0	4.8	7.9	2.6	3.9	11.9	11.3	22.8	22.8	11.5	16.5	11.4
Cycle Q Clear(g_c), s	19.0	4.8	7.9	2.6	3.9	11.9	11.3	22.8	22.8	11.5	16.5	11.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	727	585	497	100	297	463	264	1079	581	237	1692	1628
V/C Ratio(X)	1.02	0.23	0.36	0.52	0.31	0.54	0.89	0.91	0.91	0.96	0.63	0.37
Avail Cap(c_a), veh/h	727	585	497	138	331	493	296	1079	581	237	1692	1628
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	0.77	0.77	0.77	1.00	1.00	1.00	0.81	0.81	0.81	0.82	0.82	0.82
Uniform Delay (d), s/veh	35.5	22.8	23.9	41.3	33.4	26.7	30.9	15.3	15.3	42.8	35.6	17.3
Incr Delay (d2), s/veh	34.0	0.2	0.3	4.1	0.6	1.0	20.6	11.2	18.2	43.2	1.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.4	2.5	3.5	1.4	2.0	5.3	7.0	11.8	13.8	8.5	8.7	5.1
LnGrp Delay(d),s/veh	69.5	23.0	24.2	45.3	34.0	27.8	51.5	26.5	33.5	86.0	37.1	17.8
LnGrp LOS	F	C	C	D	C	C	D	C	C	F	D	B
Approach Vol, veh/h		1054			393			1752			1890	
Approach Delay, s/veh		55.9			31.5			31.9			36.9	
Approach LOS		E			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	32.7	9.1	32.3	17.4	31.3	23.0	18.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	27.0	7.0	28.0	15.0	24.0	19.0	16.0
Max Q Clear Time (g_c+I1), s	13.5	24.8	4.6	9.9	13.3	18.5	21.0	13.9
Green Ext Time (p_c), s	0.0	2.1	0.0	2.5	0.1	5.2	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	38.7
HCM 2010 LOS	D

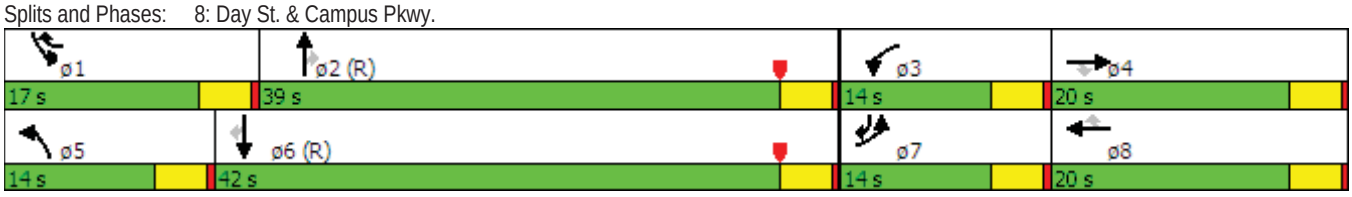
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	213	107	190	91	209	267	210	1238	102	275	965	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		50	200		0	130		50	190		0
Storage Lanes	1		1	1		1	2		1	2		1
Taper Length (ft)	60			120			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		938			519			1025			728	
Travel Time (s)		16.0			10.1			17.5			12.4	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	1	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	11.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	14.0	20.0	20.0	14.0	20.0	17.0	14.0	39.0	39.0	17.0	42.0	14.0
Total Split (%)	15.6%	22.2%	22.2%	15.6%	22.2%	18.9%	15.6%	43.3%	43.3%	18.9%	46.7%	15.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 68 (76%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Day St. & Campus Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	213	107	190	91	209	267	210	1238	102	275	965	67
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	222	111	198	95	218	278	219	1290	106	286	1005	70
Adj No. of Lanes	2	1	1	1	2	1	2	3	1	2	3	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	298	358	304	125	623	445	297	2312	720	361	2407	887
Arrive On Green	0.09	0.19	0.19	0.07	0.18	0.18	0.06	0.30	0.30	0.21	0.95	0.95
Sat Flow, veh/h	3442	1863	1583	1774	3539	1583	3442	5085	1583	3442	5085	1583
Grp Volume(v), veh/h	222	111	198	95	218	278	219	1290	106	286	1005	70
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1774	1770	1583	1721	1695	1583	1721	1695	1583
Q Serve(g_s), s	5.7	4.6	10.4	4.7	4.9	13.8	5.6	19.1	4.4	7.1	1.6	0.2
Cycle Q Clear(g_c), s	5.7	4.6	10.4	4.7	4.9	13.8	5.6	19.1	4.4	7.1	1.6	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	298	358	304	125	623	445	297	2312	720	361	2407	887
V/C Ratio(X)	0.74	0.31	0.65	0.76	0.35	0.63	0.74	0.56	0.15	0.79	0.42	0.08
Avail Cap(c_a), veh/h	382	358	304	197	629	448	382	2312	720	497	2407	887
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.82	0.82	0.82	0.75	0.75	0.75
Uniform Delay (d), s/veh	40.1	31.2	33.6	41.1	32.6	28.2	41.4	23.7	18.6	34.6	1.3	0.9
Incr Delay (d2), s/veh	5.7	0.5	4.8	9.0	0.3	2.7	4.4	0.8	0.4	4.5	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	2.4	5.0	2.6	2.4	6.3	2.9	9.2	2.0	3.6	0.6	0.1
LnGrp Delay(d),s/veh	45.9	31.7	38.4	50.1	32.9	30.9	45.8	24.5	18.9	39.2	1.7	1.0
LnGrp LOS	D	C	D	D	C	C	D	C	B	D	A	A
Approach Vol, veh/h		531			591			1615			1361	
Approach Delay, s/veh		40.1			34.7			27.0			9.5	
Approach LOS		D			C			C			A	

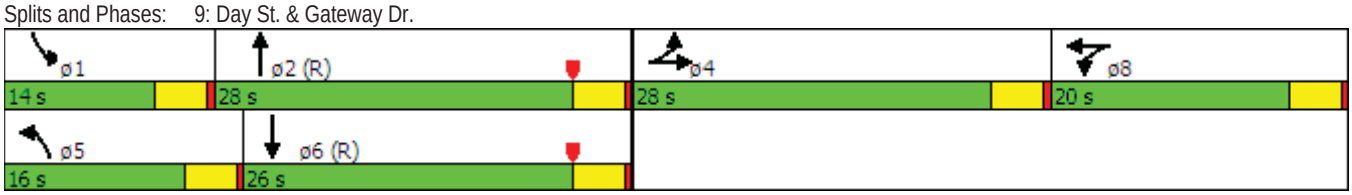
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	44.9	10.3	21.3	11.8	46.6	11.8	19.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	35.0	10.0	16.0	10.0	38.0	10.0	16.0
Max Q Clear Time (g_c+I1), s	9.1	21.1	6.7	12.4	7.6	3.6	7.7	15.8
Green Ext Time (p_c), s	0.4	11.3	0.1	1.3	0.2	22.8	0.2	0.1

Intersection Summary	
HCM 2010 Ctrl Delay	24.0
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	419	142	192	128	121	197	122	746	129	221	726	174
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	100		0	190		400	260		0
Storage Lanes	1		0	1		0	1		1	2		0
Taper Length (ft)	0			120			60			165		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		318			585			592			1025	
Travel Time (s)		5.4			11.4			10.1			17.5	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)	39%											
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		11.0	20.0		11.0	20.0	
Total Split (s)	28.0	28.0		20.0	20.0		16.0	28.0		14.0	26.0	
Total Split (%)	31.1%	31.1%		22.2%	22.2%		17.8%	31.1%		15.6%	28.9%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 80 (89%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: Day St. & Gateway Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	419	142	192	128	121	197	122	746	129	221	726	174
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	479	74	196	131	123	201	124	761	132	226	741	178
Adj No. of Lanes	2	1	0	1	2	0	1	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	734	94	248	271	271	242	157	1639	282	300	1536	365
Arrive On Green	0.07	0.07	0.07	0.15	0.15	0.15	0.03	0.12	0.12	0.12	0.50	0.50
Sat Flow, veh/h	3548	453	1199	1774	1770	1583	1774	4369	751	3442	4105	976
Grp Volume(v), veh/h	479	0	270	131	123	201	124	589	304	226	611	308
Grp Sat Flow(s),veh/h/ln	1774	0	1651	1774	1770	1583	1774	1695	1730	1721	1695	1691
Q Serve(g_s), s	11.8	0.0	14.5	6.1	5.7	11.1	6.3	14.5	14.7	5.7	10.7	10.9
Cycle Q Clear(g_c), s	11.8	0.0	14.5	6.1	5.7	11.1	6.3	14.5	14.7	5.7	10.7	10.9
Prop In Lane	1.00		0.73	1.00		1.00	1.00		0.43	1.00		0.58
Lane Grp Cap(c), veh/h	734	0	341	271	271	242	157	1272	649	300	1268	632
V/C Ratio(X)	0.65	0.00	0.79	0.48	0.45	0.83	0.79	0.46	0.47	0.75	0.48	0.49
Avail Cap(c_a), veh/h	946	0	440	315	315	281	237	1272	649	382	1268	632
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	0.90	0.90
Uniform Delay (d), s/veh	38.8	0.0	40.0	34.9	34.7	37.0	42.9	31.0	31.1	38.8	16.8	16.9
Incr Delay (d2), s/veh	1.0	0.0	7.3	1.3	1.2	16.5	9.9	1.2	2.4	5.6	1.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	0.0	7.3	3.1	2.9	6.0	3.5	7.0	7.5	2.9	5.1	5.4
LnGrp Delay(d),s/veh	39.8	0.0	47.3	36.2	35.9	53.5	52.8	32.2	33.5	44.4	18.0	19.3
LnGrp LOS	D		D	D	D	D	D	C	C	D	B	B
Approach Vol, veh/h		749			455			1017			1145	
Approach Delay, s/veh		42.5			43.8			35.1			23.6	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.9	37.8		22.6	12.0	37.7		17.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	24.0		24.0	12.0	22.0		16.0
Max Q Clear Time (g_c+I1), s	7.7	16.7		16.5	8.3	12.9		13.1
Green Ext Time (p_c), s	0.2	5.5		2.1	0.1	6.6		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	34.0
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	46	120	118	91	25	201	649	76	44	610	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		70	140		50	150		0	120		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	60			60			60			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			40			40			40	
Link Distance (ft)		327			603			402			804	
Travel Time (s)		7.4			10.3			6.9			13.7	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8						
Detector Phase	4	4		8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	20.0	20.0		20.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	27.0	27.0		27.0	27.0	27.0	27.0	39.0		13.0	25.0	
Total Split (%)	34.2%	34.2%		34.2%	34.2%	34.2%	34.2%	49.4%		16.5%	31.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 79	
Actuated Cycle Length: 79	
Offset: 44 (56%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 20: Valley Springs Pkwy. & Corporate Centre Pl.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	36	46	120	118	91	25	201	649	76	44	610	34
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	37	47	124	122	94	26	207	669	78	45	629	35
Adj No. of Lanes	1	1	0	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	351	103	271	257	802	359	253	2617	302	99	2362	131
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.14	0.57	0.57	0.06	0.48	0.48
Sat Flow, veh/h	1266	454	1198	1209	3539	1583	1774	4624	534	1774	4932	273
Grp Volume(v), veh/h	37	0	171	122	94	26	207	489	258	45	431	233
Grp Sat Flow(s),veh/h/ln	1266	0	1651	1209	1770	1583	1774	1695	1768	1774	1695	1815
Q Serve(g_s), s	1.9	0.0	7.1	7.6	1.7	1.0	8.9	5.8	5.9	1.9	6.0	6.1
Cycle Q Clear(g_c), s	3.6	0.0	7.1	14.7	1.7	1.0	8.9	5.8	5.9	1.9	6.0	6.1
Prop In Lane	1.00		0.73	1.00		1.00	1.00		0.30	1.00		0.15
Lane Grp Cap(c), veh/h	351	0	374	257	802	359	253	1918	1001	99	1624	869
V/C Ratio(X)	0.11	0.00	0.46	0.47	0.12	0.07	0.82	0.25	0.26	0.46	0.27	0.27
Avail Cap(c_a), veh/h	433	0	481	335	1030	461	516	1918	1001	202	1624	869
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.7	0.0	26.4	32.7	24.3	24.0	32.9	8.7	8.7	36.1	12.3	12.3
Incr Delay (d2), s/veh	0.1	0.0	0.9	1.4	0.1	0.1	6.5	0.3	0.6	3.3	0.4	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	3.3	2.6	0.8	0.5	4.8	2.7	3.0	1.0	2.9	3.2
LnGrp Delay(d),s/veh	25.8	0.0	27.2	34.1	24.3	24.1	39.3	9.0	9.3	39.4	12.7	13.1
LnGrp LOS	C		C	C	C	C	D	A	A	D	B	B
Approach Vol, veh/h		208			242			954			709	
Approach Delay, s/veh		27.0			29.2			15.7			14.5	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.4	48.7		21.9	15.3	41.8		21.9
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.0	35.0		23.0	23.0	21.0		23.0
Max Q Clear Time (g_c+I1), s	3.9	7.9		9.1	10.9	8.1		16.7
Green Ext Time (p_c), s	0.0	10.0		1.9	0.4	6.9		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	17.9
HCM 2010 LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	0	34	13	0	4	20	910	14	4	827	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	25		0	75		50
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	60			60			10			80		
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		252			253			418			402	
Travel Time (s)		5.7			5.8			7.1			6.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	12	0	34	13	0	4	20	910	14	4	827	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	35	13	0	4	20	929	14	4	844	17

