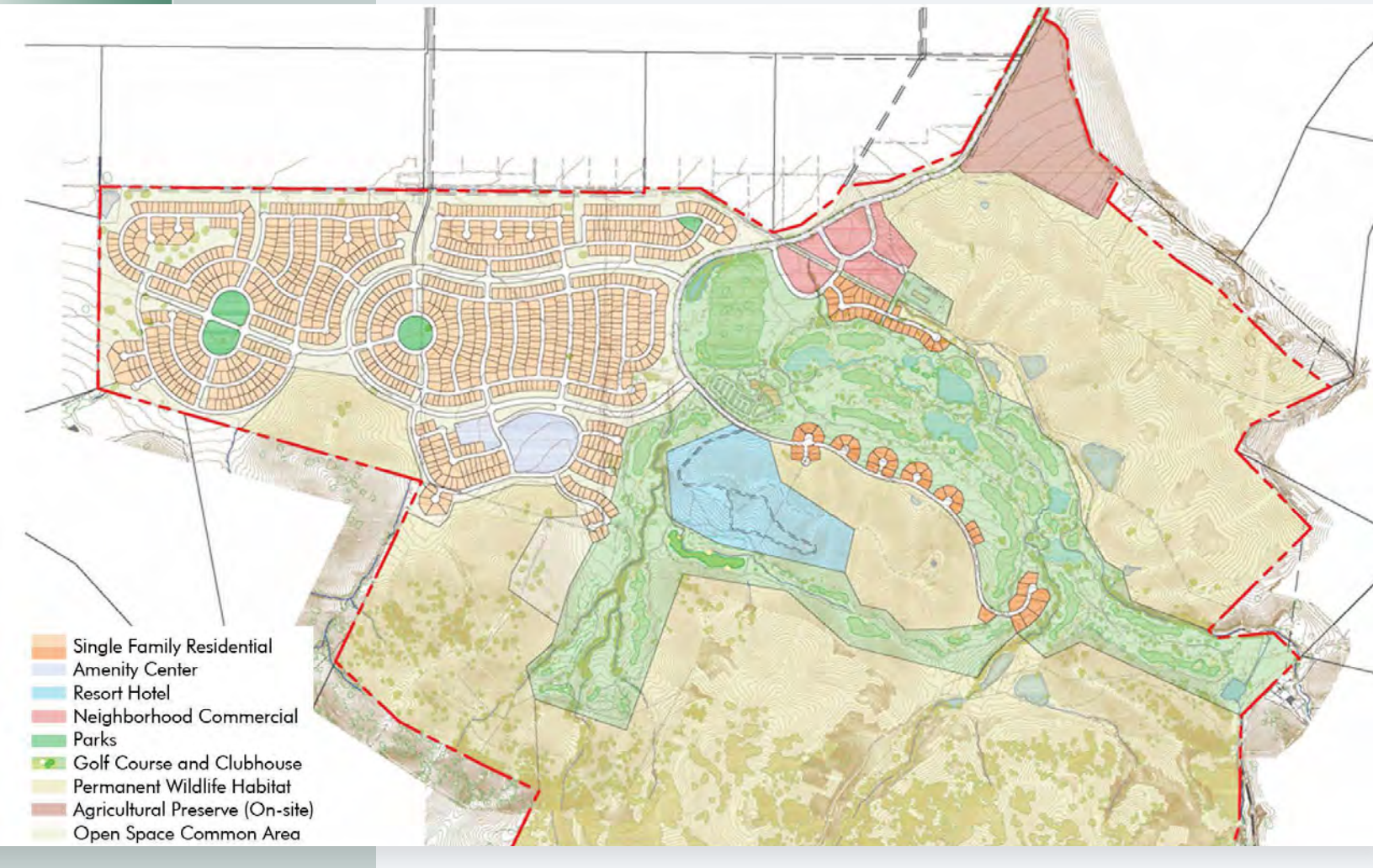
Appendix I

Transportation Impact Analysis

San Juan Oaks Specific Plan
Draft Transportation Impact Analysis



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San Juan Oaks Specific Plan:

Draft Transportation Impact Analysis

Prepared for:
Rincon Consultants Inc.

June 18, 2015

SJ13-1462

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I. EXECUTIVE SUMMARY

This report presents the results of the transportation impact analysis (TIA) for the proposed development of the San Juan Oaks Specific Plan. The San Juan Oaks Specific Plan development area is located in northeastern San Benito County, California, and covers approximately 1,994 acres of land (Project Site). Currently, about 1,756 acres of the Project Site are used for agricultural activities, while the remaining 237 acres consist of the San Juan Oaks Golf Club. A majority of the Project Site would be designated as permanent wildlife habitat and open space, while approximately 235 acres would be developed with residential, commercial, and office uses as seen in **Figure 1**.

This analysis includes an evaluation of the proposed development, which consists of the Del Webb Active Adult residential community (1,017 active adult units plus a 25,000-square foot amenity center), 67 single family units, a 200-room resort hotel, a 100-bed assisted living center, and 65,000 square feet of neighborhood commercial and office development (Project). The surrounding roadway system was evaluated under No Project and plus Project scenarios for Existing, Background, and Cumulative Conditions. Site access, on-site circulation, parking, and potential construction impacts are also addressed.

PROJECT TRAFFIC ESTIMATES

Project generated trips were estimated using standard vehicle trip rates published by Institute of Transportation Engineers (ITE) for all land use types. The proposed Project is estimated to generate a total of 7,906 net new daily vehicle trips, 373 net new AM peak hour trips (181 inbound trips and 192 outbound trips), and 562 net new PM peak hour trips (270 inbound trips and 292 outbound trips).

PROJECT IMPACTS

This analysis identifies potentially significant adverse impacts of the proposed Project on the surrounding transportation system and recommends measures to mitigate significant impacts, to the extent feasible, for environmental clearance.

INTERSECTION IMPACTS AND MITIGATION MEASURES

Project intersection impacts and mitigations under the Plus Project scenarios for Existing, Background, and Cumulative conditions are summarized in **Table ES - 1**.

All Project transportation impacts can be mitigated to a less than significant level with the identified mitigation measures except for the intersection of Bixby Road and SR 156 under Cumulative plus Project Conditions.

FREEWAY SEGMENT IMPACTS

The Project traffic would not add more than one percent of the freeway's capacity to any of the US 101 freeway study segments operating unacceptably under Existing, Background or Cumulative conditions; and therefore no significant freeway impacts were identified.

VEHICLE MILES TRAVELED (VMT) ANALYSIS

Based on the VMT analysis, the Project would generate a total of approximately 94,330 daily VMT or about 46.45 VMT per household. The VMT per household estimate falls between the range for low-density suburban developments (76 VMT/household) and those for transit oriented developments (35 VMT/household). The Project has a lower VMT than average low-density developments, because the Project includes a housing type (senior housing) that has a low trip generation rate per unit and mixed-use components that reduce the number and length of Project trips.

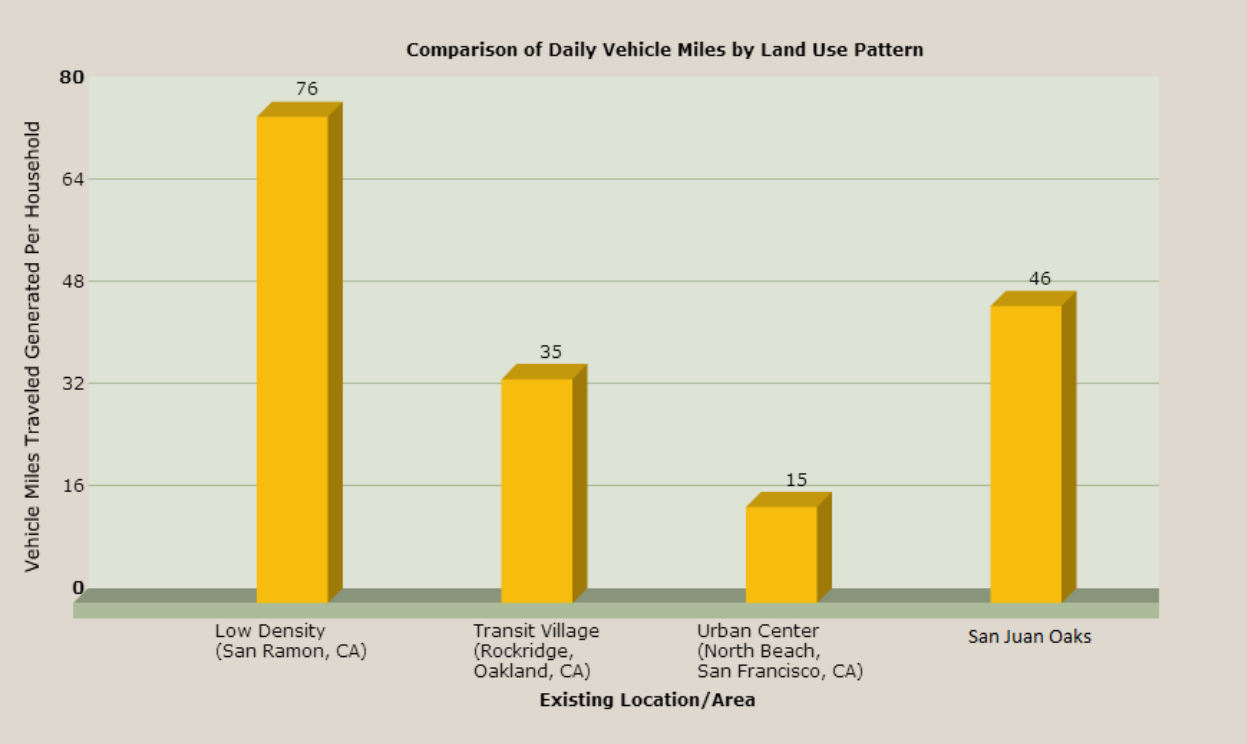

TABLE ES - 1: SUMMARY OF INTERSECTION IMPACTS AND PROPOSED MITIGATION MEASURES

Impacted Intersection		Int. Control[1]	Impact/Status	Plus Project Scenario			Mitigation Measure
				Existing	Background	Cumulative	
4	Bixby Road and SR 156-San Juan Road	SSSC	Impact[2]	No Impact	No Impact	AM/PM	Signalize intersection (C).
			Mitigation Status[3]	N/A	N/A	LTS	
			CEQA Status[4]	N/A	N/A	SU	
5	Union Road and SR 156-San Juan Road*	Signal	Impact[2]	AM/PM	AM/PM	No Impact[5]	Provide dual left-turn lanes on northbound approach with associated receiving lane on SR 156 (E, B).
			Mitigation Status[3]	LTS	LTS	N/A	
			CEQA Status[4]	SU	SU	N/A	
8	Union Road and San Juan Oaks Drive**	SSSC	Impact[2]	AM/PM	AM/PM	AM/PM	Signalize intersection (E, B, & C).
			Mitigation Status[3]	LTS	LTS	LTS	
			CEQA Status[4]	LTS	LTS	LTS	
11	SR 25-Airline Highway and Union Road*	Signal	Impact[2]	AM/PM	AM/PM	No Impact[5]	Add eastbound right-turn lane on Union Road (E, B).
			Mitigation Status[3]	LTS	LTS	N/A	
			CEQA Status[4]	SU	SU	N/A	

Notes: AM = morning peak hour, PM = evening peak hour, E = Existing, B = Background, C = Cumulative

1. Signal = signalized intersection, AWSC = all-way stop controlled intersection, SSSC = side-street stop controlled intersection
2. Identifies the peak hour when the impact occurs for each plus Project study scenario
3. Impact status after implementation of mitigation measure (LTS = Less-Than-Significant, SU = Significant and Unavoidable).
4. Impact status for CEQA purposes, since the County of San Benito does not have jurisdiction over Caltrans facilities and cannot guarantee implementation of identified mitigation measures.
5. The identified mitigation measure for Existing and Background conditions at the SR 156/Union Road intersection are part of a planned improvement (SR 156 Widening) that is assumed to be in place under Cumulative Conditions.

* Indicates a Caltrans intersection
** Indicates a San Benito County intersection
Source: Fehr & Peers, 2015.

SITE ACCESS, ON-SITE CIRCULATION AND PARKING

The general on-site circulation proposed in connection with the Project is considered adequate. The main driveway at Union Road/San Juan Oaks Drive is evaluated under the intersection impact discussion chapters (Intersection #8) and will require signalization to serve the projected Project traffic. However, no internal intersections require a signal. It was assumed that internal Project design features such as all-way stop-controlled intersections will be included as part of the Project. The most current site plan reviewed indicated no immediate impacts at Project Site intersections. Once type and location of on-site retail is determined a review of site access and circulation is recommended to evaluate appropriate access control (such as stop controlled or signalization) at internal intersections throughout the Project Site.

In addition to several on-site circulation recommendations to minimize conflicts and improve circulation, the following key Project Site improvements are recommended to accommodate all modes of travel:

- Install the signage and striping required for side-street stop controlled intersections on all minor streets that approach collector roads.
- Install ADA accessible features throughout the site including ramps, handicap parking spaces, etc.
- Provide sidewalks on both sides of the streets throughout the development, especially on routes to and from the golf course.

PARKING REQUIREMENTS

Currently, the Project description in the San Juan Oaks Specific Plan does not include a detailed parking plan; although the Specific Plan requires that the Project provide sufficient parking spaces to meet San Benito County's parking requirements set forth in the County Code. Based on a review of the site plan, there are numerous opportunities throughout the Project site where the required parking could be adequately accommodated. Under San Benito County's Code Section 25.31, the Project would be required to provide 2,800 parking spaces upon full buildout.

CONSTRUCTION IMPACTS

Construction of the Project is estimated to generate a maximum of approximately 240 peak hour trips and would not exceed the peak hour trips generated by the Project. Construction-related impacts are generally not considered significant since they are temporary in nature and limited in duration. The Project applicant should develop a Construction Management Plan (CMP) for review and approval by the Public Works department, as part of a larger construction management plan, to further reduce any impacts created by construction traffic.

1. INTRODUCTION

This report presents the results of the transportation impact analysis (TIA) for the proposed San Juan Oaks development in San Benito County, California ("Project"). The Project is proposed to be constructed on approximately 1,994 acres of land in unincorporated San Benito County ("Project Site"), as described more fully in the San Juan Oaks Specific Plan ("Specific Plan"). Currently about 1,756 acres of the Project Site are used for agricultural activities, while the remaining 237 acres consists of the San Juan Oaks Golf Club. The Project proposes to convert 235 acres of existing agricultural activities and create a mixed-use development, including, among other things, the Del Webb Active Adult Housing community. The Project Site is generally located on the southwest corner of the Union Street/San Juan Oaks Drive intersection in unincorporated San Benito County west of the City of Hollister.

The purpose of this analysis is to identify potentially significant adverse impacts of the proposed Project on the surrounding transportation system and to recommend measures to mitigate significant impacts, to the extent feasible. The TIA was prepared following the guidelines of San Benito County and the California Department of Transportation (Caltrans), who has jurisdiction over all state roadway facilities in the study area.

PROJECT DESCRIPTION

A majority of the Project Site would be designated as permanent wildlife habitat and open space, while approximately 235 acres would be developed with residential, commercial and office uses, as follows:

- Del Webb Active Adult residential community (1,017 active adult units and 25,000 square feet amenity center);
- 67 single family units;
- 200-room resort hotel;
- 100-bed assisted living center;
- 65,000 square feet of neighborhood commercial and office development.

The parks and open space common areas that will be included as part of the Project are expected to generate few trips during the weekday peak hours, as these land uses are mostly utilized on weekends. Therefore, no trips were included as part of the peak hour trips generated by this Project. The main access point to the Project Site is at the intersection of Union Road and San Juan Oaks Drive. All Project traffic is assumed to use this entrance/exit to access the Project Site. The Project will include the construction of a new emergency vehicle access road (E.V.A.) from the Project Site to SR 156 between Bixby Road and Flint Road. The site plan is presented **Figure 1**.

Figure 1

San Juan Oaks Specific Plan
Site Plan

FEHR PEERS

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Date: March, 2014

PROJECT STUDY AREA

The roadway impacts of the proposed Project were evaluated for the intersections and freeway segments discussed below. The study intersections were selected utilizing industry-standard methodologies based on the Project trips anticipated travel paths and the number of trips the Project would add to intersections and freeway segments within proximity of the Project Site. Additionally, the study area selection criteria form Section III of Caltrans' *Guide for the Preparation of Traffic Impact Studies* (December 2002) was applied to determine study locations.[1]

STUDY INTERSECTIONS

Project impacts on the study area roadway facilities were determined by measuring the effect that Project traffic would have on intersections during the morning (7:00 AM to 9:00 AM) and evening (4:00 PM to 6:00 PM) peak periods. Eleven (11) intersections, as shown on **Figure 3**, were selected as study locations in consultation with San Benito County and Caltrans. The intersections include:

1. SR 129-Chittenden Road and US 101 Southbound Ramps* (Caltrans facility)
2. SR 129-Chittenden Road and US 101 Northbound Ramps* (Caltrans facility)
3. The Alameda and SR 156-San Juan Road (Caltrans facility)
4. Bixby Road and SR 156-San Juan Road* (Caltrans facility)
5. Union Road and SR 156-San Juan Road (Caltrans facility)
6. SR 156 and San Juan Road (Caltrans facility)
7. San Juan Hollister Road and San Juan Road* (County facility)
8. Union Road and San Juan Oaks Drive* (County facility)
9. Riverside Road and Union Road* (County facility)
10. San Benito Street and Union Road (County facility)
11. SR 25-Airline Highway and Union Road (Caltrans facility)

* Unsignalized

FREEWAY SEGMENTS

The study freeway segments were evaluated to determine the effects of the Project during the AM and PM peak hours. The list of study freeway segments includes:

1. US 101 between Monterey/San Benito County Line and Matt Will Memorial Highway (SR 156)
2. US 101 between Matt Will Memorial Highway (SR 156) and Chittenden Road (SR 129)
3. US 101 between Chittenden Road (SR 129) and San Benito/Santa Clara County Line

[1] Generally Caltrans's TIA guidelines indicates that State facilities need to be evaluated if (1) over 100 peak hour trips are assigned to State facilities, (2) between 50 and 100 peak hour trips are assigned to facilities operating at LOS C/D, and (3) between one and 49 trips are assigned to State facilities operating at LOS E or F.

ANALYSIS SCENARIOS

The study intersections were evaluated during the morning and evening peak hours for the following scenarios:

Scenario 1: *Existing Conditions* – Existing volumes obtained from new traffic counts.

Scenario 2: *Existing with Project Conditions* – Existing volumes plus traffic generated by the proposed Project.

Scenario 3: *Background No Project Conditions* – Existing volumes plus traffic from approved but not yet constructed and/or occupied developments in the area.

Scenario 4: *Background plus Project Conditions* – Background volumes from *Scenario 3* plus traffic generated by the proposed Project.

Scenario 5: *Cumulative Conditions* – Cumulative volumes obtained by applying a two percent growth rate (based on a review of AMBAG model projections to Year 2035) to existing traffic counts. In addition, roadway infrastructure improvements planned for a horizon year of 2035 are included in this scenario.

Scenario 6: *Cumulative plus Project Conditions* – Scenario 5 volumes plus traffic generated by the proposed Project.

ANALYSIS METHODS

The operations of roadway facilities are described with the term level of service ("LOS"), a qualitative description of traffic flow based on such factors as speed, travel time, delay, and freedom to maneuver). Six levels are defined from LOS A, operating conditions with little to no delay, to LOS F, when traffic volumes exceed the intersection capacity, stop-and-go conditions result.

SIGNALIZED INTERSECTIONS

Levels of service for signalized intersections were evaluated with the method described in Chapter 16 of the *2010 Highway Capacity Manual*. In this method LOS is based on the average control delay for the critical movements. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and acceleration delay. The average control delay for signalized intersections is calculated using Synchro 8 analysis software and is correlated to a LOS designation as shown in **Table 1**.

At times, intersections may show a reduction in average delay with the addition of Project traffic which is counter-intuitive. However, the average delay values in the table are weighted averages. Weighted

average delays will be reduced when traffic is added to a movement with low delay.[2] Conversely, relatively low-volume increases to movements with high delays can substantially increase the weighted average delay.

TABLE 1: SIGNALIZED INTERSECTION LEVEL OF SERVICE CRITERIA

Level of Service	Description	Delay in Seconds
A	Progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	< 10.0
B	Progression is good, cycle lengths are short, or both. More vehicles stop than with LOS A, causing higher levels of average delay.	> 10.0 to 20.0
C	Higher congestion may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level, though many still pass through the intersection without stopping.	> 20.0 to 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	> 35.0 to 55.0
E	This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	> 55.0 to 80.0
F	This level is considered unacceptable with oversaturation, which is when arrival flow rates exceed the capacity of the intersection. This level may also occur at high V/C ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be contributing factors to such delay levels.	> 80.0

Source: 2010 Highway Capacity Manual.

UNSIGNALIZED INTERSECTIONS

The operations of the unsignalized intersections were evaluated using LOS and the MUTCD peak-hour volume signal warrants. Each of these is described below.

Level of Service Method

The LOS method is contained in Chapter 17 of the *2010 Highway Capacity Manual* and was determined using Synchro 8 LOS software. LOS ratings for all-way stop-controlled intersections are based on the weighted average control delay expressed in seconds per vehicle for all intersection approaches. At two-way or side-street stop-controlled intersections, the average control delay is calculated and reported as

[2] For example, if there is one movement with 10 vehicles and a delay of 100 seconds per vehicle and another movement with 400 vehicles and 10 seconds of delay per vehicle, the weighted average delay is calculated as (100 seconds X 10 vehicles + 10 seconds X 400 vehicles) / 410 vehicles = 12.2 seconds per vehicle. Now if 100 vehicles are added to the movement with 10 seconds of delay per vehicle, the weighted average delay is calculated as (100 seconds X 10 vehicles + 10 seconds X 500 vehicles) / 510 vehicles = 11.8 seconds per vehicle. The weighted average delay improves, even though more vehicles are added.

the worst stopped approach delay, not for the intersection as a whole. **Table 2** summarizes the relationship between delay and LOS for unsignalized intersections.

TABLE 2: UNSIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS USING AVERAGE CONTROL VEHICULAR DELAY

Level of Service	Description	Delay in Seconds
A	Little or no delay.	≤ 10.0
B	Short traffic delay.	10.1 to 15.0
C	Average traffic delays.	15.1 to 25.0
D	Long traffic delays.	25.1 to 35.0
E	Very long traffic delays.	35.1 to 50.0
F	Extreme traffic delays with intersection capacity exceeded.	> 50.0

Sources: Highway Capacity Manual, Transportation Research Board, 2010.

MUTCD Peak-Hour Volume Signal Warrant

In addition to LOS, the *California Manual on Uniform Traffic Control Devices* (CA MUTCD) peak-hour volume signal warrant analyses are used to evaluate impacts at unsignalized intersections.

Signal warrant analyses are intended to examine the general correlation between the planned level of future development and the need to install new traffic signals. It estimates future development-generated traffic compared against a sub-set of the standard traffic signal warrants recommended in CA MUTCD. This analysis should not serve as the only basis for deciding whether and when to install a signal. To reach such a decision, the full set of warrants should be investigated based on field-measured, rather than projected traffic demands and a thorough study of traffic and roadway conditions by an experienced engineer. Furthermore, the decision to install a signal should not be based solely upon the warrants, since the installation of signals can lead to certain types of collisions. The responsible State or local agency should undertake regular monitoring of actual traffic conditions and accident data, and timely re-evaluation of the full set of warrants in order to prioritize and program intersections for signalization.

FREEWAY SEGMENTS

Freeway mainline segments were evaluated using the method presented in Caltrans' *Guide for the Preparation of Traffic Impact Studies* (December 2002). Caltrans' analysis procedure is based on the density of the traffic flow using methods described in the *2010 Highway Capacity Manual*[3]. Density is expressed in vehicles per mile per lane. The *2010 HCM* methodology was used to calculate the freeway segment levels of service. **Table 3** presents the range of densities for freeway mainline segment LOS.

[3] *2010 HCM* is the preferred methodology for Caltrans freeway facilities.

TABLE 3: FREEWAY SEGMENT LEVEL OF SERVICE DEFINITIONS

Level of Service	Description	Density (passenger cars per mile per lane)
A	Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	≤ 11
B	Free-flow speeds are maintained. The ability to maneuver with the traffic stream is only slightly restricted.	11.1 to 18.0
C	Flow with speeds at or near free-flow speeds. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver.	18.1 to 26.0
D	Speeds decline slightly with increasing flows. Freedom to maneuver with the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort.	26.1 to 35.0
E	Operation at capacity. There are virtually no usable gaps within the traffic stream, leaving little room to maneuver. Any disruption can be expected to produce a breakdown with queuing.	35.1 to 45.0
F	Represents a breakdown in flow.	> 45.0

Sources: *Highway Capacity Manual*, Transportation Research Board, 2010.

LEVEL OF SERVICE STANDARD AND IMPACT CRITERIA

The County of San Benito is currently in the process of updating their General Plan. The Revised Draft Environmental Impact Report (EIR) for the 2035 San Benito County General Plan Update was published March 16, 2015 and is currently being circulated for public review and comment. As part of the General Plan Update the San Benito County Board of Supervisors voted to revise the policy language from a LOS standard of C to D, to adequately serve automobile traffic throughout the County while still promoting and accommodating non-auto modes of transportation as a part of the 2035 General Plan update (Policy C-1.12, Circulation Element). As of May 2015, the General Plan Update has not been approved nor the EIR certified; therefore the analysis presented in this TIA relies on the LOS standards and impact criteria form the currently adopted (1992) General Plan to identify impacts for CEQA purposes. However for information purposes, each potentially significant impact identified per the 1992 General Plan are also discussed in the context of the LOS standards and impact criteria included as part of the General Plan Update.

CURRENT GENERAL PLAN (1992) – FOR IMPACT DETERMINATION

The study area selected falls under the jurisdiction of two public agencies: San Benito County and Caltrans, a state agency. These agencies have different level of service standards. Each agency's level of service standards and impact thresholds used in the TIA are discussed below. The majority of the study intersections are located within the Caltrans right-of-way and are therefore subject to Caltrans' LOS standards and impact thresholds.

SAN BENITO COUNTY FACILITIES

Transportation facilities within the County's jurisdiction include both signalized and unsignalized intersections.

Signalized Intersections

San Benito County identifies LOS C[4] as the standard for their signalized intersections. Significant impacts at signalized San Benito County intersections are defined when the addition of Project traffic causes one of the following to occur:

1. The level of service at the intersection degrades from an acceptable LOS C or better under baseline conditions to an unacceptable LOS D or worse under Project conditions, or
2. The level of service at the intersection is an unacceptable LOS D or worse under baseline conditions and the addition of Project trips causes the average intersection delay to increase by five or more seconds.

Unsignalized Intersections

San Benito County does not have a specific level of service standard for unsignalized intersections. A signal warrant analysis was performed for unsignalized intersections that degrade from a LOS C or better under baseline conditions to a LOS D or worse under Project conditions. For purposes of this study, a significant impact will occur when an intersection both: (1) operates unacceptably (i.e. LOS D or worse), and (2) a MUTCD peak hour signal warrant is met.

CALTRANS FACILITIES

Most study intersections, as seen in **Table 4**, are located within Caltrans' right-of-way and are subject to the criteria below.

Signalized Intersections

In the *Guide for the Preparation of Traffic Impact Studies* (2002), Caltrans identifies a level of service threshold of C/D (i.e. on the "cusp" or threshold between level of service C and D) as the acceptable service level. Significant impacts at signalized Caltrans intersections are defined to occur when with the addition of Project traffic one of the following occurs:

[4] As part of San Benito County's General Plan update process, the County has discussed the possibility of modifying its standard to signalized intersections to LOS D. However, as of the timing of this TIA, the County has not made any such modifications, and therefore the existing LOS C standard is used in this TIA.

1. The level of service at the intersection degrades from an acceptable LOS C or better under baseline conditions to an unacceptable LOS D or worse under Project conditions, or
2. The level of service at the intersection is an unacceptable LOS D or worse under baseline conditions and the addition of Project trips causes the average intersection delay to increase by any amount.

Unsignalized Intersections

Caltrans does not have an identified LOS threshold for unsignalized intersections. Therefore, for the purpose of this report, impacts at unsignalized intersections are defined to occur when the addition of Project traffic results in both of the following:

1. Operates at an unacceptable service level (LOS E or worse), and
2. The MUTCD peak hour volumes signal warrant is met.

Freeway Mainline Segments

In the *Guide for the Preparation of Traffic Impact Studies* (2002), Caltrans identifies a level of service threshold of C/D (i.e. on the "cusp" or threshold between level of service C and D) as the acceptable service level for basic freeway segments. The LOS standard for the freeway segments is LOS C or better in San Benito County. Traffic impacts on freeway segments are determined to occur when the addition of Project traffic causes either of the following to occur:

1. Freeway segment operation to deteriorate from an acceptable level (LOS C or better) to an unacceptable level (LOS D or worse), or
2. The Project's traffic is equal to, or greater than, a one percent of the freeway segment's capacity (2,300 vehicles per hour per lane) if the state-operated facility operates at LOS D or worse.

2035 SAN BENITO COUNTY GENERAL PLAN UPDATE – FOR INFORMATION PURPOSES

The County's General Plan Update is proposing to amend the LOS standard for County facilities from LOS C to D. Similarly, the General Plan Update is proposing to apply a LOS D standard to all Caltrans facilities within the County. The following impact criteria would apply to transportation impact analysis if the General Plan Update is approved and the EIR certified.

SAN BENITO COUNTY FACILITIES

Transportation facilities within the County's jurisdiction include both signalized and unsignalized intersections.

Signalized Intersections

Significant impacts at signalized San Benito County intersections would be defined when the addition of Project traffic causes one of the following to occur:

1. The level of service at the intersection degrades from an acceptable LOS D or better under baseline conditions to an unacceptable LOS E or F under Project conditions, or
2. The level of service at the intersection is an unacceptable LOS E or F under baseline conditions and the addition of Project trips causes the average intersection delay to increase by any amount.

Unsignalized Intersections

For unsignalized intersections in the County, the 2035 General Plan Update identifies a significant adverse impact on traffic conditions at the intersection if for any peak hour when the following conditions would be met for the all-way stop and one-/two-way stop controlled intersections:

- <u>All-way stop</u>:
    - The average overall LOS at the intersection degrades from an acceptable LOS D or better under baseline conditions to an unacceptable LOS E or F under project conditions; or
    - The average overall intersection LOS is already at an unacceptable LOS E or F under baseline conditions and the addition of project traffic causes the average overall delay to increase by more than four seconds beyond what it was without the project.
- One- or two-way stop:
    - The delay on the worst approach at a one- or two-way stop-controlled intersection degrades from an acceptable LOS D or better under baseline conditions to an unacceptable LOS E or F under project conditions and the traffic volumes at the intersection under project conditions are high enough to satisfy the peak-hour volume traffic signal warrant adopted by Caltrans; or
    - The delay on the worst approach at a one- or two-way stop-controlled intersection is already at an unacceptable LOS E or F under baseline conditions and the traffic volumes at the intersection under project conditions are high enough to satisfy the peak-hour volume traffic signal warrant adopted by Caltrans, and the addition of project traffic causes the delay on the worst stop-controlled approach to increase by more than four seconds beyond what it was without the project.

CALTRANS FACILITIES

The 2035 San Benito County General Plan Update proposes to apply the following impact criteria to Caltrans intersection and freeway facilities.

Signalized Intersections

Significant impacts at signalized Caltrans intersections would be defined to occur when with the addition of Project traffic causes one of the following to occur:

1. The level of service at the intersection degrades from an acceptable LOS D or better under baseline conditions to an unacceptable LOS E or F under Project conditions, or
2. The level of service at the intersection is an unacceptable LOS E or F under baseline conditions and the addition of Project trips causes the average intersection delay to increase by any amount.

Unsignalized Intersections

The General Plan Update does not outline an impact criteria for unsignalized Caltrans intersections, thus it is assumed for the purposes of this TIA that the currently unsignalized standards would be maintained. With the currently impact threshold, impacts at unsignalized Caltrans intersections are defined to occur when the addition of Project traffic results in both of the following:

1. Operates at an unacceptable service level (LOS E or worse), and
2. The MUTCD peak hour volumes signal warrant is met.

Freeway Mainline Segments

With the General Plan Update, traffic impacts on freeway segments would be determined to occur when the addition of Project traffic causes either of the following to occur:

1. Freeway segment operation to deteriorate from an acceptable level (LOS D or better) to an unacceptable level (LOS E or F), or
2. The LOS on the freeway is an unacceptable LOS E or worse under baseline conditions, and the addition of project traffic causes the measure of effectiveness (freeway density) to degrade by more than one percent.

REPORT ORGANIZATION

This report is divided into seven additional chapters as described below:

- **Chapter 2 – Existing Conditions** describes the transportation system near the Project Site, including the surrounding roadway network, morning and evening peak period driveway and intersection turning movement volumes, existing bicycle, pedestrian, and transit facilities, intersection levels of service, and freeway segment levels of service.
- **Chapter 3 – Project Traffic Estimates** discusses the method used to estimate the amount of traffic added to the surrounding roadways by the proposed Project.
- **Chapter 4 – Existing plus Project Traffic Conditions** describes the Existing with Project Conditions, and identifies any significant Project vehicular impacts.
- **Chapter 5 – Background No Project and Background plus Project Traffic Conditions** describes the near-term approved conditions, both without and with the Project, and identifies any significant Project vehicular impacts.
- **Chapter 6 – Cumulative No Project and Cumulative plus Project Traffic Conditions** describes year 2035 cumulative conditions, both without and with the Project, and identifies any significant Project vehicular impacts.
- **Chapter 7 – VMT Analysis** describes the projected amount of vehicles miles traveled due to Project traffic.
- **Chapter 8 – Site Access, On-Site Circulation and Parking** describes Project access and on-site circulation for all travel modes, and provides recommendations to improve Project Site access and circulation. Additionally, this chapter discusses the parking requirements for projects in San Benito County, which are relevant to Project implementation.
- **Chapter 9 – Construction Impacts and Project Phasing** discusses expected traffic and parking impacts of the Project during construction and approximate timing of intersection improvements relative to housing implementation.

2. EXISTING CONDITIONS

This chapter describes the existing conditions of the roadway facilities, pedestrian and bicycle facilities, and transit service in the Project Site and vicinity. It also presents existing volumes and operations for the study intersections and freeway segments with the results of level of service calculations.

EXISTING ROADWAY NETWORK

State Route 156 (SR 156) and US 101 provide regional access to the Project Site. Local access is provided by the following roadways: San Juan Oaks Drive and Union Road. Descriptions of these roadways are presented below. **Figure 2** shows the location of these facilities in relation to the Project Site.

US 101 is a federal highway that extends north through San Jose and San Francisco and south through Salinas. Near the Project Site, US 101 travels in a north-south direction and SR 156 intercepts with US 101just south of the city of San Juan Bautista. In this area, US 101 has two mixed-flow lanes in each direction separated by a grassy median with barrier. The speed limit in the study area is 65 miles per hour (mph). The interchange at SR 156 provides local access to the Project Site via freeway on- and off-ramps.

SR 156 is a state highway that is located just north of the project Site and continues south to merge with US 101, then continues south on the US 101 alignment, until it veers west in Prunedale onto its own alignment to Highway 1. Near the Project Site SR 156 travels in an east-west direction joining the cities of San Juan Bautista and Hollister. In this area, there is one mixed-flow travel lane in each direction and the speed limit is 55 mph. This roadway provides access to all local access streets listed below.

Union Road is an access road originating at SR 156 providing a connection to the main Project Site access roads at San Juan Oaks Drive and San Justo Road. It continues to SR 25 and into the City of Hollister.

San Juan Oaks Drive is a two-lane private local road beginning at Union Road in the city of Hollister and terminating at the San Juan Oaks Golf Club located in the southeast portion of the Project Site.

PEDESTRIAN FACILITIES

Pedestrian facilities consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections. There are currently no public streets adjacent to the Project Site with sidewalks, crosswalks or pedestrian signals; however, there are sidewalks located along the existing private roads near the San Juan Oaks Golf Club.

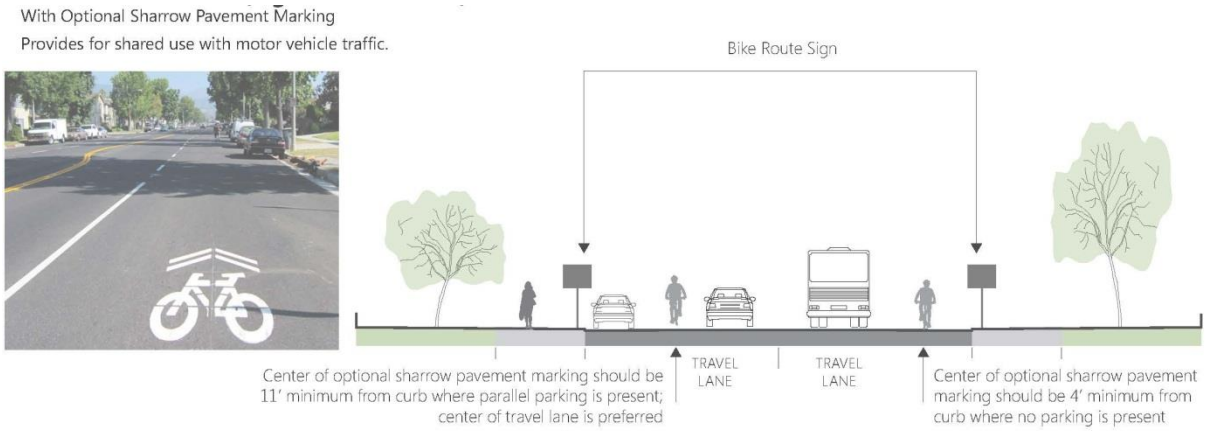
BICYCLE FACILITIES

Bikeway planning and design in California typically relies on guidelines and design standards established by California Department of Transportation (Caltrans) in the *Highway Design Manual* (Chapter 1000: Bikeway Planning and Design). Caltrans provides for three distinct types of bikeway facilities, as described below and shown on the accompanying figures.

Class I Bikeways (Bike Paths) provide a completely separate right-of-way and are designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian cross-flow minimized. In general, bike paths serve corridors not served by streets and highways or where sufficient right-of-way exists to allow such facilities to be constructed away from the influence of parallel streets and vehicle conflicts.

Class II Bikeways (Bike Lanes) are lanes for bicyclists generally adjacent to the outer vehicle travel lanes. These lanes have special lane markings, pavement legends, and signage. Bicycle lanes are generally five (5) feet wide. Adjacent vehicle parking and vehicle/pedestrian cross-flow are permitted.

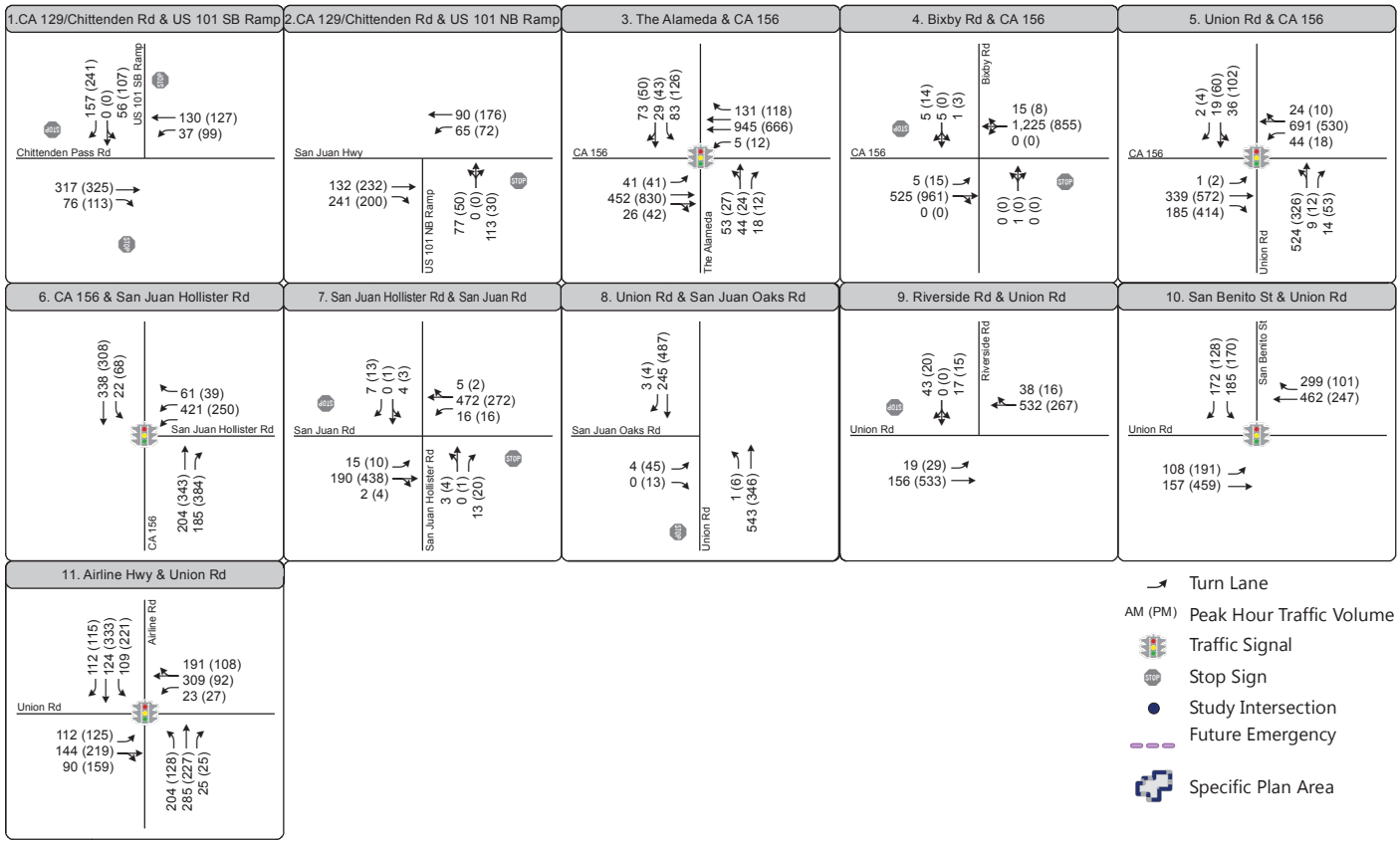
Class III Bikeways (Bike Routes) are designated by signs or pavement markings for shared use with pedestrians or motor vehicles, but have no separated bike right-of-way or lane striping. Bike routes serve either to: a) provide continuity to other bicycle facilities, or b) designate preferred routes through high demand corridors.