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1273	1845	431	1323	1846	471	861	0	0	943	0	0
Stage 1	861	861	-	977	977	-	-	-	-	-	-	-
Stage 2	412	984	-	346	869	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	176	74	489	164	74	461	457	-	-	417	-	-
Stage 1	248	371	-	207	327	-	-	-	-	-	-	-
Stage 2	538	325	-	589	367	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	161	67	489	141	67	461	457	-	-	417	-	-
Mov Cap-2 Maneuver	161	67	-	141	67	-	-	-	-	-	-	-
Stage 1	225	367	-	188	297	-	-	-	-	-	-	-
Stage 2	484	295	-	542	363	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.2	28.7	0.7	0.1
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	457	-	-	319	169	417	-	-
HCM Lane V/C Ratio	0.045	-	-	0.147	0.103	0.01	-	-
HCM Control Delay (s)	13.2	0.4	-	18.2	28.7	13.7	-	-
HCM Lane LOS	B	A	-	C	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.3	0	-	-

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (vph)	496	96	0	848	202	50	824
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125	0	180		0	115	
Storage Lanes	1	1	1		0	1	
Taper Length (ft)	60		100			120	
Right Turn on Red		Yes			Yes		
Link Speed (mph)	40			40			40
Link Distance (ft)	609			576			418
Travel Time (s)	10.4			9.8			7.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)							
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	Left	Right	R NA	Left	Right	Left	Left
Median Width(ft)	24			12			12
Link Offset(ft)	0			0			0
Crosswalk Width(ft)	16			16			16
Two way Left Turn Lane	Yes						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	9		9	15	
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	3		5	2		1	6
Permitted Phases		3					
Detector Phase	3	3	5	2		1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	7.0	7.0		7.0	7.0
Minimum Split (s)	11.0	11.0	11.0	20.0		11.0	20.0
Total Split (s)	33.0	33.0	11.0	43.0		14.0	46.0
Total Split (%)	36.7%	36.7%	12.2%	47.8%		15.6%	51.1%
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag			Lead	Lag		Lead	Lag
Lead-Lag Optimize?			Yes	Yes		Yes	Yes
Recall Mode	None	None	None	C-Max		None	C-Max

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 6 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 45
Control Type: Actuated-Coordinated

Splits and Phases: 22: Valley Springs Pkwy. & Gateway Dr.

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Volume (veh/h)	496	96	0	848	202	50	824
Number	3	18		2	12	1	6
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00	
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1900	1863	1863
Adj Flow Rate, veh/h	539	104		922	220	54	896
Adj No. of Lanes	2	1		3	0	1	3
Peak Hour Factor	0.92	0.92		0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	668	307		2525	600	102	3647
Arrive On Green	0.19	0.19		1.00	1.00	0.06	0.72
Sat Flow, veh/h	3442	1583		4272	976	1774	5253
Grp Volume(v), veh/h	539	104		761	381	54	896
Grp Sat Flow(s),veh/h/ln	1721	1583		1695	1691	1774	1695
Q Serve(g_s), s	13.5	5.1		0.0	0.0	2.7	5.4
Cycle Q Clear(g_c), s	13.5	5.1		0.0	0.0	2.7	5.4
Prop In Lane	1.00	1.00			0.58	1.00	
Lane Grp Cap(c), veh/h	668	307		2085	1040	102	3647
V/C Ratio(X)	0.81	0.34		0.36	0.37	0.53	0.25
Avail Cap(c_a), veh/h	1109	510		2085	1040	197	3647
HCM Platoon Ratio	1.00	1.00		2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		0.86	0.86	1.00	1.00
Uniform Delay (d), s/veh	34.7	31.3		0.0	0.0	41.2	4.4
Incr Delay (d2), s/veh	2.4	0.6		0.4	0.9	4.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	2.3		0.1	0.2	1.4	2.5
LnGrp Delay(d),s/veh	37.0	31.9		0.4	0.9	45.4	4.5
LnGrp LOS	D	C		A	A	D	A
Approach Vol, veh/h	643			1142			950
Approach Delay, s/veh	36.2			0.6			6.9
Approach LOS	D			A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.2	59.4				68.5		21.5
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	10.0	39.0				42.0		29.0
Max Q Clear Time (g_c+I1), s	4.7	2.0				7.4		15.5
Green Ext Time (p_c), s	0.0	19.2				18.5		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	11.1
HCM 2010 LOS	B

Notes

User approved ignoring U-Turning movement.

URBAN CROSSROADS

Ofc: 1001 Dove St. | Suite 260 | Newport Beach, CA 92660
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June 13, 2017

Mr. Nathan Mustafa
City of Riverside Public Works
3900 Main Street
Riverside, CA 92501

SUBJECT: CANYON SPRINGS HEALTHCARE CAMPUS & SENIOR LIVING TRAFFIC IMPACT ANALYSIS – SUPPLEMENTAL ANALYSIS

Dear Mr. Mustafa:

The purpose of this letter is to provide additional documentation of the relationship between project development areas and roadway improvements. Overall street improvement requirements are based upon the Canyon Springs Healthcare Campus & Senior Living Traffic Impact Analysis (Urban Crossroads, Inc. February 28, 2017), herein after referred to as the TIA. The Project is generally located north of Eucalyptus Avenue, between Valley Springs Parkway and Day Street in the City of Riverside.

Section 2.8 of the TIA documents the threshold of significance for each jurisdiction, which for the City of Riverside includes a scale-based delay.

This supplemental analysis addresses the timing / phasing of recommended improvements, and presents alternative improvements for a recently reconstructed intersection.

ACCESS IMPROVEMENTS TIED TO PROJECT LAND USES

Traffic signal improvements at project driveways are recommended for construction by the Project, as indicated in Section 8.1 of the TIA, rather than with a fair share contribution.

The intersection of Valley Springs Parkway / Driveway 5 (#23) is located on Valley Springs Parkway south of Gateway Drive, providing access to the Project Traffic Analysis Zone (TAZ) 1 in the TIA. Therefore, construction concurrent with the project development areas located east of Valley Springs Parkway and south of Gateway Drive would be appropriate.

The south leg of the intersection of Canyon Park Drive – Driveway 7 / Gateway Drive (#25) provides access to the Project Traffic Analysis Zone (TAZ) 1 in the TIA. The improvements associated with the intersection of Canyon Park Drive – Driveway 7 / Gateway Drive generally provide access to the south leg. Therefore, construction concurrent with the project development areas located south of the intersection of Canyon Park Drive – Driveway 7 / Gateway Drive would be appropriate.

MEMORIAL WAY / TOWNGATE DRIVE INTERSECTION IMPROVEMENTS

At the intersection of Memorial Way at Towngate Drive (#16), intersection restriping and signal phasing improvements were recommended in the TIA. Since then, the existing configuration has been changed to eliminate one eastbound through lane and one westbound through lane in order to provide one bike lane with buffer on each side of the street. Therefore, the intersection improvements that were included in the TIA no longer conform to the existing lane configuration.

A concept striping plan for the ultimate lanes was presented on Exhibit 9-6 of the TIA. Previous recommendations for the eastbound approach included converting the existing 3rd through lane to provide a dedicated right turn lane with overlap phasing, in addition to the existing left turn lane and two through lanes, in order to eliminate deficiencies that occur for Opening Year conditions without or with the Project. For General Plan buildout With Project conditions, the TIA recommended converting the existing 2nd through lane to provide a dedicated right turn lane with overlap phasing, in addition to the existing left turn lane and one through lane.

For With Project conditions, additional intersection analysis has been performed with an alternative lane configuration, and is summarized in Table 1. Exhibit 1 shows a concept striping plan for the alternative lanes shown in Table 1. Attachment 1 contains the supporting intersection analysis worksheets.

TABLE 1: MEMORIAL / TOWNGATE (#16) INTERSECTION ANALYSIS SUMMARY

														Without Project				With Project			
		Intersection Approach Lanes[1]												Delay[2] (Secs)		Level of Service[2]		Delay[2] (Secs)		Level of Service[2]	
		Northbound			Southbound			Eastbound			Westbound										
Analysis Scenario	Traffic Control[3]	L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM
Existing Conditions	TS	1	2	0	1	2	0	1	2	d	1	2	d	33.9	29.7	C	C	34.3	30.2	C	C
Opening Year																					
- W/o Improvements	TS	1	2	0	1	2	0	1	2	d	1	2	d	54.1	**61.4**	D	**E**	**60.9**	**68.7**	**E**	**E**
- W/ Improvements	TS	1	2	0	1	**1**	**1>**	1	2	d	1	2	d	42.4	48.4	D	D	45.1	52.2	D	D
General Plan Buildout																					
- W/o Improvements	TS	1	2	0	1	2	0	1	2	d	1	2	d	**65.5**	**73.2**	**E**	**E**	**73.9**	**80.0**	**E**	**E**
- W/ Improvements	TS	1	2	0	1	**1**	**1>**	1	2	d	1	2	d	47.3	54.6	D	D	51.2	54.9	D	D

NOTE: Lane configuration includes recently implemented "road diet" on Towngate - Eucalyptus Avenue. The roadway, through striping modification, was reduced from six to four travel lanes and the extra width was reallocated for buffered bike lanes.

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; d= Defacto Right Turn Lane; **1** = Improvement

[2] Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal control. Delay and level of service is calculated using Synchro 8.0 analysis software.
BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[3] TS = Traffic Signal

With the following improvements, the intersection of Memorial Way at Towngate Drive experiences acceptable operations:

- Southbound Approach: Convert the existing 2nd through lane to provide a dedicated right turn lane with overlap phasing, in addition to the existing left turn lane and one through lane.
- Eastbound Approach: Retain existing 2 through lanes and defacto right turn lane.
- Westbound Approach: Retain existing 2 through lanes and defacto right turn lane.

- Signal modifications for protected/permitted operations for both the north/south movements and the east/west movements. Protected/permitted phasing satisfies the Left Turn Phasing Guidelines in the Signal Timing Manual, Transportation Research Board 2015 (NCHRP Report 812).

ADJUSTMENT IN PROJECT DESCRIPTION REGARDING ASSISTED LIVING FACILITY

In the TIA evaluation, the proposed Project included hospital land use with approximately 280 beds, approximately 370,000 square feet of medical office, approximately 234 senior adult-housing attached dwelling units, and an assisted living facility with approximately 267 beds. The Project description has recently been corrected to increase the quantity of beds in the assisted living facility. Twenty-three (23) additional beds are included, for a total of 290 beds.

The increase in beds for the assisted living facility results in an additional **4** AM peak hour, **6** PM peak hour, and **63** daily trips. Once distributed on the roadway system, the trip generation is reduced to two or fewer total vehicles at study area intersections with the 23 additional beds. The implications of the slight trip generation increase on the study area roadway system have been tested, and there is no measurable change in the LOS results.

CONCLUSION

The association of improvements to project development areas, the alternative improvements at intersection #16, and the slight increase in trip generation associated with the increase of 23 beds in the assisted living facility of the project (TAZ 3) do not introduce any additional Project impacts. The alternative intersection #16 improvements provide acceptable LOS. If you have any questions, please contact me directly at (949) 336-5991.

Respectfully submitted,

URBAN CROSSROADS, INC.

Marlie Whiteman, P.E.

Senior Associate

EXHIBIT 1: CONCEPTUAL STRIPING PLAN FOR MEMORIAL WAY AND TOWNGATE DRIVE (#16)

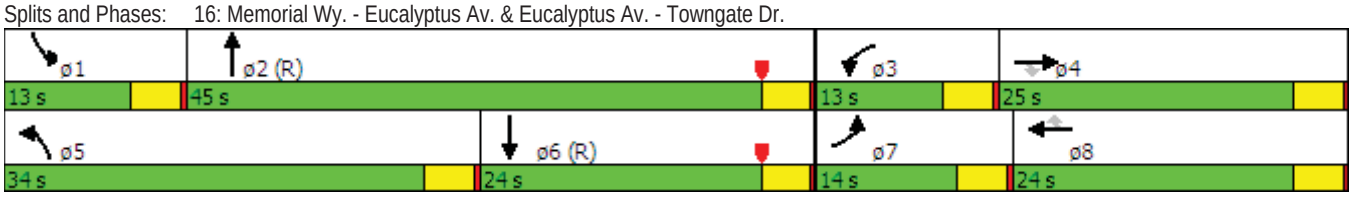
URBAN CROSSROADS

ATTACHMENT 1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	180	123	9	175	30	221	160	15	14	82	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	150		50	200		0	200		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	14.0	25.0	25.0	13.0	24.0	24.0	34.0	45.0		13.0	24.0	
Total Split (%)	14.6%	26.0%	26.0%	13.5%	25.0%	25.0%	35.4%	46.9%		13.5%	25.0%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	39	180	123	9	175	30	221	160	15	14	82	42
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	42	196	134	10	190	33	240	174	16	15	89	46
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	455	204	30	342	153	281	2177	198	43	1224	594
Arrive On Green	0.05	0.13	0.13	0.02	0.10	0.10	0.16	0.66	0.66	0.02	0.53	0.53
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3281	299	1774	2312	1123
Grp Volume(v), veh/h	42	196	134	10	190	33	240	93	97	15	67	68
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1810	1774	1770	1665
Q Serve(g_s), s	2.2	4.9	7.7	0.5	4.9	1.8	12.6	1.8	1.8	0.8	1.8	1.9
Cycle Q Clear(g_c), s	2.2	4.9	7.7	0.5	4.9	1.8	12.6	1.8	1.8	0.8	1.8	1.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		0.67
Lane Grp Cap(c), veh/h	87	455	204	30	342	153	281	1174	1201	43	937	881
V/C Ratio(X)	0.48	0.43	0.66	0.33	0.56	0.22	0.86	0.08	0.08	0.35	0.07	0.08
Avail Cap(c_a), veh/h	185	774	346	166	737	330	554	1174	1201	166	937	881
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.5	38.6	39.8	46.6	41.4	40.0	39.3	5.7	5.7	46.1	11.0	11.1
Incr Delay (d2), s/veh	4.1	0.6	3.6	6.2	1.4	0.7	7.3	0.1	0.1	4.9	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	2.4	3.6	0.3	2.5	0.8	6.8	0.9	1.0	0.4	0.9	0.9
LnGrp Delay(d),s/veh	48.5	39.2	43.4	52.8	42.8	40.7	46.7	5.9	5.9	51.0	11.2	11.3
LnGrp LOS	D	D	D	D	D	D	D	A	A	D	B	B
Approach Vol, veh/h		372			233			430			150	
Approach Delay, s/veh		41.8			43.0			28.6			15.2	
Approach LOS		D			D			C			B	

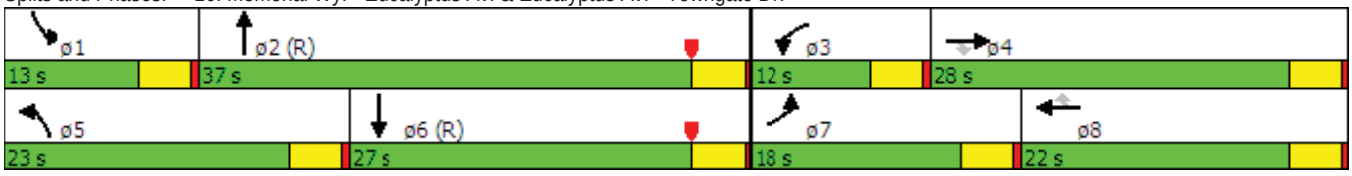
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	67.7	5.6	16.3	19.2	54.8	8.7	13.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	41.0	9.0	21.0	30.0	20.0	10.0	20.0
Max Q Clear Time (g_c+I1), s	2.8	3.8	2.5	9.7	14.6	3.9	4.2	6.9
Green Ext Time (p_c), s	0.0	1.8	0.0	2.2	0.6	1.5	0.0	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	33.9
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	115	260	213	26	240	61	153	265	20	53	271	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	150		50	200		0	200		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	18.0	28.0	28.0	12.0	22.0	22.0	23.0	37.0		13.0	27.0	
Total Split (%)	20.0%	31.1%	31.1%	13.3%	24.4%	24.4%	25.6%	41.1%		14.4%	30.0%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	115	260	213	26	240	61	153	265	20	53	271	81
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	122	277	227	28	255	65	163	282	21	56	288	86
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	677	303	69	509	228	200	1782	132	104	1294	379
Arrive On Green	0.09	0.19	0.19	0.04	0.14	0.14	0.11	0.53	0.53	0.06	0.48	0.48
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3341	247	1774	2701	792
Grp Volume(v), veh/h	122	277	227	28	255	65	163	149	154	56	187	187
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1819	1774	1770	1723
Q Serve(g_s), s	6.1	6.2	12.2	1.4	6.0	3.3	8.1	3.9	3.9	2.8	5.5	5.7
Cycle Q Clear(g_c), s	6.1	6.2	12.2	1.4	6.0	3.3	8.1	3.9	3.9	2.8	5.5	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.46
Lane Grp Cap(c), veh/h	154	677	303	69	509	228	200	944	970	104	847	825
V/C Ratio(X)	0.79	0.41	0.75	0.40	0.50	0.29	0.81	0.16	0.16	0.54	0.22	0.23
Avail Cap(c_a), veh/h	276	944	422	158	708	317	375	944	970	177	847	825
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.3	31.9	34.4	42.2	35.6	34.4	39.0	10.7	10.7	41.2	13.7	13.7
Incr Delay (d2), s/veh	8.8	0.4	4.7	3.7	0.8	0.7	7.8	0.4	0.4	4.3	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.0	5.7	0.7	3.0	1.5	4.4	2.0	2.0	1.5	2.8	2.9
LnGrp Delay(d),s/veh	49.1	32.3	39.0	45.9	36.3	35.1	46.8	11.1	11.1	45.5	14.3	14.3
LnGrp LOS	D	C	D	D	D	D	D	B	B	D	B	B
Approach Vol, veh/h		626			348			466			430	
Approach Delay, s/veh		38.0			36.9			23.6			18.4	
Approach LOS		D			D			C			B	

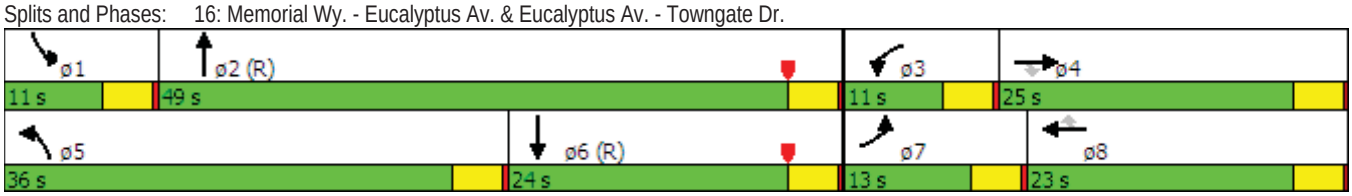
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	52.0	7.5	21.2	14.2	47.1	11.8	16.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	33.0	8.0	24.0	19.0	23.0	14.0	18.0
Max Q Clear Time (g_c+I1), s	4.8	5.9	3.4	14.2	10.1	7.7	8.1	8.0
Green Ext Time (p_c), s	0.0	3.9	0.0	3.0	0.3	3.3	0.1	3.1

Intersection Summary	
HCM 2010 Ctrl Delay	29.7
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	190	134	9	206	30	253	160	15	14	82	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	150		50	200		0	200		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	13.0	25.0	25.0	11.0	23.0	23.0	36.0	49.0		11.0	24.0	
Total Split (%)	13.5%	26.0%	26.0%	11.5%	24.0%	24.0%	37.5%	51.0%		11.5%	25.0%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	39	190	134	9	206	30	253	160	15	14	82	42
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	42	207	146	10	224	33	275	174	16	15	89	46
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	491	219	30	377	169	317	2144	195	43	1154	560
Arrive On Green	0.05	0.14	0.14	0.02	0.11	0.11	0.18	0.65	0.65	0.02	0.50	0.50
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3281	299	1774	2312	1123
Grp Volume(v), veh/h	42	207	146	10	224	33	275	93	97	15	67	68
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1810	1774	1770	1665
Q Serve(g_s), s	2.2	5.1	8.4	0.5	5.8	1.8	14.5	1.8	1.9	0.8	1.9	2.1
Cycle Q Clear(g_c), s	2.2	5.1	8.4	0.5	5.8	1.8	14.5	1.8	1.9	0.8	1.9	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		0.67
Lane Grp Cap(c), veh/h	87	491	219	30	377	169	317	1157	1183	43	883	831
V/C Ratio(X)	0.48	0.42	0.67	0.33	0.59	0.20	0.87	0.08	0.08	0.35	0.08	0.08
Avail Cap(c_a), veh/h	166	774	346	129	700	313	591	1157	1183	129	883	831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.5	37.8	39.2	46.6	40.9	39.1	38.3	6.1	6.1	46.1	12.5	12.6
Incr Delay (d2), s/veh	4.1	0.6	3.4	6.2	1.5	0.6	7.2	0.1	0.1	4.9	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	2.5	3.9	0.3	2.9	0.8	7.7	0.9	1.0	0.4	0.9	1.0
LnGrp Delay(d),s/veh	48.5	38.4	42.7	52.8	42.4	39.7	45.6	6.2	6.2	51.0	12.7	12.7
LnGrp LOS	D	D	D	D	D	D	D	A	A	D	B	B
Approach Vol, veh/h		395			267			465			150	
Approach Delay, s/veh		41.1			42.5			29.5			16.5	
Approach LOS		D			D			C			B	