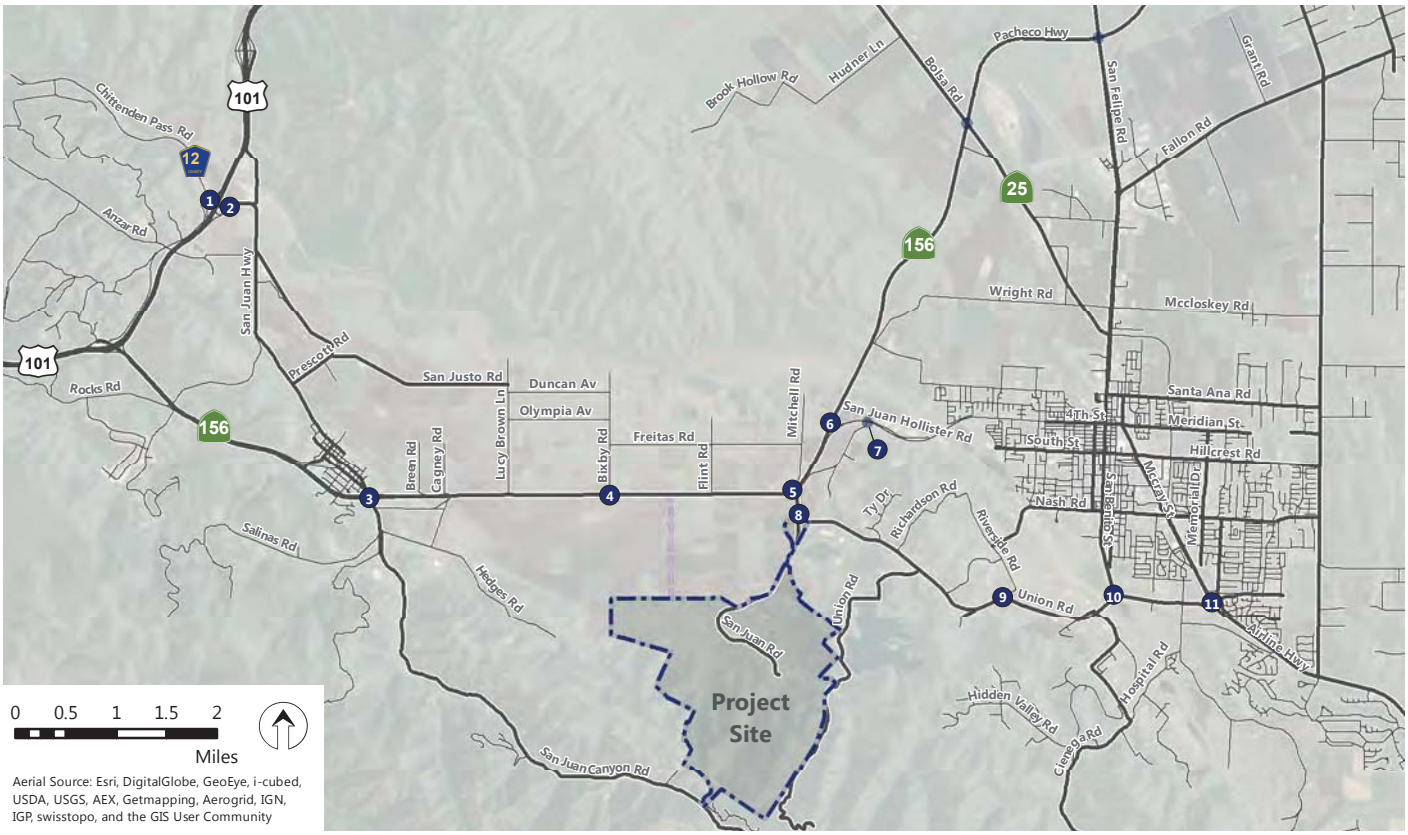


There are currently no dedicated Class I, Class II, or Class III bicycle facilities provided on the Project Site or in the vicinity. San Benito County Bikeway and Pedestrian Master Plan (May 2009) proposed a Class II bicycle facility along SR 156 and a Class III bicycle facility along Union Road that would both potential connect with the project site. Both of these facilities would cater to the Project, however, there are currently no plans to implement these facilities.

EXISTING TRANSIT SERVICE

The Project Site is located near the San Benito County Express transit network, approximately three miles from the nearest bus stop. Local buses serving the City of Hollister operate weekdays from 5:30 AM to 8:30 PM and weekends from 7:40 AM to 6:00 PM, however no buses currently serve the Project Site. The closest County Express Blue Line and Green Line stop is located in the City of Hollister at Graf Road and Central Avenue and the closest Red Line stop is located at Sunset Drive and Memorial Drive. County Express inter-county bus service provides access to the nearby cities of Gilroy and San Juan Bautista. The closest County Express bus stop to the Project Site is located in the City of Hollister at Fourth Street and Miller Road. This service operates Monday through Friday between Hollister, San Juan Bautista and Gilroy during the school year only. Users can access both the Caltrain commuter rail station as well as the VTA bus system in Gilroy.





Aerial Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Figure 2

San Juan Oaks Specific Plan
Peak Hour Traffic Volumes and Lane Configurations - Existing Conditions

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EXISTING INTERSECTION VOLUMES AND LANE CONFIGURATIONS

The existing operations of the study intersections were evaluated for the highest one-hour volume during the weekday morning and evening peak periods. AM and PM peak-period intersection turning movement counts were conducted in February 2014 according to industry standards from 7:00AM to 9:00AM and 4:00PM to 6:00PM. Copies of the traffic counts are included in **Appendix A. Figure 2** presents the existing AM and PM peak-hour turning movement volumes, lane configurations, and traffic control devices (signals or stop signs) at the study intersections.

EXISTING INTERSECTION LEVELS OF SERVICE

The existing intersection lane configurations, signal timings, and peak-hour turning movement volumes were used to calculate the levels of service for the study intersections during each peak hour. The results of the LOS analysis using the Synchro 8 software program for Existing Conditions are presented in **Table 4**. **Appendix B** contains the corresponding calculation sheets. With the current LOS policy the results indicate that most study intersections operate at acceptable service levels (LOS C or better) during the AM and PM peak hours with the exception of the following three locations during the specified peak hours:

- Intersection#4: Bixby Road and SR 156 (based on the southbound left turn movements in the AM and PM peak hours for this side-street stop-controlled intersection);
- Intersection #5: Union Road and SR 156 (based on the average signalized intersection delay in the AM and PM peak hours);
- Intersection #11: SR 25 and Union Road (based on the average signalized intersection delay in the AM and PM peak hours).

If the 2035 General Plan Update were approved and the new LOS D service standard were applied to the analysis, then only the Bixby Road/SR 156 (#4) intersection during the AM peak hour would be considered to operate unacceptably.

TABLE 4: EXISTING INTERSECTION LEVEL OF SERVICE

	Intersection	Intersection Control	Peak Hour	Delay[1]	LOS[2]
1	SR 129-Chittenden Road and US 101 Southbound Ramps*	AWSC	AM PM	12.4 13.1	B B
2	SR 129-Chittenden Road and US 101 Northbound Ramps*	SSSC	AM PM	13.5 12.7	B B
3	The Alameda and SR 156-San Juan Road*	Signal	AM PM	19.2 18.2	B B
4	Bixby Road and SR 156-San Juan Road*	SSSC	AM PM	**55.7** **27.4**	**F** **D**
5	Union Road and SR 156-San Juan Road*	Signal	AM PM	**47.8** 34.3	**D** C
6	SR 156 and San Juan Road*	Signal	AM PM	10.8 11.5	B B
7	San Juan Hollister Road and San Juan Road**	SSSC	AM PM	13.8 13.6	B B
8	Union Road and San Juan Oaks Drive**	SSSC	AM PM	16.6 18.7	C C
9	Riverside Road and Union Road**	SSSC	AM PM	15.4 13.6	B B
10	San Benito Street and Union Road**	Signal	AM PM	15.8 11.9	B B
11	SR 25-Airline Highway and Union Road*	Signal	AM PM	**52.5** **36.3**	**D** **D**

Notes: AM = morning peak hour, PM = evening peak hour

Signal = signalized intersection, AWSC = all-way stop controlled intersection, SSSC = side-street stop controlled intersection

Bold text indicated unacceptable operations.

* Indicates a Caltrans intersection

** Indicates a San Benito County intersection

1. For signalized intersection, delay shows whole intersection weighted average control delay using methods described in the *2010 HCM*. For all-way Stop-controlled intersections, average delay and LOS is reported. For two-way and side-street stop-controlled intersections, delay and LOS reported is for the worst-case approach.

2. LOS = Level of service. LOS calculations conducted using the Synchro 8.0 level of service analysis software package.

Source: Fehr & Peers, 2015.

EXISTING FREEWAY SEGMENT LEVELS OF SERVICE

The Santa Clara County Valley Transportation Authority (VTA) monitors freeway performance and operations for freeway segments in Santa Clara County and the segments of US 101 in San Benito County every two years. The results for the US 101 freeway study segments were obtained from the latest monitoring report (VTA Monitoring and Conformance Report 2012). The peak hour volumes presented in this report were used to evaluate freeway operations using the *2010 HCM*. The results are presented in **Table 5**.

With the current LOS policy, acceptable operations are defined as LOS C or better. As described more fully in **Table 5**, the results of the density calculations indicate that all but one of the study segments operate at acceptable levels of service according to the Caltrans LOS standard. However, the following segment did not meet the Caltrans LOS designation during the PM peak hour:

- Southbound US 101: San Benito / Santa Clara County Line to SR 129.

TABLE 5: EXISTING FREEWAY SEGMENT LEVELS OF SERVICE

Freeway	From	To	Peak Hour	Density[1]	LOS
Northbound US 101	Monterey / San Benito County Line	SR 156	AM PM	10.3 13.5	A B
	SR 156	SR 129	AM PM	15.1 13.9	B B
	SR 129	San Benito / San Clara County Line	AM PM	24.4 16.3	C B
	San Benito / Santa Clara County Line	SR 129	AM PM	16.3 **28.6**	B **D**
Southbound US 101	SR 129	SR 156	AM PM	11.7 17.4	B B
	SR 156	Monterey / San Benito County Line	AM PM	9.9 16.1	A B

Notes:
1. Measured in vehicles per mile per lane.
Source: 2012 VTA Monitoring and Conformance Report; Fehr & Peers, 2015.

If the 2035 General Plan Update were approved and the new LOS D service standard were applied to the analysis, then all of the freeway segments would be considered to operate acceptably.

FIELD OBSERVATIONS

Field observations at the Project Site and at the study area locations were conducted the week of February 3rd while counts were being conducted to verify the calculated LOS operations and observe overall transportation characteristics. In general, observations indicated that most of the study intersections are operating at or near the calculated levels of service. Specific descriptions for unique findings are listed below.

The intersection of Union Road and SR 156 (#5) has a morning northbound queue that extends to the Union Road and San Juan Oaks Drive intersection, the Project entrance/exit. This intersection has historically operated at levels beneath the level of service standard set forth by the County. The long queue is caused by Hollister residents using SR 156 is a major access routes to US 101.

SR 25 provides an alternative access route to US 101. During the morning peak period, the northbound traffic (just like the westbound traffic on SR 156) produces queues at the signalized intersections. In the evening peak period, the southbound queue extends far beyond the intersection as seen in the picture to the right.

Given that the Project Site is surrounded by a substantial amount of agricultural uses, there are little to no pedestrian and bicycle facilities along the roadways. Intersections located near residential units (i.e. #3, #13) provide pedestrian facilities (i.e., sidewalks), but very few pedestrians were observed using the facilities.

3. PROJECT TRAFFIC ESTIMATES

The Project will add vehicle traffic to the surrounding roadways from residents traveling to and from their homes and office, and customers traveling to and from retail, resort and entertainment uses on the Project Site, such as the golf course. The processes used to estimate the amount of traffic and how the traffic will approach and depart the site are describe in this chapter. As described more fully below, the amount of traffic produced by the proposed Project is called "trip generation," and the directions of approach and departure are called "trip distribution." These two steps are combined and the Project traffic is added to individual roadway segments and intersection turning movements in the "trip assignment" step.

TRIP GENERATION

For the proposed land uses on the Project Site, trip generation was determined using standard rates developed by the Institute of Transportation Engineers (ITE) and published in *Trip Generation Manual* (9th Edition), based on a methodology confirmed by staff at San Benito County. The ITE land use for senior adult housing developments includes private amenities such as tennis courts, swimming pools, security patrols, and common recreational facilities. Therefore the trip rates include trips generated by those uses and separate trip rates were not developed for the Amenity Center, which is anticipated to serve Project residents and their guests rather than be a destination for the broader community. (It is anticipated that the Amenity Center may include, among other things, a multi-purpose room, fitness center, craft room, locker rooms, administrative space, swimming pool, tennis courts, pickle ball, and bocce courts.) ITE Land Use Code for Specialty Retail was used for the 50,000 square feet of retail during the PM peak hour. Specialty Retail was chosen to account for the unique land uses that are anticipated to occupy the retail space and is not expected to generate trips from a large outside population like a shopping center would attract.

A 13 to 22 percent mixed-use reduction to account for trips traveling between residential and commercial land uses and staying within the site was also applied to reflect the internalization of vehicle trips due to the complementary residential and retail land uses. The reductions used in the trip generation estimates were determined using the latest mixed-use development (MXD) research. Based on the land use mix and proximity to various land uses outside of the project area, a 13 to 22 percent reduction was used to estimate project trips that leave the project site. Some of these trips would be made by patrons walking or bicycling between each facility. The reductions for the mixed-use nature of the development resulted in a total reduction of 53 AM peak hour trips and 128 PM peak hour trips.

Table 6 summarizes trip generation for the proposed Project.

TRIP DISTRIBUTION AND ASSIGNMENT

The directions of approach and departure for Project trips were estimated using the existing street and highway network, previous analyses performed within the City of Hollister, and local knowledge. Retail uses are assumed to attract more trips from the immediate vicinity than office and residential land uses; therefore, two trip distributions were developed: one for retail land uses and another for residential land uses. Trip distribution was approved by staff at the County of San Benito before analysis was conducted. The resulting major directions of approach and departure are shown on **Figure 3**.

Project trips were assigned to the roadway system based on the directions of approach and departure described above with existing street geometries taken into account. The AM and PM peak hour trip assignments at the study intersection are shown on **Figure 4**.

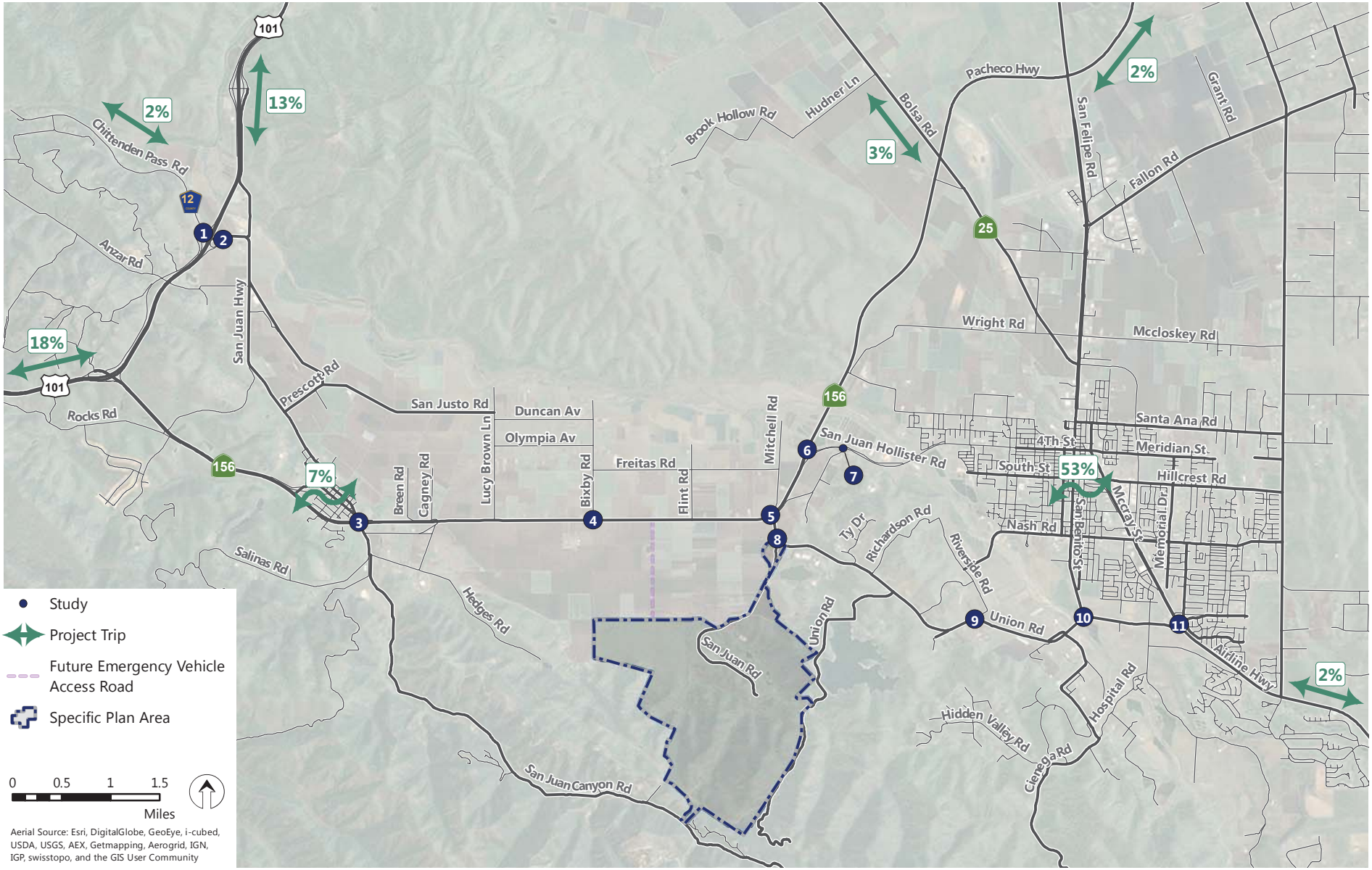
TABLE 6: TRIP GENERATION

ITE#	Land Use Type	Method[1]	Size	Type	Weekday Trips	AM Peak Hour Trips			PM Peak Hour Trips		
						Total	In	Out	Total	In	Out
Residential Development											
251	Senior Adult Housing - Detached	Equation	1,017	du	3,725	203	71	132	256	156	100
210	Single Family – Detached	Equation	67	du	727	57	14	43	73	46	27
			Gross Residential (A):		*4,452*	*260*	*85*	*175*	*329*	*202*	*127*
Other											
330	Resort Hotel	Average Rate	200	rooms	1,600	62	45	17	84	36	48
254	Assisted Living	Average Rate	100	beds	266	14	9	5	22	10	12
			Gross Other (B):		*1,866*	*76*	*54*	*22*	*106*	*46*	*60*
Neighborhood Commercial											
826/820	Specialty Retail (AM – Shopping Center)	Equation / Average Rate	50.0	ksf	2,216	48	30	18	141	62	79
710	General Office	Equation	7.5	ksf	183	24	21	3	87	15	72
720	Medical Office	Equation / Average Rate	7.5	ksf	92	18	14	4	27	8	19
		Gross Neighborhood Commercial (C):			*2,491*	*90*	*65*	*25*	*255*	*85*	*170*
		Total Gross Trip Generation (A+B+C):			8,809	426	204	222	690	333	357
		MXD Reduction off Residential and Commercial ((A+C) x MXD Reduction)[2]:			-903	-53	-23	-30	-128	-63	-65
		Net New Trip Generation:			**7,906**	**373**	**181**	**192**	**562**	**270**	**292**

Notes: du = dwelling units, ksf = 1,000 square feet

1. ITE Trip Generation Manual (9th Edition) provides an average rate and a best fit curve equation for trip generation estimates.
2. Mixed-Use Development (MXD) Reduction was estimated to be 13% for total daily trips, 15% for AM peak hour trips, and 22% for PM peak hour trips.

Source: ITE *Trip Generation Manual* (9th Edition); Fehr & Peers, 2015.



Aerial Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Figure 3

San Juan Oaks Specific Plan
Trip Distribution and Study Intersections

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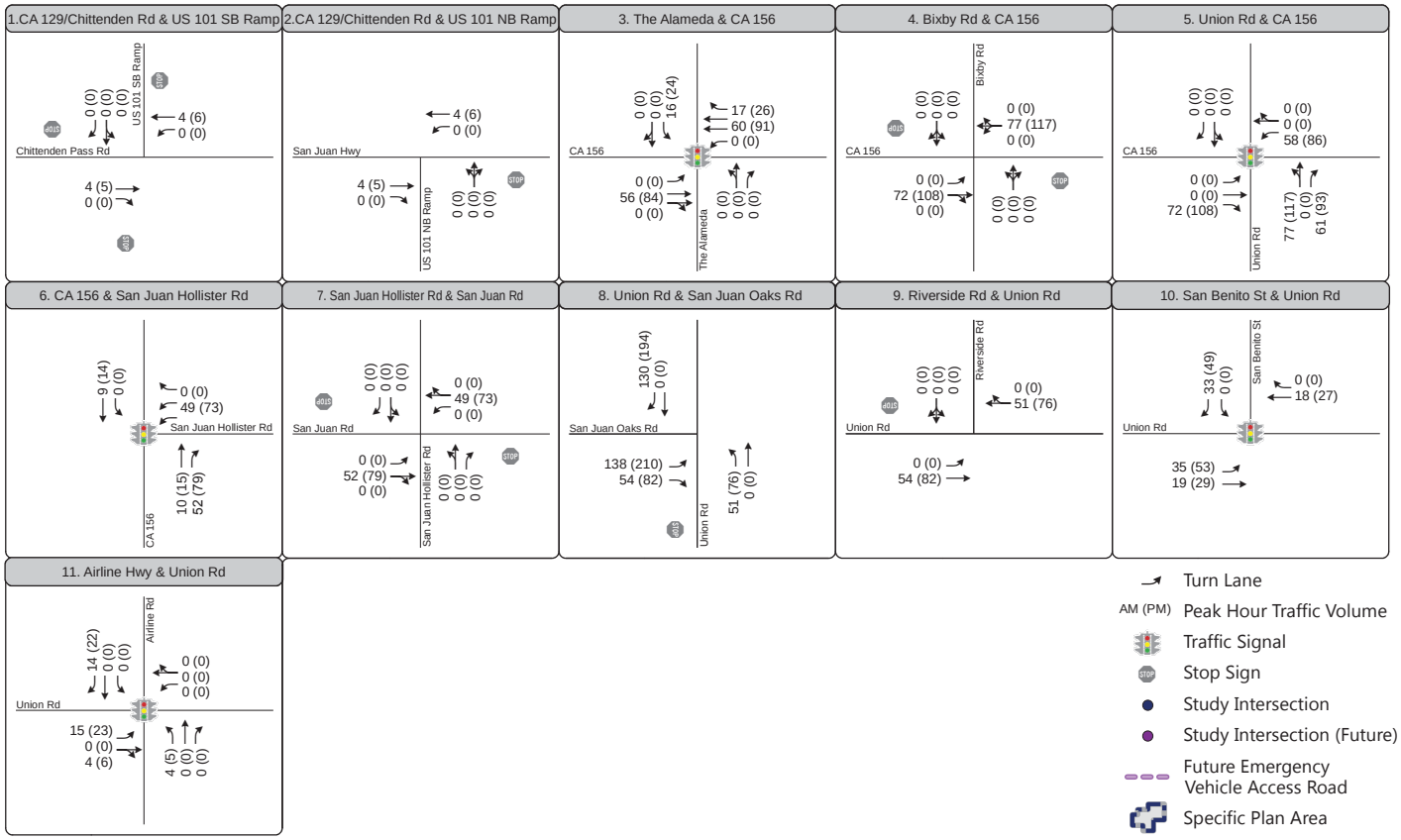

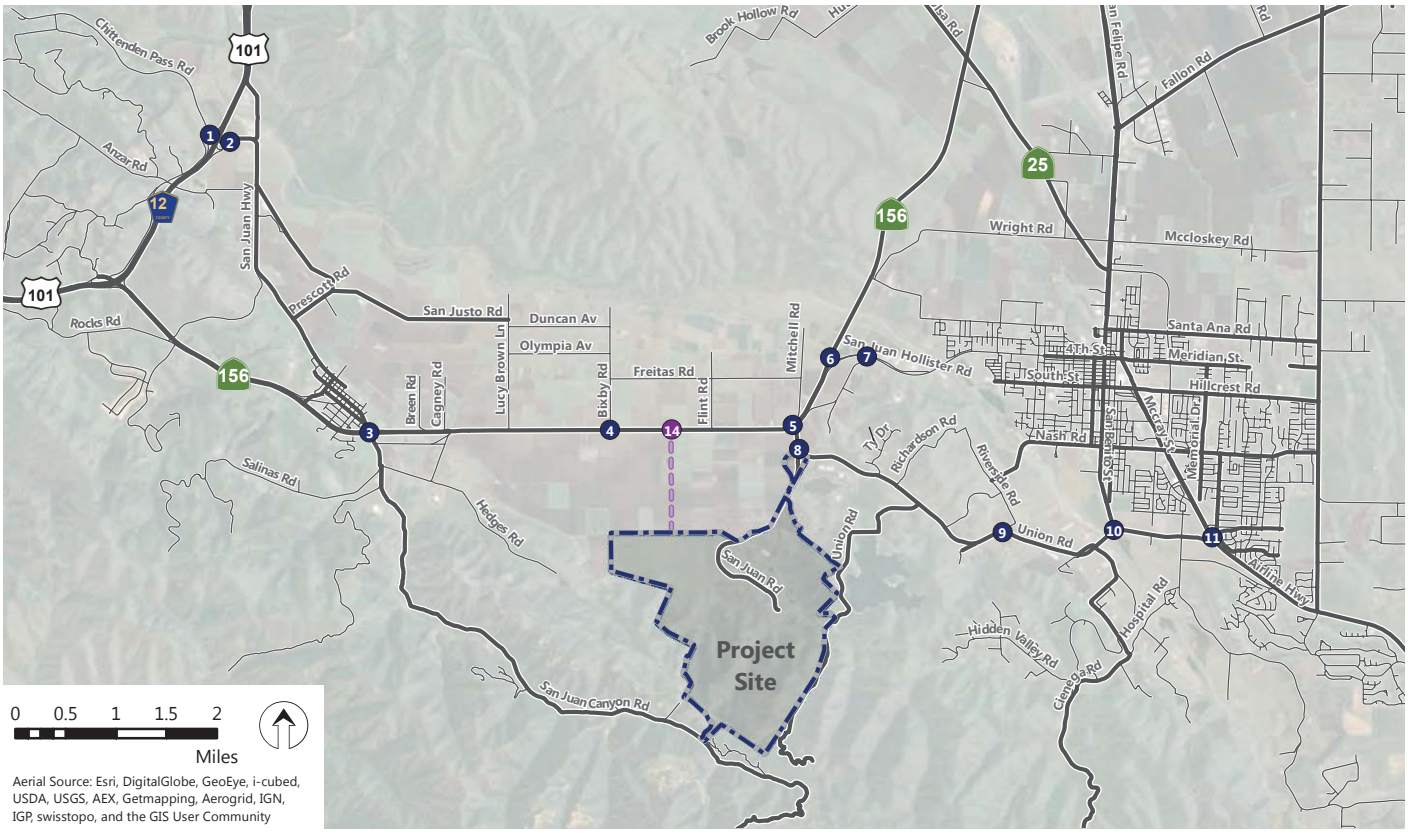

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Figure 4

Del Webb at San Juan Oaks Specific Plan: Peak Hour Traffic Volumes and Lane Configurations - Project Conditions

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4. EXISTING PLUS PROJECT CONDITIONS

This chapter presents the impacts of the proposed Project on the surrounding roadway system. First, the method used to estimate the amount of traffic for this scenario is described. Then, the results of the level of service calculations for Existing plus Project Conditions are presented. Existing plus Project Conditions are defined as Existing Conditions plus traffic generated by the proposed Project. Impacts under this scenario are identified by comparing the level of service results under Existing plus Project Conditions to those under Existing Conditions.

EXISTING PLUS PROJECT TRAFFIC VOLUMES

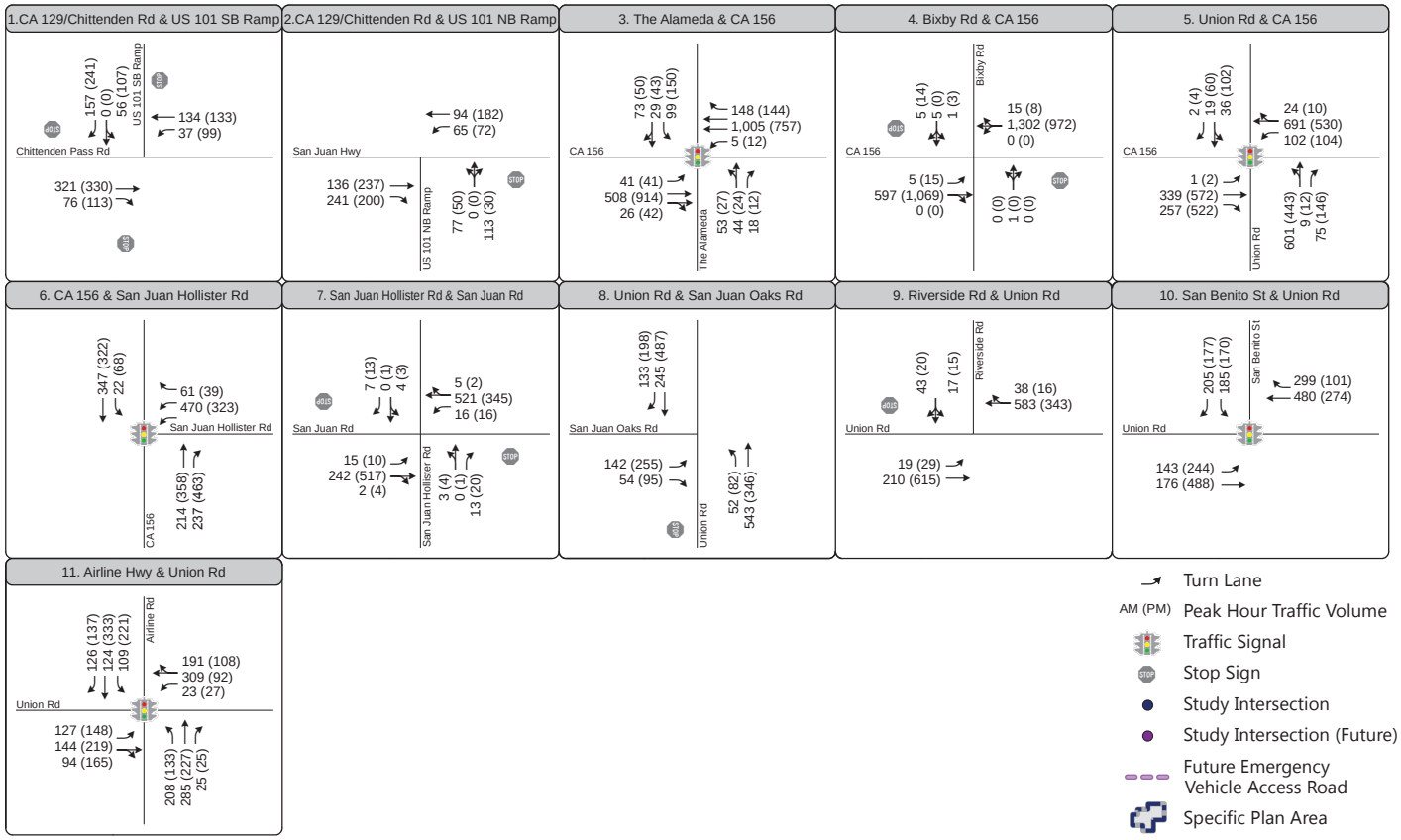
The Project trip assignment from **Figure 4** was added to the existing volumes to establish volumes under Existing plus Project Conditions. The results are shown on **Figure 5**.

EXISTING PLUS PROJECT INTERSECTION LEVELS OF SERVICE

Level of service analysis was conducted to evaluate intersection operations under Existing plus Project Conditions. The results of the LOS analysis for Existing plus Project Conditions are summarized in **Table 7** and the corresponding LOS calculation sheets are included in **Appendix B**. Results for Existing Conditions are included for comparison purposes. With the current LOS policy, the results of the LOS calculations indicate that the majority of the study intersections will operate at acceptable levels of service (LOS C or better). However, under Existing plus Project Conditions, the Project would exacerbate unacceptable intersection operations at the three intersections operating unacceptably. In addition, Project traffic would degrade operations from acceptable LOS under Existing No Project Conditions to unacceptable levels at the Union Road and San Juan Oaks Drive intersection.

In summary, the following four intersections would operate unacceptably during the specified peak hours under Existing plus Project Conditions with the current LOS policy:

- Intersection #4: Bixby Road and SR 156 (based on the southbound left-turn movement in the AM peak hour and PM peak hours for this side-street stop controlled intersection);
- Intersection #5: Union Road-Mitchell Road and SR 156 (based on the average signalized intersection delay in the AM and PM peak hours);
- Intersection #8: Union Road and San Juan Oaks Drive (based on the eastbound left-turn movement in the AM and PM peak hours for this side-street stop controlled intersection);
- Intersection #11: SR 25 – Airline Highway and Union Road (based on the average signalized intersection delay in the AM and PM peak hours).



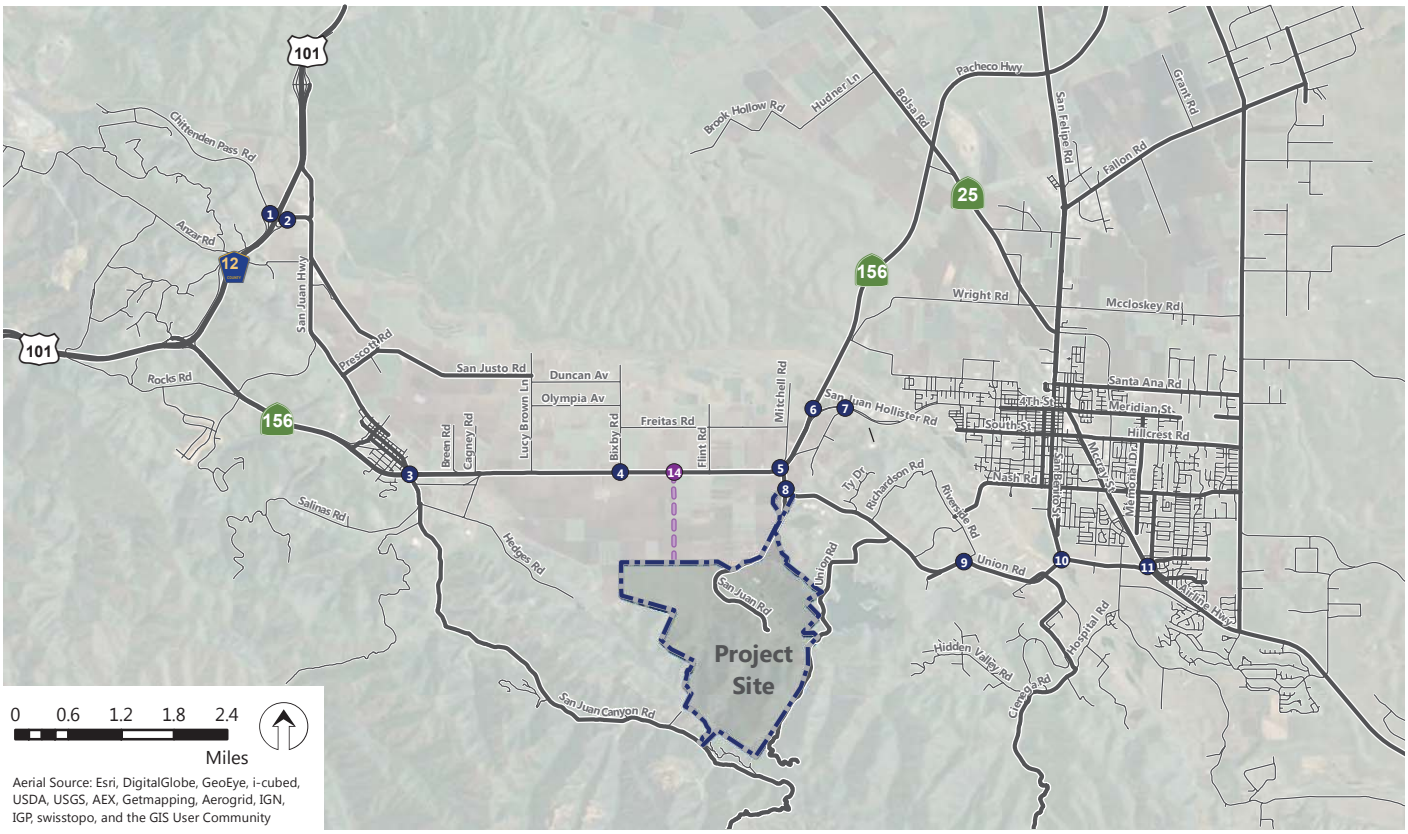


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Figure 5

Del Webb at San Juan Oaks Specific Plan: Peak Hour Traffic Volumes and Lane Configurations Existing Plus Project Conditions

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If the 2035 General Plan Update were approved and the new LOS D service standard were applied to the analysis, then the Union Road/SR 156-San Juan Oaks Road (#5) intersection during the PM peak hour, the Union Road/San Juan Oaks Drive (#8) intersection during the AM peak hour, and the SR 25-Airline Highway/Union Road (#11) intersection during the PM peak hour would be considered to operate acceptably.

TABLE 7: EXISTING AND EXISTING PLUS PROJECT INTERSECTION LEVELS OF SERVICE

	Intersection	Int. Control	Peak Hour	Existing		Existing plus Project		
				Delay[1]	LOS[2]	Delay[1]	LOS[2]	Signal Warrant Met?[3]
1	SR 129-Chittenden Road and US 101 Southbound Ramps*	AWSC	AM PM	12.4 13.1	B B	12.6 13.3	B B	N/A
2	SR 129-Chittenden Road and US 101 Northbound Ramps*	SSSC	AM PM	13.5 12.7	B B	13.7 12.8	B B	N/A
3	The Alameda and SR 156-San Juan Road*	Signal	AM PM	19.2 18.2	B B	19.4 19.4	B B	N/A
4	Bixby Road and SR 156-San Juan Road*	SSSC	AM PM	**55.7** **27.4**	**F** **D**	**69.3** **36.0**	**F** **E**	No No
5	Union Road and SR 156-San Juan Road*	Signal	AM PM	**47.8** 34.3	**D** C	**65.6** **51.9**	**E** **D**	N/A
6	SR 156 and San Juan Road*	Signal	AM PM	10.8 11.5	B B	11.4 12.8	B B	N/A
7	San Juan Hollister Road and San Juan Road**	SSSC	AM PM	13.8 13.6	B B	15.0 15.3	C C	N/A
8	Union Road and San Juan Oaks Drive**	SSSC	AM PM	16.6 18.7	C C	**28.6** **147.4**	**D** **F**	**Yes** **Yes**
9	Riverside Road and Union Road**	SSSC	AM PM	15.4 13.6	B B	16.9 15.6	C C	N/A
10	San Benito Street and Union Road**	Signal	AM PM	15.8 11.9	B B	16.9 12.8	B B	N/A
11	SR 25-Airline Highway and Union Road*	Signal	AM PM	**52.5** **36.3**	**D** **D**	**55.4** **38.8**	**E** **D**	N/A

Notes:

AM = morning peak hour, PM = evening peak hour

Signal = signalized intersection, AWSC = all-way stop controlled intersection, SSSC = side-street stop controlled intersection

Bold text indicated unacceptable operations.

Bold and highlighted indicates a significant impact.

* Indicates a Caltrans intersection

** Indicates a San Benito County intersection

1. For signalized intersection, delay shows whole intersection weighted average control delay using methods described in the *2010 HCM*. For all-way Stop-controlled intersections, average delay and LOS is reported. For two-way and side-street stop-controlled intersections, delay and LOS reported is for the worst-case approach.

2. LOS = Level of service. LOS calculations conducted using the Synchro 8.0 level of service analysis software package.

3. A MUTCD peak hour signal warrant was evaluated at unsignalized intersections that operate at LOS E or F under Existing plus Project conditions.

Source: Fehr & Peers, 2015.

EXISTING PLUS PROJECT INTERSECTION IMPACTS AND MITIGATION MEASURES

Based on the current impact criteria outlined in **Chapter 1**, the proposed Project will have a significant impact at three of the four study intersections operating unacceptably under Existing plus Project Conditions. The following discusses the intersection impacts and associated mitigation measures to reduce the identified impacts. The mitigated intersection LOS calculations results are presented in **Table 8** and **Appendix G** contains the corresponding calculation sheets.

TABLE 8: EXISTING PLUS PROJECT MITIGATED INTERSECTION LOS

	Intersection	Peak Hour	Existing		Existing plus Project			
					Pre-Mitigation		Post-Mitigation	
			Delay	LOS	Delay	LOS	Delay	LOS
4	Bixby Road and SR 156-San Juan Road	AM	**55.7**	**F**	**69.3**	**F**	Less-Than-Significant Impact	
		PM	**27.4**	**D**	**36.0**	**E**		
5	Union Road-Mitchell Road and SR 156	AM	**47.8**	**D**	**65.6**	**E**	27.7	C
		PM	34.3	C	**51.9**	**D**	29.9	C
8	Union Road and San Juan Oaks Drive	AM	16.6	C	**28.6**	**D**	7.3	A
		PM	18.7	C	**147.4**	**F**	11.6	B
11	SR 25-Airline Highway and Union Road	AM	**52.5**	**D**	**55.4**	**E**	**45.0**	**D**
		PM	**36.3**	**D**	**38.8**	**D**	32.2	C

Notes: **Bold** represents unacceptable level of service.
Bold and highlighted indicates a significant impact.
Source: Fehr & Peers, 2015.

Intersection #8 is a County controlled intersection, while intersections #4, #5, and #11 are Caltrans controlled intersections. Each intersection is evaluated based on the appropriate intersection criteria stated for their respective jurisdiction as described in **Chapter 1**.

BIXBY ROAD AND SR 156-SAN JUAN ROAD (INTERSECTION #4)

Current General Plan (1992) Impact Discussion:

Under Existing and Existing plus Project Conditions, the side-street control delay at this intersection operates unacceptably (LOS E or F) during the AM and PM peak hours. However, the intersection does not meet the MUTCD peak hour volume traffic signal warrant during either peak hour due to the low volumes along Bixby Road. Therefore, the addition of Project traffic would not be considered as resulting in a significant impact at this intersection and the Project would have **less-than-significant impact**.

2035 San Benito County General Plan Update Impact Discussion – For Information Purposes Only:

The side-street control delay at this intersection operates at unacceptable LOS F during the AM peak hour and the addition of Project traffic increases the delay by four or more seconds (13.6 seconds). During the PM peak, the addition of Project traffic degrades intersection operations from acceptable levels (LOS D) to unacceptable levels (LOS E). However, the intersection does not meet the MUTCD peak hour volume traffic signal warrant during either peak hour due to the low volumes along Bixby Road. Therefore, the addition of Project traffic would not be considered as resulting in a significant impact at this intersection and the Project would have less-than-significant impact under the 2035 General Plan Update.

UNION ROAD-MITCHELL ROAD AND SR 156 (INTERSECTION #5)

Current General Plan (1992) Impact Discussion:

The addition of Project traffic under Existing plus Project Conditions would exacerbate already unacceptable intersection operations from LOS D to E during the AM peak hour and degrade operations to unacceptable levels from LOS C to LOS D during the PM peak hour; resulting in a **significant impact** at this intersection. The following mitigation measure would improve operations back to baseline conditions and reduce the impact to a **less-than-significant** level:

- Reconstruct the northbound approach on Union Road to include two left-turn lanes and one shared through-right lane;
- Add the associated second left-turn receiving lane to the west leg of SR 156.

The reconfiguration of the Union Road-Mitchell Road and SR 156 intersection as described above in the two measures is part of the SR 156 widening project that is evaluated under Cumulative Conditions and therefore would not be a feasible mitigation measure under Existing Conditions. Since the SR 156 widening project is already a planned improvement included in the San Benito County Transportation Impact Mitigation Fee (TIMF)[5] Nexus Study dated March 2011, the Project would be required to pay its TIMF fee. However, the intersection is under Caltrans jurisdiction and neither the project sponsor nor the County of San Benito can ensure the implementation of the proposed mitigation measure; thus the impact is considered **significant and unavoidable** even with the required payment of the TIMF.

The Project is expected to be constructed over five phases with construction of residential units taking place throughout every phase. Given that the mitigation measures associated with the SR 156 widening project will most likely not occur prior to completion of the full buildout of the Project, the Union Road-

[5] San Benito County of Government (COG) has adopted the 2011 traffic mitigation fee program for the purpose of collecting fees to finance transportation facilities needed to accommodate new development within the City of Hollister and unincorporated San Benito County. The 2011 TIMF includes a fee schedule for projects that occur in the County area.

Mitchell Road and SR 156 intersection was evaluated to determine the Project's impact at various times throughout Project construction. The intersection of Union Road/Mitchell Road and SR 156 will degrade from a LOS D to LOS E+ during the morning peak hour when five percent of the Project is completed, approximately 70 senior adult residential units or 14 trips entering and exiting the Project Site in the morning peak hour. The intersection will degrade from a LOS E+ to LOS E during the morning peak hour when 37 percent of the Project is completed, which equates to approximately 100 trips entering and exiting the Project in the morning peak hour. This equals approximately 500 senior adult residential units, assuming that all other facilities are constructed and occupied.

2035 San Benito County General Plan Update Impact Discussion – For Information Purposes Only:

Applying the impact criteria from the pending 2035 General Plan Update, the addition of Project traffic under Existing plus Project Conditions would degrade operations from acceptable LOS D to unacceptable LOS E intersection operations during the AM peak hour resulting in a significant impact at this intersection. The same mitigation as discussed above under the current General Plan (1992) impact criteria would apply to this intersection.

UNION ROAD AND SAN JUAN OAKS DRIVE (INTERSECTION #8)

Current General Plan (1992) Impact Discussion:

Union Road and San Juan Oaks Drive is the only access intersection for the Project. During the AM and PM peak hours, the addition of Project traffic would degrade acceptable operations under Existing Conditions to unacceptable operations under Existing plus Project Conditions, resulting in a **significant impact**.

The following mitigation measure would improve intersection operations to acceptable LOS B or better and reduce the impact to a **less-than-significant** level:

- Signalize the intersection.

The projected volumes meet the volume thresholds for the MUTCD peak hour volume traffic signal warrant and can be referenced in **Appendix C**. Since, this intersection serves as the main access intersection into the Project Site, the Project would be responsible for the construction of the signal.

2035 San Benito County General Plan Update Impact Discussion – For Information Purposes Only:

During the PM peak hour, the addition of Project traffic would degrade acceptable operations under Existing Conditions to unacceptable operations under Existing plus Project Conditions, resulting in a significant impact. The same mitigation as discussed above under the current General Plan (1992) impact criteria would apply to this intersection.

SR 25-AIRLINE HIGHWAY AND UNION ROAD (INTERSECTION #11)

Current General Plan (1992) Impact Discussion:

The addition of Project traffic under Existing plus Project Conditions would exacerbate unacceptable intersection operations during the AM (LOS D to LOS E) and PM (LOS D to LOS D) peak hours resulting in a **significant impact** at this intersection.

The following mitigation measure would improve operations back to baseline conditions and reduce the impact to a **less-than-significant** level:

- Add an eastbound right-turn lane from Union Road onto southbound Airline Highway (SR 25).

The widening of Union Road from SR 156 to east of SR 25 is already a planned improvement included in the San Benito County TIMF; thus the Project would be required to pay its TIMF fee for this intersection impact. However, the intersection is under Caltrans jurisdiction and neither the project sponsor nor the County of San Benito can ensure the implementation of the proposed mitigation measure; thus the impact is considered **significant and unavoidable** even with the required payment of the TIMF.

2035 San Benito County General Plan Update Impact Discussion – For Information Purposes Only:

The addition of Project traffic under Existing plus Project Conditions in the AM peak hour would degrade acceptable operations under Existing Conditions to unacceptable operations under Existing plus Project Conditions, resulting in a significant impact at this intersection. The same mitigation as discussed above under the current General Plan (1992) impact criteria would apply to this intersection.

EXISTING PLUS PROJECT FREEWAY SEGMENT LEVELS OF SERVICE

Freeway segment operations were evaluated under Existing plus Project Conditions. The results of the analysis are summarized in **Table 9** and the corresponding calculation sheets are included in **Appendix D**. Based on the current LOS standard, the freeway segment listed below continues to operate unacceptably according to the Caltrans LOS C standard with the addition of Project traffic:

- Southbound US 101: San Benito / Santa Clara County Line to SR 129 (PM peak hour).

If the 2035 General Plan Update were approved and the new LOS D service standard were applied to the analysis, then all of the freeway segments would be considered to operate acceptably under Existing plus Project Conditions.

EXISTING PLUS PROJECT FREEWAY IMPACTS AND MITIGATION MEASURES

Current General Plan (1992) Impact Discussion:

The amount of traffic contributed by the Project would not exceed one percent of the freeway's capacity on segments that are operating unacceptable under baseline conditions. Therefore, the Project would have a **less-than-significant** impact at the study freeway segments under the current LOS policies and impact threshold.

2035 San Benito County General Plan Update Impact Discussion – For Information Purposes Only:

Under the pending 2035 General Plan Update LOS thresholds, all of the study freeway segments operate at acceptable level LOS D or better with the addition of Project traffic; therefore, the Project would have a less-than-significant impact at the study freeway segments.

TABLE 9: EXISTING PLUS PROJECT FREEWAY SEGMENT LEVELS OF SERVICE

Freeway	From	To	Peak Hour	Existing		Existing plus Project			
				Density	LOS	Trips[1]	Density	LOS	%[2]
Northbound US 101	Monterey / San Benito County Line	SR 156	AM	10.3	A	33	10.5	A	0.8
			PM	13.5	B	49	13.9	B	1.1
	SR 156	SR 129	AM	15.1	B	25	15.3	B	0.6
			PM	13.9	B	38	14.3	B	0.9
	SR 129	San Benito / Santa Clara County Line	AM	24.4	C	25	24.6	C	0.6
			PM	16.3	B	38	16.6	B	0.9
	San Benito / Santa Clara County Line	SR 129	AM	16.3	B	24	16.6	B	0.5
			PM	**28.6**	**D**	35	**29.2**	**D**	0.8
Southbound US 101	SR 129	SR 156	AM	11.7	B	24	11.9	B	0.5
			PM	17.4	B	35	17.7	B	0.8
	SR 156	Monterey / San Benito County Line	AM	9.9	A	35	10.1	A	0.8
			PM	16.1	B	53	16.4	B	1.2

Notes: **Bold** indicates the segment operates at unacceptable LOS.

1. The number of Project trips added to the freeway segment.
2. Percentage increase in freeway segment capacity resulting from number of trips added.

Source: 2012 VTA Monitoring and Conformance Report; Fehr & Peers, 2015.

5. BACKGROUND NO PROJECT AND BACKGROUND PLUS PROJECT CONDITIONS

This chapter presents the results of the level of service calculations under Background Conditions without and with the Project. Background Conditions are defined as conditions prior to completion and occupancy of the proposed Project. Specifically, traffic volumes for Background No Project Conditions comprise existing volumes plus traffic generated by approved but not yet constructed and/or occupied developments in the area. Background plus Project Conditions are defined as Background No Project Conditions plus net new traffic generated by the proposed Project.

BACKGROUND NO PROJECT TRAFFIC VOLUMES

Vehicle trips from "approved but not yet built" and/or "not occupied" development projects in the study area were added to Existing volumes to develop Background No Project volumes and does not include projects that are pending but not yet approved (pending projects are accounted for in the cumulative analysis). Staff from San Benito County and City of Hollister provided a list of fully approved developments in the area, primarily in the City of Hollister. The City of Hollister has 31 residential and six commercial and industrial developments that are projected to add traffic to study intersections. Vehicle trips generated by these projects were obtained from the City of Hollister on February 28, 2014. Large developments in the City of Gilroy were also evaluated for any additional Background volumes that may affect the study intersections. Smaller projects with minimal impact to the surround transportation network were not included in the Background volumes. The names and description of each Background project and a trip generation table are contained in **Appendix E**.

The trips for each of the Background projects were added to the existing volumes to represent Background No Project Conditions as shown on **Figure 6**.

BACKGROUND PLUS PROJECT TRAFFIC VOLUMES

Trip assignments from the proposed Project were added to the Background No Project traffic projections to develop traffic volumes for Background plus Project Conditions. The resulting volumes are shown on **Figure 7**.

BACKGROUND ROADWAY IMPROVEMENTS

There are no funded roadway improvement projects in the study area that are expected to be completed in the near future. The geometries and roadway network is assumed to be the same as Existing Conditions.

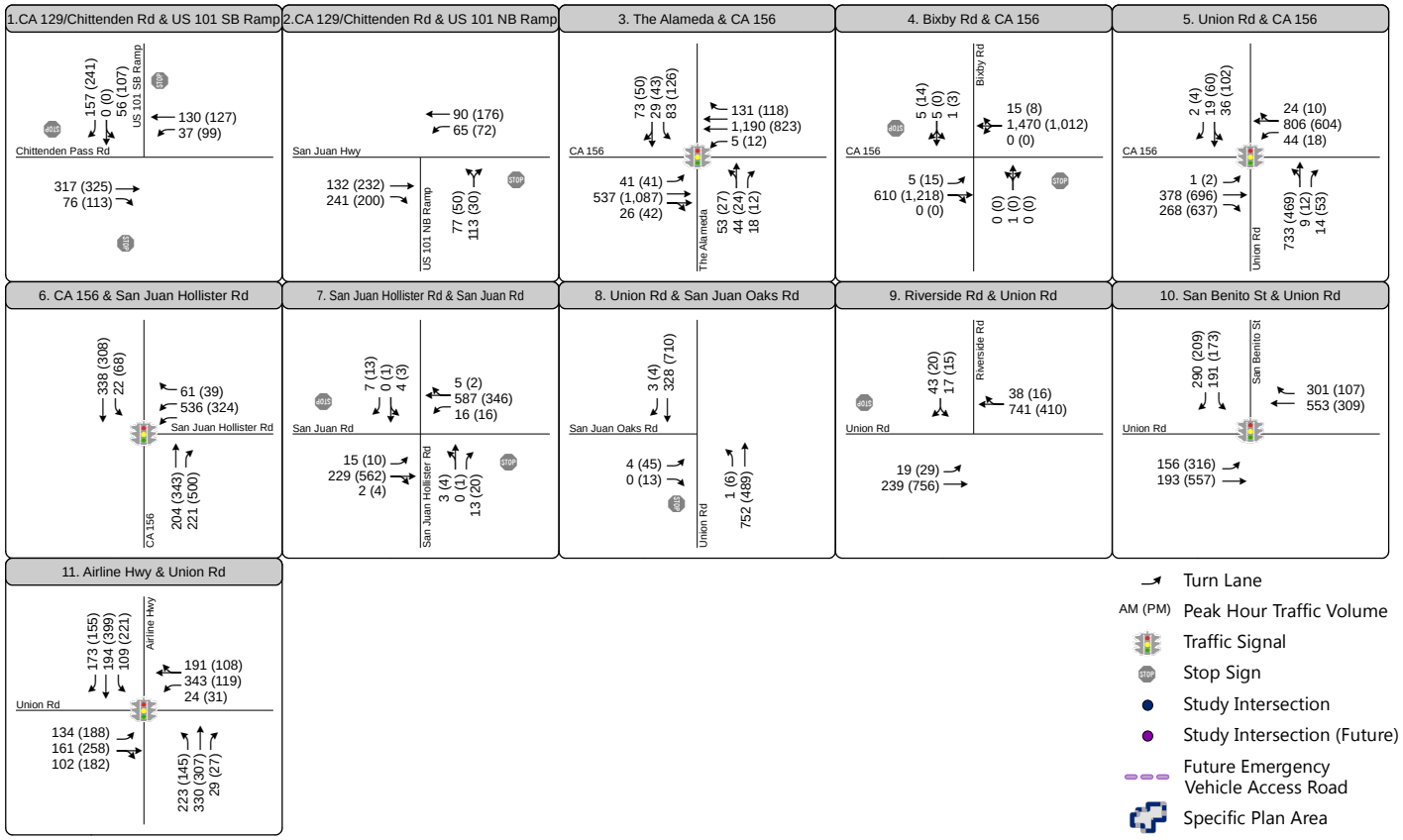
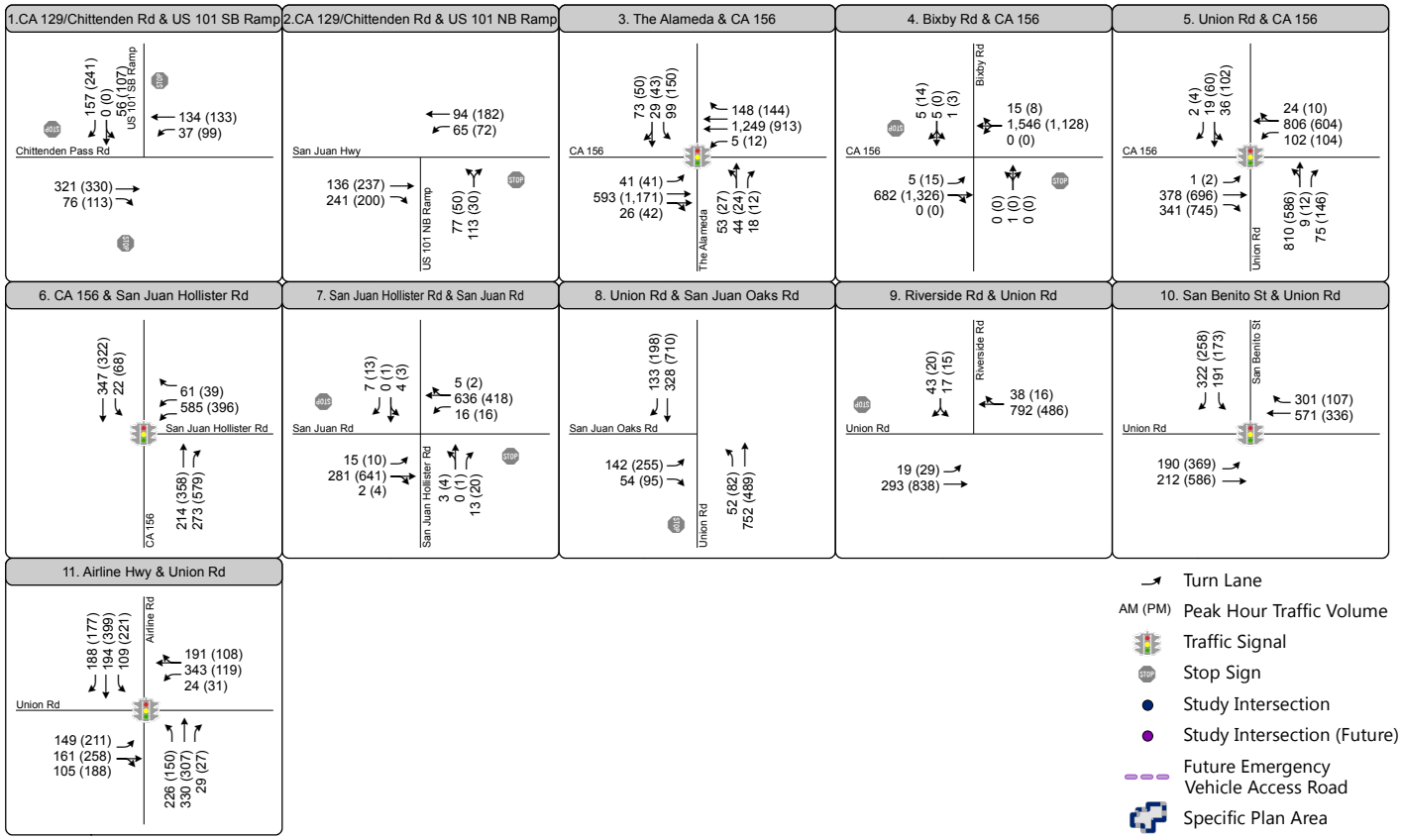


Figure 6

Del Webb at San Juan Oaks Specific Plan: Peak Hour Traffic Volumes and Lane Configurations - Background Conditions

FEHR PEERS

Document Path: \\fpainc.local\Dfs-ent-data\San Jose N Drive\Projects_SJ13_Projects\SJ13_1462_San_Juan_Oaks_SP_EIR\Graphics\GIS\Fig_6_BG_Volumes.mxd
Date: June, 2015



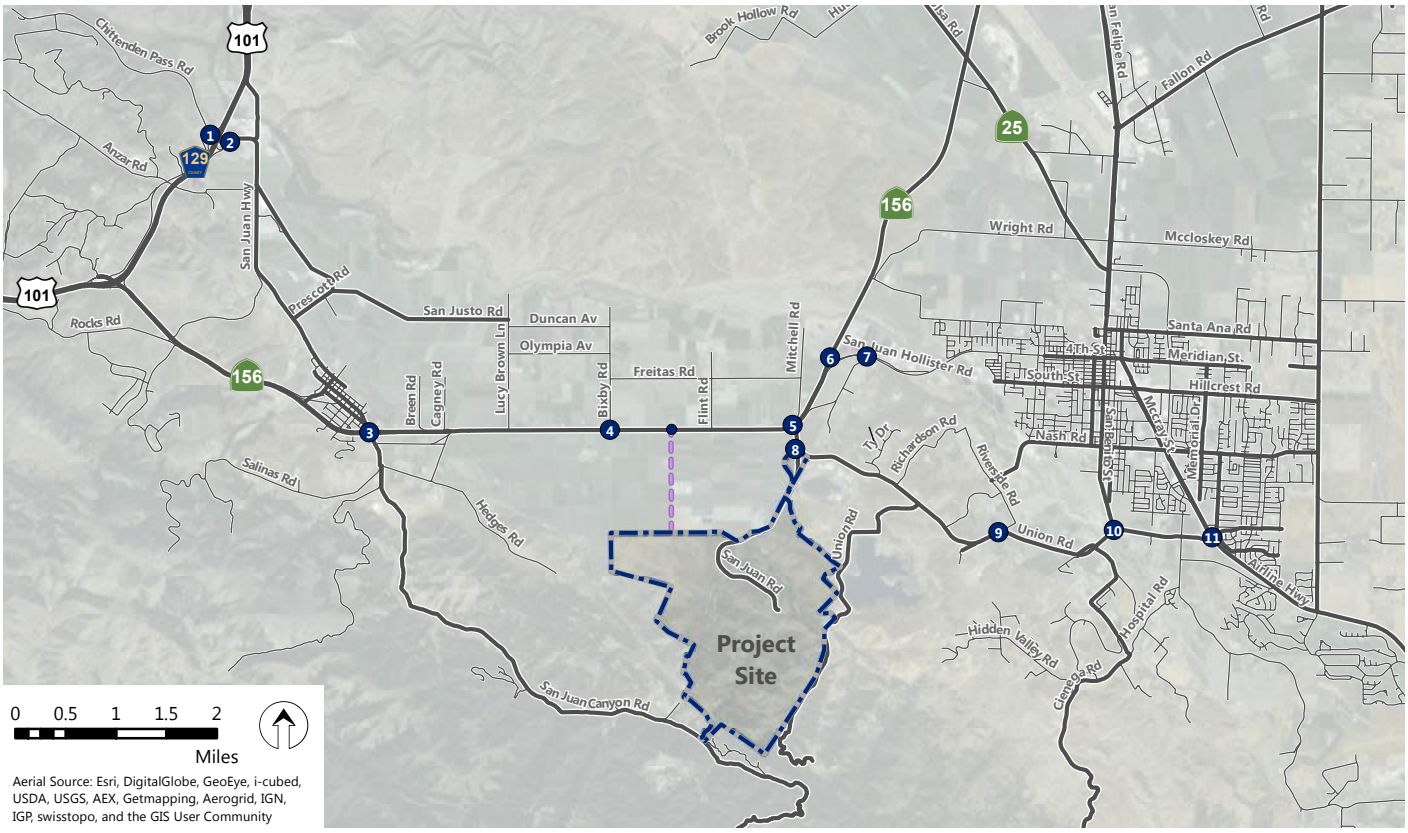


Figure 7

Del Webb at San Juan Oaks Specific Plan:
Peak Hour Traffic Volumes and Lane Configurations
Background Plus Project Conditions

FEHR PEERS

Document Path: \\fpainc.local\Dfs-ent-data\San Jose N Drive\Projects_SJ13_Projects\SJ13_1462_San_Juan_Oaks_SP_EIR\Graphics\GIS\Fig_7_BG_Plus_Project_Volumes.mxd
Date: June, 2015

BACKGROUND NO PROJECT AND BACKGROUND PLUS PROJECT INTERSECTION LEVELS OF SERVICE

Level of service calculations were conducted to evaluate intersection operations under Background No Project and Background plus Project Conditions. **Table 10** presents the level of service and **Appendix B** contains the corresponding calculation sheets. The results of the LOS calculations indicate that the majority of the study intersections will operate at acceptable levels of service according to their designated LOS standard. However, under Background plus Project Conditions, the Project would exacerbate unacceptable intersection operations at the four intersections operating unacceptably under Background No Project Conditions. In addition, Project traffic would degrade operations from acceptable LOS under Background No Project Conditions to unacceptable levels at the Union Road and San Juan Oaks Drive intersection. In summary, the following four intersections are projected to operate at unacceptable service levels under Background plus Project Conditions with the current LOS policies:

- Intersection #4: Bixby Road and SR 156 (based on the southbound left-turn movement in the AM peak hour and PM peak hour for this side-street stop controlled intersection);
- Intersection #5: Union Road-Mitchell Road and SR 156 (based on the average signalized intersection delay in the AM and PM peak hours);
- Intersection #8: Union Road and San Juan Oaks Drive (based on the eastbound left-turn movement in the AM and PM peak hours for this side-street stop controlled intersection).
- Intersection #11: SR 25 – Airline Highway and Union Road (based on the average signalized intersection delay in the AM and PM peak hours).

The remaining seven study intersections are projected to operate at acceptable levels under Background plus Project Conditions.

TABLE 10: BACKGROUND NO PROJECT AND BACKGROUND PLUS PROJECT INTERSECTION LEVEL OF SERVICE

	Intersection	Int. Control	Peak Hour	Background No Project		Background plus Project		Signal Warrant Met?[3]
				Delay[1]	LOS[2]	Delay[1]	LOS[2]	
1	SR 129-Chittenden Road and US 101 Southbound Ramps*	AWSC	AM PM	12.4 13.1	B B	12.6 13.3	B B	N/A
2	SR 129-Chittenden Road and US 101 Northbound Ramps*	SSSC	AM PM	13.5 12.7	B B	13.7 12.8	B B	N/A
3	The Alameda and SR 156-San Juan Road*	Signal	AM PM	19.5 18.8	B B	19.9 20.5	B C	N/A
4	Bixby Road and SR 156-San Juan Road*	SSSC	AM PM	**90.8** **44.1**	**F** **E**	**111.0** **62.8**	**F** **F**	No No
5	Union Road and SR 156-San Juan Road*	Signal	AM PM	**133.2** **67.6**	**F** **E**	**164.8** **105.3**	**F** **F**	N/A
6	SR 156 and San Juan Road*	Signal	AM PM	11.7 12.6	B B	12.2 13.7	B B	N/A
7	San Juan Hollister Road and San Juan Road**	SSSC	AM PM	16.0 16.3	C C	17.5 18.9	C C	N/A
8	Union Road and San Juan Oaks Drive**	SSSC	AM PM	23.4 33.1	C D	**73.7** **>200.0**	**F** **F**	**Yes** **Yes**
9	Riverside Road and Union Road**	SSSC	AM PM	21.8 18.9	C C	24.7 22.5	C C	N/A
10	San Benito Street and Union Road**	Signal	AM PM	17.8 13.4	B B	20.9 16.2	C B	N/A
11	SR 25-Airline Highway and Union Road*	Signal	AM PM	**96.4** **58.9**	**F** **E**	**100.8** **63.3**	**F** **E**	N/A

Notes:

AM = morning peak hour, PM = evening peak hour

Signal = signalized intersection, AWSC = all-way stop controlled intersection, SSSC = side-street stop controlled intersection.
Bold text indicated unacceptable operations.

Bold and highlighted indicates a significant impact.

* Indicates a Caltrans intersection

** Indicates a San Benito County intersection

1. For signalized intersection, delay shows whole intersection weighted average control delay using methods described in the *2010 HCM*. For all-way Stop-controlled intersections, average delay and LOS is reported. For two-way and side-street stop-controlled intersections, delay and LOS reported is for the worst-case approach.

2. LOS = Level of service. LOS calculations conducted using the Synchro 8.0 level of service analysis software package.

3. A MUTCD peak hour signal warrant was evaluated at unsignalized intersections that operate at LOS E or F under Background plus Project conditions.

Source: Fehr & Peers, 2015.

BACKGROUND PLUS PROJECT INTERSECTION IMPACTS AND MITIGATION MEASURES

Based on the current impact criteria outlined in **Chapter 1**, the proposed Project will have a significant impact at four of the five study intersections operating unacceptably under Background plus Project Conditions. The following discusses the intersection impacts and associated mitigation measures to reduce the identified impacts. The mitigated intersection LOS calculations results are presented in **Table 11** and **Appendix G** contains the corresponding calculation sheets.

TABLE 11: BACKGROUND PLUS PROJECT MITIGATED INTERSECTION LOS

Intersection		Peak Hour	Background No Project		Background plus Project			
					Pre-Mitigation		Post-Mitigation	
			Delay	LOS	Delay	LOS	Delay	LOS
4	Bixby Road and SR 156-San Juan Road	AM	**90.8**	**F**	**111.0**	**F**	Less-Than-Significant Impact	
		PM	**44.1**	**E**	**62.8**	**F**		
5	Union Road-Mitchell Road and SR 156	AM	**133.2**	**F**	**164.8**	**F**	**43.7**	**D**
		PM	**67.6**	**E**	**105.3**	**F**	**43.2**	**D**
8	Union Road and San Juan Oaks Drive	AM	23.4	C	**73.7**	**F**	7.3	A
		PM	**33.1**	**D**	**>200.0**	**F**	14.5	B
11	SR 25-Airline Highway and Union Road	AM	**96.4**	**F**	**100.8**	**F**	**76.1**	**E**
		PM	**58.9**	**E**	**63.3**	**E**	40.7	D

Notes: **Bold** represents unacceptable level of service.
Bold and highlighted indicates a significant impact.
Source: Fehr & Peers, 2015.

Intersection #8 is a County controlled intersection, while intersections #4, #5, and #11 are Caltrans controlled intersections. Each intersection is evaluated based on the appropriate intersection criteria stated for their respective jurisdiction as described in **Chapter 1**.

BIXBY ROAD AND SR 156-SAN JUAN ROAD (INTERSECTION #4)

Current General Plan (1992) Impact Discussion:

Under Background No Project and Background plus Project Conditions, the side-street control delay at this intersection operates unacceptably (LOS E or F) during the AM and PM peak hours. However, the intersection does not meet the MUTCD peak hour volume traffic signal warrant due to the low volumes along Bixby Road. Therefore, the addition of Project traffic would not be considered as resulting in a significant impact at this intersection and the Project would have **less-than-significant impact**.

2035 San Benito County General Plan Update Impact Discussion – For Information Purposes Only:

Under Background No Project and Background plus Project Conditions, the side-street control delay at this intersection operates unacceptably (LOS E or F) during the AM and PM peak hours. However, the intersection does not meet the MUTCD peak hour volume traffic signal warrant due to the low volumes along Bixby Road. Therefore, the addition of Project traffic would not be considered as resulting in a significant impact at this intersection and the Project would have less-than-significant impact under the pending 2035 General Plan Update.

UNION ROAD-MITCHELL ROAD AND SR 156 (INTERSECTION #5)

Current General Plan (1992) Impact Discussion:

The addition of Project traffic under Background plus Project Conditions would exacerbate unacceptable intersection operations during the AM and PM peak hours resulting in a **significant impact** at this intersection.

The following mitigation measure improves operations back to baseline conditions and reduces the impact to a **less-than-significant level**:

- Reconstruct the northbound approach on Union Road to include two left-turn lanes and one shared through-right lane;
- Add the associated left-turn receiving lane on the west leg of SR 156.

The reconfiguration of the Union Road-Mitchell Road and SR 156 intersection is part of the SR 156 widening project that is evaluated under Cumulative Conditions and therefore would not be a feasible mitigation measure under Background Conditions. Since the SR 156 widening project is already a planned improvement included in the San Benito County TIMF and the Project would be required to pay its TIMF fee for this impact. However, the intersection is under Caltrans jurisdiction and neither the project sponsor nor the County of San Benito can ensure the implementation of the proposed mitigation measure; thus the impact is considered **significant and unavoidable** even with the required payment of the TIMF.

2035 San Benito County General Plan Update Impact Discussion – For Information Purposes Only:

Applying the impact criteria from the pending 2035 General Plan Update, the addition of Project traffic under Background plus Project Conditions would exacerbate unacceptable intersection operations during the AM and PM peak hours resulting in a significant impact at this intersection. The same mitigation as discussed above under the current General Plan (1992) impact criteria would apply to this intersection.

UNION ROAD AND SAN JUAN OAKS DRIVE (INTERSECTION #8)

Current General Plan (1992) Impact Discussion:

During the AM and PM peak hours, the addition of Project traffic would degrade acceptable operations under Background No Project Conditions to unacceptable operations under Background plus Project Conditions, resulting in a **significant impact**.

The following mitigation measure would improve operations to acceptable LOS (LOS D) and reduce the impact to **less-than-significant** level:

- Signalize the intersection.

The projected volumes meet the volume thresholds for the MUTCD peak hour volume traffic signal warrant and can be referenced in **Appendix C**. This intersection serves as the main access intersection into the Project Site, and the Project would be responsible for the construction of the signal.

2035 San Benito County General Plan Update Impact Discussion – For Information Purposes Only:

During the AM and PM peak hours, the addition of Project traffic would degrade acceptable operations under Background No Project Conditions to unacceptable operations under Background plus Project Conditions, resulting in a significant impact. The same mitigation as discussed above under the current General Plan (1992) impact criteria would apply to this intersection.

SR 25-AIRLINE HIGHWAY AND UNION ROAD (INTERSECTION #11)

Current General Plan (1992) Impact Discussion:

The addition of Project traffic under Background plus Project Conditions would exacerbate unacceptable intersection operations during the AM and PM peak hours resulting in a **significant impact** at this intersection.

The following mitigation measure would improve operations back to baseline conditions and reduce the impact to **less-than-significant level**:

- Add an eastbound right-turn lane from Union Road onto southbound Airline Highway (SR 25).

The widening of Union Road from SR 156 to east of SR 25 is already a planned improvement included in the San Benito County TIMF; thus the Project would be required to pay its TIMF fee for this intersection impact. However, the intersection is under Caltrans jurisdiction and neither the project sponsor nor the

County of San Benito can ensure the implementation of the proposed mitigation measure; thus the impact is considered **significant and unavoidable** even with the required payment of the TIMF.

2035 San Benito County General Plan Update Impact Discussion – For Information Purposes Only:

The addition of Project traffic under Background plus Project Conditions would exacerbate unacceptable intersection operations during the AM peak hour resulting in a significant impact at this intersection. The same mitigation as discussed above under the current General Plan (1992) impact criteria would apply to this intersection.

BACKGROUND NO PROJECT AND BACKGROUND PLUS PROJECT FREEWAY SEGMENT LEVELS OF SERVICE

Freeway traffic projections for Background No Project and Background plus Project Conditions were estimated using the same approach as the intersection volume projections. The results of the level of service analysis for Background No Project and Background plus Project Conditions are summarized in **Table 12** and the corresponding calculation sheets are included in **Appendix D**.

TABLE 12: BACKGROUND NO PROJECT AND BACKGROUND PLUS PROJECT FREEWAY SEGMENT LEVELS OF SERVICE

Freeway	From	To	Peak Hour	Background No Project			Background plus Project		
				Density	LOS	Trips[1]	Density	LOS	%[2]
Northbound US 101	Monterey / San Benito County Line	SR 156	AM	10.9	A	33	11.2	B	0.8
			PM	14.3	B	49	14.7	B	1.1
	SR 156	SR 129	AM	16.0	B	25	16.2	B	0.6
			PM	14.8	B	38	15.1	B	0.9
	SR 129	San Benito / Santa Clara County Line	AM	**26.1**	**D**	25	**26.4**	**D**	0.6
			PM	17.3	B	38	17.6	B	0.9
Southbound US 101	San Benito / Santa Clara County Line	SR 129	AM	17.3	B	24	17.6	B	0.5
			PM	**31.0**	**D**	35	**31.7**	**D**	0.8
	SR 129	SR 156	AM	12.4	B	24	12.6	B	0.5
			PM	18.5	C	35	18.8	C	0.8
	SR 156	Monterey / San Benito County Line	AM	10.5	A	35	10.7	A	0.8
			PM	17.1	B	53	17.4	B	1.2

Notes: **Bold** indicates the segment operates at unacceptable LOS.

1. The number of Project trips added to the freeway segment.
2. Percentage increase in freeway segment capacity resulting from number of trips added.

Source: 2012 VTA Monitoring and Conformance Report; Fehr & Peers, 2015.

Applying the current LOS policy, two segments are projected to operate at an unacceptable LOS D during the identified peak hour under Background No Project and Background plus Project Conditions:

- Northbound US 101: SR 129 to San Benito / Santa Clara County Line (AM peak hour);
- Southbound US 101: San Benito / Santa Clara County Line to SR 129 (PM peak hour).

If the 2035 General Plan Update were approved and the new LOS D service standard were applied to the analysis, then all of the freeway segments would be considered to operate acceptably under Background plus Project Conditions.

BACKGROUND PLUS PROJECT FREEWAY IMPACTS AND MITIGATION MEASURES

Current General Plan (1992) Impact Discussion:

The amount of traffic contributed by the Project would not exceed one percent of the freeway's capacity on segments that are operating unacceptably under Background No Project conditions. Therefore, the Project would have a **less-than-significant** impact at the identified freeway segment under the current LOS policies and impact threshold.

2035 San Benito County General Plan Update Impact Discussion – For Information Purposes Only:

Under the pending 2035 General Plan Update LOS thresholds, all of the study freeway segments would operate at acceptable level LOS D or better with the addition of Project traffic; therefore, the Project would have a less-than-significant impact at the study freeway segments.

6. CUMULATIVE NO PROJECT AND CUMULATIVE PLUS PROJECT CONDITIONS

This chapter presents the results of the intersection and freeway segment level of service calculations under Cumulative Conditions without and with the Project. Cumulative No Project Conditions are defined as existing volumes plus an annual growth rate applied to the Year 2035. Cumulative plus Project Conditions are defined as Cumulative No Project Conditions plus traffic generated by the proposed Project.

CUMULATIVE NO PROJECT TRAFFIC VOLUMES

Traffic volumes under Cumulative No Project Conditions are based on the peak hour forecasts determined in collaboration with San Benito County staff and Caltrans. For all intersections in the study area, future volumes were developed by applying an annual growth factor of 2.0 percent per year to the existing volumes. This growth rate was developed after reviewing the traffic projections from the Association of Monterey Bay Area Governments (AMBAG) regional transportation demand model and the *San Benito Route 156 Improvement Project Draft Environmental Impact Report/Environmental Assessment* (Caltrans, July 2007). The Cumulative No Project volumes can be found on **Figure 9**.

For purposes of this analysis, the methodology used to project cumulative growth is different from the approach used for the background traffic projections. The background growth projections used available information on specified approved projects in the adjacent communities to reflect the anticipated near-term growth. To project the cumulative (20 year) traffic growth, a growth factor was developed using the 2035 AMBAG travel demand model. The 2035 AMBAG model captures regional, as well as local, land use changes that will impact future travel patterns in the area and traffic volumes on the highways serving the Project Site. Due to the fact that roadway segment growth rates varied throughout the AMBAG model, an average of two percent per year was assumed for purposes of this Project.

The Cumulative projections developed for this analysis were compared to the more current 2014 AMBAG model projections developed for the General Plan Update. The volume comparison shows that in general that the volumes are comparable within a reasonable range (10 to 15 percent variation). Therefore, the cumulative intersection analysis conclusions would be similar between the results presented in this TIA and those based on the General Plan Update.

CUMULATIVE PLUS PROJECT TRAFFIC VOLUMES

Trip generated from the proposed Project were added to the Cumulative No Project traffic projections to develop traffic volumes for Cumulative plus Project Conditions. The resulting volumes are shown on **Figure 10**.

CUMULATIVE ROADWAY IMPROVEMENTS

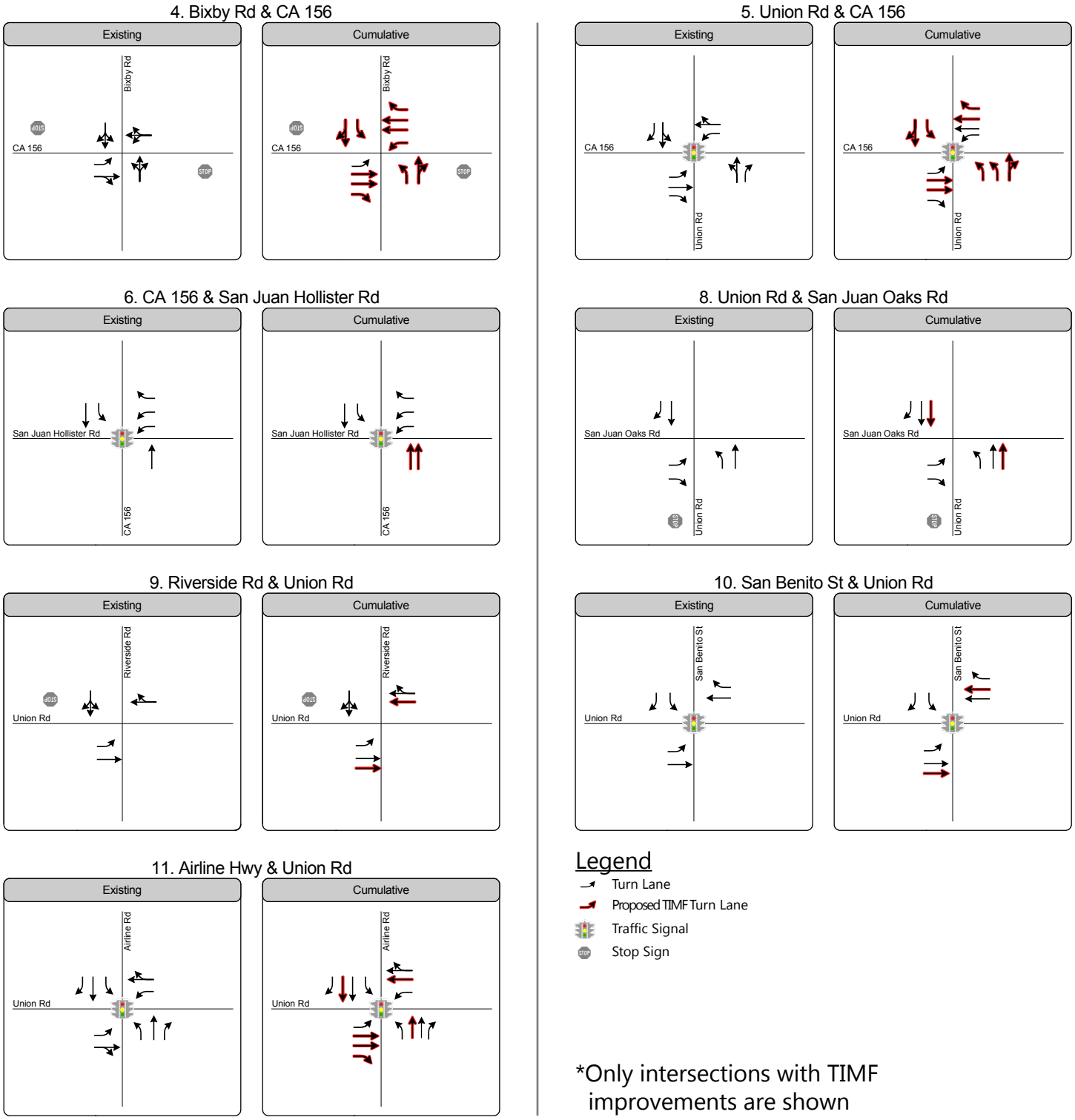
The Cumulative roadway network includes planned transportation improvements that have been identified within the San Benito County Transportation Impact Mitigation Fee (TIMF) Nexus Study dated March 2011. These roadway improvement projects are assumed to be in place under the 2035 General Plan build-out conditions. TIMF fees previously mentioned under Existing and Background conditions will contribute to the applicable project listed below.

- US 101 Widening – from SR 156 on- and off-ramp to the north will be widened from two-lanes to three-lanes in each direction;
- Highway 156 Widening – widen 5.2 miles of SR 156 from two lanes to a four-lane expressway and realign the route from The Alameda to 0.2 miles east of Fourth Street/Business Route 156;
- Airline Highway Widening (SR 25) – widen from two lanes to a four-lane expressway from Sunset Drive to Fairview Road;
- Highway 25 Widening (Phase I) – widen from a two-lane rural highway to a four-lane expressway from San Felipe Road to Hudner Lane;
- Union Road Construction – construct a four-lane arterial from SR 25 to Fairview Road;
- Union Road Widening (East) – widen to a four-lane arterial from San Benito Street to Airline Highway (SR 25);
- Union Road Widening (West) – widen to a four-lane arterial from SR 156 to San Benito Street.