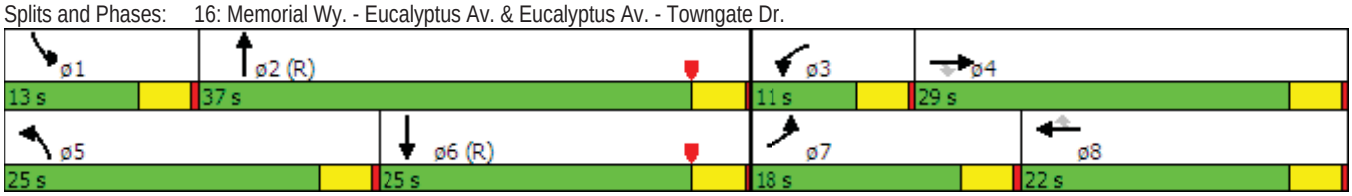
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	66.7	5.6	17.3	21.1	51.9	8.7	14.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	45.0	7.0	21.0	32.0	20.0	9.0	19.0
Max Q Clear Time (g_c+I1), s	2.8	3.9	2.5	10.4	16.5	4.1	4.2	7.8
Green Ext Time (p_c), s	0.0	1.8	0.0	2.4	0.7	1.5	0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	34.3
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	115	299	253	26	258	61	171	265	20	53	271	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	150		50	200		0	200		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	18.0	29.0	29.0	11.0	22.0	22.0	25.0	37.0		13.0	25.0	
Total Split (%)	20.0%	32.2%	32.2%	12.2%	24.4%	24.4%	27.8%	41.1%		14.4%	27.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	115	299	253	26	258	61	171	265	20	53	271	81
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	122	318	269	28	274	65	182	282	21	56	288	86
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	769	344	69	601	269	221	1694	125	104	1192	349
Arrive On Green	0.09	0.22	0.22	0.04	0.17	0.17	0.12	0.51	0.51	0.06	0.44	0.44
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3341	247	1774	2701	792
Grp Volume(v), veh/h	122	318	269	28	274	65	182	149	154	56	187	187
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1819	1774	1770	1723
Q Serve(g_s), s	6.1	7.0	14.4	1.4	6.3	3.2	9.0	4.1	4.1	2.8	5.9	6.1
Cycle Q Clear(g_c), s	6.1	7.0	14.4	1.4	6.3	3.2	9.0	4.1	4.1	2.8	5.9	6.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.46
Lane Grp Cap(c), veh/h	154	769	344	69	601	269	221	897	922	104	781	760
V/C Ratio(X)	0.79	0.41	0.78	0.40	0.46	0.24	0.82	0.17	0.17	0.54	0.24	0.25
Avail Cap(c_a), veh/h	276	983	440	138	708	317	414	897	922	177	781	760
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.3	30.3	33.2	42.2	33.6	32.3	38.4	11.9	11.9	41.2	15.7	15.8
Incr Delay (d2), s/veh	8.8	0.4	6.8	3.7	0.5	0.5	7.5	0.4	0.4	4.3	0.7	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.4	7.0	0.7	3.1	1.4	4.9	2.1	2.2	1.5	3.1	3.1
LnGrp Delay(d),s/veh	49.1	30.6	40.0	45.9	34.2	32.8	45.9	12.3	12.3	45.5	16.4	16.5
LnGrp LOS	D	C	D	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		709			367			485			430	
Approach Delay, s/veh		37.4			34.8			24.9			20.3	
Approach LOS		D			C			C			C	

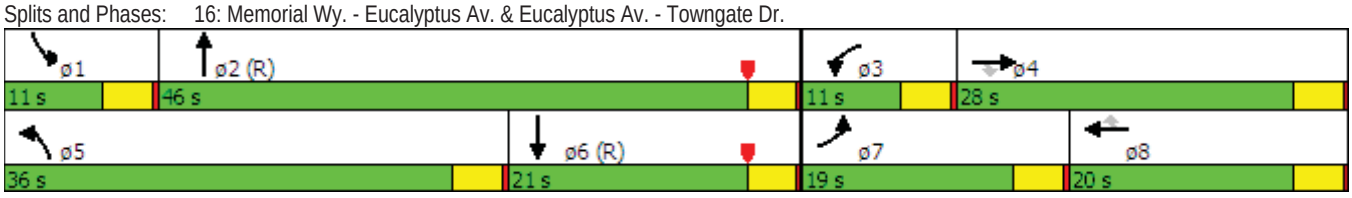
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	49.6	7.5	23.6	15.2	43.7	11.8	19.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	33.0	7.0	25.0	21.0	21.0	14.0	18.0
Max Q Clear Time (g_c+I1), s	4.8	6.1	3.4	16.4	11.0	8.1	8.1	8.3
Green Ext Time (p_c), s	0.0	3.9	0.0	3.2	0.3	3.1	0.1	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	30.2
HCM 2010 LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	221	372	310	9	459	31	506	166	16	15	85	314
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	150		50	200		0	200		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	19.0	28.0	28.0	11.0	20.0	20.0	36.0	46.0		11.0	21.0	
Total Split (%)	19.8%	29.2%	29.2%	11.5%	20.8%	20.8%	37.5%	47.9%		11.5%	21.9%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	221	372	310	9	459	31	506	166	16	15	85	314
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	240	404	337	10	499	34	550	180	17	16	92	341
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	272	1051	470	30	569	255	578	1616	151	45	342	306
Arrive On Green	0.15	0.30	0.30	0.02	0.16	0.16	0.33	0.49	0.49	0.03	0.19	0.19
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3272	306	1774	1770	1583
Grp Volume(v), veh/h	240	404	337	10	499	34	550	97	100	16	92	341
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1809	1774	1770	1583
Q Serve(g_s), s	12.7	8.7	18.2	0.5	13.2	1.8	29.1	2.8	2.9	0.9	4.2	18.5
Cycle Q Clear(g_c), s	12.7	8.7	18.2	0.5	13.2	1.8	29.1	2.8	2.9	0.9	4.2	18.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	272	1051	470	30	569	255	578	874	893	45	342	306
V/C Ratio(X)	0.88	0.38	0.72	0.33	0.88	0.13	0.95	0.11	0.11	0.36	0.27	1.11
Avail Cap(c_a), veh/h	277	1051	470	129	590	264	591	874	893	129	342	306
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.8	26.8	30.1	46.6	39.3	34.5	31.6	13.0	13.0	46.0	33.0	38.7
Incr Delay (d2), s/veh	26.3	0.2	5.2	6.2	13.6	0.2	25.2	0.3	0.3	4.7	1.9	85.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	4.3	8.6	0.3	7.5	0.8	18.2	1.4	1.5	0.5	2.3	15.4
LnGrp Delay(d),s/veh	66.1	27.0	35.3	52.8	53.0	34.8	56.8	13.3	13.3	50.7	34.9	124.7
LnGrp LOS	E	C	D	D	D	C	E	B	B	D	C	F
Approach Vol, veh/h		981			543			747			449	
Approach Delay, s/veh		39.4			51.9			45.3			103.6	
Approach LOS		D			D			D			F	

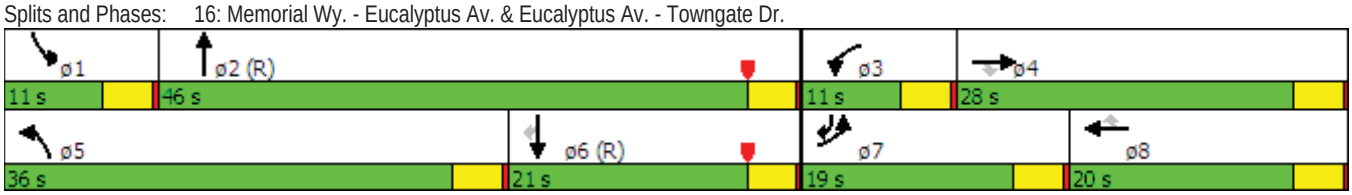
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	51.4	5.6	32.5	35.3	22.5	18.7	19.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	42.0	7.0	24.0	32.0	17.0	15.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	4.9	2.5	20.2	31.1	20.5	14.7	15.2
Green Ext Time (p_c), s	0.0	4.1	0.0	2.3	0.2	0.0	0.0	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	54.1
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	221	372	310	9	459	31	506	166	16	15	85	314
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	150		50	200		0	200		0
Storage Lanes	1		1	1		1	1		0	0		1
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	19.0	28.0	28.0	11.0	20.0	20.0	36.0	46.0		11.0	21.0	19.0
Total Split (%)	19.8%	29.2%	29.2%	11.5%	20.8%	20.8%	37.5%	47.9%		11.5%	21.9%	19.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	221	372	310	9	459	31	506	166	16	15	85	314
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	240	404	337	10	499	34	550	180	17	16	92	341
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	1	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	272	1051	470	30	569	255	578	1616	151	45	360	549
Arrive On Green	0.15	0.30	0.30	0.02	0.16	0.16	0.33	0.49	0.49	0.03	0.19	0.19
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3272	306	1774	1863	1583
Grp Volume(v), veh/h	240	404	337	10	499	34	550	97	100	16	92	341
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1809	1774	1863	1583
Q Serve(g_s), s	12.7	8.7	18.2	0.5	13.2	1.8	29.1	2.8	2.9	0.9	4.0	17.2
Cycle Q Clear(g_c), s	12.7	8.7	18.2	0.5	13.2	1.8	29.1	2.8	2.9	0.9	4.0	17.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	272	1051	470	30	569	255	578	874	893	45	360	549
V/C Ratio(X)	0.88	0.38	0.72	0.33	0.88	0.13	0.95	0.11	0.11	0.36	0.26	0.62
Avail Cap(c_a), veh/h	277	1051	470	129	590	264	591	874	893	129	360	549
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.8	26.8	30.1	46.6	39.3	34.5	31.6	13.0	13.0	46.0	32.9	26.1
Incr Delay (d2), s/veh	26.3	0.2	5.2	6.2	13.6	0.2	25.2	0.3	0.3	4.7	1.7	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	4.3	8.6	0.3	7.5	0.8	18.2	1.4	1.5	0.5	2.2	8.3
LnGrp Delay(d),s/veh	66.1	27.0	35.3	52.8	53.0	34.8	56.8	13.3	13.3	50.7	34.6	31.4
LnGrp LOS	E	C	D	D	D	C	E	B	B	D	C	C
Approach Vol, veh/h		981			543			747			449	
Approach Delay, s/veh		39.4			51.9			45.3			32.7	
Approach LOS		D			D			D			C	

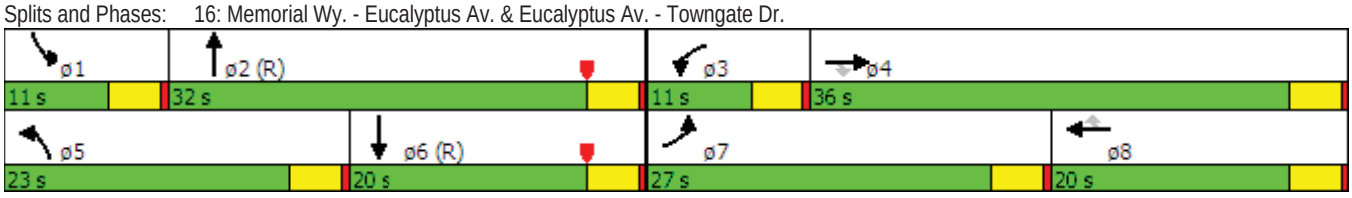
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	51.4	5.6	32.5	35.3	22.5	18.7	19.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	42.0	7.0	24.0	32.0	17.0	15.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	4.9	2.5	20.2	31.1	19.2	14.7	15.2
Green Ext Time (p_c), s	0.0	2.8	0.0	2.3	0.2	0.0	0.0	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	42.4
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	450	609	559	27	476	63	382	276	21	55	282	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	150		50	200		0	200		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	27.0	36.0	36.0	11.0	20.0	20.0	23.0	32.0		11.0	20.0	
Total Split (%)	30.0%	40.0%	40.0%	12.2%	22.2%	22.2%	25.6%	35.6%		12.2%	22.2%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	450	609	559	27	476	63	382	276	21	55	282	304
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	479	648	595	29	506	67	406	294	22	59	300	323
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	453	1348	603	71	586	262	375	1140	85	106	336	301
Arrive On Green	0.26	0.38	0.38	0.04	0.17	0.17	0.21	0.34	0.34	0.06	0.19	0.19
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3340	249	1774	1770	1583
Grp Volume(v), veh/h	479	648	595	29	506	67	406	155	161	59	300	323
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1819	1774	1770	1583
Q Serve(g_s), s	23.0	12.5	33.5	1.4	12.5	3.3	19.0	5.7	5.8	2.9	14.9	17.1
Cycle Q Clear(g_c), s	23.0	12.5	33.5	1.4	12.5	3.3	19.0	5.7	5.8	2.9	14.9	17.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	453	1348	603	71	586	262	375	604	621	106	336	301
V/C Ratio(X)	1.06	0.48	0.99	0.41	0.86	0.26	1.08	0.26	0.26	0.55	0.89	1.07
Avail Cap(c_a), veh/h	453	1348	603	138	629	281	375	604	621	138	336	301
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	21.1	27.6	42.2	36.6	32.7	35.5	21.4	21.4	41.1	35.5	36.4
Incr Delay (d2), s/veh	58.0	0.3	33.1	3.7	11.4	0.5	70.9	1.0	1.0	4.4	28.0	72.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.5	6.2	20.0	0.8	7.0	1.5	16.6	2.9	3.0	1.6	9.9	13.5
LnGrp Delay(d),s/veh	91.5	21.4	60.7	45.9	48.0	33.2	106.4	22.4	22.4	45.6	63.6	109.1
LnGrp LOS	F	C	E	D	D	C	F	C	C	D	E	F
Approach Vol, veh/h		1722			602			722			682	
Approach Delay, s/veh		54.5			46.2			69.6			83.6	
Approach LOS		D			D			E			F	