CUMULATIVE INTERSECTION IMPROVEMENTS

The planned roadway improvements identified above would modify the following intersection geometries as shown in **Figure 8**.

- Intersection #4: Bixby Road and SR 156;
- Intersection #5: Union Road-Mitchell Road and SR 156;
- Intersection #8: Union Road and San Juan Oaks Drive;
- Intersection #9: Riverside Road and Union Road;
- Intersection #10: San Benito Road and Union Road;
- Intersection #11: SR 25 (Airline Highway) and Union Road.



*Only intersections with TIMF improvements are shown

Figure 8

Del Webb at San Juan Oaks Specific Plan: Cumulative Changes in Geometry

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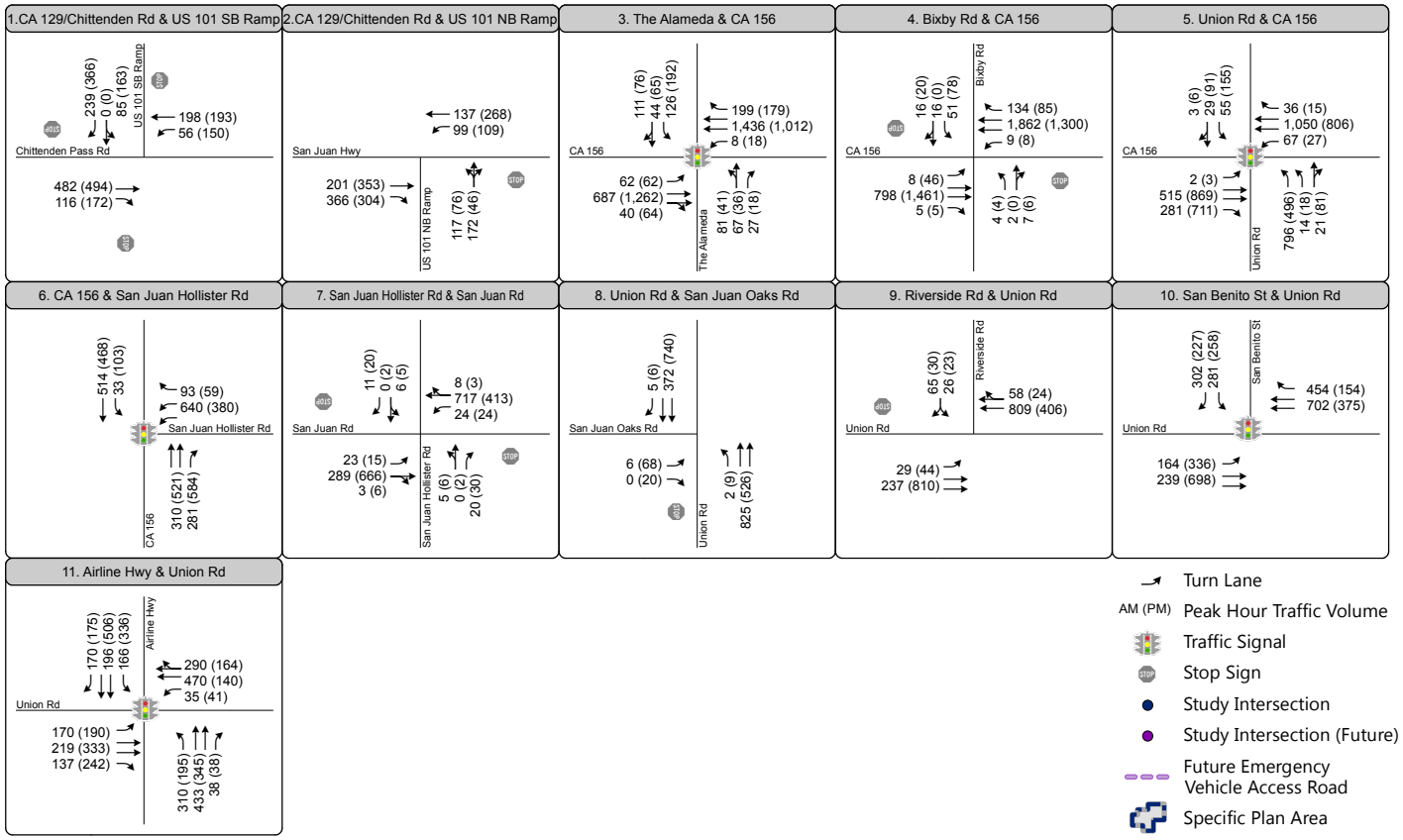
CUMULATIVE NO PROJECT AND CUMULATIVE PLUS PROJECT INTERSECTION LEVELS OF SERVICE

Level of service calculations were conducted to evaluate intersection operations under Cumulative conditions without and with Project traffic. **Table 13** presents the level of service results for the study intersections under Cumulative No Project and Cumulative plus Project Conditions. **Appendix B** contains the corresponding calculation sheets. The results of the LOS calculations indicate that the majority of the study intersections will operate at acceptable levels of service according to their designated LOS standard. However, under Cumulative plus Conditions, the Project would exacerbate unacceptable intersection operations at two of the intersections operating unacceptably under Cumulative No Project Conditions. In addition, Project traffic would degrade operations from acceptable LOS under Cumulative No Project Conditions to unacceptable levels at the Union Road and San Juan Oaks Drive intersection during the AM peak hour. The following intersections are projected to operate unacceptably during the identified peak hours under Cumulative plus Project Conditions with the current LOS policies:

- Intersection #4: Bixby Road and SR 156 (based on the southbound left-turn movement in the AM peak hour and PM peak hour for this side-street stop controlled intersection);
- Intersection #8: Union Road and San Juan Oaks Drive (based on the eastbound left-turn movement in the AM and PM peak hours for this side-street stop controlled intersection).

The remaining nine study intersections are projected to operate at acceptable levels under Cumulative plus Project Conditions. If the 2035 General Plan Update were approved and the new LOS D service standard were applied to the analysis, then the same two intersection would be considered to operate unacceptably under Cumulative plus Project Conditions.

It should be noted that the Union Road-Mitchell Road and SR 156 intersection was previously identified with significant impacts under Existing and Background Conditions. The identified mitigation measure included elements from the SR 156 Widening project. Since the SR 156 Widening project is a planned improvement and is assumed to be implemented under Cumulative No Project Conditions, there no longer is a significant cumulative impact at the Union Road-Mitchell Road and SR 156 intersection.



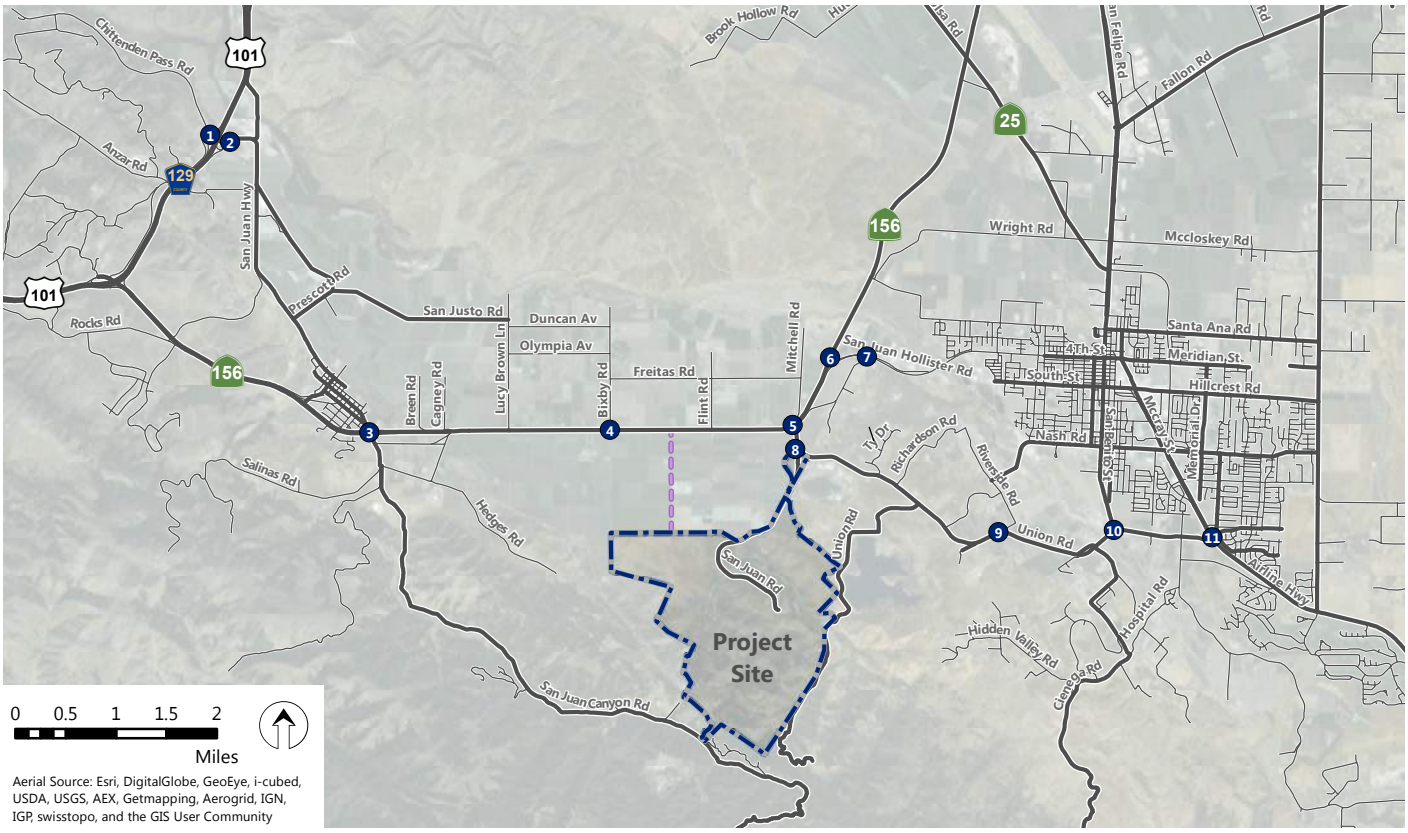


Figure 9

Del Webb at San Juan Oaks Specific Plan: Peak Hour Traffic Volumes and Lane Configurations - Cumulative Conditions

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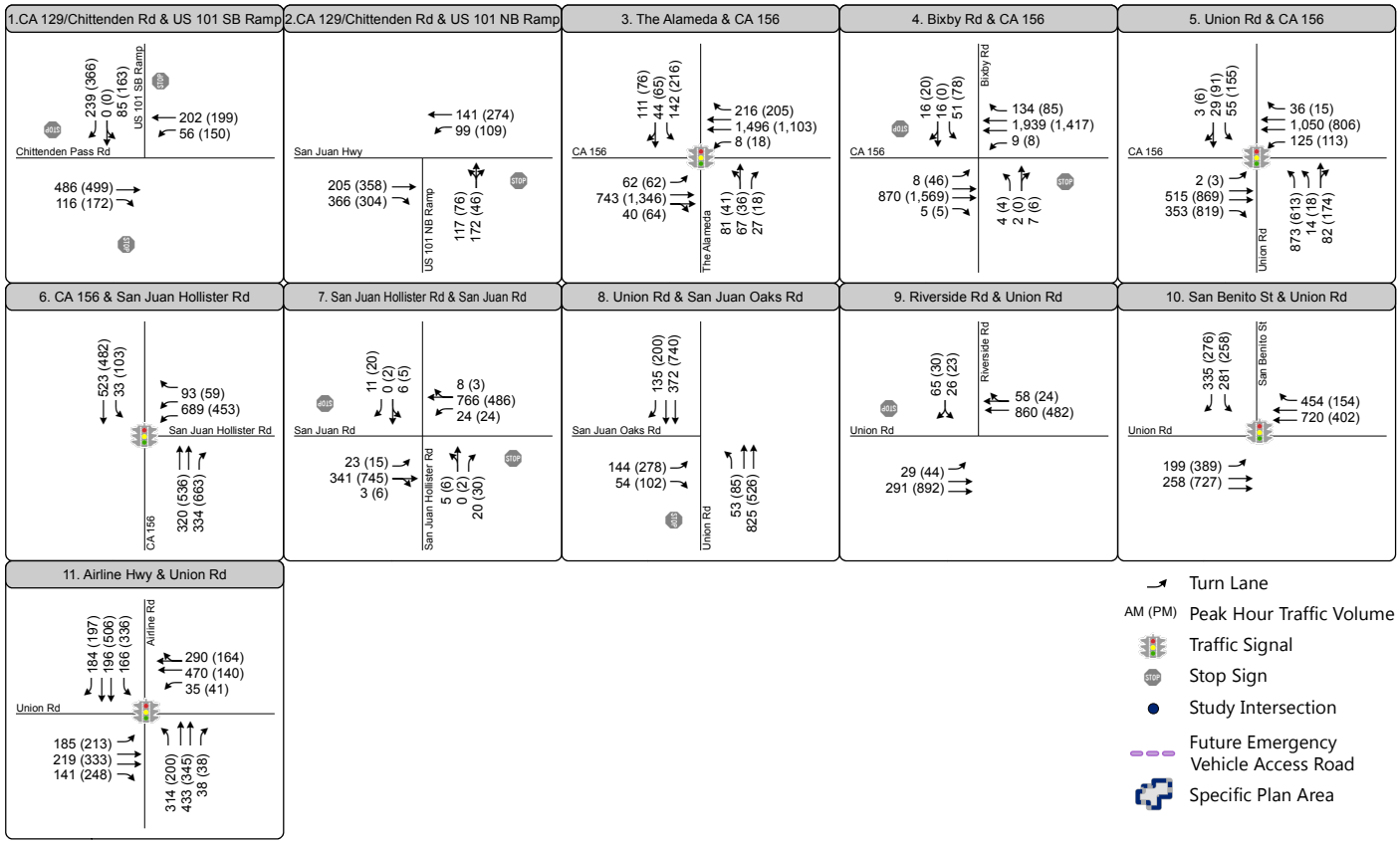

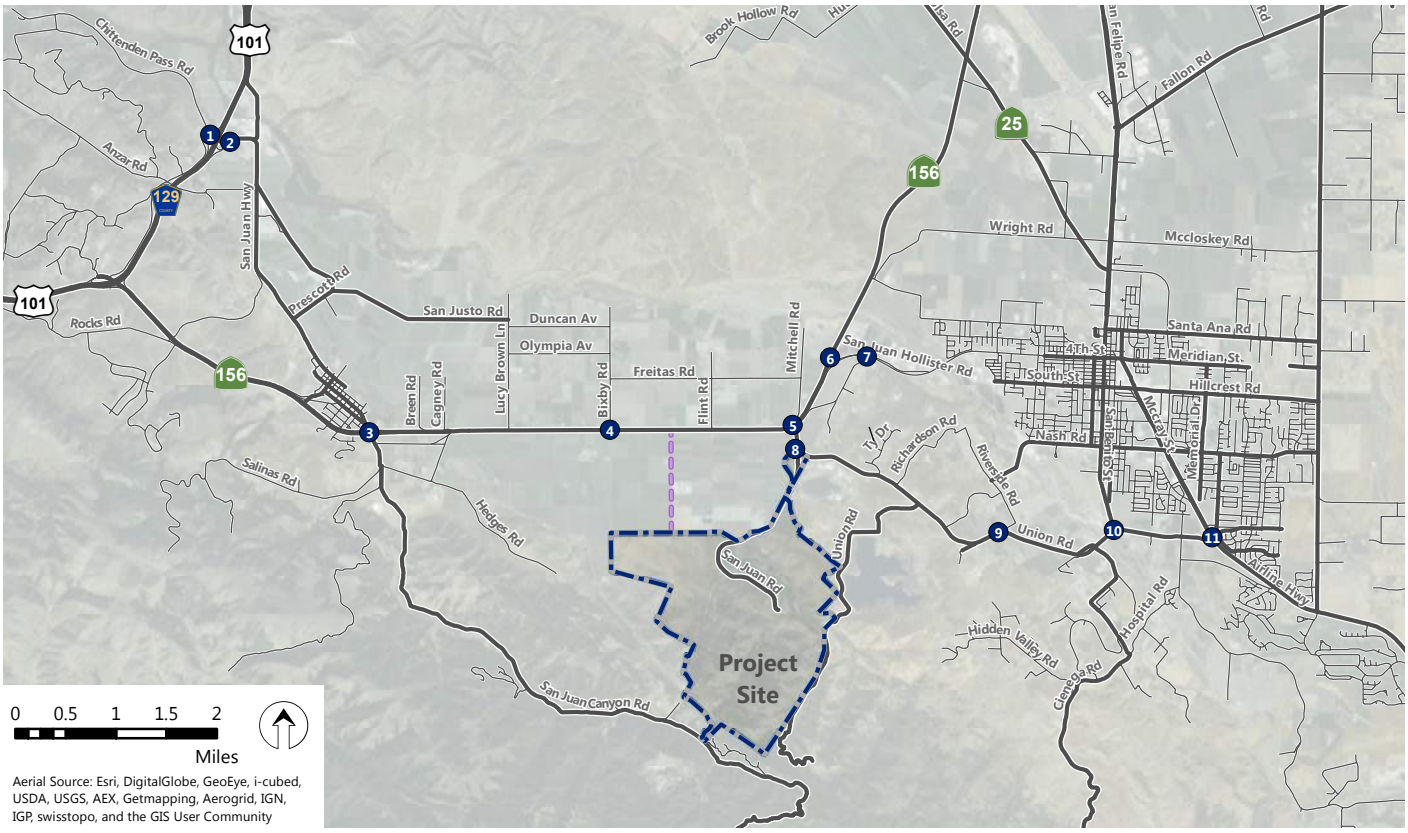

Aerial Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Figure 10

Del Webb at San Juan Oaks Specific Plan:
Peak Hour Traffic Volumes and Lane Configurations
Cumulative Plus Project Conditions

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TABLE 13: CUMULATIVE NO PROJECT AND CUMULATIVE PLUS PROJECT INTERSECTION LEVELS OF SERVICE

	Intersection	Int. Control	Peak Hour	Cumulative No Project		Cumulative plus Project		Signal Warrant Met?[3]
				Delay[1]	LOS[2]	Delay[1]	LOS[2]	
1	SR 129-Chittenden Road and US 101 Southbound Ramps*	AWSC	AM PM	34.0 33.8	D D	34.2 34.0	D D	N/A
2	SR 129-Chittenden Road and US 101 Northbound Ramps*	SSSC	AM PM	23.6 18.9	C C	24.2 19.2	C C	N/A
3	The Alameda and SR 156-San Juan Road*	Signal	AM PM	26.4 26.8	C C	27.9 29.6	C C	N/A
4	Bixby Road and SR 156-San Juan Road*	SSSC	AM PM	**>200** **>200**	**F** **F**	**>200** **>200**	**F** **F**	No **Yes**
5	Union Road and SR 156-San Juan Road*	Signal	AM PM	29.3 25.5	C C	33.7 31.8	C C	N/A
6	SR 156 and San Juan Road*	Signal	AM PM	13.5 13.7	B B	14.1 15.0	B B	N/A
7	San Juan Hollister Road and San Juan Road**	SSSC	AM PM	20.2 20.8	C C	22.6 24.8	C C	N/A
8	Union Road and San Juan Oaks Drive**	SSSC	AM PM	18.0 **31.7**	C **D**	**35.5** **>200**	**E** **F**	**Yes** **Yes**
9	Riverside Road and Union Road**	SSSC	AM PM	21.0 15.5	C C	23.4 17.5	C C	N/A
10	San Benito Street and Union Road**	Signal	AM PM	18.2 14.7	B B	20.0 17.7	C B	N/A
11	SR 25-Airline Highway and Union Road*	Signal	AM PM	26.0 28.1	C C	28.8 26.1	C C	N/A

Notes: AM = morning peak hour, PM = evening peak hour

Signal = signalized intersection, AWSC = all-way stop controlled intersection, SSSC = side-street stop controlled intersection

Bold text indicated unacceptable operations.

Bold and highlighted indicates a significant impact.

* Indicates a Caltrans intersection

** Indicates a San Benito County intersection

1. For signalized intersection, delay shows whole intersection weighted average control delay using methods described in the *2010 HCM*. For all-way Stop-controlled intersections, average delay and LOS is reported. For two-way and side-street stop-controlled intersections, delay and LOS reported is for the worst-case approach.
2. LOS = Level of service. LOS calculations conducted using the Synchro 8.0 level of service analysis software package.
3. A MUTCD peak hour signal warrant was evaluated at unsignalized intersections that operate at LOS E or F under Cumulative plus Project conditions.

Source: Fehr & Peers, 2015.

Intersection #4 and #8 are Caltrans and County intersections, respectively, and therefore evaluated based on the unsignalized intersection criteria stated for their respective jurisdiction as described in **Chapter 1**.

CUMULATIVE PLUS PROJECT INTERSECTION IMPACTS AND MITIGATION MEASURES

Based on the current impact criteria outlined in **Chapter 1**, the proposed Project will have a significant impact at the intersection of Bixby Road and SR 156-San Juan Road under Cumulative plus Project Conditions. The following discusses the intersection impacts and associated mitigation measures to reduce the identified impacts. The mitigated intersection LOS calculations results are presented in **Table 14** and **Appendix G** contains the corresponding calculation sheets.

TABLE 14: CUMULATIVE PLUS PROJECT MITIGATED INTERSECTION LOS

	Intersection	Peak Hour	Cumulative No Project		Cumulative plus Project			
					Pre-Mitigation		Post-Mitigation	
			Delay	LOS	Delay	LOS	Delay	LOS
4	Bixby Road and SR 156-San Juan Road*	AM	**>200**	**F**	**>200**	**F**	**Significant and Unavoidable**	
		PM	**>200**	**F**	**>200**	**F**		
8	Union Road and San Juan Oaks Drive*	AM	15.8	C	**27.4**	**D**	6.0	A
		PM	20.0	C	**>200**	**F**	10.4	B

Notes: **Bold** represents unacceptable level of service.
Bold and highlighted indicates a significant impact.
* Indicates signalized under Cumulative plus Project Post Mitigations.
Source: Fehr & Peers, 2015.

BIXBY ROAD AND SR 156-SAN JUAN ROAD (INTERSECTION #4)

Current General Plan (1992) Impact Discussion:

Under Cumulative No Project and Cumulative plus Project Conditions, the side-street control delay at this intersection operates unacceptably (LOS E or F) during the AM and PM peak hours. Additionally, during the evening peak the MUTCD peak hour volume signal warrant is met; therefore, the Project is considered to have a **significant impact** at this intersection. Since the intersection operates unacceptably and meets the MUTCD peak hour volume signal warrant under the "No Project" scenario, the "Project" scenario does not cause the operational deficiency, but rather exacerbates the unacceptable operations.

It should be noted that the *San Benito Route 156 Improvement Project Draft EIR Assessment* prepared by Caltrans (July 2007) assumed this intersection to be signalized as part of the SR 156 widening project. However, recent plans submitted by Caltrans show this intersection as side street stop controlled despite the anticipated operational deficiencies. Signalization of this intersection would mitigate the identified impact. The decision to install a traffic signal is ultimately Caltrans' decision. If at the time the first building permits for this Project are recorded at San Benito County, the Project will be responsible for their fair share contribution to a traffic signal (the Project contributes seven percent of the traffic growth at this

intersection) and the Project's cumulative impact would be considered **less-than-significant cumulative impact**. However, if Caltrans does not plan to install a signal, then the impact is considered **significant and unavoidable cumulative impact**. The project adds seven percent of the cumulative development growth traffic to the intersection; therefore the project applicant shall pay a seven percent fair share contribution to mitigate its cumulative impact. Since the County of San Benito does not have jurisdiction over the state controlled SR 156/Bixby Road intersection, the impact for CEQA purposes is ultimately considered **significant and unavoidable cumulative impact**.

2035 San Benito County General Plan Update Impact Discussion – For Information Purposes Only:

Under Cumulative No Project and Cumulative plus Project Conditions, the side-street control delay at this intersection operates unacceptably (LOS E or F) and meets the MUTCD peak hour volume signal warrant during the AM and PM peak hours. Therefore, the Project would be considered to have a significant impact at this intersection with the pending 2035 General Plan Update impact criteria. The same mitigation as discussed above under the current General Plan (1992) impact criteria would apply to this intersection.

UNION ROAD AND SAN JUAN OAKS DRIVE (INTERSECTION #8)

Current General Plan (1992) Impact Discussion:

During the AM peak hour, the addition of Project traffic would degrade acceptable operations under Cumulative No Project Conditions to unacceptable operations under Cumulative plus Project Conditions. During the PM peak hour, the addition of Project traffic under Cumulative plus Project Conditions would exacerbate unacceptable intersection operations; thus the Project would have a **significant cumulative impact** at this intersection during both peak hours. However, for purposes of comparison, the Project would contribute approximately 24 percent of vehicle traffic at this intersection during the AM peak hour and approximately 29 percent of vehicle traffic during the PM peak hour.

The following mitigation measure would improve operations to acceptable LOS A and **reduce the cumulative impact to less-than-significant level**:

- Signalize the intersection.

The projected volumes meet the volume thresholds for the MUTCD peak hour volume traffic signal warrant and can be referenced in **Appendix C**. Since this intersection serves as the main access intersection into the Project Site, the Project would be responsible for the construction of the signal.

2035 San Benito County General Plan Update Impact Discussion – For Information Purposes Only:

Under Cumulative No Project and Cumulative plus Project Conditions, the side-street control delay at this intersection operates unacceptably (LOS E or F) and meets the MUTCD peak hour volume signal warrant

during the AM and PM peak hours. Therefore, the Project would be considered to have a significant impact at this intersection with the pending 2035 General Plan Update impact criteria. The same mitigation as discussed above under the current General Plan (1992) impact criteria would apply to this intersection.

CUMULATIVE PLUS PROJECT FREEWAY SEGMENT LEVEL OF SERVICE

Based on the current San Benito County's General Plan, US 101 north of SR 156 was assumed to be widened from two to three lanes, and therefore this improvement is assumed in the Cumulative No Project scenario. The results of the freeway segment level of service analysis for Cumulative No Project and Cumulative plus Project Conditions are summarized in **Table 15** and the corresponding calculation sheets are included in **Appendix D**. One segment is projected to operate at an unacceptable LOS D during the identified peak hour under Cumulative No Project and Cumulative plus Project Conditions:

- Southbound US 101: San Benito / Santa Clara County Line to SR 129 (PM peak hour).

CUMULATIVE PLUS PROJECT FREEWAY IMPACTS AND MITIGATION MEASURES

<u>Current General Plan (1992) Impact Discussion:</u>

The amount of traffic contributed by the Project would not exceed one percent of the freeway's capacity on segments that are operating unacceptable under Cumulative No Project conditions. Therefore, the Project would have a **less-than-significant** cumulative impact at the identified freeway segment under the current LOS policies and impact threshold.

<u>2035 San Benito County General Plan Update Impact Discussion – For Information Purposes Only:</u>

Under the pending 2035 General Plan Update LOS thresholds, all of the study freeway segments would operate at acceptable level LOS D or better with the addition of Project traffic; therefore, the Project would have a less-than-significant impact at the study freeway segments.

TABLE 15: CUMULATIVE NO PROJECT AND CUMULATIVE PLUS PROJECT FREEWAY SEGMENT LEVELS OF SERVICE

Freeway	From	To	Peak Hour	Cumulative No Project[1]			Cumulative plus Project[1]		
				Density	LOS	Trips[2]	Density	LOS	%[3]
Northbound US 101	Monterey / San Benito County Line	SR 156	AM	15.5	B	33	15.8	B	0.8
			PM	20.4	C	49	20.9	C	1.1
	SR 156	SR 129	AM	15.2	B	25	15.4	B	0.4
			PM	14.1	B	38	14.3	B	0.6
	SR 129	San Benito / Santa Clara County Line	AM	24.6	C	25	24.8	C	0.4
			PM	16.4	B	38	16.7	B	0.6
	San Benito / Santa Clara County Line	SR 129	AM	16.4	B	24	16.7	B	0.3
			PM	**29.0**	**D**	35	**29.4**	**D**	0.5
Southbound US 101	SR 129	SR 156	AM	11.8	B	24	11.9	B	0.3
			PM	17.6	B	35	17.8	B	0.5
	SR 156	Monterey / San Benito County Line	AM	15.0	B	35	15.2	B	0.8
			PM	24.6	C	53	24.9	C	1.2

Notes: **Bold** indicates the segment operates at unacceptable LOS.

1. Cumulative Conditions include widening of US 101 between San Benito / Santa Clara County line and SR 156 from four-lanes to six-lanes.
2. The number of Project trips added to the freeway segment.
3. Percentage increase in freeway segment capacity resulting from number of trips added.

Source: 2012 VTA Monitoring and Conformance Report; Fehr & Peers, 2015.

7. VEHICLE MILES TRAVELED (VMT) ANALYSIS

The following provides an estimate of vehicle miles traveled (VMT) due to the Project for use in air quality modeling for greenhouse gas (GHG) emissions. Fehr & Peers' VMT+ Tool was used to determine the VMT for San Juan Oaks. The VMT+ Tool uses ITE trip generation rates to estimate gross trips. These trips are then proportioned across common trips purposes, such as Home-Based Work, Home-Base Other, and Non-Home Based. The trips, by purpose, are then multiplied by corresponding trip lengths derived from the National Household Travel Survey (NHTS) or local trip lengths. To estimate vehicle miles traveled, land use, trip internalization and retail pass-by are taken into account. Land use quantities (amount of square feet or dwelling units) are converted to daily trips. Trip internalization reduces the total gross trip generation by accounting for internal trips, or trips taken within the Project Site. Of the total number of daily trips, 13 percent are estimated to be internal trips as noted in **Chapter 3**. Internal-to-Internal trips were assumed to be an average of 0.8 miles due to the large amount of the San Juan Oaks developed area.

Average trip lengths to key destinations such as Monterey, Hollister, and San Jose were applied to the internal-to-external (IX) trips. The average external trip length is estimated to be 18.27 miles for Home Based Work trips and is based on the peak hour trip distribution for the San Juan Oaks development and land use types. Home Based Other trips were assumed to travel to Hollister (approximately 6.9 miles) and all other Non-Home Based trips remained the default 8.48 miles. Table 16 summarizes the Project's VMT estimates.

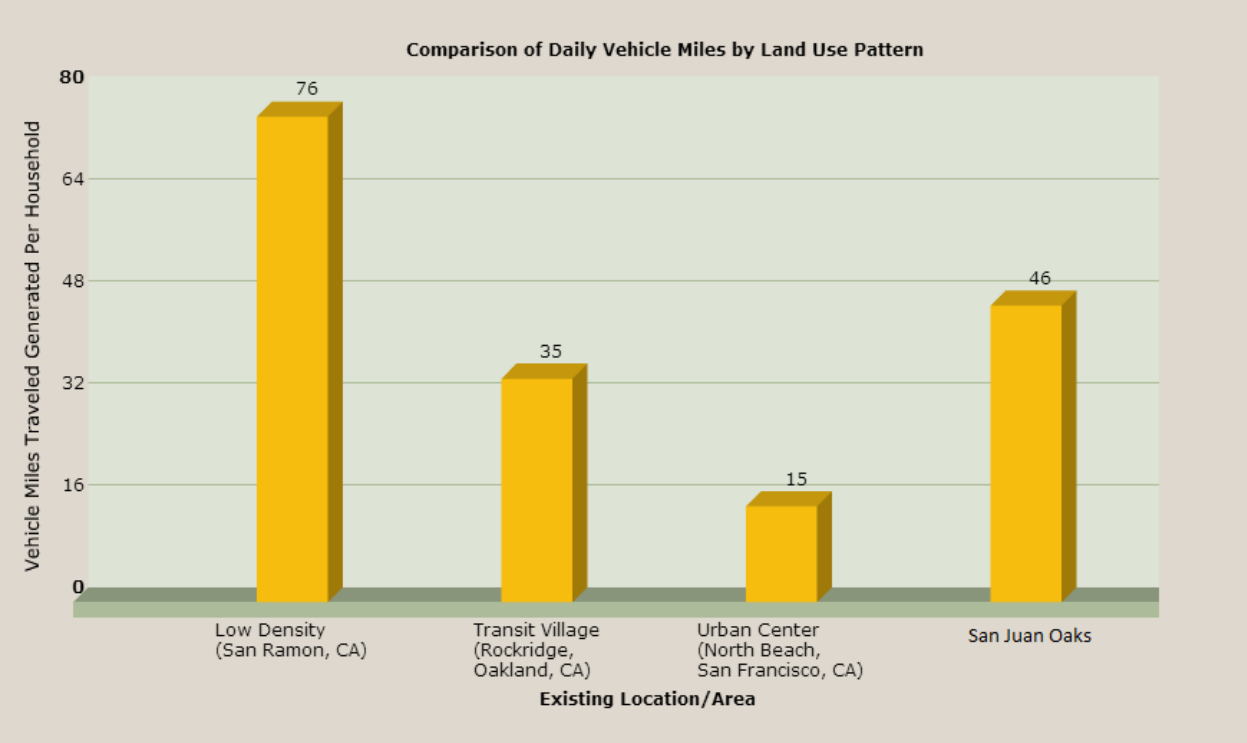
As a result of the mixed-use nature of the Project, the VMT per household estimate falls between the average for low density developments as shown in the **Figure 11** below (76 miles per household daily) and transit-oriented developments (35 miles per household daily).

TABLE 16: VEHICLE MILES TRAVELED

Factor	Vehicle Miles Traveled (miles)
VMT / Household	46.45
Total VMT	94,330

Source: Fehr & Peers, 2015.

Figure 11: Daily VMT by Land Use Pattern



8. SITE ACCESS, ON-SITE CIRCULATION AND PARKING

This chapter of the report analyzes site access and internal circulation for vehicles, pedestrians, bicycles, and transit service based on the site plan presented on **Figure 1**. The site access and on-site circulation is considered adequate with several recommended changes described below that address on-site vehicle circulation and reduce driver confusion The most current site plan review showed no immediate impacts to the internal roadway network; however, once type and location of retail components are known it is suggested that the site access and circulation be reviewed to identify mitigations at key internal intersections.. Recommendations stated below would be the responsibility of the Project and should be incorporated as Project design features.

ACCESS AND CIRCULATION REVIEW

Access to the Project Site and its internal street network will be provided via one access point from Union Road and an additional emergency vehicle access (E.V.A.) point located along SR 156.

Five locations throughout the Project Site, as seen on **Figure 12**, were evaluated using the MUTCD peak hour signal warrant. No traffic signals were warranted within the Project Site under Plus Project Conditions as seen in **Appendix C**. In addition, no internal intersection met the suggested minimum volumes for a multi-way stop according to the California MUTCD (shown in **Appendix C**). However, given that the major movements for the residential intersections are left and right turns into and out of the development, it is advised that the three residential study intersections shown in **Figure 12** be all-way stop controlled intersections.

Intersections along San Juan Oaks Drive and minor roads within the on-site retail area should be evaluated once the retail components are determined to see if additional improvements such as all-way stop-controlled or side-street stop-controlled intersections would improve traffic conditions at those locations.

The following changes to the site plan are recommended:

- Reduce the width of the vehicle lanes to 12 feet or less in order to reduce speeding along roads throughout the development while maintaining adequate space for bicyclists along Class I and Class II bicycle facilities.
- Provide sidewalks (5-foot minimum) on both sides of the streets throughout the development, especially to and from the golf course, to facilitate pedestrian circulation and reduce vehicle traffic
- Provide Class II short-term bicycle parking racks, such as inverted U-style parking racks, near the main attractors like the golf course, amenity center, and hiking trailheads.

- Add a location for tour and shuttle buses to pick up passengers near the amenity center and assisted living facility, i.e. bus duck out, for residents living on the Project Site.
- Install the signage and striping required for side-street stop controlled intersections on all on-site minor streets that approach collector roads, except all-way stop controlled intersections as shown on **Figure 12**.
- Install ADA accessible features throughout the Project including ramps, handicap parking spaces, etc.

These recommendations will improve pedestrian and bicycle access, as well as establish clear right-of-way at the major intersections within the Project.

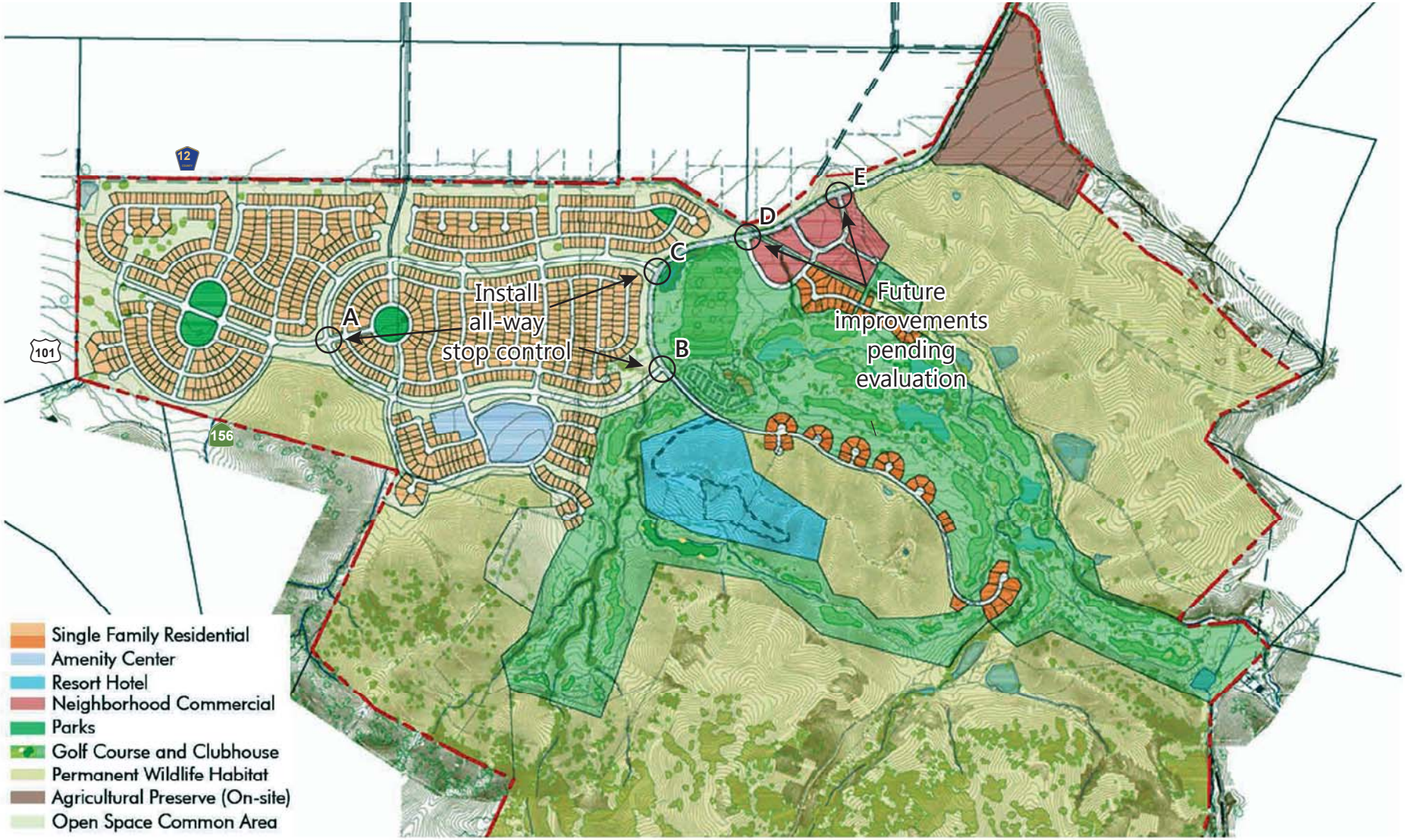


Figure 12

San Juan Oaks Internal Intersection Improvements

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Date: March, 2014

PARKING

Currently, the Project description in the Specific Plan does not include a detailed proposed parking plan; however the Specific Plan requires that each component of the proposed Project adhere to applicable parking requirements set forth in the County Code. Specifically, the San Benito County Code of Ordinances Section 25.31 provides off-street parking requirements for different land uses. **Table 17** summarizes parking requirements for the individual land uses proposed for the Project Site. Based on San Benito County's Code, the Project, at full buildout, would be required to provide a total of 2,800 parking spaces.

TABLE 17: VEHICLE PARKING REQUIREMENTS

Project Site	Project Size	San Benito County Parking Requirement[1]		Parking Demand[2]
		Rate	Supply	
Senior Adult Housing	1,017 du	2 spaces/du	2,034 spaces	1,424 spaces
Single Family	67 du	2 spaces/du	134 spaces	94 spaces
Amenity Center	25,000 sf	1 space/300 sf	83 spaces	96 spaces
Resort Hotel	200 rooms	1 space/room + 4 spaces +1 space/employee[3]	229 spaces	284 spaces
Assisted Living Family	100 beds	1 space/doctor + 1 space/2 employees + 1 space/4 beds[4]	45 spaces	33 spaces
Specialty Retail	50,000 sf	1 space/250 sf[5]	200 spaces	188 spaces
General Office	7,500 sf	1 space/300 sf	25 spaces	22 spaces
Medical Office	7,500 sf	1 space/150 sf	50 spaces	24 spaces
	Total		**2,800 spaces**	**2,165 spaces**

Notes:
1. San Benito County Code Section 25.31.
2. Parking demand based on average rate stated in the ITE *Parking Generation Manual, 4th Edition*.
3. For the purpose of this parking analysis 25 shift employees were assumed.
4. For the purpose of this analysis 5 doctors and 30 employees were assumed.
5. Undefined commercial uses' rate of 1 space/250 sf was applied, per San Benito County Code off-street parking requirements.

Source: ITE *Parking Generation Manual*, 4th Edition; Fehr & Peers, 2015.

The parking requirements were compared to the parking demand rates published in the *ITE Parking Generation Manual* to provide additional information and to assess the ability of the Project to adhere to the applicable parking requirements. As noted in **Table 17**, the actual parking demand for the Project is approximately 2,165 parking spaces. Apply a circulation factor of 80 percent (this is a conservative factor, since a majority of the land uses are residential and parking lot circulation is typically not an issue) creates a parking supply of 2,706 spaces (2,165 parking demand / 0.80 = 2,706 spaces) which would be adequate for the Project Site. Thus the Project Site has a conservative requirement for the residential uses.

9. CONSTRUCTION IMPACTS

This chapter discusses the construction period of the proposed Project, including construction traffic estimates, and construction parking. While no significant impacts were identified and thus no mitigation is necessary, general recommendations are also provided for construction-related improvement measures, such as limiting times when trucks would be permitted to travel to/from the site and restricting routes to further reduce any adverse impacts on neighboring communities. Recommendations stated below would be the responsibility of the Project and should be incorporated as part of the Construction Management Plan (CMP).