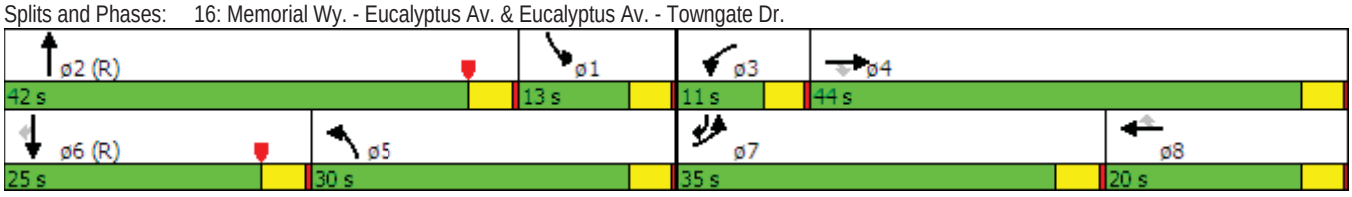
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	34.7	7.6	38.3	23.0	21.1	27.0	18.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	28.0	7.0	32.0	19.0	16.0	23.0	16.0
Max Q Clear Time (g_c+I1), s	4.9	7.8	3.4	35.5	21.0	19.1	25.0	14.5
Green Ext Time (p_c), s	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	61.4
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	450	609	559	27	476	63	382	276	21	55	282	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	150		50	200		0	200		0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	35.0	44.0	44.0	11.0	20.0	20.0	30.0	42.0		13.0	25.0	35.0
Total Split (%)	31.8%	40.0%	40.0%	10.0%	18.2%	18.2%	27.3%	38.2%		11.8%	22.7%	31.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	450	609	559	27	476	63	382	276	21	55	282	304
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	479	648	595	29	506	67	406	294	22	59	300	323
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	500	1380	617	66	515	230	419	1154	86	145	356	748
Arrive On Green	0.28	0.39	0.39	0.04	0.15	0.15	0.24	0.35	0.35	0.08	0.19	0.19
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3340	249	1774	1863	1583
Grp Volume(v), veh/h	479	648	595	29	506	67	406	155	161	59	300	323
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1819	1774	1863	1583
Q Serve(g_s), s	29.2	15.0	19.9	1.8	15.7	3.4	24.9	6.9	7.0	3.5	17.1	5.1
Cycle Q Clear(g_c), s	29.2	15.0	19.9	1.8	15.7	3.4	24.9	6.9	7.0	3.5	17.1	5.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	500	1380	617	66	515	230	419	611	628	145	356	748
V/C Ratio(X)	0.96	0.47	0.96	0.44	0.98	0.29	0.97	0.25	0.26	0.41	0.84	0.43
Avail Cap(c_a), veh/h	500	1380	617	113	515	230	419	611	628	145	356	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	25.1	8.0	51.8	46.9	28.1	41.6	25.8	25.9	48.0	42.9	7.4
Incr Delay (d2), s/veh	29.8	0.2	27.4	4.5	35.1	0.7	35.6	1.0	1.0	1.8	21.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.4	7.4	13.3	0.9	10.2	1.5	16.3	3.5	3.7	1.8	10.8	3.7
LnGrp Delay(d),s/veh	68.7	25.3	35.3	56.3	82.0	28.8	77.2	26.8	26.8	49.8	63.9	9.2
LnGrp LOS	E	C	D	E	F	C	E	C	C	D	E	A
Approach Vol, veh/h		1722			602			722			682	
Approach Delay, s/veh		40.8			74.8			55.2			36.8	
Approach LOS		D			E			E			D	

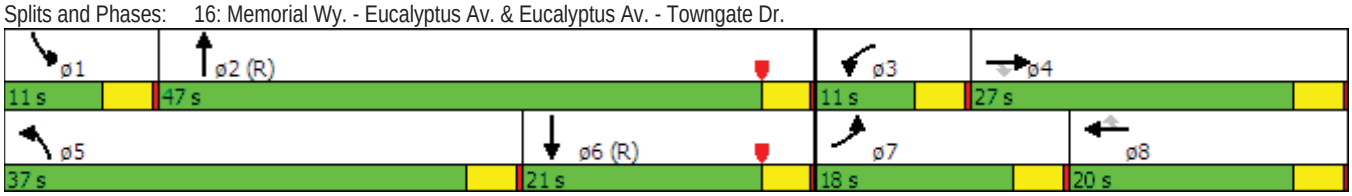
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	42.0	8.1	46.9	30.0	25.0	35.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	38.0	7.0	40.0	26.0	21.0	31.0	16.0
Max Q Clear Time (g_c+I1), s	5.5	9.0	3.8	21.9	26.9	19.1	31.2	17.7
Green Ext Time (p_c), s	0.5	1.7	0.0	9.7	0.0	0.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	48.4
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	221	382	321	9	490	31	538	166	16	15	85	314
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	150		50	200		0	200		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	18.0	27.0	27.0	11.0	20.0	20.0	37.0	47.0		11.0	21.0	
Total Split (%)	18.8%	28.1%	28.1%	11.5%	20.8%	20.8%	38.5%	49.0%		11.5%	21.9%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	221	382	321	9	490	31	538	166	16	15	85	314
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	240	415	349	10	533	34	585	180	17	16	92	341
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	1046	468	30	590	264	610	1621	152	45	313	280
Arrive On Green	0.15	0.30	0.30	0.02	0.17	0.17	0.34	0.50	0.50	0.03	0.18	0.18
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3272	306	1774	1770	1583
Grp Volume(v), veh/h	240	415	349	10	533	34	585	97	100	16	92	341
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1809	1774	1770	1583
Q Serve(g_s), s	12.8	9.0	19.1	0.5	14.2	1.8	31.0	2.8	2.8	0.9	4.3	17.0
Cycle Q Clear(g_c), s	12.8	9.0	19.1	0.5	14.2	1.8	31.0	2.8	2.8	0.9	4.3	17.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	259	1046	468	30	590	264	610	877	896	45	313	280
V/C Ratio(X)	0.93	0.40	0.75	0.33	0.90	0.13	0.96	0.11	0.11	0.36	0.29	1.22
Avail Cap(c_a), veh/h	259	1046	468	129	590	264	610	877	896	129	313	280
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.5	27.0	30.6	46.6	39.2	34.1	30.8	12.9	12.9	46.0	34.3	39.5
Incr Delay (d2), s/veh	37.0	0.2	6.4	6.2	17.3	0.2	26.6	0.3	0.3	4.7	2.4	125.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	4.4	9.1	0.3	8.4	0.8	19.6	1.4	1.5	0.5	2.3	17.2
LnGrp Delay(d),s/veh	77.5	27.2	37.0	52.8	56.6	34.3	57.4	13.2	13.2	50.7	36.7	164.8
LnGrp LOS	E	C	D	D	E	C	E	B	B	D	D	F
Approach Vol, veh/h		1004			577			782			449	
Approach Delay, s/veh		42.7			55.2			46.3			134.4	
Approach LOS		D			E			D			F	

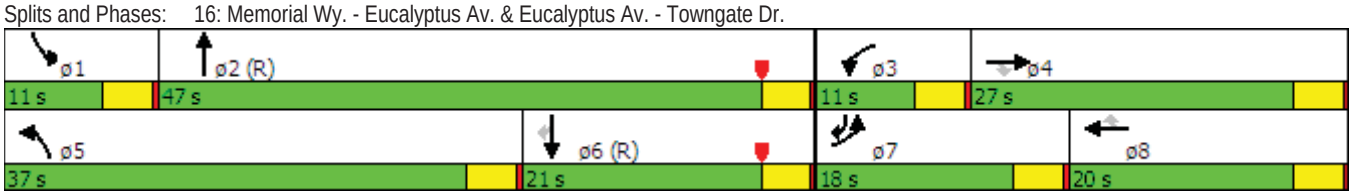
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	51.6	5.6	32.4	37.0	21.0	18.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	43.0	7.0	23.0	33.0	17.0	14.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	4.8	2.5	21.1	33.0	19.0	14.8	16.2
Green Ext Time (p_c), s	0.0	4.1	0.0	1.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	60.9
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	221	382	321	9	490	31	538	166	16	15	85	314
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	150		50	200		0	200		0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	18.0	27.0	27.0	11.0	20.0	20.0	37.0	47.0		11.0	21.0	18.0
Total Split (%)	18.8%	28.1%	28.1%	11.5%	20.8%	20.8%	38.5%	49.0%		11.5%	21.9%	18.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	221	382	321	9	490	31	538	166	16	15	85	314
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	240	415	349	10	533	34	585	180	17	16	92	341
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	1	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	1046	468	30	590	264	610	1621	152	45	330	511
Arrive On Green	0.15	0.30	0.30	0.02	0.17	0.17	0.34	0.50	0.50	0.03	0.18	0.18
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3272	306	1774	1863	1583
Grp Volume(v), veh/h	240	415	349	10	533	34	585	97	100	16	92	341
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1809	1774	1863	1583
Q Serve(g_s), s	12.8	9.0	19.1	0.5	14.2	1.8	31.0	2.8	2.8	0.9	4.1	17.0
Cycle Q Clear(g_c), s	12.8	9.0	19.1	0.5	14.2	1.8	31.0	2.8	2.8	0.9	4.1	17.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	259	1046	468	30	590	264	610	877	896	45	330	511
V/C Ratio(X)	0.93	0.40	0.75	0.33	0.90	0.13	0.96	0.11	0.11	0.36	0.28	0.67
Avail Cap(c_a), veh/h	259	1046	468	129	590	264	610	877	896	129	330	511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.5	27.0	30.6	46.6	39.2	34.1	30.8	12.9	12.9	46.0	34.2	28.0
Incr Delay (d2), s/veh	37.0	0.2	6.4	6.2	17.3	0.2	26.6	0.3	0.3	4.7	2.1	6.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	4.4	9.1	0.3	8.4	0.8	19.6	1.4	1.5	0.5	2.3	8.7
LnGrp Delay(d),s/veh	77.5	27.2	37.0	52.8	56.6	34.3	57.4	13.2	13.2	50.7	36.3	34.8
LnGrp LOS	E	C	D	D	E	C	E	B	B	D	D	C
Approach Vol, veh/h		1004			577			782			449	
Approach Delay, s/veh		42.7			55.2			46.3			35.7	
Approach LOS		D			E			D			D	