CONSTRUCTION ACTIVITIES

Site preparation includes all of the activities required to allow construction of the Project. Major components of site preparation would involve grading of the site, installing utilities and walls/fences, landscaping, and constructing necessary infrastructure. A variety of equipment would be required for the site preparation stage including, without limitation, bulldozers, grading machines, cranes, and dump trucks, which would be responsible for the removal and deposition of cut-and-fill material on the site.

Building construction involves the assembly of almost 1,100 residential units, the amenity center, commercial facilities, hotel, and assisted living facility, and other Project components. Major elements of the building construction would include, among other things, the building foundations, pouring concrete, housing framing installation, and completing the building accessories such as elevators.

Construction activities are expected to be completed over five phases by the year 2025. It is anticipated that the first four phases of construction will be the Del Webb housing portion of the Project. The development of the amenity center is projected to be completed as part of the second phase. The final phase (phase five) will consist of the construction of the conventional single-family homes, neighborhood commercial, resort, and the assisted living facility.

TRAFFIC OPERATIONS

Union Road provides the only access to the Project Site until the emergency vehicle access route is constructed along SR 156. Truck access to the site should be limited during peak commute times (7:00 to 9:00 AM and 4:00 to 6:00 PM) to reduce potential impacts to the operations of the nearby intersections and to reduce delay.

CONSTRUCTION TRIP ESTIMATES

The project applicant provided information regarding anticipated truck and vehicle demands during both the land development and home construction phases of the Project, which are outlined in **Table 18**.

According to the *2010 HCM*, a passenger car equivalent (PCE) factor can be applied to construction trip forecasts to account for truck trips. PCEs are used in capacity analysis to convert heavy vehicle traffic (i.e. construction traffic) into the equivalent passenger car flow to account for their relative impact. The *2010 HCM* specifies a PCE range for trucks from 1.5 for level terrains to 4.5 for mountainous terrains. The terrain in the project area is relatively level and a PCE of 1.5 is applied.

The peak land development and landscaping construction is anticipated to generate 1,879 daily PCE trips and 533 daily PCE trips during the peak home construction. Assuming that these construction phases would overlap, then the maximum number of daily PCE trips would be 2,412 as shown in **Table 18**. However, this represents a very conservative estimate since it is unlikely that the peak of both of these construction phases would overlap. Additionally, the development would occur in five phases over approximately 10 years.

TABLE 18: PASSENGER-CAR EQUIVALENTS FOR CONSTRUCTION VEHICLES

Truck Type	PCE Factor	Land Development and Landscaping		Home Construction		Total PCE
		Truck/Non-Truck	Total PCE	Truck/Non-Truck	Total PCE	
Equipment Trucks	1.5	54	81	16	24	105
Delivery Trucks	1.5	1,022	1,533	260	390	1,923
Non-Truck Vehicles	1.0	265	265	119	119	384
Total	**--**	**1,341**	**1,879**	**395**	**533**	**2,412**

Source: Fehr & Peers, 2015.

In the worst case scenario (assuming land development peak and construction peak overlap), the construction of the Project is estimated to generate a maximum of approximately 240 peak hour PCE trips (approximately 10 percent of the daily trips) in the AM and PM peak hours and would not exceed the trips generated by the Project (373 trips and 562 PM trips). As shown in **Table 4**, the intersections nearest the Project Site entrance do not operate at acceptable LOS thresholds during peak hours under Existing Conditions. Truck access to the site should be limited during peak commute times (7:00 to 9:00 AM and 4:00 to 6:00 PM) to reduce potential impacts to the operations of the nearby intersections and to reduce delay. Temporary lane closures along Union Road or SR 156 are not expected assuming that major construction traffic occurs during off-peak times. Elements related to construction traffic circulation and access would be addressed in a Construction Management Plan, discussed in the following section.

Given the size of the Project Site, all construction workers are anticipated to park on the Project Site and therefore no off-site parking impacts have been identified.

CONSTRUCTION TRAFFIC MANAGEMENT PLAN

Although anticipated to be less than the amount of traffic generated by the Project at buildout, construction traffic should be managed to reduce its effects on normal daily traffic operations. The Project

applicant and construction contractor should meet with the Public Works department to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion. The Project applicant should develop a construction management plan for review and approval by the Public Works department. The plan should include at least the following items and requirements:

- A set of comprehensive traffic control measures, including scheduling of major truck trips and designated construction access routes and deliveries to avoid peak traffic.
- Notification procedures for adjacent property owners (i.e., the golf course) and the appropriate County staff when major deliveries will occur.
- Specific location(s) of construction staging areas for materials, equipment, and vehicles (must be located on the Project Site).
- Identification of haul routes for movement of construction vehicles that would minimize impacts on vehicular traffic, and a provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the Project applicant.
- Provisions for removal of trash generated by Project construction activity.
- A process for responding to and tracking complaints pertaining to construction activity.

It is anticipated that these measures will be incorporated into a more detailed Construction Management Plan, which would address other issues such as hours of construction on site, limitations on noise and dust emissions, and other applicable items.

PHYSICAL IMPROVEMENTS

Physical roadway impacts are not evaluated for construction traffic because of the temporary nature of construction activities. However, a project specific mitigation measure (construct new signal) was identified under Existing plus Project Conditions at the Union Road/San Juan Oaks Drive intersection, which serves as the main entry point to the Project/construction site. The Project specific impact is primarily triggered due to additional PM peak hour trips exiting the site, which result in the MUTCD peak hour volume warrant being met. Under Existing Conditions, about 60 vehicles exit San Juan Oaks Drive in the PM peak hour; the MUTCD peak hour volume signal warrant for rural areas[6] would be met with a minimum of 75 vehicles exiting the project site (i.e. 15 additional PM vehicles exiting the site (60 existing trips plus 15 construction trips = 75 trips)). It is reasonable to assume that the addition of construction traffic would trigger the MUTCD signal warrant; thus the Construction Management Plan should include an element that requires one of the following at the Union Road/San Juan Oaks Drive intersection: a) the

[6] Per MUTCD, rural areas are defined as those areas that have a population of less than 10,000 people or where the major street has a posted speed limit above 40 miles per hour. San Juan Oaks Drive is posted at 55 miles per hour.

construction of the permanent signal prior to construction, b) the installation of a temporary signal prior to construction, or c) manual traffic management during construction.

APPENDIX A: TRAFFIC COUNTS

Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 1AM FINAL
Site Code : 00000001
Start Date : 2/5/2013
Page No : 1

Groups Printed- Vehicles

	US-101 SB RAMPS Southbound					CHITTENDEN RD Westbound					US-101 SB RAMPS Northbound					CHITTENDEN RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	29	0	9	0	38	0	31	4	0	35	0	0	0	0	0	11	58	0	0	69	142
07:15 AM	47	0	8	0	55	0	32	5	0	37	0	0	0	0	0	21	69	0	0	90	182
07:30 AM	34	0	20	0	54	0	36	12	0	48	0	0	0	0	0	26	102	0	0	128	230
07:45 AM	29	0	18	0	47	0	40	20	0	60	0	0	0	0	0	15	86	0	0	101	208
Total	139	0	55	0	194	0	139	41	0	180	0	0	0	0	0	73	315	0	0	388	762
08:00 AM	47	0	10	0	57	0	22	0	0	22	0	0	0	0	0	14	56	0	0	70	149
08:15 AM	34	1	14	0	49	0	19	2	0	21	0	0	0	0	0	15	47	0	0	62	132
08:30 AM	43	0	7	0	50	0	12	2	0	14	0	0	0	0	0	14	57	0	0	71	135
08:45 AM	38	0	18	0	56	0	12	4	0	16	0	0	0	0	0	13	64	0	0	77	149
Total	162	1	49	0	212	0	65	8	0	73	0	0	0	0	0	56	224	0	0	280	565
Grand Total	301	1	104	0	406	0	204	49	0	253	0	0	0	0	0	129	539	0	0	668	1327
Apprch %	74.1	0.2	25.6	0		0	80.6	19.4	0		0	0	0	0		19.3	80.7	0	0		
Total %	22.7	0.1	7.8	0	30.6	0	15.4	3.7	0	19.1	0	0	0	0	0	9.7	40.6	0	0	50.3	

	US-101 SB RAMPS Southbound				CHITTENDEN RD Westbound				US-101 SB RAMPS Northbound				CHITTENDEN RD Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	**47**	0	8	55	0	32	5	37	0	0	0	0	21	69	0	90	182
07:30 AM	34	0	**20**	54	0	36	12	48	0	0	0	0	**26**	**102**	0	**128**	**230**
07:45 AM	29	0	18	47	0	**40**	**20**	**60**	0	0	0	0	15	86	0	101	208
08:00 AM	47	0	10	**57**	0	22	0	22	0	0	0	0	14	56	0	70	149
Total Volume	157	0	56	213	0	130	37	167	0	0	0	0	76	313	0	389	769
% App. Total	73.7	0	26.3		0	77.8	22.2		0	0	0		19.5	80.5	0		
PHF	.835	.000	.700	.934	.000	.813	.463	.696	.000	.000	.000	.000	.731	.767	.000	.760	.836

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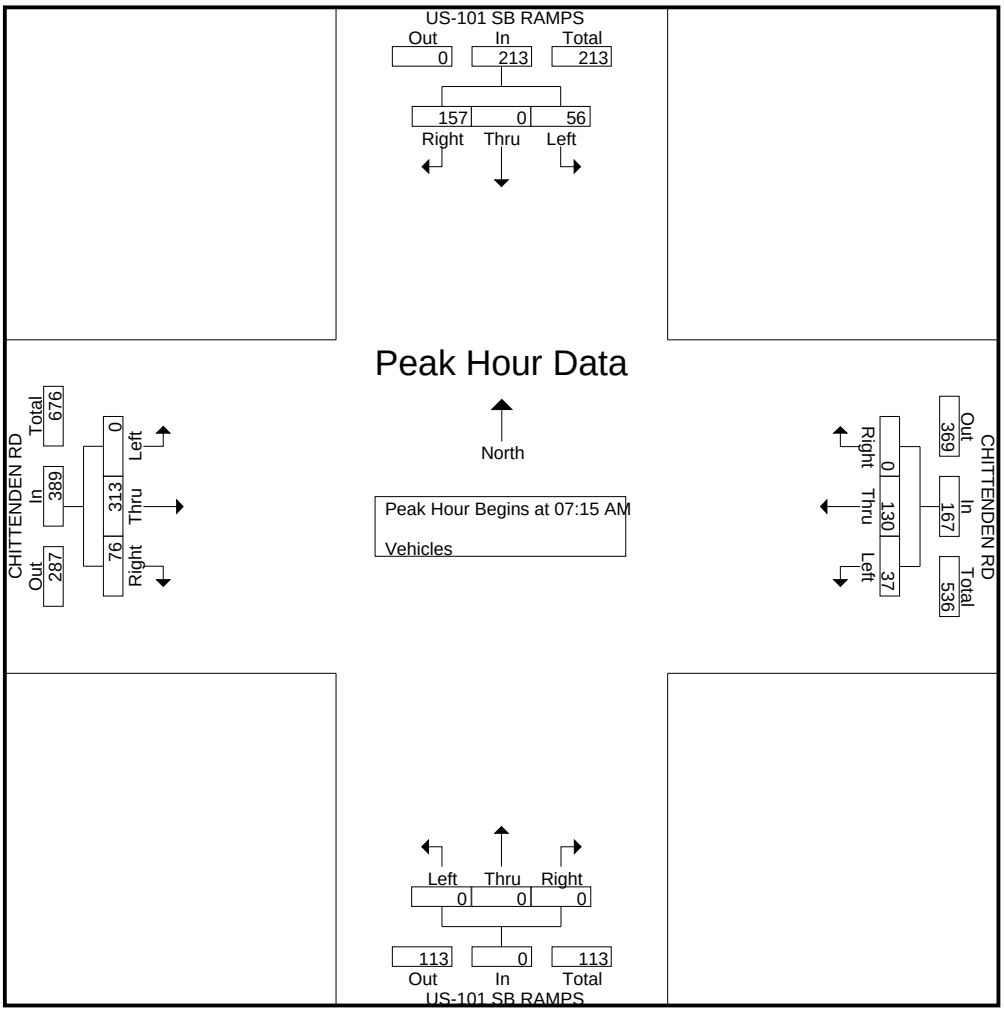

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File Name : 1PM FINAL
Site Code : 00000001
Start Date : 2/5/2013
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Groups Printed- Vehicles

	US-101 SB RAMPS Southbound					CHITTENDEN RD Westbound					US-101 SB RAMPS Northbound					CHITTENDEN RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	57	0	25	0	82	0	35	36	0	71	0	0	0	0	0	23	70	0	0	93	246
04:15 PM	57	0	22	0	79	0	39	18	0	57	0	0	0	0	0	31	79	0	0	110	246
04:30 PM	59	0	24	0	83	0	25	24	0	49	0	0	0	0	0	25	90	0	0	115	247
04:45 PM	68	0	29	0	97	0	28	21	0	49	0	0	0	0	0	34	86	0	0	120	266
Total	241	0	100	0	341	0	127	99	0	226	0	0	0	0	0	113	325	0	0	438	1005
05:00 PM	70	1	25	0	96	0	34	20	0	54	0	0	0	0	0	28	59	0	0	87	237
05:15 PM	74	2	35	0	111	0	23	12	0	35	0	0	0	0	0	37	89	0	0	126	272
05:30 PM	66	1	28	0	95	0	26	10	0	36	0	0	0	0	0	19	77	0	0	96	227
05:45 PM	47	1	27	0	75	0	13	10	0	23	0	0	0	0	0	29	72	0	0	101	199
Total	257	5	115	0	377	0	96	52	0	148	0	0	0	0	0	113	297	0	0	410	935
Grand Total	498	5	215	0	718	0	223	151	0	374	0	0	0	0	0	226	622	0	0	848	1940
Apprch %	69.4	0.7	29.9	0		0	59.6	40.4	0		0	0	0	0		26.7	73.3	0	0		
Total %	25.7	0.3	11.1	0	37	0	11.5	7.8	0	19.3	0	0	0	0	0	11.6	32.1	0	0	43.7	

	US-101 SB RAMPS Southbound				CHITTENDEN RD Westbound				US-101 SB RAMPS Northbound				CHITTENDEN RD Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	59	0	24	83	0	25	**24**	49	0	0	0	0	25	**90**	0	115	247
04:45 PM	68	0	29	97	0	28	21	49	0	0	0	0	34	86	0	120	266
05:00 PM	70	1	25	96	0	**34**	20	**54**	0	0	0	0	28	59	0	87	237
05:15 PM	**74**	**2**	**35**	**111**	0	23	12	35	0	0	0	0	**37**	89	0	**126**	**272**
Total Volume	271	3	113	387	0	110	77	187	0	0	0	0	124	324	0	448	1022
% App. Total	70	0.8	29.2		0	58.8	41.2		0	0	0		27.7	72.3	0		
PHF	.916	.375	.807	.872	.000	.809	.802	.866	.000	.000	.000	.000	.838	.900	.000	.889	.939

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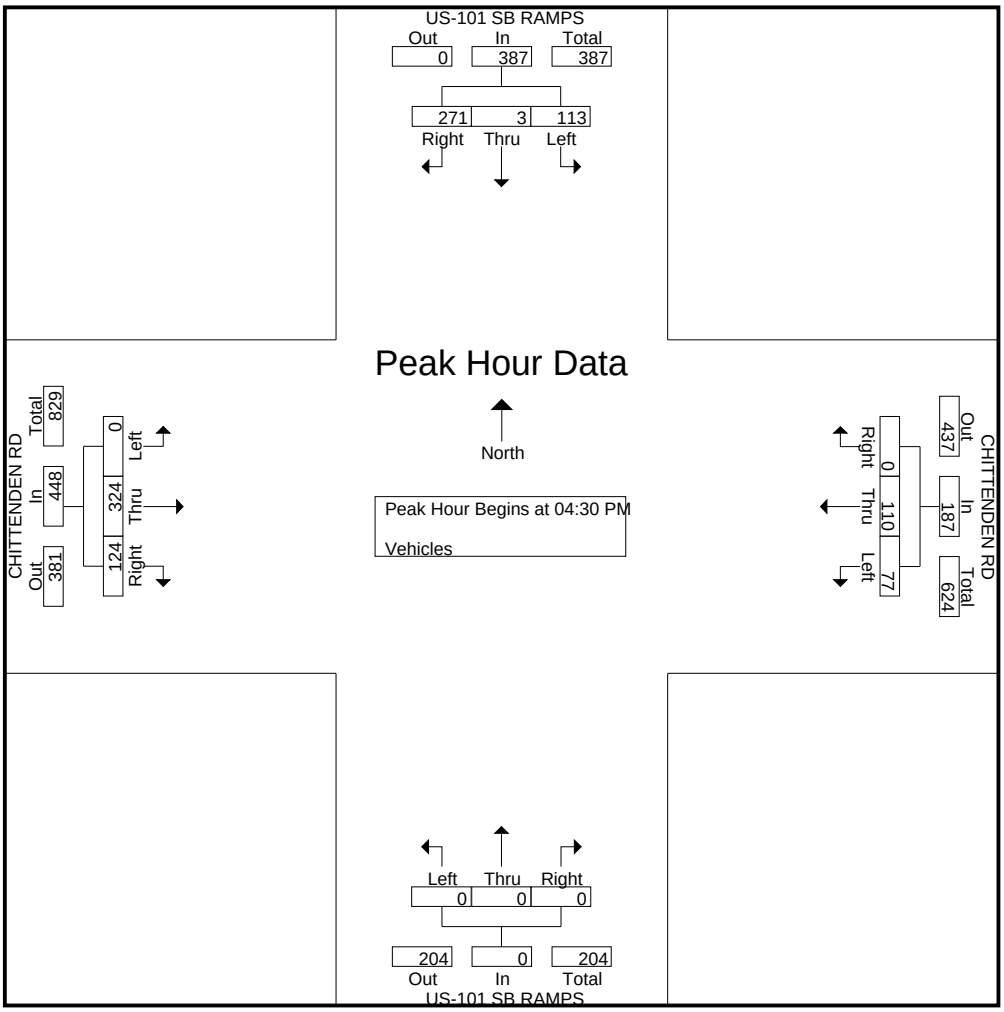

Traffic Data Service

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File Name : 2AM FINAL
Site Code : 00000002
Start Date : 2/5/2013
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Groups Printed- Vehicles

	Southbound					CHITTENDEN RD Westbound					US-101 NB RAMPS Northbound					CHITTENDEN RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	20	9	0	29	7	0	16	0	23	49	22	0	0	71	123
07:15 AM	0	0	0	0	0	0	17	13	0	30	17	0	20	0	37	51	23	0	0	74	141
07:30 AM	0	0	0	0	0	0	27	19	0	46	47	0	21	0	68	75	51	0	0	126	240
07:45 AM	0	0	0	0	0	0	41	20	0	61	35	0	19	0	54	66	37	0	0	103	218
Total	0	0	0	0	0	0	105	61	0	166	106	0	76	0	182	241	133	0	0	374	722
08:00 AM	0	0	0	0	0	0	5	13	0	18	14	0	17	0	31	49	21	0	0	70	119
08:15 AM	0	0	0	0	0	0	5	10	0	15	11	0	18	0	29	42	22	0	0	64	108
08:30 AM	0	0	0	0	0	0	6	13	0	19	9	0	6	0	15	46	14	0	0	60	94
08:45 AM	0	0	0	0	0	0	11	8	0	19	10	0	5	0	15	60	28	0	0	88	122
Total	0	0	0	0	0	0	27	44	0	71	44	0	46	0	90	197	85	0	0	282	443
Grand Total	0	0	0	0	0	0	132	105	0	237	150	0	122	0	272	438	218	0	0	656	1165
Apprch %	0	0	0	0		0	55.7	44.3	0		55.1	0	44.9	0		66.8	33.2	0	0		
Total %	0	0	0	0	0	0	11.3	9	0	20.3	12.9	0	10.5	0	23.3	37.6	18.7	0	0	56.3	

	Southbound				CHITTENDEN RD Westbound				US-101 NB RAMPS Northbound				CHITTENDEN RD Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	0	0	0	0	0	20	9	29	7	0	16	23	49	22	0	71	123
07:15 AM	0	0	0	0	0	17	13	30	17	0	20	37	51	23	0	74	141
07:30 AM	0	0	0	0	0	27	19	46	**47**	0	**21**	**68**	**75**	**51**	0	**126**	**240**
07:45 AM	0	0	0	0	0	**41**	**20**	**61**	35	0	19	54	66	37	0	103	218
Total Volume	0	0	0	0	0	105	61	166	106	0	76	182	241	133	0	374	722
% App. Total	0	0	0		0	63.3	36.7		58.2	0	41.8		64.4	35.6	0		
PHF	.000	.000	.000	.000	.000	.640	.763	.680	.564	.000	.905	.669	.803	.652	.000	.742	.752

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File Name : 2AM FINAL
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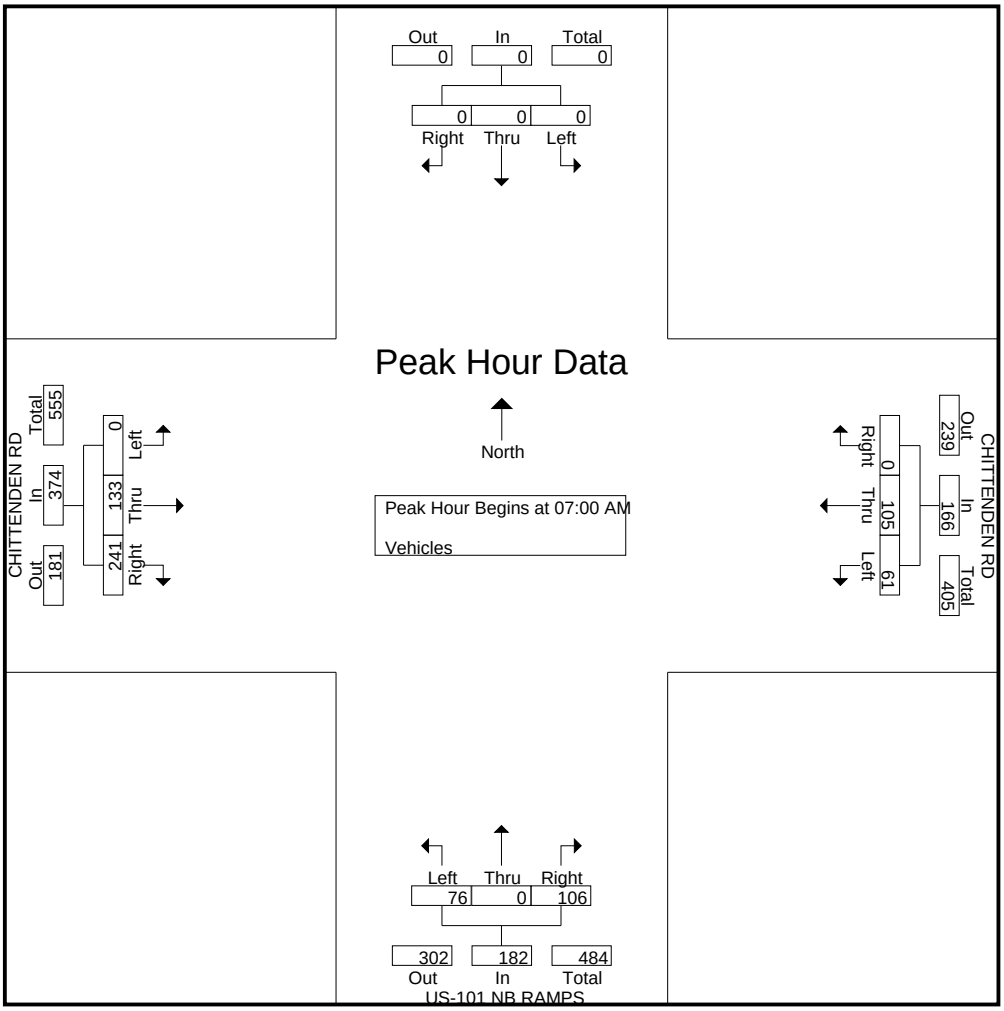

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File Name : 2PM FINAL
Site Code : 00000002
Start Date : 2/5/2013
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Groups Printed- Vehicles

	Southbound					CHITTENDEN RD Westbound					US-101 NB RAMPS Northbound					CHITTENDEN RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	59	21	0	80	5	0	13	0	18	42	52	0	0	94	192
04:15 PM	0	0	0	0	0	0	46	19	0	65	8	0	10	0	18	43	62	0	0	105	188
04:30 PM	0	0	0	0	0	0	36	17	0	53	11	0	11	0	22	59	57	0	0	116	191
04:45 PM	0	0	0	0	0	0	34	15	0	49	6	0	16	0	22	56	61	0	0	117	188
Total	0	0	0	0	0	0	175	72	0	247	30	0	50	0	80	200	232	0	0	432	759
05:00 PM	0	0	0	0	0	0	41	19	0	60	6	0	10	0	16	38	42	0	0	80	156
05:15 PM	0	0	0	0	0	0	21	14	0	35	2	0	14	0	16	57	70	0	0	127	178
05:30 PM	0	0	0	0	0	0	22	11	0	33	6	0	16	0	22	62	49	0	0	111	166
05:45 PM	0	0	0	0	0	0	15	14	0	29	12	0	8	0	20	47	53	0	0	100	149
Total	0	0	0	0	0	0	99	58	0	157	26	0	48	0	74	204	214	0	0	418	649
Grand Total	0	0	0	0	0	0	274	130	0	404	56	0	98	0	154	404	446	0	0	850	1408
Apprch %	0	0	0	0		0	67.8	32.2	0		36.4	0	63.6	0		47.5	52.5	0	0		
Total %	0	0	0	0	0	0	19.5	9.2	0	28.7	4	0	7	0	10.9	28.7	31.7	0	0	60.4	

	Southbound				CHITTENDEN RD Westbound				US-101 NB RAMPS Northbound				CHITTENDEN RD Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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 04:00 PM																	
04:00 PM	0	0	0	0	0	**59**	**21**	**80**	5	0	13	18	42	52	0	94	**192**
04:15 PM	0	0	0	0	0	46	19	65	8	0	10	18	43	**62**	0	105	188
04:30 PM	0	0	0	0	0	36	17	53	**11**	0	11	**22**	**59**	57	0	116	191
04:45 PM	0	0	0	0	0	34	15	49	6	0	**16**	22	56	61	0	**117**	188
Total Volume	0	0	0	0	0	175	72	247	30	0	50	80	200	232	0	432	759
% App. Total	0	0	0		0	70.9	29.1		37.5	0	62.5		46.3	53.7	0		
PHF	.000	.000	.000	.000	.000	.742	.857	.772	.682	.000	.781	.909	.847	.935	.000	.923	.988

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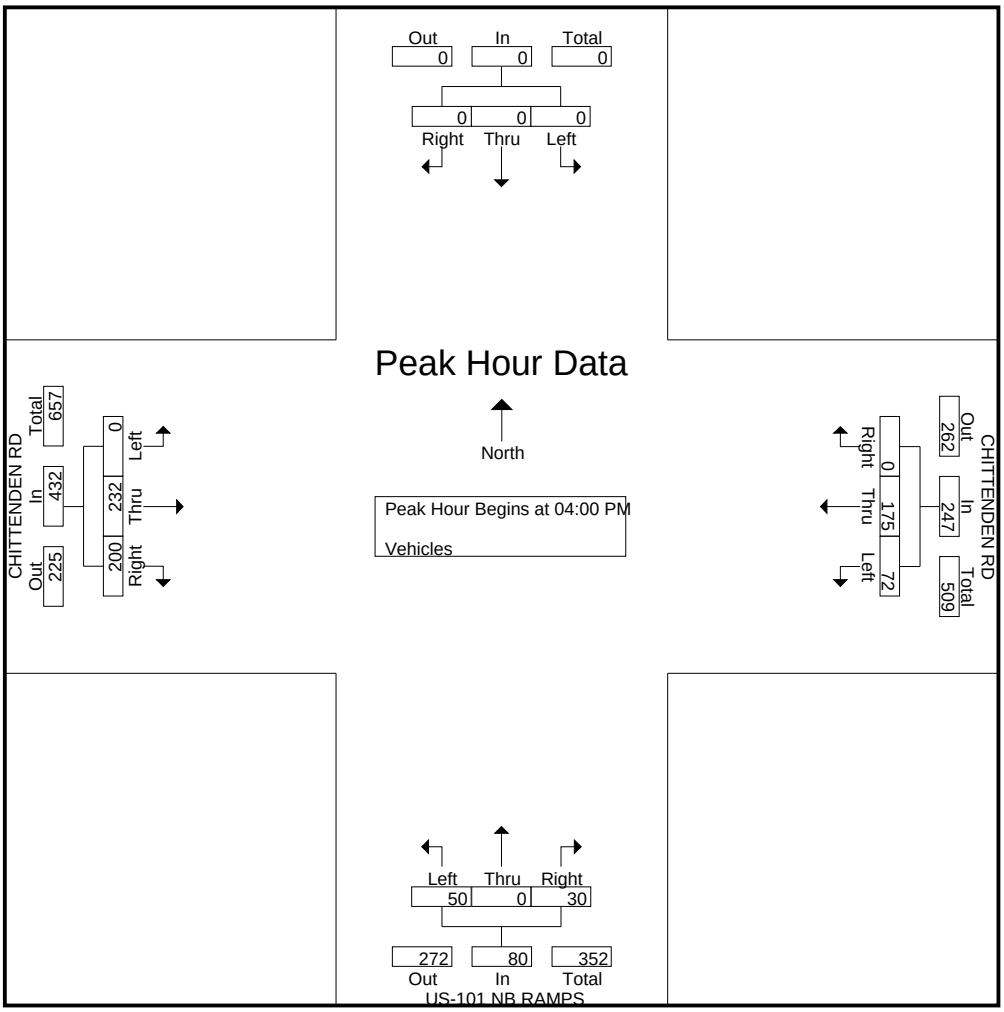

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File Name : 3AM FINAL
Site Code : 00000003
Start Date : 2/5/2013
Page No : 1

Groups Printed- Vehicles

	THE ALAMEDA Southbound					SR-156 Westbound					THE ALAMEDA Northbound					SR-156 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	12	6	21	0	39	12	281	0	0	293	4	5	8	0	17	2	93	5	0	100	449
07:15 AM	10	2	11	0	23	27	278	0	0	305	4	6	18	0	28	7	101	4	1	113	469
07:30 AM	23	9	22	0	54	33	258	1	0	292	6	9	13	0	28	6	130	11	0	147	521
07:45 AM	17	6	28	0	51	29	198	3	0	230	4	12	13	0	29	7	126	15	1	149	459
Total	62	23	82	0	167	101	1015	4	0	1120	18	32	52	0	102	22	450	35	2	509	1898
08:00 AM	23	12	22	0	57	42	211	1	0	254	4	17	9	0	30	6	95	11	0	112	453
08:15 AM	15	4	26	0	45	20	160	0	0	180	3	4	5	0	12	2	99	8	1	110	347
08:30 AM	11	7	21	0	39	23	140	3	0	166	1	3	7	0	11	5	96	6	1	108	324
08:45 AM	6	4	14	4	28	13	139	3	0	155	3	3	3	0	9	7	118	1	1	127	319
Total	55	27	83	4	169	98	650	7	0	755	11	27	24	0	62	20	408	26	3	457	1443
Grand Total	117	50	165	4	336	199	1665	11	0	1875	29	59	76	0	164	42	858	61	5	966	3341
Apprch %	34.8	14.9	49.1	1.2		10.6	88.8	0.6	0		17.7	36	46.3	0		4.3	88.8	6.3	0.5		
Total %	3.5	1.5	4.9	0.1	10.1	6	49.8	0.3	0	56.1	0.9	1.8	2.3	0	4.9	1.3	25.7	1.8	0.1	28.9	

	THE ALAMEDA Southbound				SR-156 Westbound				THE ALAMEDA Northbound				SR-156 Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	10	2	11	23	27	**278**	0	**305**	4	6	**18**	28	**7**	101	4	112	468
07:30 AM	**23**	9	22	54	33	258	1	292	**6**	9	13	28	6	**130**	11	147	**521**
07:45 AM	17	6	**28**	51	29	198	**3**	230	4	12	13	29	7	126	**15**	**148**	458
08:00 AM	23	**12**	22	**57**	**42**	211	1	254	4	**17**	9	**30**	6	95	11	112	453
Total Volume	73	29	83	185	131	945	5	1081	18	44	53	115	26	452	41	519	1900
% App. Total	39.5	15.7	44.9		12.1	87.4	0.5		15.7	38.3	46.1		5	87.1	7.9		
PHF	.793	.604	.741	.811	.780	.850	.417	.886	.750	.647	.736	.958	.929	.869	.683	.877	.912

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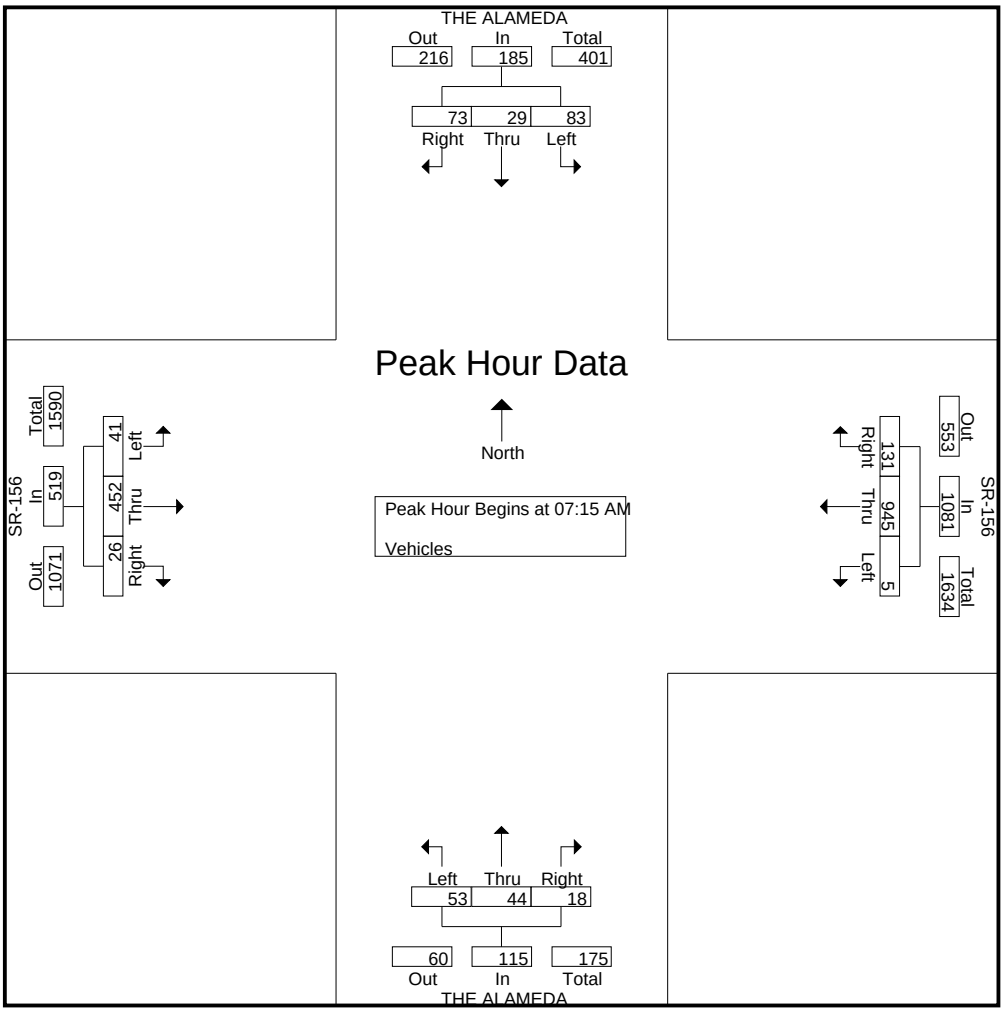

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Groups Printed- Vehicles

	THE ALAMEDA Southbound					SR-156 Westbound					THE ALAMEDA Northbound					SR-156 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	17	11	35	0	63	22	150	0	0	172	6	4	8	1	19	7	174	6	1	188	442
04:15 PM	11	9	32	0	52	26	133	1	0	160	2	13	7	0	22	8	218	7	0	233	467
04:30 PM	6	13	33	0	52	23	149	3	0	175	4	7	8	0	19	8	201	7	0	216	462
04:45 PM	18	11	33	0	62	38	166	0	0	204	3	3	6	0	12	15	196	11	0	222	500
Total	52	44	133	0	229	109	598	4	0	711	15	27	29	1	72	38	789	31	1	859	1871
05:00 PM	10	5	24	0	39	32	163	3	0	198	1	4	1	0	6	9	203	16	1	229	472
05:15 PM	16	14	36	0	66	25	188	6	0	219	4	10	12	0	26	10	230	7	0	247	558
05:30 PM	8	10	25	0	43	16	135	3	0	154	2	4	5	0	11	8	214	10	0	232	440
05:45 PM	12	4	17	0	33	27	129	1	0	157	2	2	1	0	5	7	220	15	2	244	439
Total	46	33	102	0	181	100	615	13	0	728	9	20	19	0	48	34	867	48	3	952	1909
Grand Total	98	77	235	0	410	209	1213	17	0	1439	24	47	48	1	120	72	1656	79	4	1811	3780
Apprch %	23.9	18.8	57.3	0		14.5	84.3	1.2	0		20	39.2	40	0.8		4	91.4	4.4	0.2		
Total %	2.6	2	6.2	0	10.8	5.5	32.1	0.4	0	38.1	0.6	1.2	1.3	0	3.2	1.9	43.8	2.1	0.1	47.9	

	THE ALAMEDA Southbound				SR-156 Westbound				THE ALAMEDA Northbound				SR-156 Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	6	13	33	52	23	149	3	175	**4**	7	8	19	8	201	7	216	462
04:45 PM	**18**	11	33	62	**38**	166	0	204	3	3	6	12	**15**	196	11	222	500
05:00 PM	10	5	24	39	32	163	3	198	1	4	1	6	9	203	**16**	228	471
05:15 PM	16	**14**	**36**	**66**	25	**188**	**6**	**219**	4	**10**	**12**	**26**	10	**230**	7	**247**	**558**
Total Volume	50	43	126	219	118	666	12	796	12	24	27	63	42	830	41	913	1991
% App. Total	22.8	19.6	57.5		14.8	83.7	1.5		19	38.1	42.9		4.6	90.9	4.5		
PHF	.694	.768	.875	.830	.776	.886	.500	.909	.750	.600	.563	.606	.700	.902	.641	.924	.892

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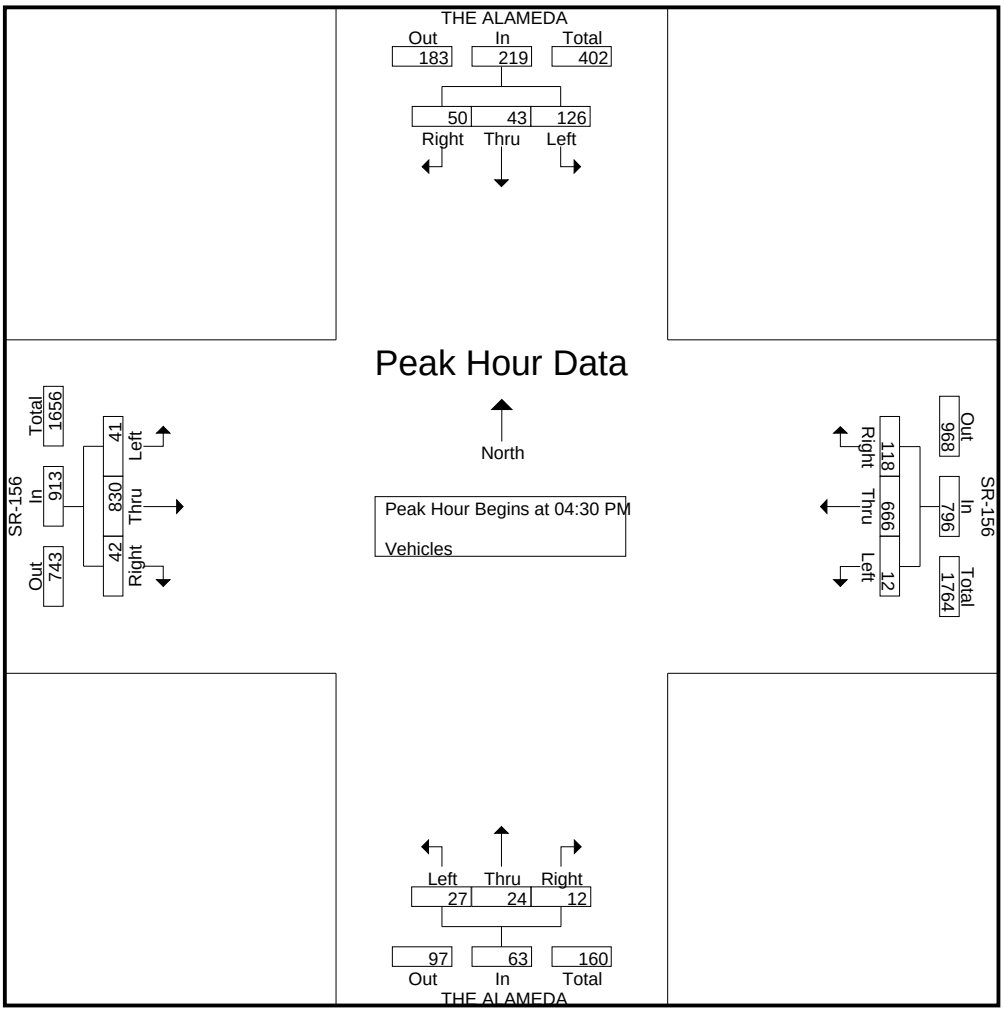

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Groups Printed- Vehicles

	BIXBY RD Southbound					SR-156 Westbound					BIXBY RD Northbound					SR-156 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	3	2	0	0	5	2	311	0	0	313	0	0	0	0	0	0	104	2	0	106	424
07:15 AM	1	2	0	0	3	6	319	0	0	325	0	0	0	0	0	0	112	0	0	112	440
07:30 AM	0	1	0	0	1	6	312	0	0	318	0	0	0	0	0	0	145	1	0	146	465
07:45 AM	1	0	1	0	2	1	283	0	0	284	0	1	0	0	1	0	164	2	0	166	453
Total	5	5	1	0	11	15	1225	0	0	1240	0	1	0	0	1	0	525	5	0	530	1782
08:00 AM	3	1	0	0	4	3	224	0	0	227	0	0	0	0	0	0	130	3	0	133	364
08:15 AM	3	0	1	0	4	2	185	0	0	187	0	0	0	0	0	0	105	0	0	105	296
08:30 AM	2	0	4	0	6	0	174	0	0	174	0	0	0	0	0	0	139	1	0	140	320
08:45 AM	1	0	0	0	1	5	169	0	0	174	0	0	0	0	0	0	135	1	0	136	311
Total	9	1	5	0	15	10	752	0	0	762	0	0	0	0	0	0	509	5	0	514	1291
Grand Total	14	6	6	0	26	25	1977	0	0	2002	0	1	0	0	1	0	1034	10	0	1044	3073
Apprch %	53.8	23.1	23.1	0		1.2	98.8	0	0		0	100	0	0		0	99	1	0		
Total %	0.5	0.2	0.2	0	0.8	0.8	64.3	0	0	65.1	0	0	0	0	0	0	33.6	0.3	0	34	