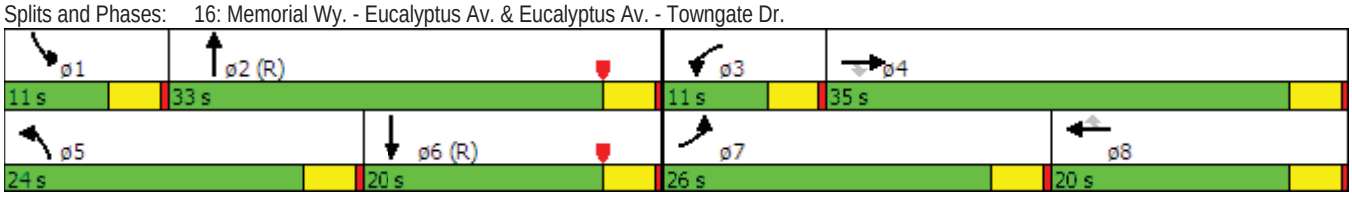
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	51.6	5.6	32.4	37.0	21.0	18.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	43.0	7.0	23.0	33.0	17.0	14.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	4.8	2.5	21.1	33.0	19.0	14.8	16.2
Green Ext Time (p_c), s	0.0	2.9	0.0	1.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	45.1
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	450	648	599	27	494	63	400	276	21	55	282	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	150		50	200		0	200		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	26.0	35.0	35.0	11.0	20.0	20.0	24.0	33.0		11.0	20.0	
Total Split (%)	28.9%	38.9%	38.9%	12.2%	22.2%	22.2%	26.7%	36.7%		12.2%	22.2%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	450	648	599	27	494	63	400	276	21	55	282	304
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	479	689	637	29	526	67	426	294	22	59	300	323
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	434	1324	592	71	601	269	394	1162	86	106	329	294
Arrive On Green	0.24	0.37	0.37	0.04	0.17	0.17	0.22	0.35	0.35	0.06	0.19	0.19
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3340	249	1774	1770	1583
Grp Volume(v), veh/h	479	689	637	29	526	67	426	155	161	59	300	323
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1819	1774	1770	1583
Q Serve(g_s), s	22.0	13.6	33.7	1.4	13.0	3.3	20.0	5.6	5.7	2.9	15.0	16.7
Cycle Q Clear(g_c), s	22.0	13.6	33.7	1.4	13.0	3.3	20.0	5.6	5.7	2.9	15.0	16.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	434	1324	592	71	601	269	394	616	633	106	329	294
V/C Ratio(X)	1.10	0.52	1.08	0.41	0.88	0.25	1.08	0.25	0.25	0.55	0.91	1.10
Avail Cap(c_a), veh/h	434	1324	592	138	629	281	394	616	633	138	329	294
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	21.9	28.2	42.2	36.4	32.4	35.0	21.0	21.0	41.1	35.9	36.6
Incr Delay (d2), s/veh	74.7	0.4	58.9	3.7	12.7	0.5	68.6	1.0	1.0	4.4	31.7	81.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.7	6.7	24.4	0.8	7.4	1.5	17.3	2.9	3.0	1.6	10.2	13.9
LnGrp Delay(d),s/veh	108.7	22.3	87.0	45.9	49.2	32.9	103.6	21.9	22.0	45.6	67.6	118.0
LnGrp LOS	F	C	F	D	D	C	F	C	C	D	E	F
Approach Vol, veh/h		1805			622			742			682	
Approach Delay, s/veh		68.0			47.2			68.8			89.6	
Approach LOS		E			D			E			F	

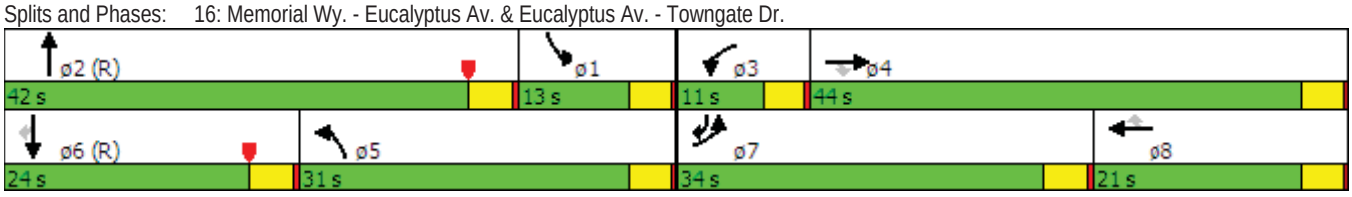
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	35.3	7.6	37.7	24.0	20.7	26.0	19.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	29.0	7.0	31.0	20.0	16.0	22.0	16.0
Max Q Clear Time (g_c+I1), s	4.9	7.7	3.4	35.7	22.0	18.7	24.0	15.0
Green Ext Time (p_c), s	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	68.7
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	450	648	599	27	494	63	400	276	21	55	282	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	150		50	200		0	200		0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	34.0	44.0	44.0	11.0	21.0	21.0	31.0	42.0		13.0	24.0	34.0
Total Split (%)	30.9%	40.0%	40.0%	10.0%	19.1%	19.1%	28.2%	38.2%		11.8%	21.8%	30.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	450	648	599	27	494	63	400	276	21	55	282	304
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	479	689	637	29	526	67	426	294	22	59	300	323
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	484	1380	617	66	547	245	435	1154	86	145	339	720
Arrive On Green	0.27	0.39	0.39	0.04	0.15	0.15	0.25	0.35	0.35	0.08	0.18	0.18
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3340	249	1774	1863	1583
Grp Volume(v), veh/h	479	689	637	29	526	67	426	155	161	59	300	323
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1819	1774	1863	1583
Q Serve(g_s), s	29.6	16.2	20.5	1.8	16.2	3.4	26.2	6.9	7.0	3.5	17.3	5.4
Cycle Q Clear(g_c), s	29.6	16.2	20.5	1.8	16.2	3.4	26.2	6.9	7.0	3.5	17.3	5.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	484	1380	617	66	547	245	435	611	628	145	339	720
V/C Ratio(X)	0.99	0.50	1.03	0.44	0.96	0.27	0.98	0.25	0.26	0.41	0.89	0.45
Avail Cap(c_a), veh/h	484	1380	617	113	547	245	435	611	628	145	339	720
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.9	25.4	7.7	51.8	46.2	27.4	41.2	25.8	25.9	48.0	43.9	8.0
Incr Delay (d2), s/veh	38.2	0.3	44.7	4.5	29.0	0.6	37.3	1.0	1.0	1.8	27.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.6	8.0	16.4	0.9	10.2	1.5	17.3	3.5	3.7	1.8	11.5	3.8
LnGrp Delay(d),s/veh	78.1	25.7	52.4	56.3	75.1	28.0	78.5	26.8	26.8	49.8	70.9	10.0
LnGrp LOS	E	C	F	E	E	C	E	C	C	D	E	B
Approach Vol, veh/h		1805			622			742			682	
Approach Delay, s/veh		49.0			69.2			56.5			40.2	
Approach LOS		D			E			E			D	

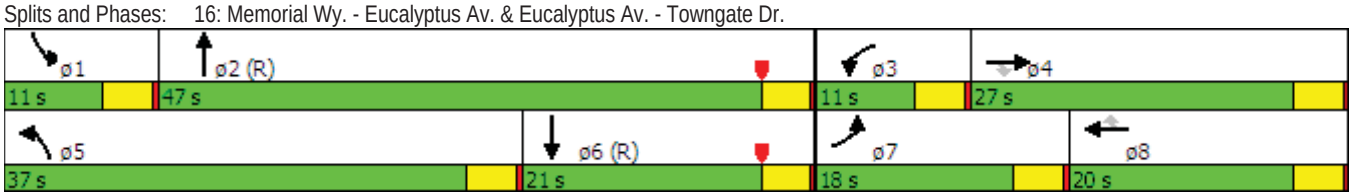
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	42.0	8.1	46.9	31.0	24.0	34.0	21.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	38.0	7.0	40.0	27.0	20.0	30.0	17.0
Max Q Clear Time (g_c+I1), s	5.5	9.0	3.8	22.5	28.2	19.3	31.6	18.2
Green Ext Time (p_c), s	0.6	1.7	0.0	10.1	0.0	0.2	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	52.2
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	232	392	326	10	508	34	533	174	17	16	89	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	150		50	200		0	200		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	18.0	27.0	27.0	11.0	20.0	20.0	37.0	47.0		11.0	21.0	
Total Split (%)	18.8%	28.1%	28.1%	11.5%	20.8%	20.8%	38.5%	49.0%		11.5%	21.9%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	232	392	326	10	508	34	533	174	17	16	89	330
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	252	426	354	11	552	37	579	189	18	17	97	359
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	1040	465	33	590	264	605	1616	152	47	318	285
Arrive On Green	0.15	0.29	0.29	0.02	0.17	0.17	0.34	0.49	0.49	0.03	0.18	0.18
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3270	308	1774	1770	1583
Grp Volume(v), veh/h	252	426	354	11	552	37	579	101	106	17	97	359
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1808	1774	1770	1583
Q Serve(g_s), s	13.6	9.3	19.5	0.6	14.8	1.9	30.6	3.0	3.0	0.9	4.6	17.3
Cycle Q Clear(g_c), s	13.6	9.3	19.5	0.6	14.8	1.9	30.6	3.0	3.0	0.9	4.6	17.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	259	1040	465	33	590	264	605	875	894	47	318	285
V/C Ratio(X)	0.97	0.41	0.76	0.33	0.94	0.14	0.96	0.12	0.12	0.36	0.30	1.26
Avail Cap(c_a), veh/h	259	1040	465	129	590	264	610	875	894	129	318	285
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.8	27.2	30.8	46.5	39.5	34.1	30.9	13.0	13.0	45.9	34.2	39.4
Incr Delay (d2), s/veh	48.6	0.3	7.2	5.8	22.5	0.2	26.0	0.3	0.3	4.6	2.5	142.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	4.5	9.5	0.3	9.0	0.9	19.3	1.5	1.6	0.5	2.5	18.8
LnGrp Delay(d),s/veh	89.4	27.5	38.0	52.4	62.0	34.4	56.9	13.3	13.3	50.5	36.6	182.1
LnGrp LOS	F	C	D	D	E	C	E	B	B	D	D	F
Approach Vol, veh/h		1032			600			786			473	
Approach Delay, s/veh		46.2			60.1			45.4			147.5	
Approach LOS		D			E			D			F	

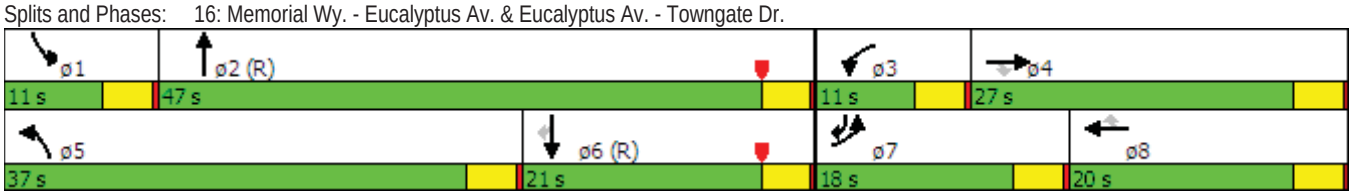
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	51.4	5.8	32.2	36.7	21.3	18.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	43.0	7.0	23.0	33.0	17.0	14.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	5.0	2.6	21.5	32.6	19.3	15.6	16.8
Green Ext Time (p_c), s	0.0	4.4	0.0	1.0	0.1	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	65.5
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	232	392	326	10	508	34	533	174	17	16	89	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	150		50	200		0	200		0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	18.0	27.0	27.0	11.0	20.0	20.0	37.0	47.0		11.0	21.0	18.0
Total Split (%)	18.8%	28.1%	28.1%	11.5%	20.8%	20.8%	38.5%	49.0%		11.5%	21.9%	18.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	232	392	326	10	508	34	533	174	17	16	89	330
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	252	426	354	11	552	37	579	189	18	17	97	359
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	1	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	1040	465	33	590	264	605	1616	152	47	335	516
Arrive On Green	0.15	0.29	0.29	0.02	0.17	0.17	0.34	0.49	0.49	0.03	0.18	0.18
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3270	308	1774	1863	1583
Grp Volume(v), veh/h	252	426	354	11	552	37	579	101	106	17	97	359
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1808	1774	1863	1583
Q Serve(g_s), s	13.6	9.3	19.5	0.6	14.8	1.9	30.6	3.0	3.0	0.9	4.3	17.3
Cycle Q Clear(g_c), s	13.6	9.3	19.5	0.6	14.8	1.9	30.6	3.0	3.0	0.9	4.3	17.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	259	1040	465	33	590	264	605	875	894	47	335	516
V/C Ratio(X)	0.97	0.41	0.76	0.33	0.94	0.14	0.96	0.12	0.12	0.36	0.29	0.70
Avail Cap(c_a), veh/h	259	1040	465	129	590	264	610	875	894	129	335	516
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.8	27.2	30.8	46.5	39.5	34.1	30.9	13.0	13.0	45.9	34.1	28.2
Incr Delay (d2), s/veh	48.6	0.3	7.2	5.8	22.5	0.2	26.0	0.3	0.3	4.6	2.2	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	4.5	9.5	0.3	9.0	0.9	19.3	1.5	1.6	0.5	2.4	9.3
LnGrp Delay(d),s/veh	89.4	27.5	38.0	52.4	62.0	34.4	56.9	13.3	13.3	50.5	36.2	35.8
LnGrp LOS	F	C	D	D	E	C	E	B	B	D	D	D
Approach Vol, veh/h		1032			600			786			473	
Approach Delay, s/veh		46.2			60.1			45.4			36.4	
Approach LOS		D			E			D			D	

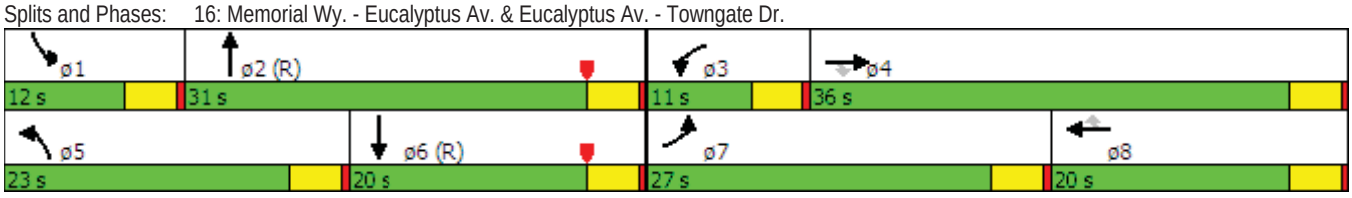
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	51.4	5.8	32.2	36.7	21.3	18.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	43.0	7.0	23.0	33.0	17.0	14.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	5.0	2.6	21.5	32.6	19.3	15.6	16.8
Green Ext Time (p_c), s	0.0	3.0	0.0	1.0	0.1	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	47.3
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	473	641	589	30	525	69	402	290	22	58	296	319
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	150		50	200		0	200		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	27.0	36.0	36.0	11.0	20.0	20.0	23.0	31.0		12.0	20.0	
Total Split (%)	30.0%	40.0%	40.0%	12.2%	22.2%	22.2%	25.6%	34.4%		13.3%	22.2%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	473	641	589	30	525	69	402	290	22	58	296	319
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	503	682	627	32	559	73	428	309	23	62	315	339
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	453	1379	617	76	626	280	375	1098	81	109	316	283
Arrive On Green	0.26	0.39	0.39	0.04	0.18	0.18	0.21	0.33	0.33	0.06	0.18	0.18
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3341	247	1774	1770	1583
Grp Volume(v), veh/h	503	682	627	32	559	73	428	163	169	62	315	339
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1819	1774	1770	1583
Q Serve(g_s), s	23.0	13.1	35.1	1.6	13.9	3.6	19.0	6.1	6.2	3.1	16.0	16.1
Cycle Q Clear(g_c), s	23.0	13.1	35.1	1.6	13.9	3.6	19.0	6.1	6.2	3.1	16.0	16.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	453	1379	617	76	626	280	375	581	598	109	316	283
V/C Ratio(X)	1.11	0.49	1.02	0.42	0.89	0.26	1.14	0.28	0.28	0.57	1.00	1.20
Avail Cap(c_a), veh/h	453	1379	617	138	629	281	375	581	598	158	316	283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	20.8	27.5	42.0	36.2	32.0	35.5	22.3	22.4	41.1	36.9	37.0
Incr Delay (d2), s/veh	75.5	0.3	40.4	3.7	15.0	0.5	91.3	1.2	1.2	4.6	49.8	118.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.7	6.4	22.2	0.9	8.1	1.6	18.8	3.2	3.3	1.6	12.2	16.3
LnGrp Delay(d),s/veh	109.0	21.0	67.8	45.7	51.3	32.4	126.8	23.6	23.6	45.7	86.7	155.3
LnGrp LOS	F	C	F	D	D	C	F	C	C	D	F	F
Approach Vol, veh/h		1812			664			760			716	
Approach Delay, s/veh		61.7			48.9			81.7			115.6	
Approach LOS		E			D			F			F	

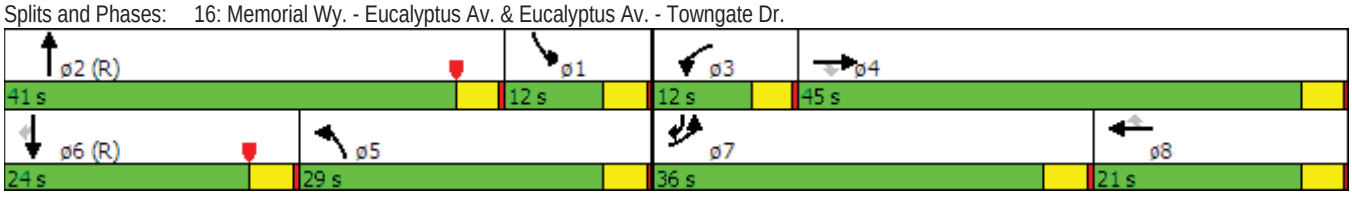
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	33.6	7.9	39.1	23.0	20.1	27.0	19.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	27.0	7.0	32.0	19.0	16.0	23.0	16.0
Max Q Clear Time (g_c+I1), s	5.1	8.2	3.6	37.1	21.0	18.1	25.0	15.9
Green Ext Time (p_c), s	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	73.2
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	473	641	589	30	525	69	402	290	22	58	296	319
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	150		50	200		0	200		0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	36.0	45.0	45.0	12.0	21.0	21.0	29.0	41.0		12.0	24.0	36.0
Total Split (%)	32.7%	40.9%	40.9%	10.9%	19.1%	19.1%	26.4%	37.3%		10.9%	21.8%	32.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	473	641	589	30	525	69	402	290	22	58	296	319
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	503	682	627	32	559	73	428	309	23	62	315	339
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	516	1436	642	70	547	245	403	1124	83	129	339	748
Arrive On Green	0.29	0.41	0.41	0.04	0.15	0.15	0.23	0.34	0.34	0.07	0.18	0.18
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3341	247	1774	1863	1583
Grp Volume(v), veh/h	503	682	627	32	559	73	428	163	169	62	315	339
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1819	1774	1863	1583
Q Serve(g_s), s	30.9	15.6	21.2	1.9	17.0	3.7	25.0	7.4	7.5	3.7	18.3	5.7
Cycle Q Clear(g_c), s	30.9	15.6	21.2	1.9	17.0	3.7	25.0	7.4	7.5	3.7	18.3	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	516	1436	642	70	547	245	403	595	612	129	339	748
V/C Ratio(X)	0.97	0.47	0.98	0.45	1.02	0.30	1.06	0.27	0.28	0.48	0.93	0.45
Avail Cap(c_a), veh/h	516	1436	642	129	547	245	403	595	612	129	339	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	24.1	7.9	51.7	46.5	28.3	42.5	26.7	26.7	49.0	44.3	7.4
Incr Delay (d2), s/veh	33.0	0.2	29.4	4.5	44.2	0.7	62.1	1.1	1.1	2.8	34.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.8	7.6	14.4	1.0	11.6	1.7	19.2	3.8	3.9	1.9	12.6	3.8
LnGrp Delay(d),s/veh	71.6	24.3	37.3	56.2	90.7	28.9	104.6	27.8	27.8	51.8	78.3	9.4
LnGrp LOS	E	C	D	E	F	C	F	C	C	D	E	A
Approach Vol, veh/h		1812			664			760			716	
Approach Delay, s/veh		41.9			82.2			71.0			43.4	
Approach LOS		D			F			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	41.0	8.4	48.6	29.0	24.0	36.0	21.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	37.0	8.0	41.0	25.0	20.0	32.0	17.0
Max Q Clear Time (g_c+I1), s	5.7	9.5	3.9	23.2	27.0	20.3	32.9	19.0
Green Ext Time (p_c), s	0.4	1.8	0.0	10.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	54.6
HCM 2010 LOS	D

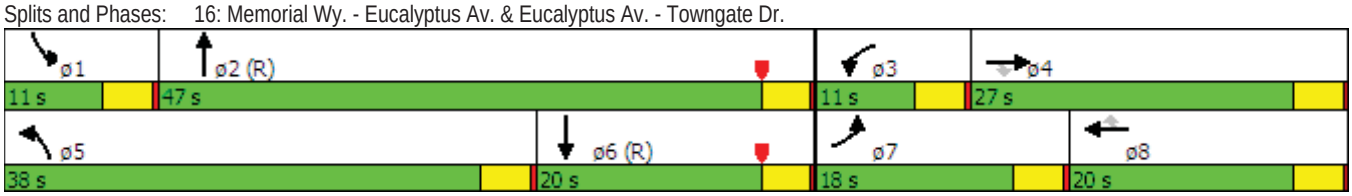
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	232	402	337	10	539	34	565	174	17	16	89	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	150		50	200		0	200		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	18.0	27.0	27.0	11.0	20.0	20.0	38.0	47.0		11.0	20.0	
Total Split (%)	18.8%	28.1%	28.1%	11.5%	20.8%	20.8%	39.6%	49.0%		11.5%	20.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	232	402	337	10	539	34	565	174	17	16	89	330
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	252	437	366	11	586	37	614	189	18	17	97	359
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	1040	465	33	590	264	628	1616	152	47	295	264
Arrive On Green	0.15	0.29	0.29	0.02	0.17	0.17	0.35	0.49	0.49	0.03	0.17	0.17
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3270	308	1774	1770	1583
Grp Volume(v), veh/h	252	437	366	11	586	37	614	101	106	17	97	359
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1808	1774	1770	1583
Q Serve(g_s), s	13.6	9.5	20.4	0.6	15.9	1.9	32.8	3.0	3.0	0.9	4.6	16.0
Cycle Q Clear(g_c), s	13.6	9.5	20.4	0.6	15.9	1.9	32.8	3.0	3.0	0.9	4.6	16.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	259	1040	465	33	590	264	628	875	894	47	295	264
V/C Ratio(X)	0.97	0.42	0.79	0.33	0.99	0.14	0.98	0.12	0.12	0.36	0.33	1.36
Avail Cap(c_a), veh/h	259	1040	465	129	590	264	628	875	894	129	295	264
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.8	27.3	31.1	46.5	39.9	34.1	30.6	13.0	13.0	45.9	35.3	40.0
Incr Delay (d2), s/veh	48.6	0.3	8.7	5.8	35.3	0.2	30.1	0.3	0.3	4.6	3.0	184.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	4.7	10.0	0.3	10.6	0.9	21.3	1.5	1.6	0.5	2.5	20.5
LnGrp Delay(d),s/veh	89.4	27.6	39.8	52.4	75.2	34.4	60.7	13.3	13.3	50.5	38.2	224.8
LnGrp LOS	F	C	D	D	E	C	E	B	B	D	D	F
Approach Vol, veh/h		1055			634			821			473	
Approach Delay, s/veh		46.6			72.5			48.8			180.3	
Approach LOS		D			E			D			F	