	BIXBY RD Southbound				SR-156 Westbound				BIXBY RD Northbound				SR-156 Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	**3**	**2**	0	**5**	2	311	0	313	0	0	0	0	0	104	**2**	106	424
07:15 AM	1	2	0	3	**6**	**319**	0	**325**	0	0	0	0	0	112	0	112	440
07:30 AM	0	1	0	1	6	312	0	318	0	0	0	0	0	145	1	146	**465**
07:45 AM	1	0	**1**	2	1	283	0	284	0	**1**	0	**1**	0	**164**	2	**166**	453
Total Volume	5	5	1	11	15	1225	0	1240	0	1	0	1	0	525	5	530	1782
% App. Total	45.5	45.5	9.1		1.2	98.8	0		0	100	0		0	99.1	0.9		
PHF	.417	.625	.250	.550	.625	.960	.000	.954	.000	.250	.000	.250	.000	.800	.625	.798	.958

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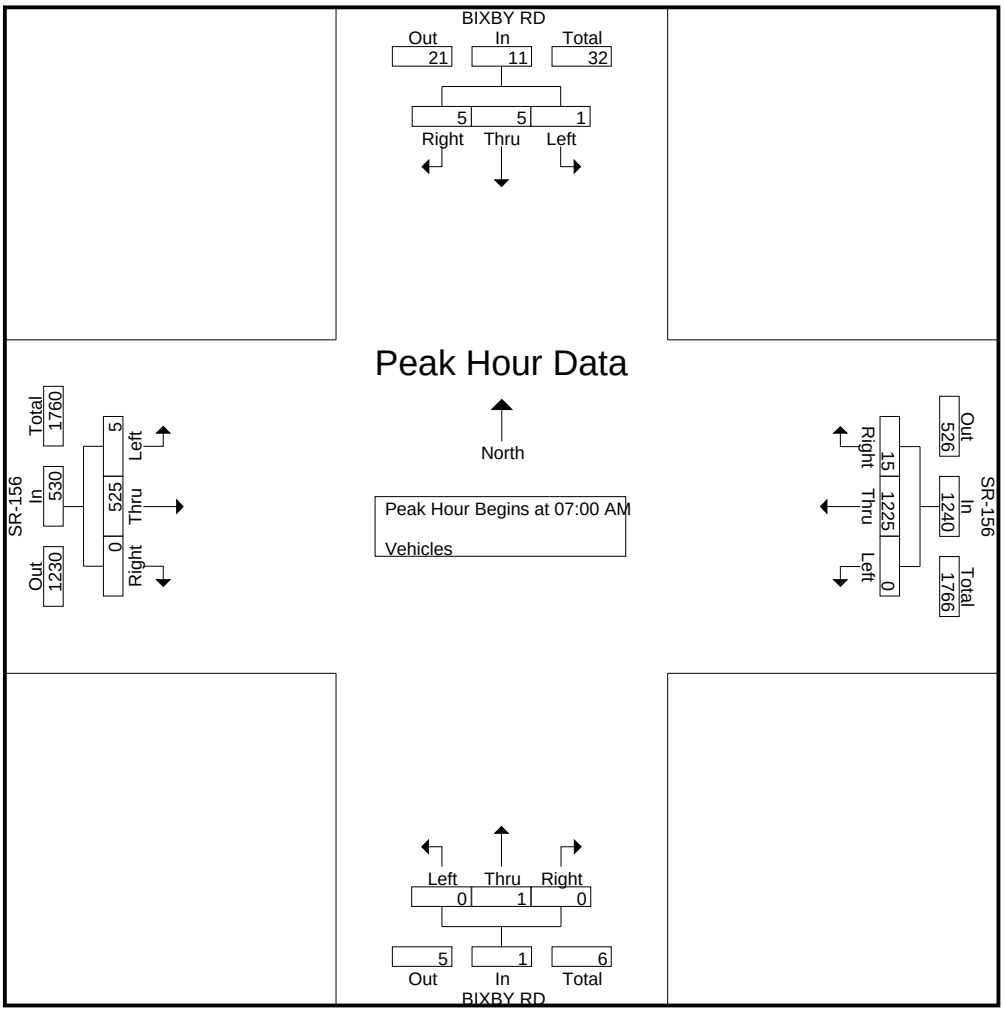

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Groups Printed- Vehicles

	BIXBY RD Southbound					SR-156 Westbound					BIXBY RD Northbound					SR-156 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	1	0	0	0	1	1	191	0	0	192	0	0	0	0	0	0	232	2	0	234	427
04:15 PM	2	1	1	0	4	0	159	1	0	160	0	0	0	0	0	0	265	1	0	266	430
04:30 PM	3	0	0	0	3	5	201	0	0	206	0	0	0	0	0	0	254	2	0	256	465
04:45 PM	3	0	2	0	5	2	233	0	0	235	0	0	0	0	0	0	213	6	0	219	459
Total	9	1	3	0	13	8	784	1	0	793	0	0	0	0	0	0	964	11	0	975	1781
05:00 PM	5	0	0	0	5	0	211	0	0	211	0	0	0	0	0	0	244	3	0	247	463
05:15 PM	3	0	1	0	4	1	210	0	0	211	0	0	0	0	0	0	250	4	0	254	469
05:30 PM	0	0	0	0	0	4	168	0	0	172	0	1	0	0	1	0	278	3	0	281	454
05:45 PM	0	0	0	0	0	0	160	0	0	160	0	0	0	0	0	0	214	1	0	215	375
Total	8	0	1	0	9	5	749	0	0	754	0	1	0	0	1	0	986	11	0	997	1761
Grand Total	17	1	4	0	22	13	1533	1	0	1547	0	1	0	0	1	0	1950	22	0	1972	3542
Apprch %	77.3	4.5	18.2	0		0.8	99.1	0.1	0		0	100	0	0		0	98.9	1.1	0		
Total %	0.5	0	0.1	0	0.6	0.4	43.3	0	0	43.7	0	0	0	0	0	0	55.1	0.6	0	55.7	

	BIXBY RD Southbound				SR-156 Westbound				BIXBY RD Northbound				SR-156 Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	3	0	0	3	**5**	201	0	206	0	0	0	0	0	**254**	2	**256**	465
04:45 PM	3	0	**2**	**5**	2	**233**	0	**235**	0	0	0	0	0	213	**6**	219	459
05:00 PM	**5**	0	0	5	0	211	0	211	0	0	0	0	0	244	3	247	463
05:15 PM	3	0	1	4	1	210	0	211	0	0	0	0	0	250	4	254	**469**
Total Volume	14	0	3	17	8	855	0	863	0	0	0	0	0	961	15	976	1856
% App. Total	82.4	0	17.6		0.9	99.1	0		0	0	0		0	98.5	1.5		
PHF	.700	.000	.375	.850	.400	.917	.000	.918	.000	.000	.000	.000	.000	.946	.625	.953	.989

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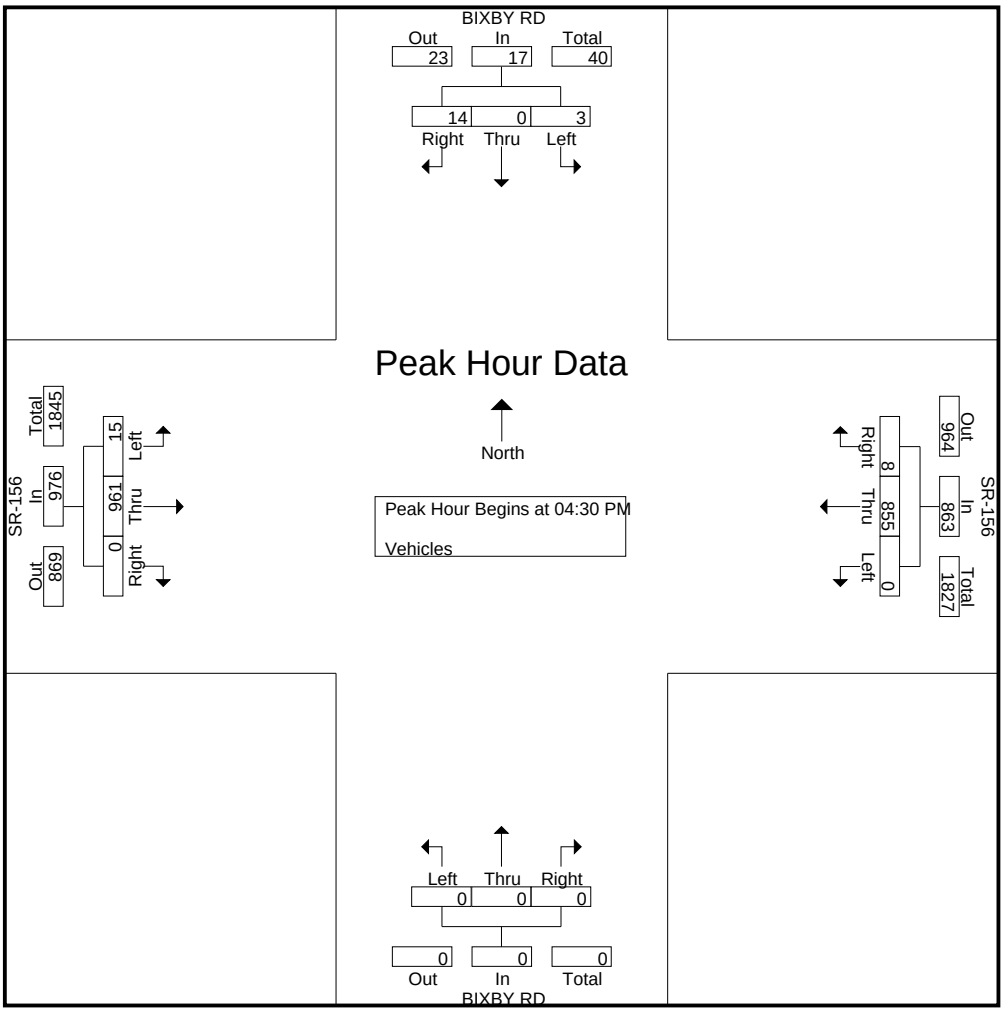

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Groups Printed- Vehicles

	MITCHELL RD Southbound					SR-156 Westbound					UNION RD Northbound					SR-156 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	4	7	0	11	7	182	9	0	198	8	4	127	0	139	42	65	1	0	108	456
07:15 AM	0	3	9	0	12	3	185	16	0	204	1	2	147	0	150	48	58	0	0	106	472
07:30 AM	1	4	7	4	16	9	169	9	0	187	0	1	130	0	131	42	108	0	0	150	484
07:45 AM	1	6	13	0	20	5	155	10	0	170	5	2	120	0	127	47	108	0	0	155	472
Total	2	17	36	4	59	24	691	44	0	759	14	9	524	0	547	179	339	1	0	519	1884
08:00 AM	1	3	7	0	11	5	129	4	0	138	5	1	83	0	89	54	80	0	0	134	372
08:15 AM	0	5	2	0	7	5	116	6	0	127	6	1	71	0	78	40	76	0	0	116	328
08:30 AM	1	2	2	0	5	3	106	6	0	115	6	0	71	0	77	50	85	0	0	135	332
08:45 AM	0	6	8	0	14	8	81	6	0	95	8	1	79	0	88	40	91	1	0	132	329
Total	2	16	19	0	37	21	432	22	0	475	25	3	304	0	332	184	332	1	0	517	1361
Grand Total	4	33	55	4	96	45	1123	66	0	1234	39	12	828	0	879	363	671	2	0	1036	3245
Apprch %	4.2	34.4	57.3	4.2		3.6	91	5.3	0		4.4	1.4	94.2	0		35	64.8	0.2	0		
Total %	0.1	1	1.7	0.1	3	1.4	34.6	2	0	38	1.2	0.4	25.5	0	27.1	11.2	20.7	0.1	0	31.9	

	MITCHELL RD Southbound				SR-156 Westbound				UNION RD Northbound				SR-156 Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	0	4	7	11	7	182	9	198	**8**	**4**	127	139	42	65	**1**	108	456
07:15 AM	0	3	9	12	3	**185**	**16**	**204**	1	2	**147**	**150**	**48**	58	0	106	472
07:30 AM	**1**	4	7	12	**9**	169	9	187	0	1	130	131	42	**108**	0	150	**480**
07:45 AM	1	**6**	**13**	**20**	5	155	10	170	5	2	120	127	47	108	0	**155**	472
Total Volume	2	17	36	55	24	691	44	759	14	9	524	547	179	339	1	519	1880
% App. Total	3.6	30.9	65.5		3.2	91	5.8		2.6	1.6	95.8		34.5	65.3	0.2		
PHF	.500	.708	.692	.688	.667	.934	.688	.930	.438	.563	.891	.912	.932	.785	.250	.837	.979

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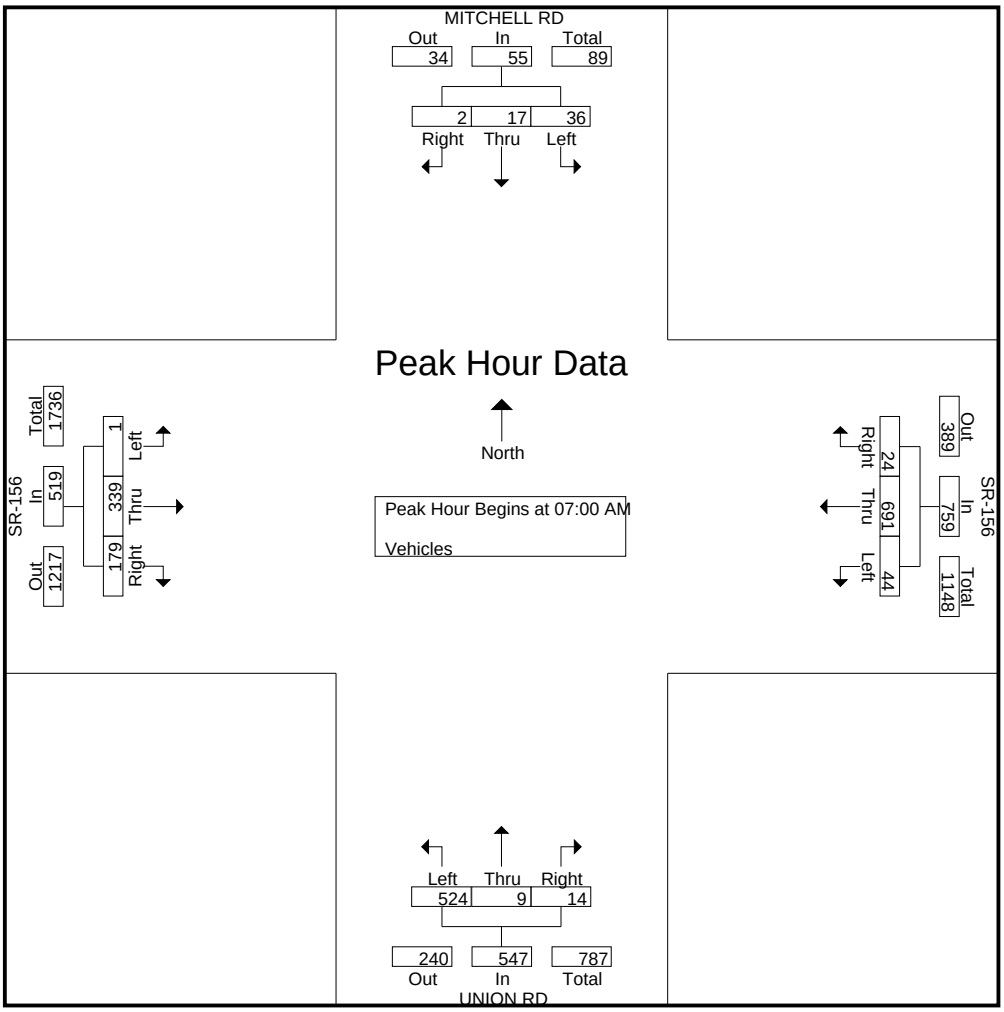

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Groups Printed- Vehicles

	MITCHELL RD Southbound					SR-156 Westbound					UNION RD Northbound					SR-156 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	9	32	0	41	6	129	6	0	141	18	2	55	0	75	86	146	1	0	233	490
04:15 PM	0	13	16	0	29	7	107	5	0	119	16	3	56	0	75	92	151	0	0	243	466
04:30 PM	3	15	34	0	52	1	132	7	0	140	25	3	90	0	118	102	158	0	0	260	570
04:45 PM	0	14	29	0	43	2	132	4	0	138	11	5	89	0	105	95	133	1	0	229	515
Total	3	51	111	0	165	16	500	22	0	538	70	13	290	0	373	375	588	2	0	965	2041
05:00 PM	1	16	22	0	39	3	122	2	0	127	10	3	80	0	93	103	131	1	0	235	494
05:15 PM	0	15	17	0	32	4	144	5	0	153	7	1	63	0	71	114	130	0	0	244	500
05:30 PM	1	15	24	0	40	6	95	1	0	102	11	4	65	0	80	143	156	0	0	299	521
05:45 PM	0	7	13	0	20	6	103	8	0	117	5	6	60	0	71	102	118	1	0	221	429
Total	2	53	76	0	131	19	464	16	0	499	33	14	268	0	315	462	535	2	0	999	1944
Grand Total	5	104	187	0	296	35	964	38	0	1037	103	27	558	0	688	837	1123	4	0	1964	3985
Apprch %	1.7	35.1	63.2	0		3.4	93	3.7	0		15	3.9	81.1	0		42.6	57.2	0.2	0		
Total %	0.1	2.6	4.7	0	7.4	0.9	24.2	1	0	26	2.6	0.7	14	0	17.3	21	28.2	0.1	0	49.3	

	MITCHELL RD Southbound				SR-156 Westbound				UNION RD Northbound				SR-156 Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	**3**	15	**34**	**52**	1	132	**7**	140	**25**	3	**90**	**118**	102	**158**	0	**260**	**570**
04:45 PM	0	14	29	43	2	132	4	138	11	**5**	89	105	95	133	**1**	229	515
05:00 PM	1	**16**	22	39	3	122	2	127	10	3	80	93	103	131	1	235	494
05:15 PM	0	15	17	32	**4**	**144**	5	**153**	7	1	63	71	**114**	130	0	244	500
Total Volume	4	60	102	166	10	530	18	558	53	12	322	387	414	552	2	968	2079
% App. Total	2.4	36.1	61.4		1.8	95	3.2		13.7	3.1	83.2		42.8	57	0.2		
PHF	.333	.938	.750	.798	.625	.920	.643	.912	.530	.600	.894	.820	.908	.873	.500	.931	.912

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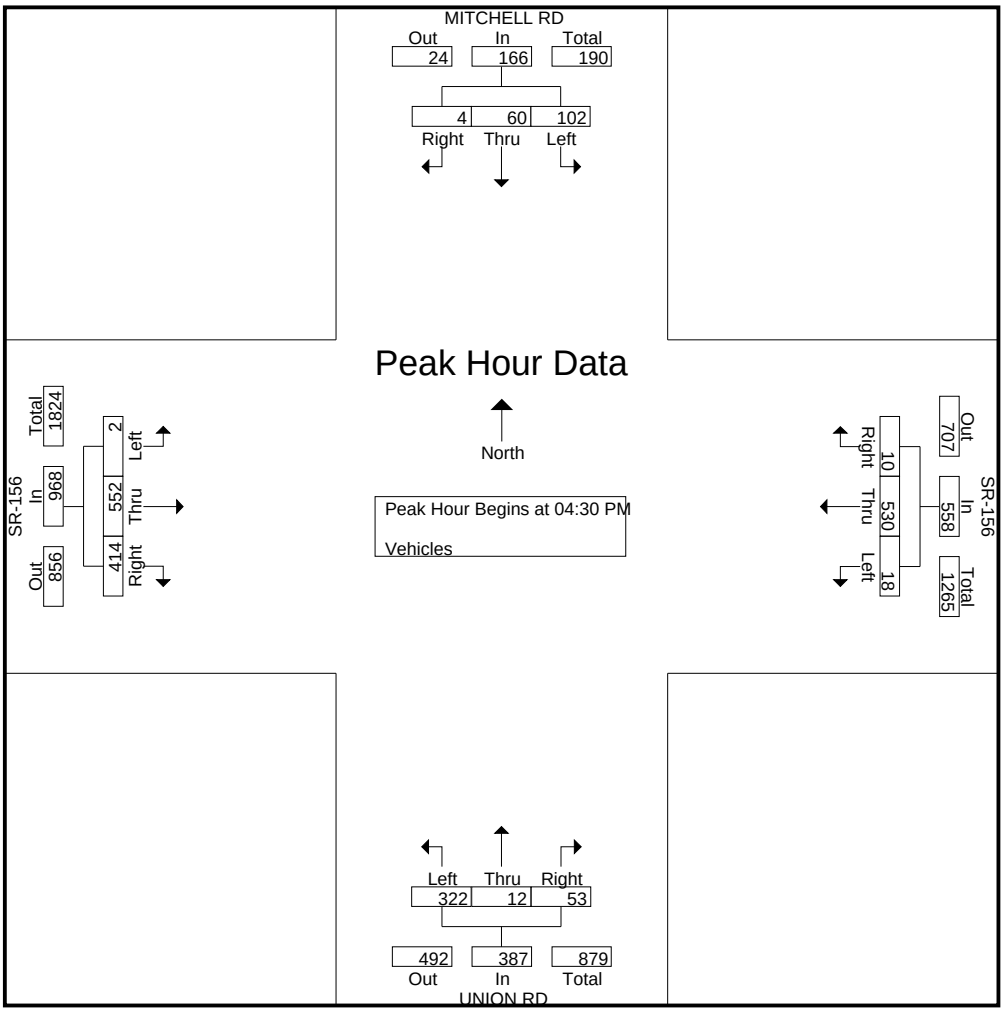

Traffic Data Service

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Groups Printed- Vehicles

	SR-156 Southbound					BUSINESS RT 156/SAN JUAN RD Westbound					SR-156 Northbound					Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	92	3	0	95	18	0	103	0	121	0	45	0	0	45	0	0	0	0	0	261
07:15 AM	0	93	6	0	99	15	0	122	0	137	0	37	0	0	37	0	0	0	0	0	273
07:30 AM	0	82	6	0	88	19	0	101	0	120	0	55	0	0	55	0	0	0	0	0	263
07:45 AM	0	68	7	0	75	9	0	95	0	104	0	67	0	0	67	0	0	0	0	0	246
Total	0	335	22	0	357	61	0	421	0	482	0	204	0	0	204	0	0	0	0	0	1043
08:00 AM	0	58	8	0	66	8	0	68	0	76	0	40	0	0	40	0	0	0	0	0	182
08:15 AM	0	69	4	0	73	19	0	71	0	90	0	52	0	0	52	0	0	0	0	0	215
08:30 AM	0	60	7	0	67	9	0	49	0	58	1	48	0	0	49	0	0	0	0	0	174
08:45 AM	0	48	3	0	51	8	0	46	0	54	0	52	0	0	52	0	0	0	0	0	157
Total	0	235	22	0	257	44	0	234	0	278	1	192	0	0	193	0	0	0	0	0	728
Grand Total	0	570	44	0	614	105	0	655	0	760	1	396	0	0	397	0	0	0	0	0	1771
Apprch %	0	92.8	7.2	0		13.8	0	86.2	0		0.3	99.7	0	0		0	0	0	0		
Total %	0	32.2	2.5	0	34.7	5.9	0	37	0	42.9	0.1	22.4	0	0	22.4	0	0	0	0	0	

	SR-156 Southbound				BUSINESS RT 156/SAN JUAN RD Westbound				SR-156 Northbound				Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	0	92	3	95	18	0	103	121	0	45	0	45	0	0	0	0	261
07:15 AM	0	**93**	6	**99**	15	0	**122**	**137**	0	37	0	37	0	0	0	0	**273**
07:30 AM	0	82	6	88	**19**	0	101	120	0	55	0	55	0	0	0	0	263
07:45 AM	0	68	**7**	75	9	0	95	104	0	**67**	0	**67**	0	0	0	0	246
Total Volume	0	335	22	357	61	0	421	482	0	204	0	204	0	0	0	0	1043
% App. Total	0	93.8	6.2		12.7	0	87.3		0	100	0		0	0	0		
PHF	.000	.901	.786	.902	.803	.000	.863	.880	.000	.761	.000	.761	.000	.000	.000	.000	.955

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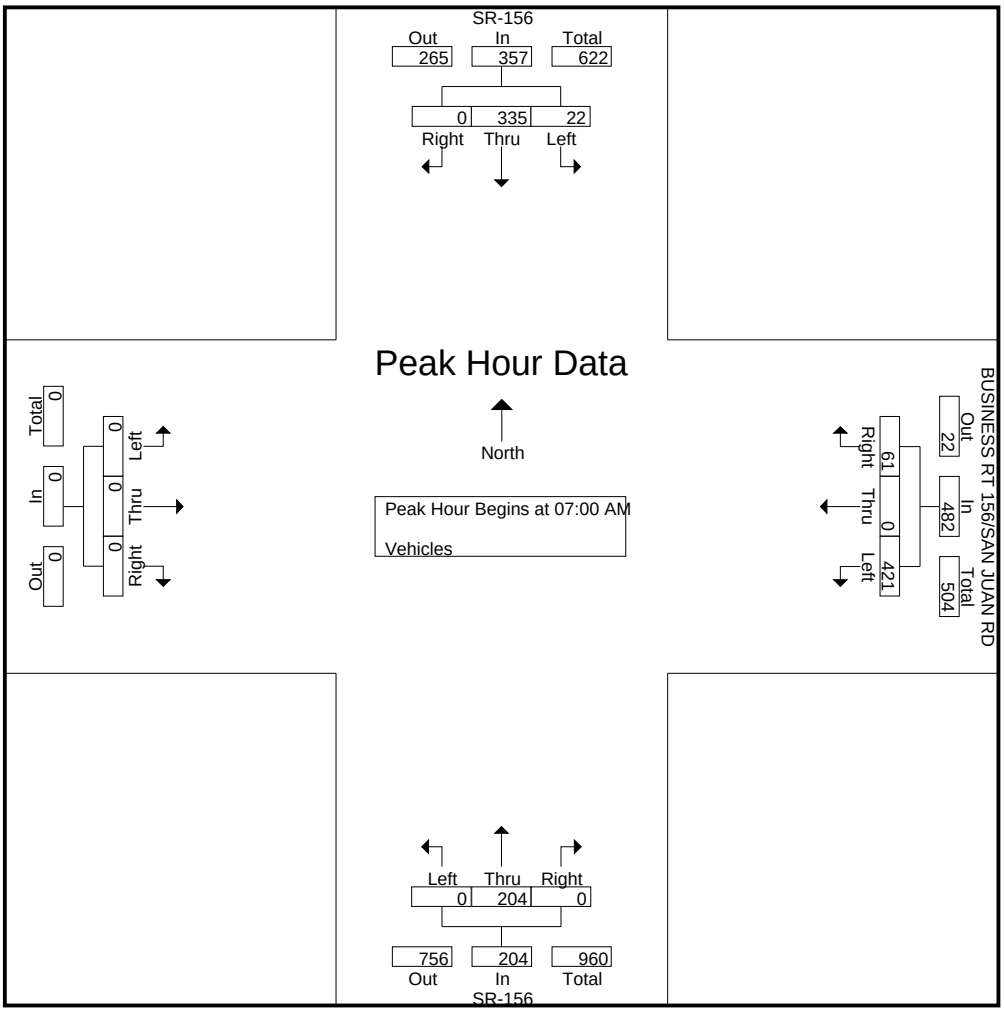

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Groups Printed- Vehicles

	SR-156 Southbound					BUSINESS RT 156/SAN JUAN RD Westbound					SR-156 Northbound					Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	79	10	0	89	13	0	58	0	71	1	99	0	0	100	0	0	0	0	0	260
04:15 PM	0	66	11	0	77	6	0	52	0	58	1	103	0	0	104	0	0	0	0	0	239
04:30 PM	0	82	13	0	95	11	0	62	0	73	0	122	0	0	122	0	0	0	0	0	290
04:45 PM	0	75	12	0	87	10	0	58	0	68	0	85	0	0	85	0	0	0	0	0	240
Total	0	302	46	0	348	40	0	230	0	270	2	409	0	0	411	0	0	0	0	0	1029
05:00 PM	0	68	12	0	80	7	0	65	0	72	0	68	0	0	68	0	0	0	0	0	220
05:15 PM	0	81	8	0	89	11	0	63	0	74	0	68	0	0	68	0	0	0	0	0	231
05:30 PM	0	56	13	0	69	7	0	53	0	60	0	88	0	0	88	0	0	0	0	0	217
05:45 PM	0	63	6	0	69	3	0	50	0	53	0	60	0	0	60	0	0	0	0	0	182
Total	0	268	39	0	307	28	0	231	0	259	0	284	0	0	284	0	0	0	0	0	850
Grand Total	0	570	85	0	655	68	0	461	0	529	2	693	0	0	695	0	0	0	0	0	1879
Apprch %	0	87	13	0		12.9	0	87.1	0		0.3	99.7	0	0		0	0	0	0		
Total %	0	30.3	4.5	0	34.9	3.6	0	24.5	0	28.2	0.1	36.9	0	0	37	0	0	0	0	0	

	SR-156 Southbound				BUSINESS RT 156/SAN JUAN RD Westbound				SR-156 Northbound				Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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 04:00 PM																	
04:00 PM	0	79	10	89	**13**	0	58	71	**1**	99	0	100	0	0	0	0	260
04:15 PM	0	66	11	77	6	0	52	58	1	103	0	104	0	0	0	0	239
04:30 PM	0	**82**	**13**	**95**	11	0	**62**	**73**	0	**122**	0	**122**	0	0	0	0	**290**
04:45 PM	0	75	12	87	10	0	58	68	0	85	0	85	0	0	0	0	240
Total Volume	0	302	46	348	40	0	230	270	2	409	0	411	0	0	0	0	1029
% App. Total	0	86.8	13.2		14.8	0	85.2		0.5	99.5	0		0	0	0		
PHF	.000	.921	.885	.916	.769	.000	.927	.925	.500	.838	.000	.842	.000	.000	.000	.000	.887

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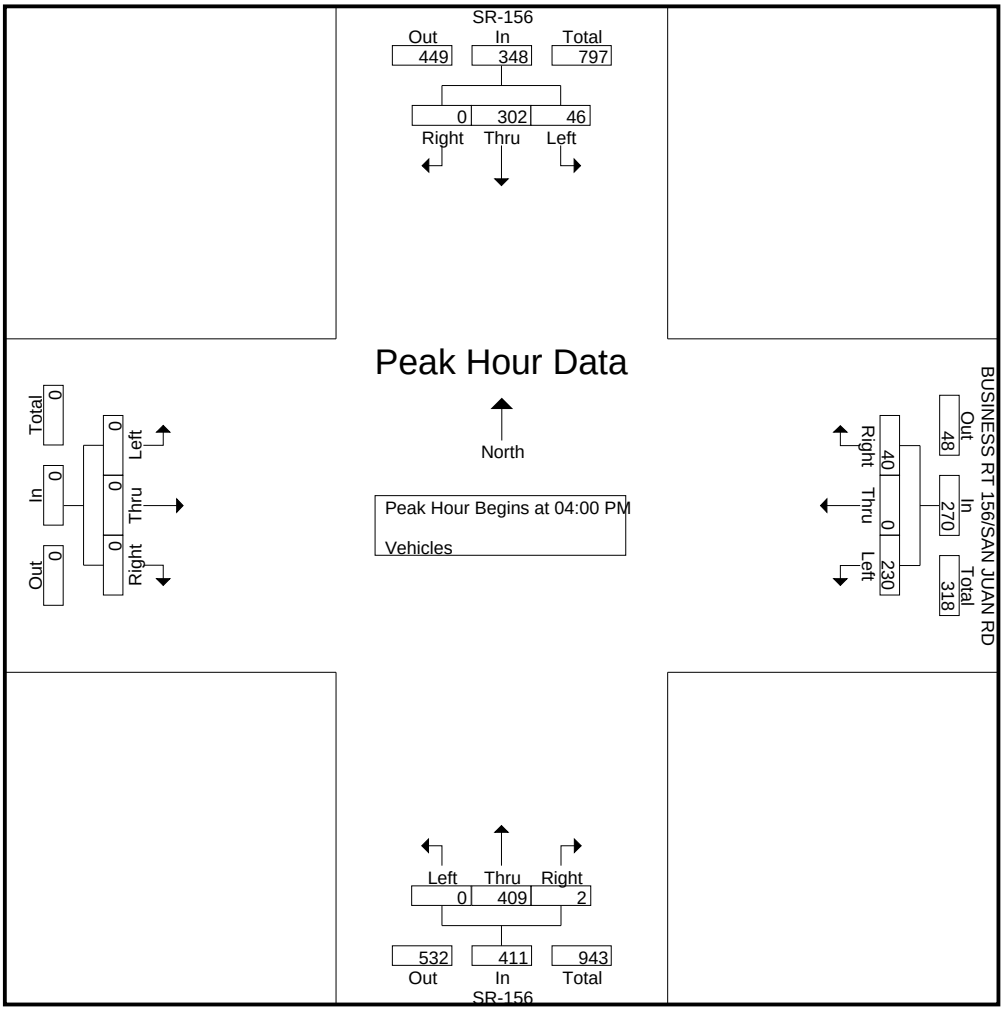

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Groups Printed- Vehicles

	SR-156 Southbound					BOLSA RD Westbound					SR-156 Northbound					BOLSA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	7	64	1	0	72	1	234	2	0	237	6	23	49	0	78	15	46	1	0	62	449
07:15 AM	5	53	1	0	59	0	251	3	0	254	4	32	45	0	81	17	60	5	0	82	476
07:30 AM	11	50	1	0	62	3	366	1	0	370	4	22	68	0	94	20	69	3	0	92	618
07:45 AM	18	58	1	0	77	2	269	3	0	274	3	37	38	0	78	19	106	8	0	133	562
Total	41	225	4	0	270	6	1120	9	0	1135	17	114	200	0	331	71	281	17	0	369	2105
08:00 AM	9	44	0	0	53	0	248	3	0	251	6	23	35	0	64	18	75	2	0	95	463
08:15 AM	7	47	1	0	55	1	187	2	0	190	9	34	38	0	81	11	81	1	0	93	419
08:30 AM	5	36	0	0	41	1	227	2	0	230	3	33	32	0	68	16	87	1	0	104	443
08:45 AM	3	40	0	0	43	0	169	5	0	174	3	28	33	0	64	10	90	3	0	103	384
Total	24	167	1	0	192	2	831	12	0	845	21	118	138	0	277	55	333	7	0	395	1709
Grand Total	65	392	5	0	462	8	1951	21	0	1980	38	232	338	0	608	126	614	24	0	764	3814
Apprch %	14.1	84.8	1.1	0		0.4	98.5	1.1	0		6.2	38.2	55.6	0		16.5	80.4	3.1	0		
Total %	1.7	10.3	0.1	0	12.1	0.2	51.2	0.6	0	51.9	1	6.1	8.9	0	15.9	3.3	16.1	0.6	0	20	

	SR-156 Southbound				BOLSA RD Westbound				SR-156 Northbound				BOLSA RD Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	5	53	**1**	59	0	251	**3**	254	4	32	45	81	17	60	5	82	476
07:30 AM	11	50	1	62	**3**	**366**	1	**370**	4	22	**68**	**94**	**20**	69	3	92	**618**
07:45 AM	**18**	**58**	1	**77**	2	269	3	274	3	**37**	38	78	19	**106**	**8**	**133**	562
08:00 AM	9	44	0	53	0	248	3	251	**6**	23	35	64	18	75	2	95	463
Total Volume	43	205	3	251	5	1134	10	1149	17	114	186	317	74	310	18	402	2119
% App. Total	17.1	81.7	1.2		0.4	98.7	0.9		5.4	36	58.7		18.4	77.1	4.5		
PHF	.597	.884	.750	.815	.417	.775	.833	.776	.708	.770	.684	.843	.925	.731	.563	.756	.857

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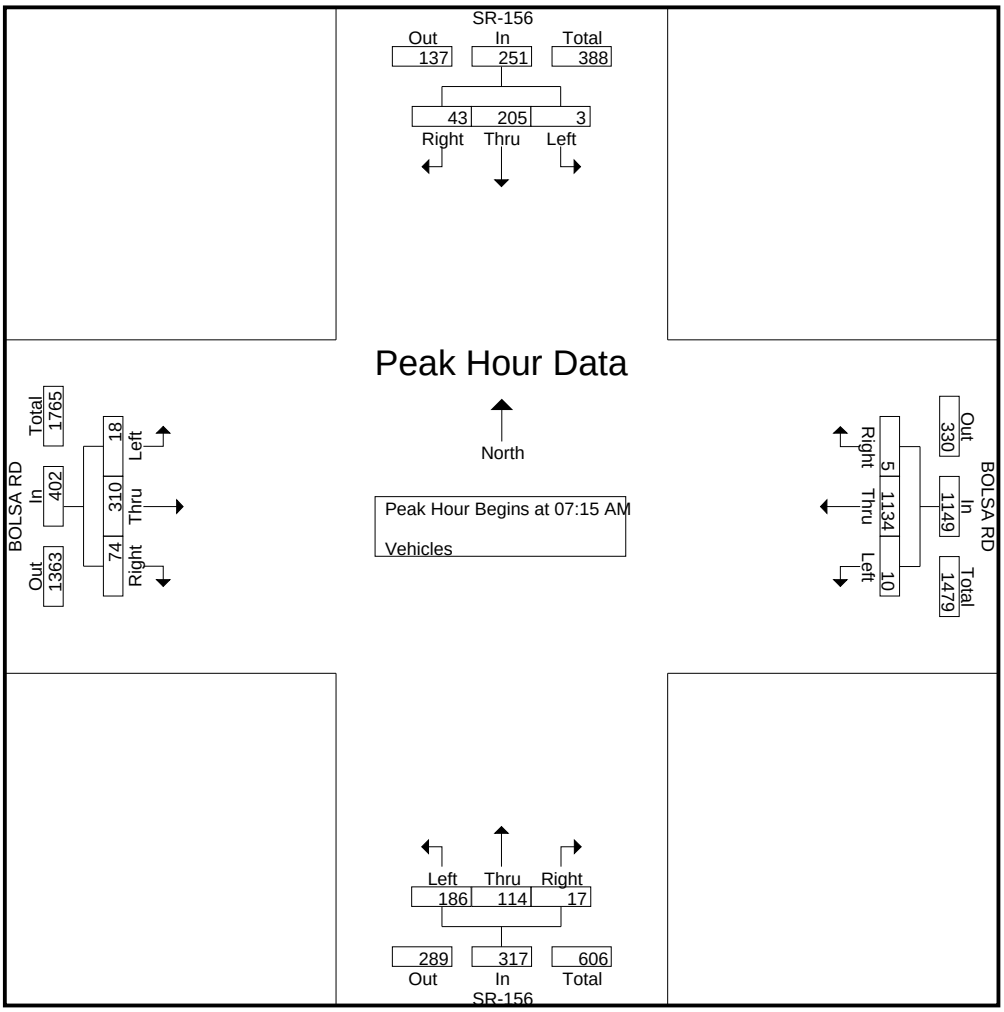

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Groups Printed- Vehicles

	SR-156 Southbound					BOLSA RD Westbound					SR-156 Northbound					BOLSA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	9	54	1	0	64	1	108	9	0	118	5	59	19	0	83	42	278	3	0	323	588
04:15 PM	6	39	1	0	46	0	86	8	0	94	12	81	25	0	118	49	305	4	0	358	616
04:30 PM	7	57	0	0	64	1	90	13	0	104	5	71	31	0	107	61	265	5	0	331	606
04:45 PM	5	53	0	0	58	0	123	6	0	129	2	52	31	0	85	51	305	2	0	358	630
Total	27	203	2	0	232	2	407	36	0	445	24	263	106	0	393	203	1153	14	0	1370	2440
05:00 PM	1	44	0	0	45	0	119	16	0	135	5	54	17	0	76	53	293	3	0	349	605
05:15 PM	4	48	1	0	53	3	134	7	0	144	3	60	23	0	86	58	293	3	0	354	637
05:30 PM	4	50	0	0	54	0	111	7	0	118	4	57	25	0	86	45	285	4	0	334	592
05:45 PM	2	46	0	0	48	0	76	5	0	81	1	43	18	0	62	60	273	2	0	335	526
Total	11	188	1	0	200	3	440	35	0	478	13	214	83	0	310	216	1144	12	0	1372	2360
Grand Total	38	391	3	0	432	5	847	71	0	923	37	477	189	0	703	419	2297	26	0	2742	4800
Apprch %	8.8	90.5	0.7	0		0.5	91.8	7.7	0		5.3	67.9	26.9	0		15.3	83.8	0.9	0		
Total %	0.8	8.1	0.1	0	9	0.1	17.6	1.5	0	19.2	0.8	9.9	3.9	0	14.6	8.7	47.9	0.5	0	57.1	

	SR-156 Southbound				BOLSA RD Westbound				SR-156 Northbound				BOLSA RD Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	**7**	**57**	0	**64**	1	90	13	104	**5**	**71**	**31**	**107**	**61**	265	**5**	331	606
04:45 PM	5	53	0	58	0	123	6	129	2	52	31	85	51	**305**	2	**358**	630
05:00 PM	1	44	0	45	0	119	**16**	135	5	54	17	76	53	293	3	349	605
05:15 PM	4	48	**1**	53	**3**	**134**	7	**144**	3	60	23	86	58	293	3	354	**637**
Total Volume	17	202	1	220	4	466	42	512	15	237	102	354	223	1156	13	1392	2478
% App. Total	7.7	91.8	0.5		0.8	91	8.2		4.2	66.9	28.8		16	83	0.9		
PHF	.607	.886	.250	.859	.333	.869	.656	.889	.750	.835	.823	.827	.914	.948	.650	.972	.973