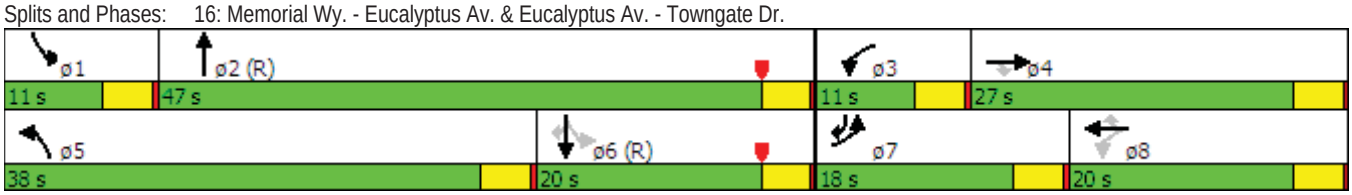
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	51.4	5.8	32.2	38.0	20.0	18.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	43.0	7.0	23.0	34.0	16.0	14.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	5.0	2.6	22.4	34.8	18.0	15.6	17.9
Green Ext Time (p_c), s	0.0	4.4	0.0	0.5	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	73.9
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	232	402	337	10	539	34	565	174	17	16	89	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	150		50	200		0	200		0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
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
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	Prot	NA		pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4	8		8				6		6
Detector Phase	7	4	4	3	8	8	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	11.0
Total Split (s)	18.0	27.0	27.0	11.0	20.0	20.0	38.0	47.0		11.0	20.0	18.0
Total Split (%)	18.8%	28.1%	28.1%	11.5%	20.8%	20.8%	39.6%	49.0%		11.5%	20.8%	18.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 96	
Actuated Cycle Length: 96	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	232	402	337	10	539	34	565	174	17	16	89	330
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	252	437	366	11	586	37	614	189	18	17	97	359
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	1	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	1040	465	220	590	264	628	1616	152	317	310	495
Arrive On Green	0.15	0.29	0.29	0.02	0.17	0.17	0.35	0.49	0.49	0.03	0.17	0.17
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3270	308	1774	1863	1583
Grp Volume(v), veh/h	252	437	366	11	586	37	614	101	106	17	97	359
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1808	1774	1863	1583
Q Serve(g_s), s	13.6	9.5	20.4	0.5	15.9	1.9	32.8	3.0	3.0	0.7	4.4	16.0
Cycle Q Clear(g_c), s	13.6	9.5	20.4	0.5	15.9	1.9	32.8	3.0	3.0	0.7	4.4	16.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	259	1040	465	220	590	264	628	875	894	317	310	495
V/C Ratio(X)	0.97	0.42	0.79	0.05	0.99	0.14	0.98	0.12	0.12	0.05	0.31	0.73
Avail Cap(c_a), veh/h	259	1040	465	317	590	264	628	875	894	399	310	495
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.8	27.3	31.1	32.1	39.9	34.1	30.6	13.0	13.0	31.5	35.2	29.3
Incr Delay (d2), s/veh	48.6	0.3	8.7	0.1	35.3	0.2	30.1	0.3	0.3	0.1	2.6	9.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	4.7	10.0	0.2	10.6	0.9	21.3	1.5	1.6	0.4	2.5	9.7
LnGrp Delay(d),s/veh	89.4	27.6	39.8	32.2	75.2	34.4	60.7	13.3	13.3	31.6	37.8	38.3
LnGrp LOS	F	C	D	C	E	C	E	B	B	C	D	D
Approach Vol, veh/h		1055			634			821			473	
Approach Delay, s/veh		46.6			72.1			48.8			38.0	
Approach LOS		D			E			D			D	

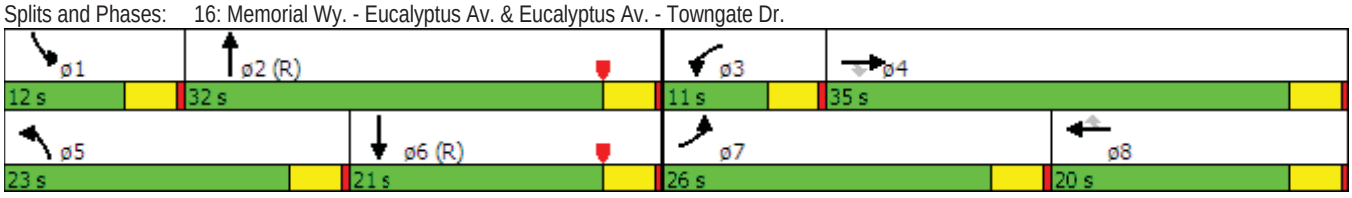
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	51.4	5.8	32.2	38.0	20.0	18.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	43.0	7.0	23.0	34.0	16.0	14.0	16.0
Max Q Clear Time (g_c+I1), s	2.7	5.0	2.5	22.4	34.8	18.0	15.6	17.9
Green Ext Time (p_c), s	0.0	3.0	0.0	0.5	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	51.2
HCM 2010 LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	473	680	629	30	543	69	420	290	22	58	296	319
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	150		50	200		0	200		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0		11.0	20.0	
Total Split (s)	26.0	35.0	35.0	11.0	20.0	20.0	23.0	32.0		12.0	21.0	
Total Split (%)	28.9%	38.9%	38.9%	12.2%	22.2%	22.2%	25.6%	35.6%		13.3%	23.3%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 35 (39%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	473	680	629	30	543	69	420	290	22	58	296	319
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	503	723	669	32	578	73	447	309	23	62	315	339
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	434	1343	601	76	629	281	375	1132	84	109	334	299
Arrive On Green	0.24	0.38	0.38	0.04	0.18	0.18	0.21	0.34	0.34	0.06	0.19	0.19
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3341	247	1774	1770	1583
Grp Volume(v), veh/h	503	723	669	32	578	73	447	163	169	62	315	339
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1819	1774	1770	1583
Q Serve(g_s), s	22.0	14.3	34.1	1.6	14.4	3.6	19.0	6.0	6.1	3.1	15.8	17.0
Cycle Q Clear(g_c), s	22.0	14.3	34.1	1.6	14.4	3.6	19.0	6.0	6.1	3.1	15.8	17.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	434	1343	601	76	629	281	375	599	616	109	334	299
V/C Ratio(X)	1.16	0.54	1.11	0.42	0.92	0.26	1.19	0.27	0.27	0.57	0.94	1.13
Avail Cap(c_a), veh/h	434	1343	601	138	629	281	375	599	616	158	334	299
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	21.8	27.9	42.0	36.4	31.9	35.5	21.7	21.7	41.1	36.0	36.5
Incr Delay (d2), s/veh	94.8	0.4	72.0	3.7	18.7	0.5	110.5	1.1	1.1	4.6	36.6	93.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.1	7.0	26.8	0.9	8.7	1.6	20.8	3.1	3.2	1.6	11.1	15.1
LnGrp Delay(d),s/veh	128.8	22.2	99.9	45.7	55.0	32.4	146.0	22.8	22.8	45.7	72.6	129.6
LnGrp LOS	F	C	F	D	E	C	F	C	C	D	E	F
Approach Vol, veh/h		1895			683			779			716	
Approach Delay, s/veh		77.9			52.2			93.5			97.2	
Approach LOS		E			D			F			F	

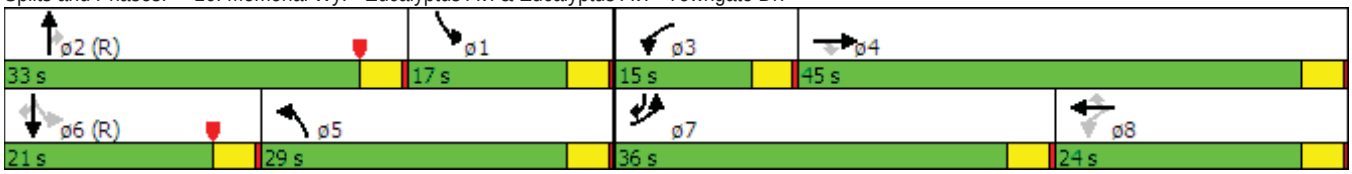
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	34.5	7.9	38.1	23.0	21.0	26.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	28.0	7.0	31.0	19.0	17.0	22.0	16.0
Max Q Clear Time (g_c+I1), s	5.1	8.1	3.6	36.1	21.0	19.0	24.0	16.4
Green Ext Time (p_c), s	0.0	5.8	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	80.0
HCM 2010 LOS	E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	473	680	629	30	543	69	420	290	22	58	296	319
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	150		50	200		0	200		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	80			100			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1034			1432			824			534	
Travel Time (s)		17.6			24.4			14.0			9.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Shared Lane Traffic (%)												
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4	8		8			2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	20.0	11.0	20.0	11.0
Total Split (s)	36.0	45.0	45.0	15.0	24.0	24.0	29.0	33.0	33.0	17.0	21.0	36.0
Total Split (%)	32.7%	40.9%	40.9%	13.6%	21.8%	21.8%	26.4%	30.0%	30.0%	15.5%	19.1%	32.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	

Splits and Phases: 16: Memorial Wy. - Eucalyptus Av. & Eucalyptus Av. - Towngate Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	473	680	629	30	543	69	420	290	22	58	296	319
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	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	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	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	503	723	669	32	578	73	447	309	23	62	315	339
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	516	1524	682	205	635	284	408	933	417	367	288	705
Arrive On Green	0.29	0.43	0.43	0.04	0.18	0.18	0.23	0.26	0.26	0.12	0.15	0.15
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	1863	1583
Grp Volume(v), veh/h	503	723	669	32	578	73	447	309	23	62	315	339
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1863	1583
Q Serve(g_s), s	30.9	16.1	21.5	1.6	17.6	3.3	25.3	7.7	1.0	0.0	17.0	6.5
Cycle Q Clear(g_c), s	30.9	16.1	21.5	1.6	17.6	3.3	25.3	7.7	1.0	0.0	17.0	6.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	516	1524	682	205	635	284	408	933	417	367	288	705
V/C Ratio(X)	0.97	0.47	0.98	0.16	0.91	0.26	1.10	0.33	0.06	0.17	1.09	0.48
Avail Cap(c_a), veh/h	516	1524	682	312	643	288	408	933	417	367	288	705
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	22.4	6.8	34.2	44.3	22.7	42.4	32.7	21.7	37.0	46.5	8.2
Incr Delay (d2), s/veh	33.0	0.2	29.7	0.3	17.1	0.5	73.2	1.0	0.3	0.2	80.6	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.8	7.9	14.8	0.8	10.1	1.5	20.6	3.9	0.5	1.6	15.2	3.9
LnGrp Delay(d),s/veh	71.6	22.6	36.5	34.5	61.4	23.2	115.6	33.6	22.0	37.2	127.1	10.6
LnGrp LOS	E	C	D	C	E	C	F	C	C	D	F	B
Approach Vol, veh/h		1895			683			779			716	
Approach Delay, s/veh		40.6			56.0			80.3			64.1	
Approach LOS		D			E			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.3	33.0	8.4	51.4	29.3	21.0	36.0	23.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	29.0	11.0	41.0	25.0	17.0	32.0	20.0
Max Q Clear Time (g_c+I1), s	2.0	9.7	3.6	23.5	27.3	19.0	32.9	19.6
Green Ext Time (p_c), s	1.2	1.8	0.0	10.8	0.0	0.0	0.0	0.1

Intersection Summary	
HCM 2010 Ctrl Delay	54.9
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.