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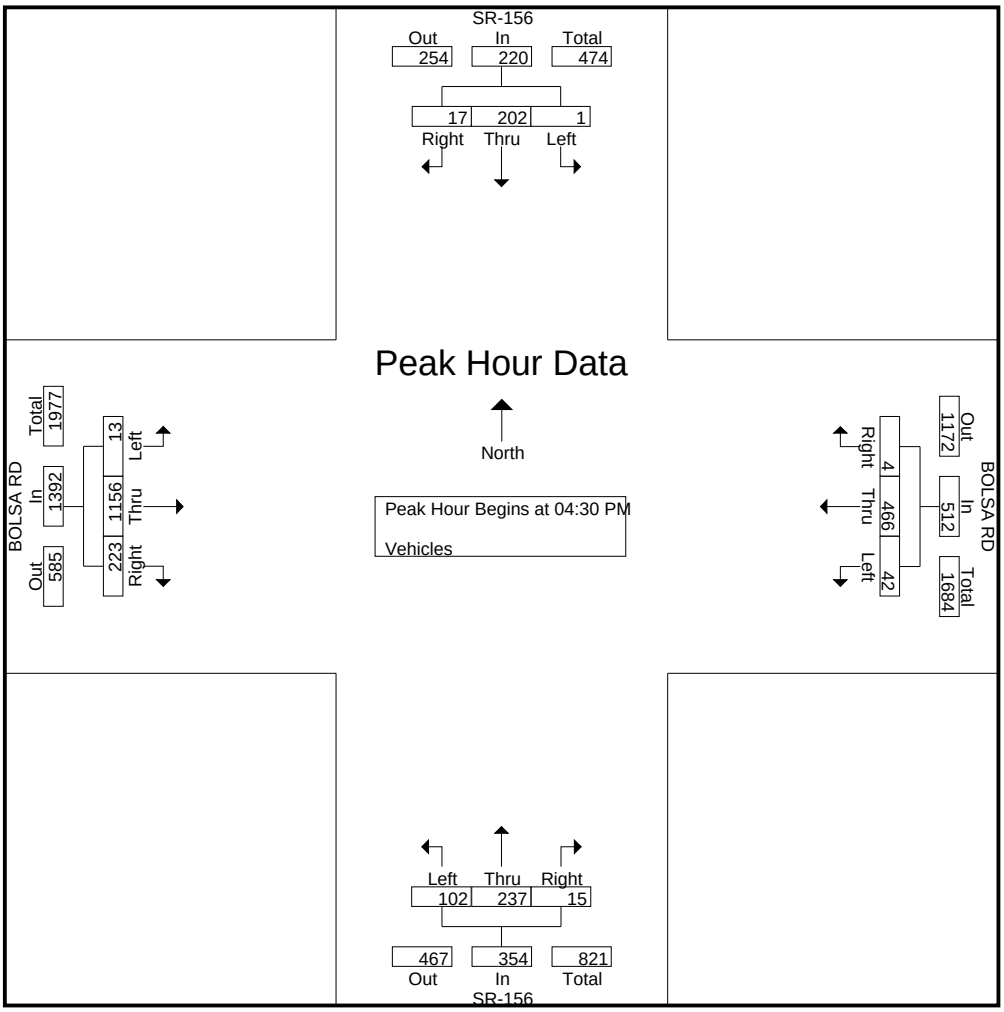

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Groups Printed- Vehicles

	SAN FELIPE RD Southbound					SR-156 Westbound					SAN FELIPE RD Northbound					SR-156 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	2	11	0	0	13	0	55	21	0	76	5	14	8	0	27	2	18	4	0	24	140
07:15 AM	3	13	0	0	16	0	53	21	0	74	11	18	7	0	36	5	28	5	0	38	164
07:30 AM	1	12	1	0	14	1	45	28	0	74	13	31	5	0	49	3	19	0	0	22	159
07:45 AM	1	15	0	0	16	0	53	35	0	88	15	21	4	0	40	5	34	1	0	40	184
Total	7	51	1	0	59	1	206	105	0	312	44	84	24	0	152	15	99	10	0	124	647
08:00 AM	2	19	0	0	21	0	55	20	0	75	11	19	3	0	33	6	25	1	0	32	161
08:15 AM	5	11	0	0	16	1	37	21	0	59	16	29	10	0	55	4	28	1	0	33	163
08:30 AM	1	13	0	0	14	1	33	25	0	59	13	19	1	0	33	2	36	1	0	39	145
08:45 AM	2	12	0	0	14	0	45	23	0	68	22	14	4	0	40	2	29	1	0	32	154
Total	10	55	0	0	65	2	170	89	0	261	62	81	18	0	161	14	118	4	0	136	623
Grand Total	17	106	1	0	124	3	376	194	0	573	106	165	42	0	313	29	217	14	0	260	1270
Apprch %	13.7	85.5	0.8	0		0.5	65.6	33.9	0		33.9	52.7	13.4	0		11.2	83.5	5.4	0		
Total %	1.3	8.3	0.1	0	9.8	0.2	29.6	15.3	0	45.1	8.3	13	3.3	0	24.6	2.3	17.1	1.1	0	20.5	

	SAN FELIPE RD Southbound				SR-156 Westbound				SAN FELIPE RD Northbound				SR-156 Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	**3**	13	0	16	0	53	21	74	11	18	**7**	36	5	28	**5**	38	164
07:30 AM	1	12	**1**	14	**1**	45	28	74	13	**31**	5	**49**	3	19	0	22	159
07:45 AM	1	15	0	16	0	53	**35**	**88**	**15**	21	4	40	5	**34**	1	**40**	**184**
08:00 AM	2	**19**	0	**21**	0	**55**	20	75	11	19	3	33	**6**	25	1	32	161
Total Volume	7	59	1	67	1	206	104	311	50	89	19	158	19	106	7	132	668
% App. Total	10.4	88.1	1.5		0.3	66.2	33.4		31.6	56.3	12		14.4	80.3	5.3		
PHF	.583	.776	.250	.798	.250	.936	.743	.884	.833	.718	.679	.806	.792	.779	.350	.825	.908

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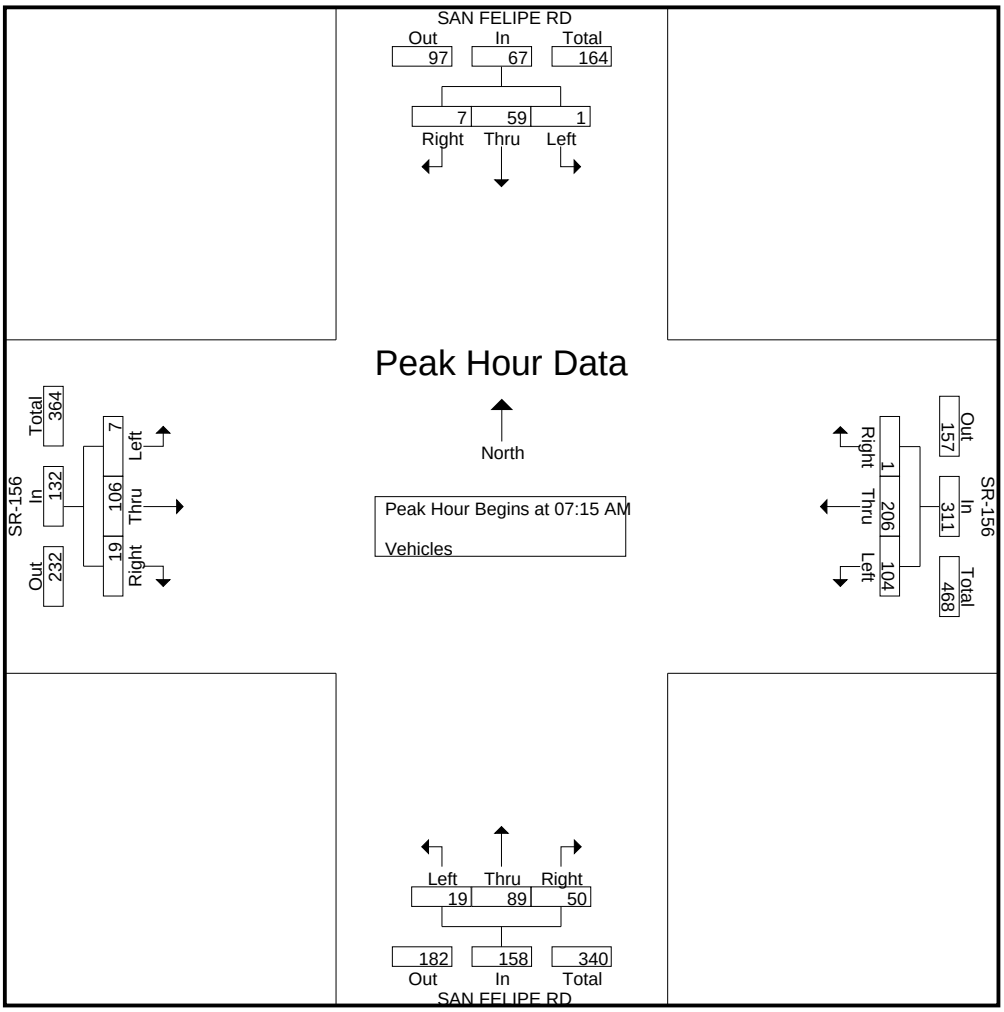

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Groups Printed- Vehicles

	SAN FELIPE RD Southbound					SR-156 Westbound					SAN FELIPE RD Northbound					SR-156 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	3	34	0	0	37	0	49	19	0	68	23	28	4	0	55	3	72	2	0	77	237
04:15 PM	4	32	0	0	36	1	31	18	0	50	19	22	10	0	51	3	70	0	0	73	210
04:30 PM	5	45	0	0	50	0	54	23	0	77	28	28	5	0	61	10	73	0	0	83	271
04:45 PM	2	42	0	0	44	1	45	22	0	68	28	19	6	0	53	3	57	3	0	63	228
Total	14	153	0	0	167	2	179	82	0	263	98	97	25	0	220	19	272	5	0	296	946
05:00 PM	3	48	0	0	51	0	51	21	0	72	39	22	9	0	70	2	59	2	0	63	256
05:15 PM	0	43	2	0	45	0	49	10	0	59	21	16	3	0	40	4	54	1	0	59	203
05:30 PM	0	48	0	0	48	0	45	12	0	57	23	5	3	0	31	1	64	1	0	66	202
05:45 PM	4	39	0	0	43	0	37	12	0	49	20	15	5	0	40	3	47	5	0	55	187
Total	7	178	2	0	187	0	182	55	0	237	103	58	20	0	181	10	224	9	0	243	848
Grand Total	21	331	2	0	354	2	361	137	0	500	201	155	45	0	401	29	496	14	0	539	1794
Apprch %	5.9	93.5	0.6	0		0.4	72.2	27.4	0		50.1	38.7	11.2	0		5.4	92	2.6	0		
Total %	1.2	18.5	0.1	0	19.7	0.1	20.1	7.6	0	27.9	11.2	8.6	2.5	0	22.4	1.6	27.6	0.8	0	30	

	SAN FELIPE RD Southbound				SR-156 Westbound				SAN FELIPE RD Northbound				SR-156 Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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 04:15 PM																	
04:15 PM	4	32	0	36	**1**	31	18	50	19	22	**10**	51	3	70	0	73	210
04:30 PM	**5**	45	0	50	0	**54**	**23**	**77**	28	**28**	5	61	**10**	**73**	0	**83**	**271**
04:45 PM	2	42	0	44	1	45	22	68	28	19	6	53	3	57	**3**	63	228
05:00 PM	3	**48**	0	**51**	0	51	21	72	**39**	22	9	**70**	2	59	2	63	256
Total Volume	14	167	0	181	2	181	84	267	114	91	30	235	18	259	5	282	965
% App. Total	7.7	92.3	0		0.7	67.8	31.5		48.5	38.7	12.8		6.4	91.8	1.8		
PHF	.700	.870	.000	.887	.500	.838	.913	.867	.731	.813	.750	.839	.450	.887	.417	.849	.890

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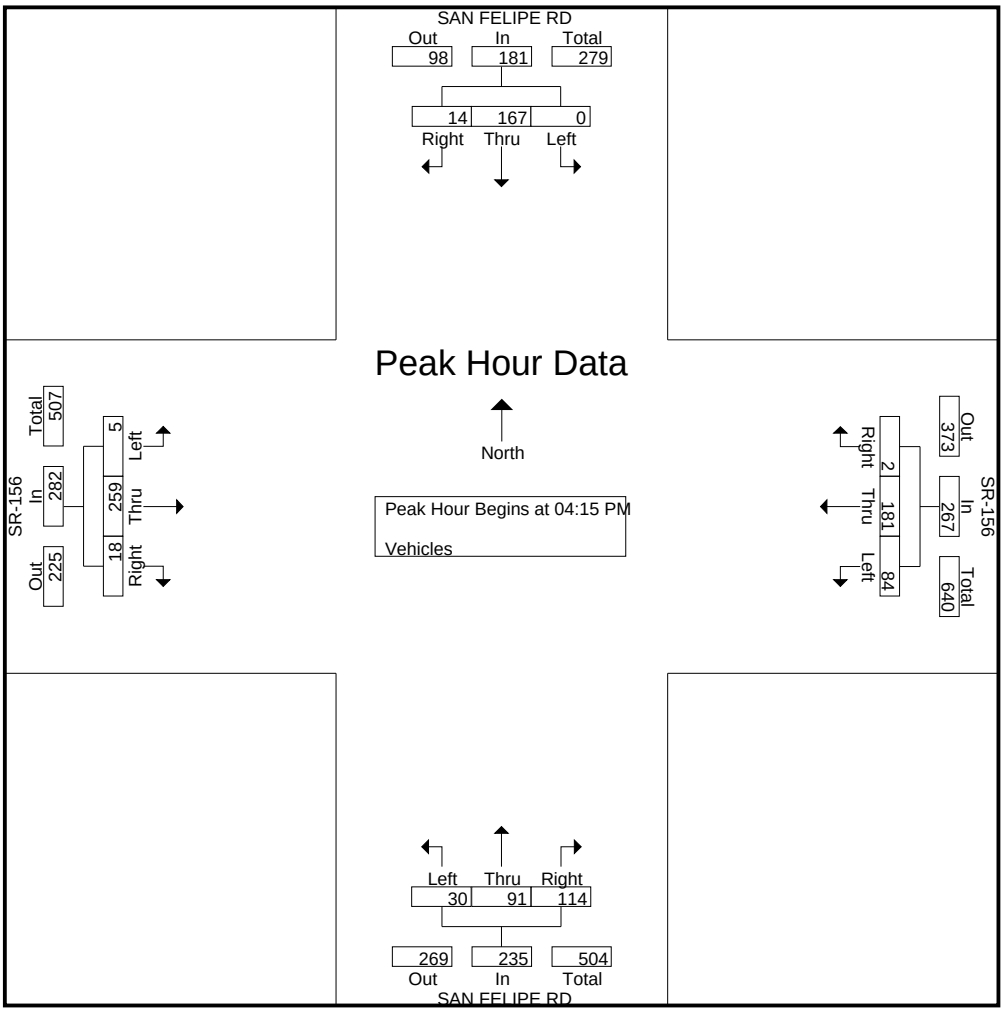

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File Name : 9AM FINAL
Site Code : 00000009
Start Date : 2/5/2013
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Groups Printed- Vehicles

	UNION RD Southbound					Westbound					UNION RD Northbound					SAN JUAN OAKS RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	1	57	0	0	58	0	0	0	0	0	0	137	1	0	138	0	0	1	0	1	197
07:15 AM	0	71	0	0	71	0	0	0	0	0	0	151	0	0	151	0	0	0	0	0	222
07:30 AM	0	56	0	0	56	0	0	0	0	0	0	130	0	0	130	0	0	1	0	1	187
07:45 AM	2	61	0	0	63	0	0	0	0	0	0	115	0	0	115	0	0	2	0	2	180
Total	3	245	0	0	248	0	0	0	0	0	0	533	1	0	534	0	0	4	0	4	786
08:00 AM	3	57	0	0	60	0	0	0	0	0	0	91	2	0	93	0	0	0	0	0	153
08:15 AM	4	56	0	0	60	0	0	0	0	0	0	75	10	0	85	0	0	0	0	0	145
08:30 AM	7	48	1	0	56	0	0	0	0	0	0	81	5	0	86	1	0	1	0	2	144
08:45 AM	5	49	1	0	55	0	0	0	0	0	0	85	1	0	86	0	0	1	0	1	142
Total	19	210	2	0	231	0	0	0	0	0	0	332	18	0	350	1	0	2	0	3	584
Grand Total	22	455	2	0	479	0	0	0	0	0	0	865	19	0	884	1	0	6	0	7	1370
Apprch %	4.6	95	0.4	0		0	0	0	0		0	97.9	2.1	0		14.3	0	85.7	0		
Total %	1.6	33.2	0.1	0	35	0	0	0	0	0	0	63.1	1.4	0	64.5	0.1	0	0.4	0	0.5	

	UNION RD Southbound				Westbound				UNION RD Northbound				SAN JUAN OAKS RD Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	1	57	0	58	0	0	0	0	0	137	**1**	138	0	0	1	1	197
07:15 AM	0	**71**	0	**71**	0	0	0	0	0	**151**	0	**151**	0	0	0	0	**222**
07:30 AM	0	56	0	56	0	0	0	0	0	130	0	130	0	0	1	1	187
07:45 AM	**2**	61	0	63	0	0	0	0	0	115	0	115	0	0	**2**	**2**	180
Total Volume	3	245	0	248	0	0	0	0	0	533	1	534	0	0	4	4	786
% App. Total	1.2	98.8	0		0	0	0		0	99.8	0.2		0	0	100		
PHF	.375	.863	.000	.873	.000	.000	.000	.000	.000	.882	.250	.884	.000	.000	.500	.500	.885

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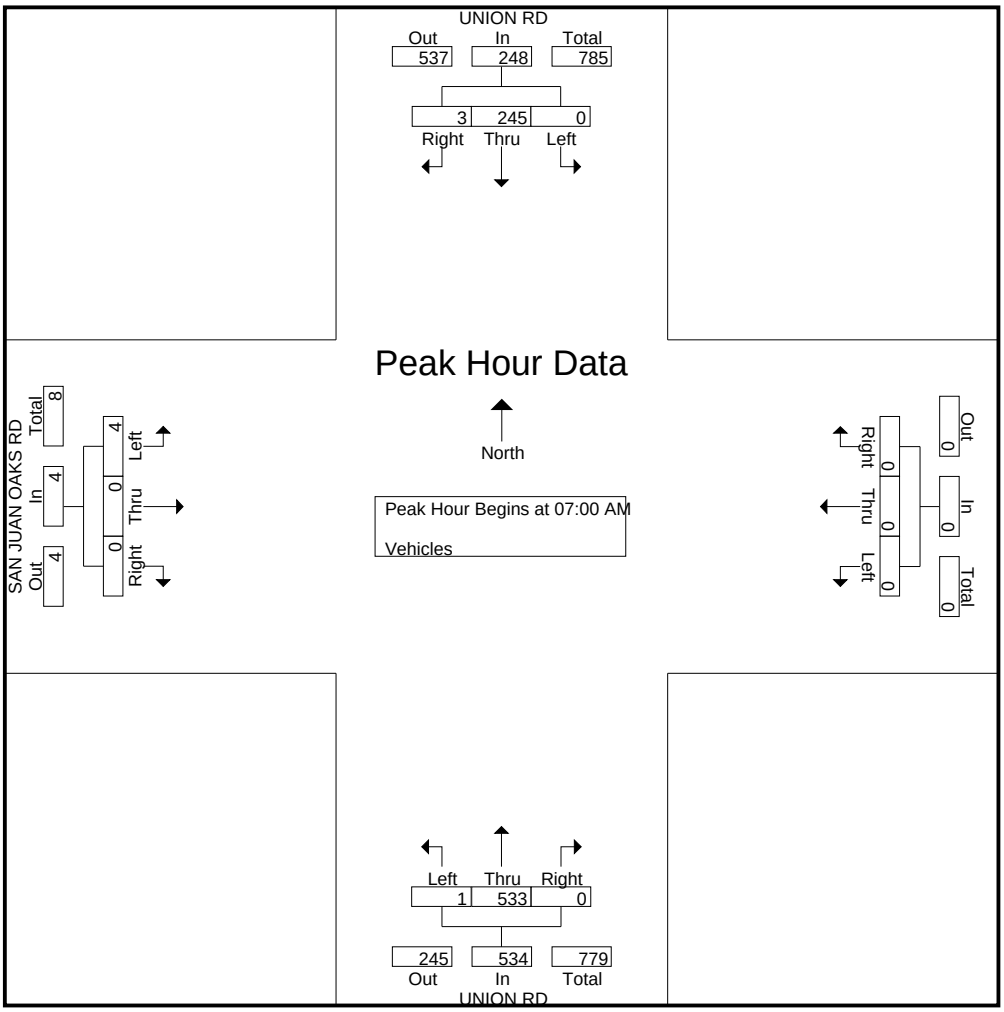

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File Name : 9PM FINAL
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Start Date : 2/5/2013
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Groups Printed- Vehicles

	UNION RD Southbound					Westbound					UNION RD Northbound					SAN JUAN OAKS RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	1	98	0	0	99	0	0	0	0	0	0	76	1	0	77	1	0	3	0	4	180
04:15 PM	3	107	0	0	110	0	0	0	0	0	0	67	0	0	67	2	0	4	0	6	183
04:30 PM	1	122	0	0	123	0	0	0	0	0	0	102	0	0	102	5	0	26	0	31	256
04:45 PM	1	113	0	0	114	0	0	0	0	0	0	90	1	0	91	0	0	3	0	3	208
Total	6	440	0	0	446	0	0	0	0	0	0	335	2	0	337	8	0	36	0	44	827
05:00 PM	0	122	1	0	123	0	0	0	0	0	0	87	2	0	89	1	0	9	0	10	222
05:15 PM	2	130	0	0	132	0	0	0	0	0	0	67	3	0	70	7	0	7	0	14	216
05:30 PM	1	150	0	0	151	0	0	0	0	0	0	62	1	0	63	6	0	11	0	17	231
05:45 PM	0	121	0	0	121	0	0	0	0	0	0	58	0	0	58	3	0	10	0	13	192
Total	3	523	1	0	527	0	0	0	0	0	0	274	6	0	280	17	0	37	0	54	861
Grand Total	9	963	1	0	973	0	0	0	0	0	0	609	8	0	617	25	0	73	0	98	1688
Apprch %	0.9	99	0.1	0		0	0	0	0		0	98.7	1.3	0		25.5	0	74.5	0		
Total %	0.5	57	0.1	0	57.6	0	0	0	0	0	0	36.1	0.5	0	36.6	1.5	0	4.3	0	5.8	

	UNION RD Southbound				Westbound				UNION RD Northbound				SAN JUAN OAKS RD Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	1	122	0	123	0	0	0	0	0	**102**	0	**102**	5	0	**26**	**31**	**256**
04:45 PM	1	113	0	114	0	0	0	0	0	90	1	91	0	0	3	3	208
05:00 PM	0	122	**1**	123	0	0	0	0	0	87	2	89	1	0	9	10	222
05:15 PM	**2**	**130**	0	**132**	0	0	0	0	0	67	**3**	70	**7**	0	7	14	216
Total Volume	4	487	1	492	0	0	0	0	0	346	6	352	13	0	45	58	902
% App. Total	0.8	99	0.2		0	0	0		0	98.3	1.7		22.4	0	77.6		
PHF	.500	.937	.250	.932	.000	.000	.000	.000	.000	.848	.500	.863	.464	.000	.433	.468	.881

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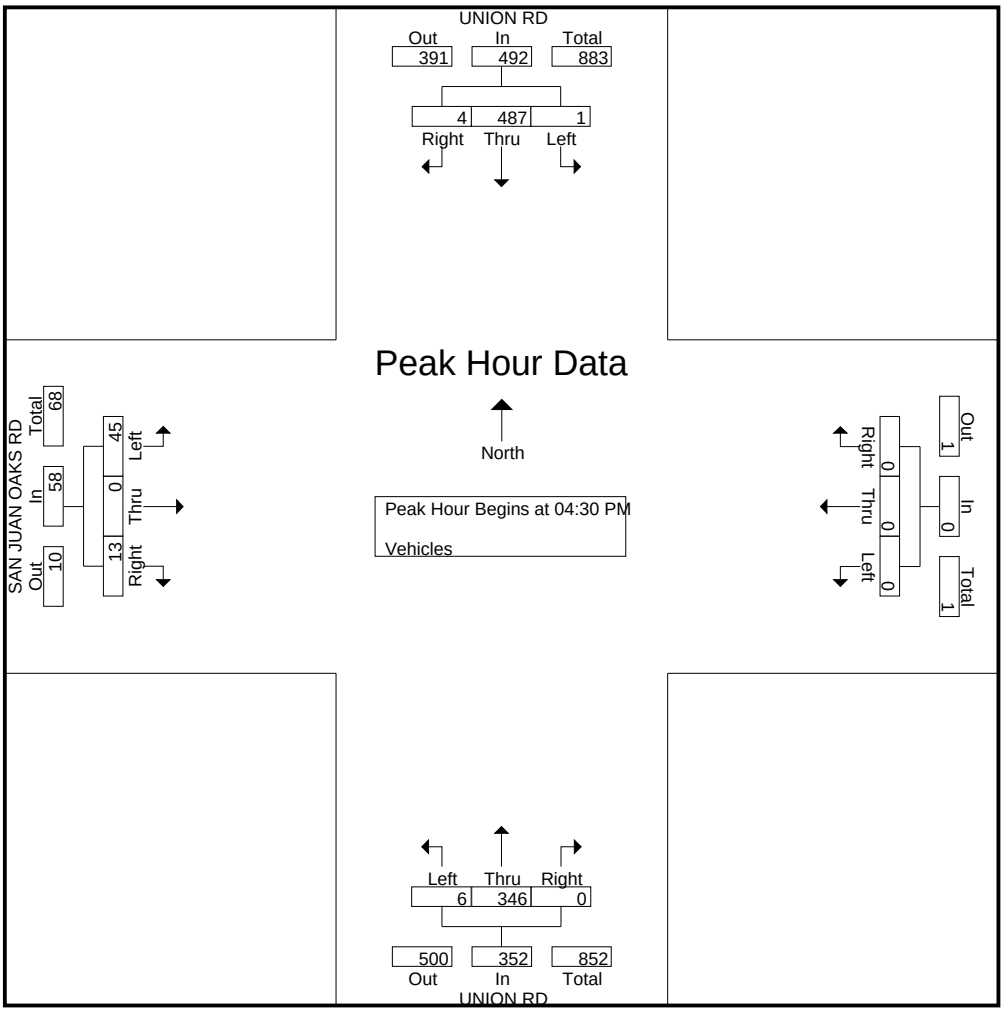

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File Name : 10AM FINAL
Site Code : 00000010
Start Date : 2/5/2013
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Groups Printed- Vehicles

	RIVERSIDE RD Southbound					UNION RD Westbound					Northbound					UNION RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	7	0	0	0	7	4	140	0	0	144	0	0	0	0	0	0	32	3	0	35	186
07:15 AM	8	0	4	0	12	10	157	0	0	167	0	0	0	0	0	0	49	7	0	56	235
07:30 AM	21	0	7	0	28	17	125	0	0	142	0	0	0	0	0	0	35	2	0	37	207
07:45 AM	7	0	6	0	13	7	110	0	0	117	0	0	0	0	0	0	40	7	0	47	177
Total	43	0	17	0	60	38	532	0	0	570	0	0	0	0	0	0	156	19	0	175	805
08:00 AM	8	0	3	0	11	6	79	0	0	85	0	0	0	0	0	0	47	8	0	55	151
08:15 AM	5	0	6	0	11	3	78	0	0	81	0	0	0	0	0	0	52	4	0	56	148
08:30 AM	10	0	3	0	13	18	84	0	0	102	0	0	0	0	0	0	56	3	0	59	174
08:45 AM	4	0	7	0	11	4	81	0	0	85	0	0	0	0	0	0	39	3	0	42	138
Total	27	0	19	0	46	31	322	0	0	353	0	0	0	0	0	0	194	18	0	212	611
Grand Total	70	0	36	0	106	69	854	0	0	923	0	0	0	0	0	0	350	37	0	387	1416
Apprch %	66	0	34	0		7.5	92.5	0	0		0	0	0	0		0	90.4	9.6	0		
Total %	4.9	0	2.5	0	7.5	4.9	60.3	0	0	65.2	0	0	0	0	0	0	24.7	2.6	0	27.3	

	RIVERSIDE RD Southbound				UNION RD Westbound				Northbound				UNION RD Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	0	7	4	140	0	144	0	0	0	0	0	32	3	35	186
07:15 AM	8	0	4	12	10	**157**	0	**167**	0	0	0	0	0	**49**	**7**	**56**	**235**
07:30 AM	**21**	0	**7**	**28**	**17**	125	0	142	0	0	0	0	0	35	2	37	207
07:45 AM	7	0	6	13	7	110	0	117	0	0	0	0	0	40	7	47	177
Total Volume	43	0	17	60	38	532	0	570	0	0	0	0	0	156	19	175	805
% App. Total	71.7	0	28.3		6.7	93.3	0		0	0	0		0	89.1	10.9		
PHF	.512	.000	.607	.536	.559	.847	.000	.853	.000	.000	.000	.000	.000	.796	.679	.781	.856

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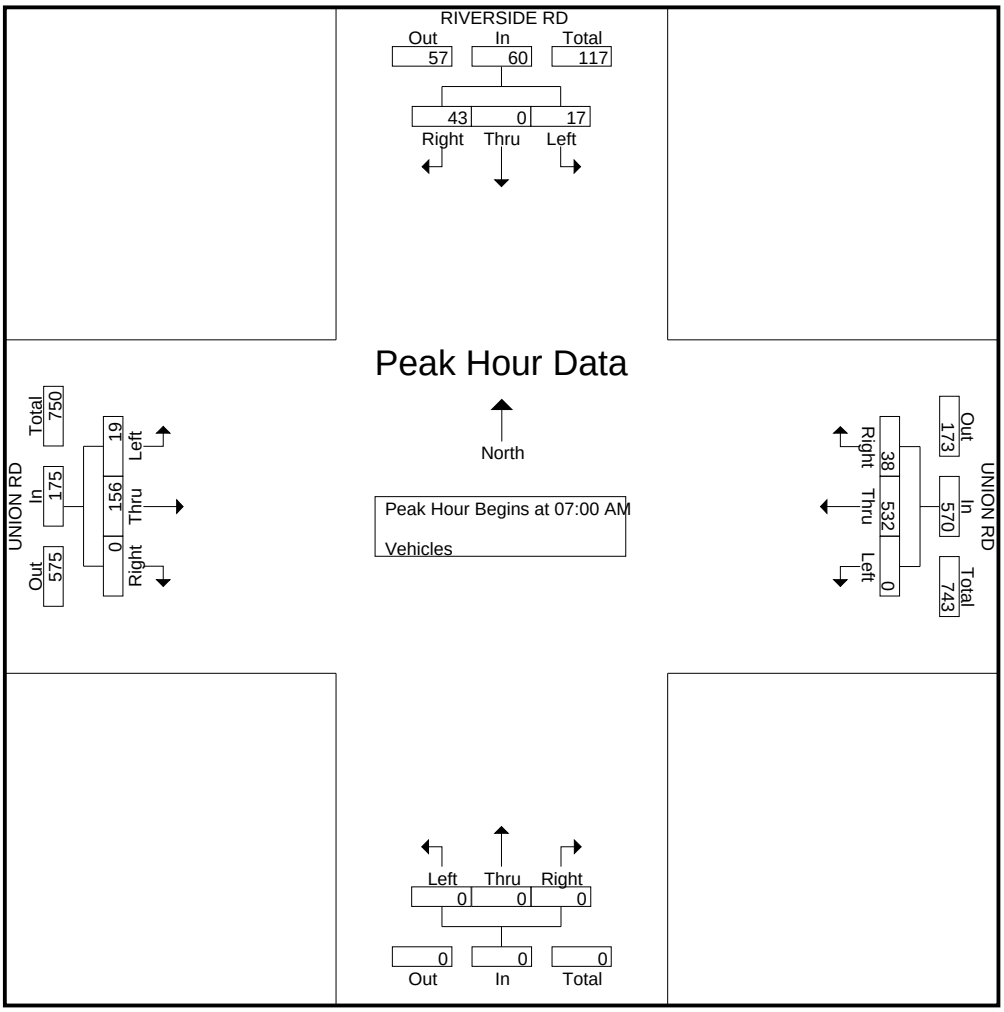

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File Name : 10PM FINAL
Site Code : 00000010
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Groups Printed- Vehicles

	RIVERSIDE RD Southbound					UNION RD Westbound					Northbound					UNION RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	5	0	5	0	10	3	61	0	0	64	0	0	0	0	0	0	101	7	0	108	182
04:15 PM	6	0	4	0	10	3	49	0	0	52	0	0	0	0	0	0	97	9	0	106	168
04:30 PM	7	0	3	0	10	4	70	0	0	74	0	0	0	0	0	0	117	18	0	135	219
04:45 PM	5	0	3	0	8	3	74	0	0	77	0	0	0	0	0	0	130	7	0	137	222
Total	23	0	15	0	38	13	254	0	0	267	0	0	0	0	0	0	445	41	0	486	791
05:00 PM	6	0	3	0	9	3	79	0	0	82	0	0	0	0	0	0	106	3	0	109	200
05:15 PM	4	0	4	0	8	8	61	0	0	69	0	0	0	0	0	0	140	10	0	150	227
05:30 PM	5	0	5	0	10	2	53	0	0	55	0	0	0	0	0	0	157	9	0	166	231
05:45 PM	8	0	3	0	11	2	48	0	0	50	0	0	0	0	0	0	115	6	0	121	182
Total	23	0	15	0	38	15	241	0	0	256	0	0	0	0	0	0	518	28	0	546	840
Grand Total	46	0	30	0	76	28	495	0	0	523	0	0	0	0	0	0	963	69	0	1032	1631
Apprch %	60.5	0	39.5	0		5.4	94.6	0	0		0	0	0	0		0	93.3	6.7	0		
Total %	2.8	0	1.8	0	4.7	1.7	30.3	0	0	32.1	0	0	0	0	0	0	59	4.2	0	63.3	

	RIVERSIDE RD Southbound				UNION RD Westbound				Northbound				UNION RD Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	5	0	3	8	3	74	0	77	0	0	0	0	0	130	7	137	222
05:00 PM	**6**	0	3	9	3	**79**	0	**82**	0	0	0	0	0	106	3	109	200
05:15 PM	4	0	4	8	**8**	61	0	69	0	0	0	0	0	140	**10**	150	227
05:30 PM	5	0	**5**	**10**	2	53	0	55	0	0	0	0	0	**157**	9	**166**	**231**
Total Volume	20	0	15	35	16	267	0	283	0	0	0	0	0	533	29	562	880
% App. Total	57.1	0	42.9		5.7	94.3	0		0	0	0		0	94.8	5.2		
PHF	.833	.000	.750	.875	.500	.845	.000	.863	.000	.000	.000	.000	.000	.849	.725	.846	.952

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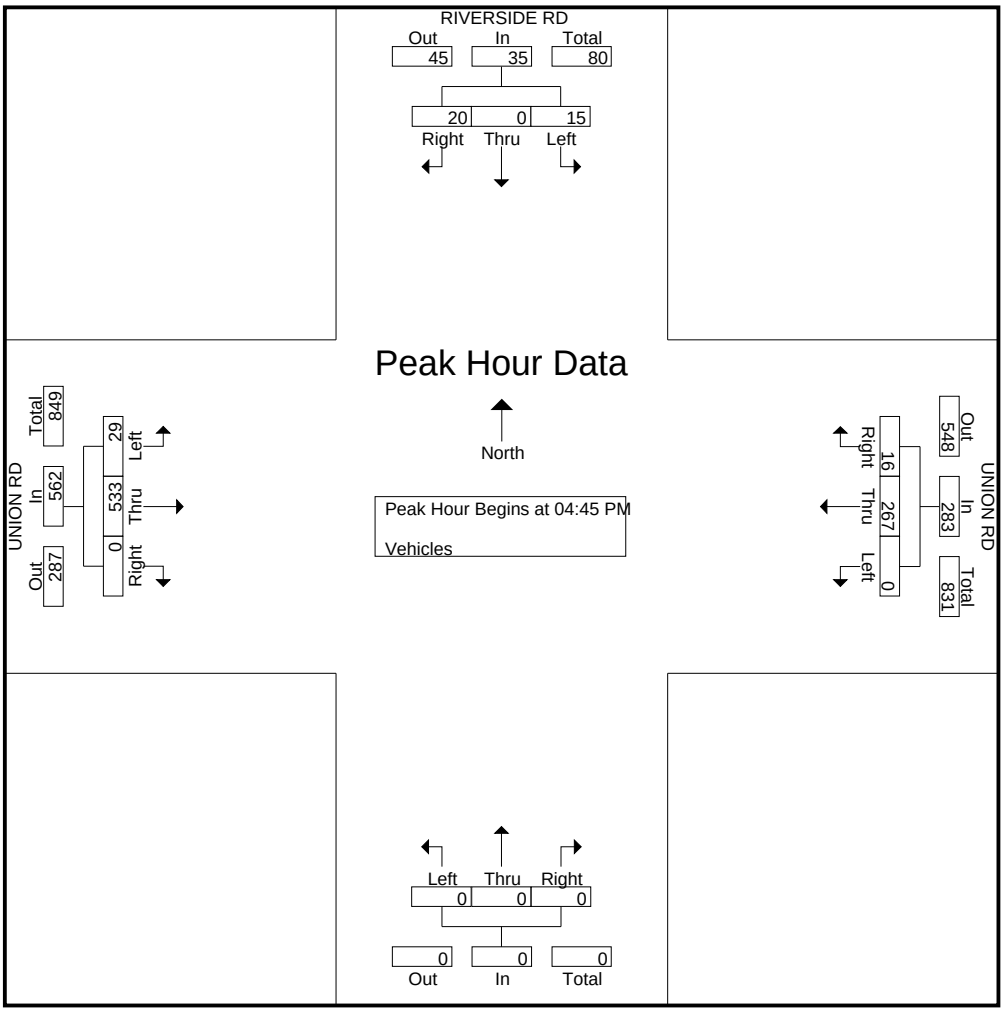

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File Name : 11AM FINAL
Site Code : 00000011
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Groups Printed- Vehicles

	SAN BENITO ST Southbound					UNION RD Westbound					Northbound					UNION RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	40	0	24	0	64	46	115	0	0	161	0	0	0	0	0	0	30	15	0	45	270
07:15 AM	59	0	35	0	94	123	129	0	0	252	0	0	0	0	0	0	34	35	0	69	415
07:30 AM	39	0	88	0	127	69	117	0	0	186	0	0	0	0	0	0	45	39	0	84	397
07:45 AM	34	0	38	0	72	61	101	0	0	162	0	0	0	0	0	0	48	19	0	67	301
Total	172	0	185	0	357	299	462	0	0	761	0	0	0	0	0	0	157	108	0	265	1383
08:00 AM	35	0	18	0	53	55	75	0	0	130	0	0	0	0	0	0	46	19	0	65	248
08:15 AM	32	0	15	0	47	47	73	0	0	120	0	0	0	0	0	0	61	20	0	81	248
08:30 AM	28	0	36	0	64	107	80	0	0	187	0	0	0	0	0	0	39	27	0	66	317
08:45 AM	22	0	46	0	68	40	68	0	0	108	0	0	0	0	0	0	43	26	0	69	245
Total	117	0	115	0	232	249	296	0	0	545	0	0	0	0	0	0	189	92	0	281	1058
Grand Total	289	0	300	0	589	548	758	0	0	1306	0	0	0	0	0	0	346	200	0	546	2441
Apprch %	49.1	0	50.9	0		42	58	0	0		0	0	0	0		0	63.4	36.6	0		
Total %	11.8	0	12.3	0	24.1	22.4	31.1	0	0	53.5	0	0	0	0	0	0	14.2	8.2	0	22.4	

	SAN BENITO ST Southbound				UNION RD Westbound				Northbound				UNION RD Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	40	0	24	64	46	115	0	161	0	0	0	0	0	30	15	45	270
07:15 AM	**59**	0	35	94	**123**	**129**	0	**252**	0	0	0	0	0	34	35	69	**415**
07:30 AM	39	0	**88**	**127**	69	117	0	186	0	0	0	0	0	45	**39**	**84**	397
07:45 AM	34	0	38	72	61	101	0	162	0	0	0	0	0	**48**	19	67	301
Total Volume	172	0	185	357	299	462	0	761	0	0	0	0	0	157	108	265	1383
% App. Total	48.2	0	51.8		39.3	60.7	0		0	0	0		0	59.2	40.8		
PHF	.729	.000	.526	.703	.608	.895	.000	.755	.000	.000	.000	.000	.000	.818	.692	.789	.833

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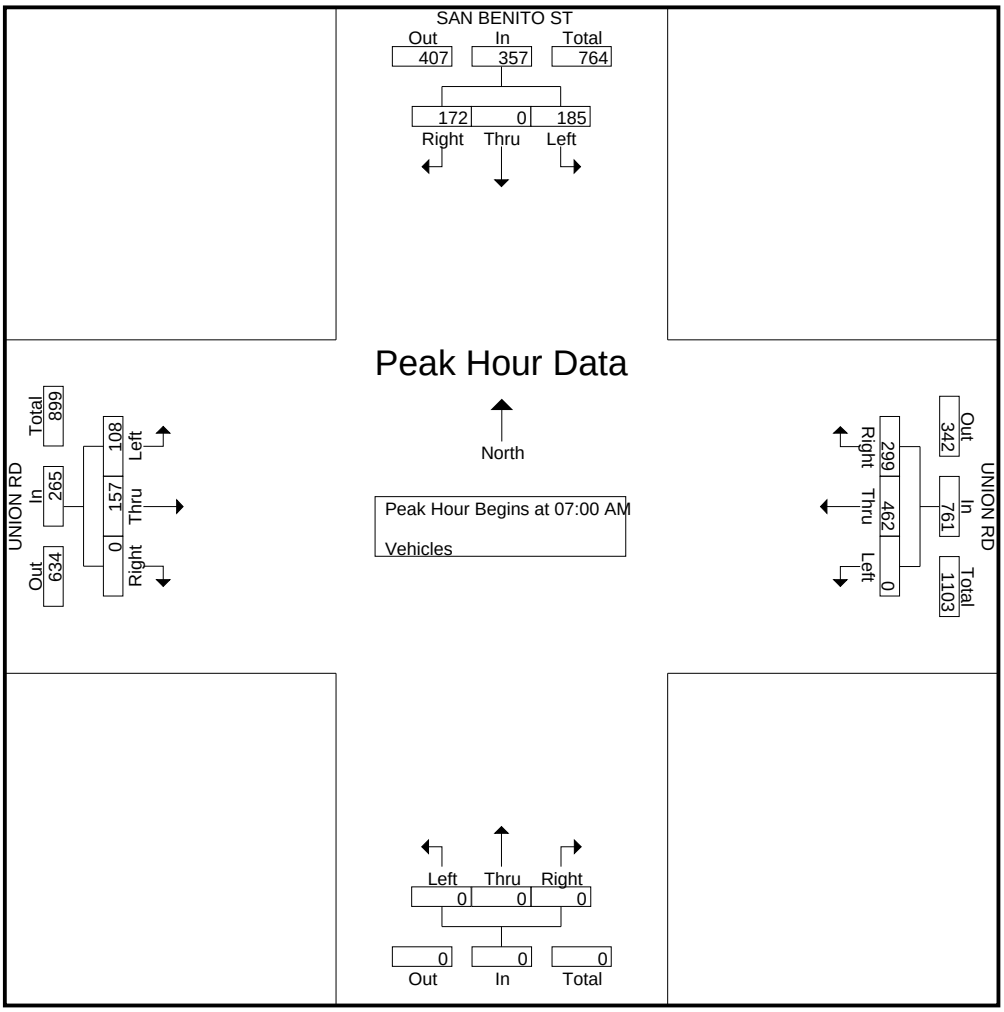

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File Name : 11PM FINAL
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Groups Printed- Vehicles

	SAN BENITO ST Southbound					UNION RD Westbound					Northbound					UNION RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	37	0	30	0	67	22	45	0	0	67	0	0	0	0	0	0	97	46	0	143	277
04:15 PM	25	0	31	0	56	26	48	0	0	74	0	0	0	0	0	0	90	36	0	126	256
04:30 PM	37	0	44	0	81	36	58	0	0	94	0	0	0	0	0	0	102	37	0	139	314
04:45 PM	39	0	43	0	82	28	71	0	0	99	0	0	0	0	0	0	113	54	0	167	348
Total	138	0	148	0	286	112	222	0	0	334	0	0	0	0	0	0	402	173	0	575	1195
05:00 PM	30	0	47	0	77	26	67	0	0	93	0	0	0	0	0	0	100	40	0	140	310
05:15 PM	27	0	40	0	67	20	58	0	0	78	0	0	0	0	0	0	126	33	0	159	304
05:30 PM	32	0	40	0	72	27	51	0	0	78	0	0	0	0	0	0	120	64	0	184	334
05:45 PM	25	0	38	0	63	26	38	0	0	64	0	0	0	0	0	0	99	32	0	131	258
Total	114	0	165	0	279	99	214	0	0	313	0	0	0	0	0	0	445	169	0	614	1206
Grand Total	252	0	313	0	565	211	436	0	0	647	0	0	0	0	0	0	847	342	0	1189	2401
Apprch %	44.6	0	55.4	0		32.6	67.4	0	0		0	0	0	0		0	71.2	28.8	0		
Total %	10.5	0	13	0	23.5	8.8	18.2	0	0	26.9	0	0	0	0	0	0	35.3	14.2	0	49.5	

	SAN BENITO ST Southbound				UNION RD Westbound				Northbound				UNION RD Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	**39**	0	43	**82**	**28**	**71**	0	**99**	0	0	0	0	0	113	54	167	**348**
05:00 PM	30	0	**47**	77	26	67	0	93	0	0	0	0	0	100	40	140	310
05:15 PM	27	0	40	67	20	58	0	78	0	0	0	0	0	**126**	33	159	304
05:30 PM	32	0	40	72	27	51	0	78	0	0	0	0	0	120	**64**	**184**	334
Total Volume	128	0	170	298	101	247	0	348	0	0	0	0	0	459	191	650	1296
% App. Total	43	0	57		29	71	0		0	0	0		0	70.6	29.4		
PHF	.821	.000	.904	.909	.902	.870	.000	.879	.000	.000	.000	.000	.000	.911	.746	.883	.931

Traffic Data Service

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File Name : 11PM FINAL
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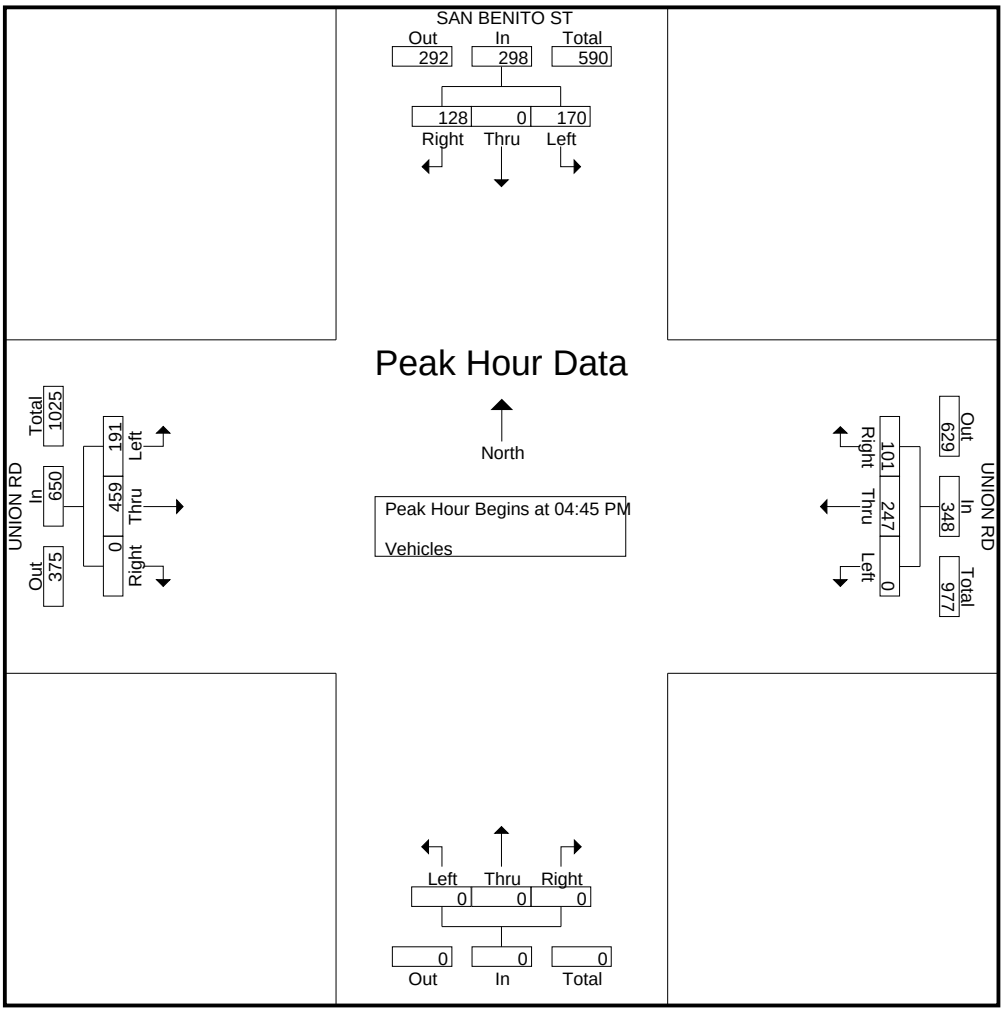

Traffic Data Service

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File Name : 12AM FINAL
Site Code : 00000012
Start Date : 2/5/2013
Page No : 1

Groups Printed- Vehicles

	AIRLINE HWY/SR-25 Southbound					UNION RD Westbound					AIRLINE HWY/SR-25 Northbound					UNION RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	26	15	14	0	55	33	64	5	0	102	6	53	53	0	112	15	18	14	0	47	316
07:15 AM	28	20	16	0	64	53	106	2	0	161	4	64	71	0	139	24	23	17	0	64	428
07:30 AM	34	38	60	0	132	39	64	7	0	110	11	58	52	0	121	23	79	20	0	122	485
07:45 AM	30	44	24	0	98	73	82	12	1	168	5	86	43	0	134	25	27	33	0	85	485
Total	118	117	114	0	349	198	316	26	1	541	26	261	219	0	506	87	147	84	0	318	1714
08:00 AM	20	22	9	0	51	26	57	2	1	86	5	77	38	0	120	18	15	42	0	75	332
08:15 AM	25	27	13	0	65	24	38	4	0	66	3	62	49	0	114	27	15	24	0	66	311
08:30 AM	28	32	16	0	76	29	70	0	0	99	2	60	58	0	120	22	25	17	0	64	359
08:45 AM	20	39	15	0	74	26	30	1	0	57	1	59	31	0	91	29	31	23	0	83	305
Total	93	120	53	0	266	105	195	7	1	308	11	258	176	0	445	96	86	106	0	288	1307
Grand Total	211	237	167	0	615	303	511	33	2	849	37	519	395	0	951	183	233	190	0	606	3021
Apprch %	34.3	38.5	27.2	0		35.7	60.2	3.9	0.2		3.9	54.6	41.5	0		30.2	38.4	31.4	0		
Total %	7	7.8	5.5	0	20.4	10	16.9	1.1	0.1	28.1	1.2	17.2	13.1	0	31.5	6.1	7.7	6.3	0	20.1	

	AIRLINE HWY/SR-25 Southbound				UNION RD Westbound				AIRLINE HWY/SR-25 Northbound				UNION RD Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	28	20	16	64	53	**106**	2	161	4	64	**71**	**139**	24	23	17	64	428
07:30 AM	**34**	38	**60**	**132**	39	64	7	110	**11**	58	52	121	23	**79**	20	**122**	**485**
07:45 AM	30	**44**	24	98	**73**	82	**12**	**167**	5	**86**	43	134	**25**	27	33	85	484
08:00 AM	20	22	9	51	26	57	2	85	5	77	38	120	18	15	**42**	75	331
Total Volume	112	124	109	345	191	309	23	523	25	285	204	514	90	144	112	346	1728
% App. Total	32.5	35.9	31.6		36.5	59.1	4.4		4.9	55.4	39.7		26	41.6	32.4		
PHF	.824	.705	.454	.653	.654	.729	.479	.783	.568	.828	.718	.924	.900	.456	.667	.709	.891

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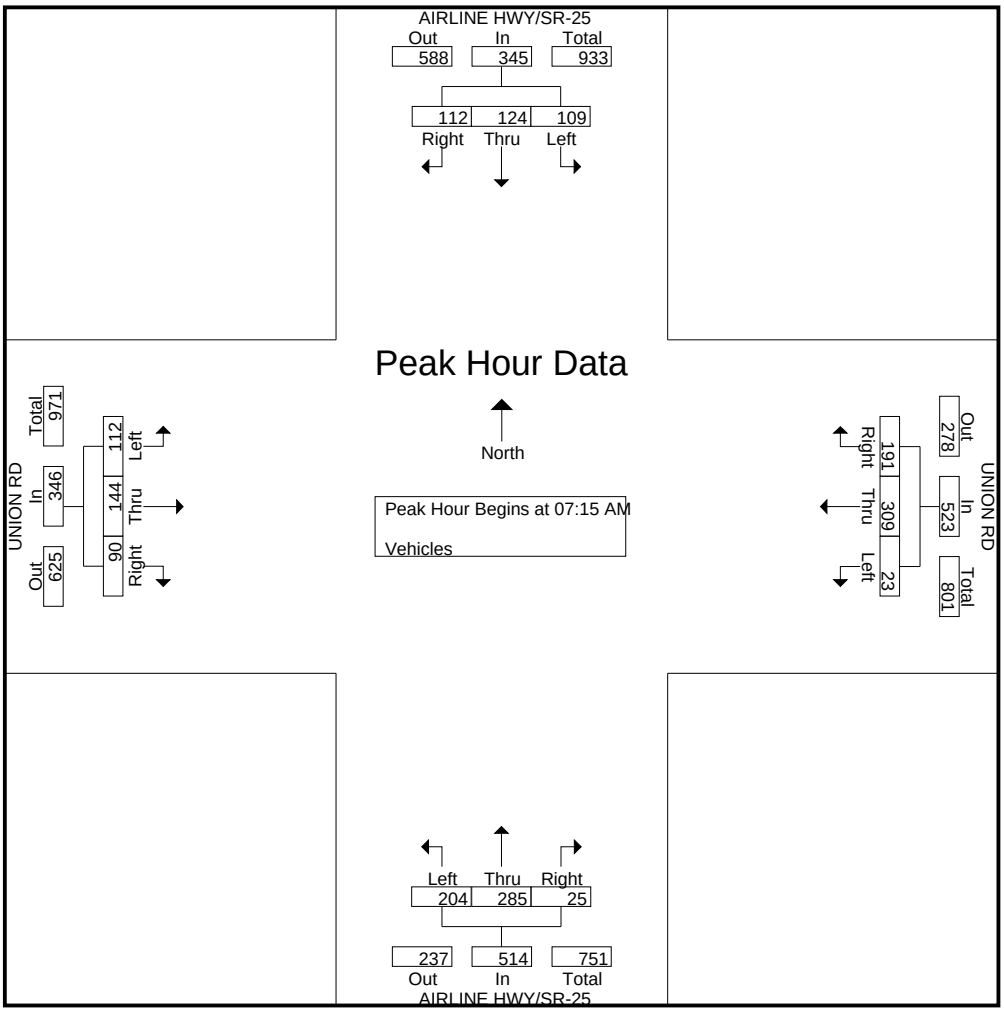

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File Name : 12PM FINAL
Site Code : 00000012
Start Date : 2/5/2013
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Groups Printed- Vehicles

	AIRLINE HWY/SR-25 Southbound					UNION RD Westbound					AIRLINE HWY/SR-25 Northbound					UNION RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	28	84	47	0	159	23	19	5	0	47	4	66	11	0	81	33	46	20	0	99	386
04:15 PM	30	75	51	0	156	11	19	3	0	33	1	45	23	0	69	36	51	37	0	124	382
04:30 PM	24	83	49	0	156	25	26	5	0	56	3	53	33	0	89	39	55	25	0	119	420
04:45 PM	33	75	50	0	158	30	20	7	0	57	8	63	49	0	120	48	45	42	0	135	470
Total	115	317	197	0	629	89	84	20	0	193	16	227	116	0	359	156	197	124	0	477	1658
05:00 PM	28	90	54	0	172	20	22	8	0	50	10	65	31	0	106	35	56	22	0	113	441
05:15 PM	30	85	68	0	183	33	24	7	0	64	4	46	15	0	65	37	63	36	1	137	449
05:30 PM	31	89	61	0	181	25	12	7	0	44	4	35	16	0	55	51	51	30	0	132	412
05:45 PM	23	75	48	0	146	29	20	10	0	59	8	55	15	0	78	44	42	27	0	113	396
Total	112	339	231	0	682	107	78	32	0	217	26	201	77	0	304	167	212	115	1	495	1698
Grand Total	227	656	428	0	1311	196	162	52	0	410	42	428	193	0	663	323	409	239	1	972	3356
Apprch %	17.3	50	32.6	0		47.8	39.5	12.7	0		6.3	64.6	29.1	0		33.2	42.1	24.6	0.1		
Total %	6.8	19.5	12.8	0	39.1	5.8	4.8	1.5	0	12.2	1.3	12.8	5.8	0	19.8	9.6	12.2	7.1	0	29	

	AIRLINE HWY/SR-25 Southbound				UNION RD Westbound				AIRLINE HWY/SR-25 Northbound				UNION RD Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	24	83	49	156	25	**26**	5	56	3	53	33	89	39	55	25	119	420
04:45 PM	**33**	75	50	158	30	20	7	57	8	63	**49**	**120**	**48**	45	**42**	135	**470**
05:00 PM	28	**90**	54	172	20	22	**8**	50	**10**	**65**	31	106	35	56	22	113	441
05:15 PM	30	85	**68**	**183**	**33**	24	7	**64**	4	46	15	65	37	**63**	36	**136**	448
Total Volume	115	333	221	669	108	92	27	227	25	227	128	380	159	219	125	503	1779
% App. Total	17.2	49.8	33		47.6	40.5	11.9		6.6	59.7	33.7		31.6	43.5	24.9		
PHF	.871	.925	.813	.914	.818	.885	.844	.887	.625	.873	.653	.792	.828	.869	.744	.925	.946

Traffic Data Service

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File Name : 12PM FINAL
Site Code : 00000012
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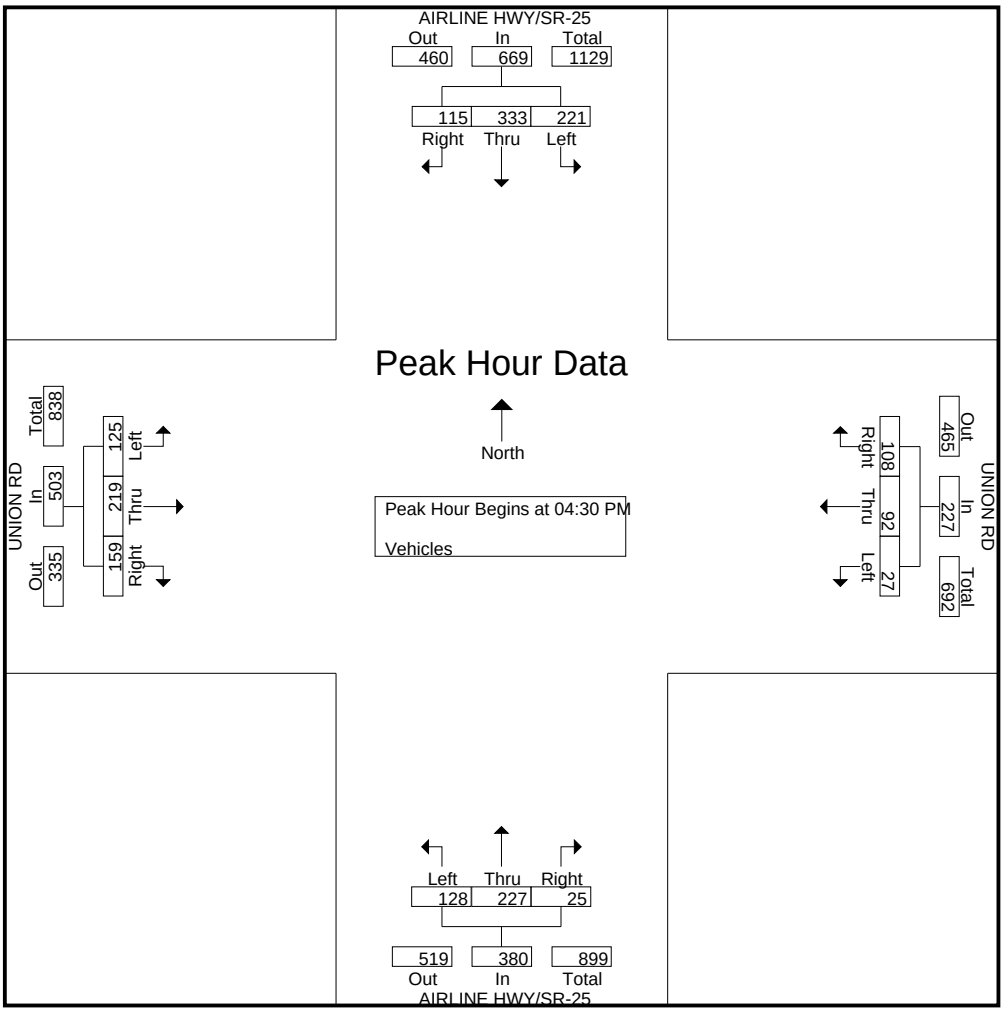

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File Name : 13AM FINAL
Site Code : 00000013
Start Date : 2/5/2013
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Groups Printed- Vehicles

	SAN JUAN HOLLISTER RD Southbound					4TH ST/BUSINESS RT 156 Westbound					SAN JUAN HOLLISTER RD Northbound					4TH ST/BUSINESS RT 156 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	1	0	1	0	2	1	114	8	0	123	5	0	0	0	5	0	34	2	0	36	166
07:15 AM	3	0	1	0	4	1	134	3	0	138	4	0	1	0	5	1	37	1	0	39	186
07:30 AM	2	0	0	0	2	0	131	2	0	133	2	0	1	0	3	0	58	3	0	61	199
07:45 AM	1	0	2	0	3	3	91	3	0	97	2	0	1	0	3	1	56	9	0	66	169
Total	7	0	4	0	11	5	470	16	0	491	13	0	3	0	16	2	185	15	0	202	720
08:00 AM	4	0	0	0	4	1	71	2	0	74	2	1	2	0	5	1	55	5	0	61	144
08:15 AM	4	1	6	0	11	0	82	4	0	86	2	0	2	0	4	0	35	4	0	39	140
08:30 AM	3	1	1	0	5	0	53	0	0	53	3	0	1	0	4	0	42	4	0	46	108
08:45 AM	2	0	3	0	5	1	50	1	0	52	1	4	1	0	6	0	49	2	0	51	114
Total	13	2	10	0	25	2	256	7	0	265	8	5	6	0	19	1	181	15	0	197	506
Grand Total	20	2	14	0	36	7	726	23	0	756	21	5	9	0	35	3	366	30	0	399	1226
Apprch %	55.6	5.6	38.9	0		0.9	96	3	0		60	14.3	25.7	0		0.8	91.7	7.5	0		
Total %	1.6	0.2	1.1	0	2.9	0.6	59.2	1.9	0	61.7	1.7	0.4	0.7	0	2.9	0.2	29.9	2.4	0	32.5	

	SAN JUAN HOLLISTER RD Southbound				4TH ST/BUSINESS RT 156 Westbound				SAN JUAN HOLLISTER RD Northbound				4TH ST/BUSINESS RT 156 Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	1	0	1	2	1	114	**8**	123	**5**	0	0	**5**	0	34	2	36	166
07:15 AM	**3**	0	1	**4**	1	**134**	3	**138**	4	0	**1**	5	**1**	37	1	39	186
07:30 AM	2	0	0	2	0	131	2	133	2	0	1	3	0	**58**	3	61	**199**
07:45 AM	1	0	**2**	3	**3**	91	3	97	2	0	1	3	1	56	**9**	**66**	169
Total Volume	7	0	4	11	5	470	16	491	13	0	3	16	2	185	15	202	720
% App. Total	63.6	0	36.4		1	95.7	3.3		81.2	0	18.8		1	91.6	7.4		
PHF	.583	.000	.500	.688	.417	.877	.500	.889	.650	.000	.750	.800	.500	.797	.417	.765	.905

Traffic Data Service

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File Name : 13AM FINAL
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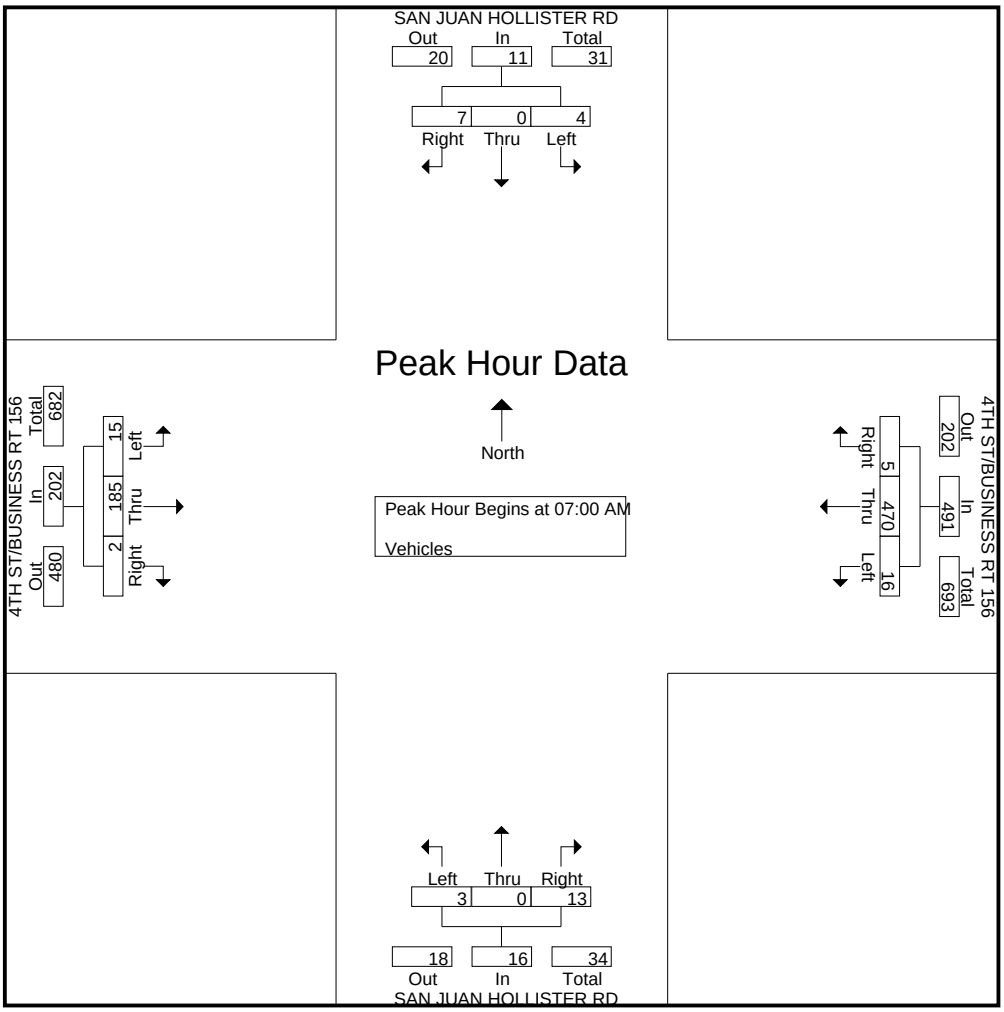

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File Name : 13PM FINAL
Site Code : 00000013
Start Date : 2/5/2013
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Groups Printed- Vehicles

	SAN JUAN HOLLISTER RD Southbound					4TH ST/BUSINESS RT 156 Westbound					SAN JUAN HOLLISTER RD Northbound					4TH ST/BUSINESS RT 156 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	9	0	2	0	11	0	60	1	0	61	7	0	0	0	7	3	101	7	0	111	190
04:15 PM	6	1	0	0	7	1	53	3	0	57	4	1	1	0	6	5	91	4	0	100	170
04:30 PM	4	0	2	0	6	1	67	6	0	74	8	1	2	0	11	1	136	7	0	144	235
04:45 PM	3	0	0	0	3	0	68	5	0	73	6	0	0	0	6	2	101	0	0	103	185
Total	22	1	4	0	27	2	248	15	0	265	25	2	3	0	30	11	429	18	0	458	780
05:00 PM	1	0	0	0	1	1	66	3	0	70	3	0	1	0	4	1	104	1	0	106	181
05:15 PM	5	1	1	0	7	0	71	2	0	73	3	0	1	0	4	0	97	2	0	99	183
05:30 PM	2	0	1	0	3	0	58	2	0	60	6	0	0	0	6	1	117	3	0	121	190
05:45 PM	5	0	3	0	8	1	43	2	0	46	2	0	0	0	2	0	73	1	0	74	130
Total	13	1	5	0	19	2	238	9	0	249	14	0	2	0	16	2	391	7	0	400	684
Grand Total	35	2	9	0	46	4	486	24	0	514	39	2	5	0	46	13	820	25	0	858	1464
Apprch %	76.1	4.3	19.6	0		0.8	94.6	4.7	0		84.8	4.3	10.9	0		1.5	95.6	2.9	0		
Total %	2.4	0.1	0.6	0	3.1	0.3	33.2	1.6	0	35.1	2.7	0.1	0.3	0	3.1	0.9	56	1.7	0	58.6	

	SAN JUAN HOLLISTER RD Southbound				4TH ST/BUSINESS RT 156 Westbound				SAN JUAN HOLLISTER RD Northbound				4TH ST/BUSINESS RT 156 Eastbound				
Start Time	Right	Thru	Left	App. Total				App. Total				App. Total				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	4	0	**2**	6	**1**	67	**6**	**74**	**8**	**1**	**2**	**11**	1	**136**	**7**	**144**	**235**
04:45 PM	3	0	0	3	0	68	5	73	6	0	0	6	**2**	101	0	103	185
05:00 PM	1	0	0	1	1	66	3	70	3	0	1	4	1	104	1	106	181
05:15 PM	**5**	**1**	1	**7**	0	**71**	2	73	3	0	1	4	0	97	2	99	183
Total Volume	13	1	3	17	2	272	16	290	20	1	4	25	4	438	10	452	784
% App. Total	76.5	5.9	17.6		0.7	93.8	5.5		80	4	16		0.9	96.9	2.2		
PHF	.650	.250	.375	.607	.500	.958	.667	.980	.625	.250	.500	.568	.500	.805	.357	.785	.834

Traffic Data Service

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File Name : 13PM FINAL
Site Code : 00000013
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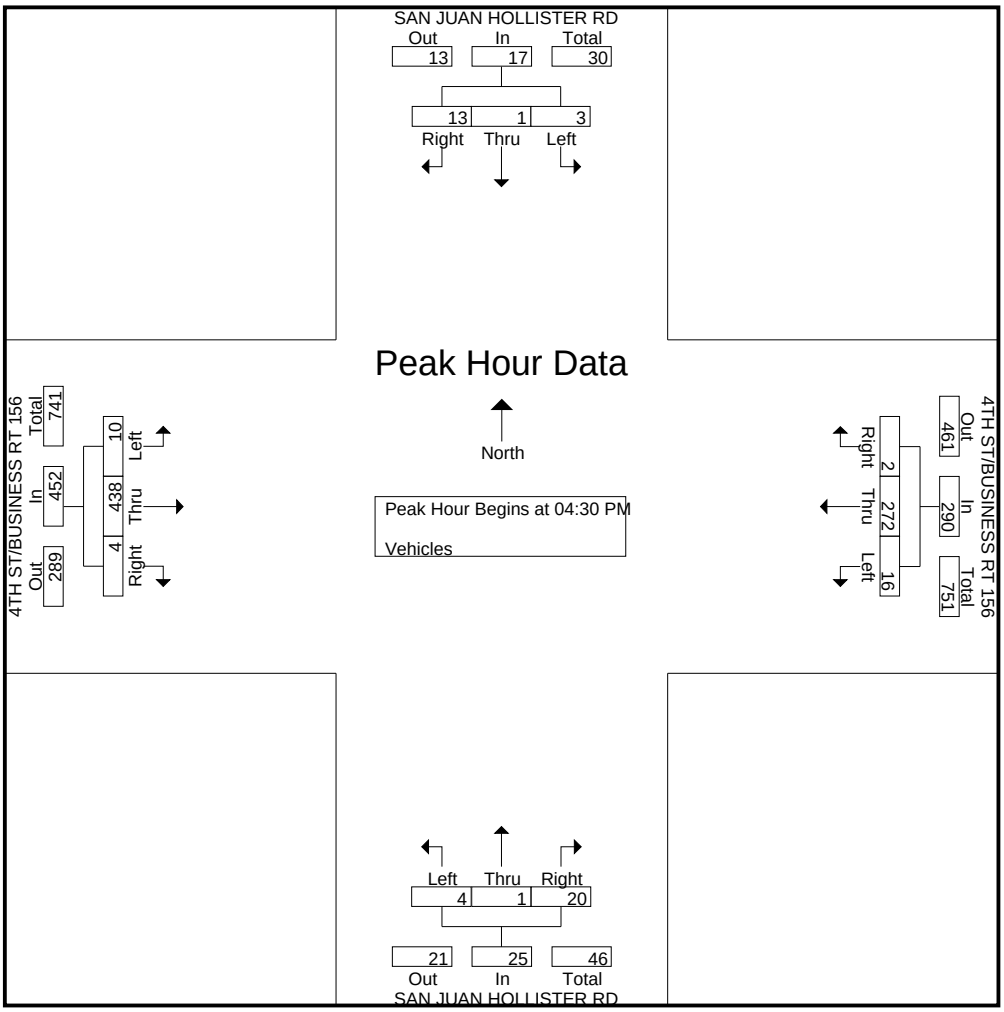


Traffic Data Service -- Campbell, CA
Class Report

CustomList-2550 -- English (ENU)

Datasets:

Site: **[2] BOLSA RD/SR 25 S OF HUNDER LN**
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 0 - 100 mph.
Direction: North (bound)
Name: Default Profile
Scheme: Vehicle classification (Scheme F)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

Column Legend:

0 [Time] 24-hour time (0000 - 2359)
1 [Total] Number in time step
2 [Cls] Class totals

*** Tuesday, February 04, 2014**

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 13
0000	24	0	16	5	0	0	0	0	1	2	0	0	0	0
0100	15	0	13	2	0	0	0	0	0	0	0	0	0	0
0200	41	0	31	4	1	0	0	0	0	2	0	2	1	0
0300	104	1	88	12	0	0	1	0	1	1	0	0	0	0
0400	419	2	318	93	0	1	0	0	2	2	0	0	1	0
0500	1247	4	921	303	2	1	6	1	0	8	0	1	0	0
0600	1173	3	886	262	4	6	0	2	4	5	0	1	0	0
0700	1415	2	1143	240	3	3	7	0	8	8	0	1	0	0
0800	935	2	737	171	6	3	2	0	2	10	0	0	1	1
0900	738	1	575	136	5	4	1	0	3	11	0	1	0	1
1000	567	3	409	129	4	2	3	0	4	11	0	1	1	0
1100	452	2	345	90	3	2	1	1	1	6	0	1	0	0
1200	484	0	351	115	1	3	4	0	0	10	0	0	0	0
1300	435	5	306	101	1	2	4	0	3	11	0	1	1	0
1400	430	0	327	91	3	3	3	0	1	1	0	0	1	0
1500	481	1	361	103	3	4	3	0	2	3	0	0	1	0
1600	522	1	414	95	5	1	1	0	2	0	2	1	0	0
1700	497	2	384	98	2	0	5	0	4	0	1	0	1	0
1800	296	0	244	46	2	0	0	0	3	0	0	0	0	1
1900	176	2	140	32	1	0	1	0	0	0	0	0	0	0
2000	142	0	117	20	1	0	0	0	2	2	0	0	0	0
2100	111	0	91	17	1	0	0	0	0	2	0	0	0	0
2200	59	0	49	7	1	0	0	0	0	2	0	0	0	0
2300	46	0	35	8	0	0	0	0	2	1	0	0	0	0
07-19	**7252**	**19**	**5596**	**1415**	**38**	**27**	**34**	**1**	**33**	**71**	**3**	**6**	**6**	**3**
06-22	**8854**	**24**	**6830**	**1746**	**45**	**33**	**35**	**3**	**39**	**80**	**3**	**7**	**6**	**3**
06-00	**8959**	**24**	**6914**	**1761**	**46**	**33**	**35**	**3**	**41**	**83**	**3**	**7**	**6**	**3**
00-00	**10809**	**31**	**8301**	**2180**	**49**	**35**	**42**	**4**	**45**	**98**	**3**	**10**	**8**	**3**

Peak step 7:00 (1415) **AM Peak step** 7:00 (1415) **PM Peak step** 16:00 (522)

*** Wednesday, February 05, 2014**

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 13
0000	29	0	24	3	0	0	0	0	0	2	0	0	0	0
0100	21	0	13	6	2	0	0	0	0	0	0	0	0	0
0200	39	0	24	12	0	0	0	0	0	2	0	0	1	0
0300	121	0	96	16	0	0	1	0	2	6	0	0	0	0
0400	414	1	307	98	0	3	0	0	0	5	0	0	0	0
0500	1230	1	907	294	3	1	3	1	5	13	0	2	0	0
0600	1195	3	904	268	4	6	4	0	3	2	0	1	0	0
0700	1354	2	1111	216	2	4	3	0	6	7	2	0	1	0
0800	986	3	785	173	3	5	3	1	1	11	1	0	0	0
0900	723	1	548	145	2	1	5	0	2	18	1	0	0	0
1000	629	1	480	117	2	3	2	1	6	13	1	0	2	1
1100	522	4	370	115	2	8	2	1	5	13	0	0	0	2
1200	499	0	389	88	2	4	2	0	2	10	0	2	0	0
1300	467	0	322	109	6	6	4	0	2	11	2	2	0	3
1400	473	3	351	103	4	2	1	0	1	7	0	0	1	0
1500	508	3	373	118	1	5	2	0	3	2	0	0	0	1
1600	530	1	407	109	2	1	1	0	2	3	1	0	1	2
1700	539	1	412	116	2	2	5	0	0	1	0	0	0	0
1800	331	1	260	65	1	2	0	0	0	1	0	0	0	1
1900	206	1	157	43	3	0	0	0	0	2	0	0	0	0
2000	153	0	124	25	1	0	2	0	1	0	0	0	0	0
2100	108	1	76	28	0	0	0	0	2	1	0	0	0	0
2200	79	0	60	17	0	0	0	0	0	1	0	0	0	1
2300	41	1	30	9	0	0	0	0	1	0	0	0	0	0
07-19	**7561**	**20**	**5808**	**1474**	**29**	**43**	**30**	**3**	**30**	**97**	**8**	**4**	**5**	**10**
06-22	**9223**	**25**	**7069**	**1838**	**37**	**49**	**36**	**3**	**36**	**102**	**8**	**5**	**5**	**10**
06-00	**9343**	**26**	**7159**	**1864**	**37**	**49**	**36**	**3**	**37**	**103**	**8**	**5**	**5**	**11**
00-00	**11197**	**28**	**8530**	**2293**	**42**	**53**	**40**	**4**	**44**	**131**	**8**	**7**	**6**	**11**

Peak step 7:00 (1354) **AM Peak step** 7:00 (1354) **PM Peak step** 17:00 (539)

*** Thursday, February 06, 2014**

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 13
0000	17	0	14	1	0	0	0	0	1	1	0	0	0	0
0100	17	0	8	5	1	0	0	0	0	3	0	0	0	0
0200	48	0	34	7	1	0	0	0	1	3	0	1	1	0
0300	118	0	90	19	0	1	1	0	0	5	0	0	2	0
0400	384	0	289	90	0	0	0	0	1	4	0	0	0	0
0500	1182	1	870	291	3	1	6	0	3	7	0	0	0	0
0600	1147	0	878	251	5	4	2	2	3	2	0	0	0	0
0700	1278	1	1025	220	5	4	7	0	8	8	0	0	0	0
0800	884	1	708	150	3	5	3	0	5	7	0	1	0	1
0900	706	0	574	109	5	3	1	0	1	12	0	1	0	0
1000	538	0	402	115	2	5	3	0	2	6	0	2	1	0
1100	419	1	322	84	0	0	2	0	3	5	0	0	1	1
1200	454	2	349	76	2	5	2	0	6	11	0	0	0	1
1300	493	0	385	95	3	3	3	0	2	2	0	0	0	0
1400	477	0	385	75	2	4	3	0	1	5	0	0	1	1
1500	496	0	375	98	4	7	2	0	2	6	0	1	0	1
1600	483	0	395	80	1	3	1	0	2	1	0	0	0	0
1700	505	0	406	94	3	0	1	0	1	0	0	0	0	0
1800	313	0	244	64	1	1	1	0	2	0	0	0	0	0
1900	212	0	168	40	1	0	0	0	0	2	0	1	0	0
2000	155	0	125	28	0	0	0	0	1	1	0	0	0	0
2100	116	3	91	18	1	0	1	0	1	1	0	0	0	0
2200	81	0	69	11	0	0	0	0	0	1	0	0	0	0
2300	39	0	29	9	0	0	0	0	1	0	0	0	0	0
07-19	**7046**	**5**	**5570**	**1260**	**31**	**40**	**29**	**0**	**35**	**63**	**0**	**5**	**3**	**5**
06-22	**8676**	**8**	**6832**	**1597**	**38**	**44**	**32**	**2**	**40**	**69**	**0**	**6**	**3**	**5**
06-00	**8796**	**8**	**6930**	**1617**	**38**	**44**	**32**	**2**	**41**	**70**	**0**	**6**	**3**	**5**
00-00	**10562**	**9**	**8235**	**2030**	**43**	**46**	**39**	**2**	**47**	**93**	**0**	**7**	**6**	**5**

Peak step 7:00 (1278) **AM Peak step** 7:00 (1278) **PM Peak step** 17:00 (505)

In profile: Vehicles = 32568 / 77321 (42.12%)

Traffic Data Service -- Campbell, CA
Class Report

CustomList-2551 -- English (ENU)

Datasets:

Site: **[2] BOLSA RD/SR 25 S OF HUNDER LN**
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 0 - 100 mph.
Direction: South (bound)
Name: Default Profile
Scheme: Vehicle classification (Scheme F)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

Column Legend:

0 [Time] 24-hour time (0000 - 2359)
1 [Total] Number in time step
2 [Cls] Class totals

*** Tuesday, February 04, 2014**

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 13
0000	81	1	74	6	0	0	0	0	0	0	0	0	0	0
0100	41	0	31	9	0	1	0	0	0	0	0	0	0	0
0200	27	0	20	1	1	2	0	0	0	3	0	0	0	0
0300	28	0	19	7	0	0	1	0	1	0	0	0	0	0
0400	40	1	33	2	0	1	0	0	0	3	0	0	0	0
0500	103	0	89	8	1	2	0	0	1	2	0	0	0	0
0600	165	0	128	19	4	3	3	1	1	5	0	0	0	1
0700	330	0	276	42	3	3	0	0	1	4	0	0	1	0
0800	369	2	275	71	4	5	1	0	3	5	1	1	1	0
0900	326	1	234	68	5	5	2	0	3	6	0	2	0	0
1000	287	0	192	66	0	5	4	1	4	15	0	0	0	0
1100	395	2	285	89	2	2	5	0	2	7	0	1	0	0
1200	445	3	309	107	3	4	3	0	4	12	0	0	0	0
1300	557	2	394	140	2	1	5	0	1	8	0	2	0	2
1400	607	2	450	134	4	3	3	0	6	4	0	1	0	0
1500	964	2	707	235	3	4	2	0	4	6	1	0	0	0
1600	1302	6	985	280	8	3	5	2	7	5	0	1	0	0
1700	1350	4	1056	274	3	4	3	1	4	1	0	0	0	0
1800	1090	2	900	182	0	1	0	1	3	1	0	0	0	0
1900	656	2	548	102	0	0	1	1	0	1	0	0	1	0
2000	460	2	375	78	1	2	0	0	1	1	0	0	0	0
2100	414	1	350	58	0	0	0	0	0	4	0	0	0	1
2200	239	0	208	30	0	0	0	0	1	0	0	0	0	0
2300	168	0	146	19	0	0	0	0	0	3	0	0	0	0
07-19	**8022**	**26**	**6063**	**1688**	**37**	**40**	**33**	**5**	**42**	**74**	**2**	**8**	**2**	**2**
06-22	**9717**	**31**	**7464**	**1945**	**42**	**45**	**37**	**7**	**44**	**85**	**2**	**8**	**3**	**4**
06-00	**10124**	**31**	**7818**	**1994**	**42**	**45**	**37**	**7**	**45**	**88**	**2**	**8**	**3**	**4**
00-00	**10444**	**33**	**8084**	**2027**	**44**	**51**	**38**	**7**	**47**	**96**	**2**	**8**	**3**	**4**

Peak step 17:00 (1350) **AM Peak step** 11:00 (395) **PM Peak step** 17:00 (1350)

*** Wednesday, February 05, 2014**

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 13
0000	93	0	81	11	1	0	0	0	0	0	0	0	0	0
0100	47	0	40	5	1	0	0	0	0	1	0	0	0	0
0200	24	0	17	3	1	1	1	0	1	0	0	0	0	0
0300	21	0	17	3	0	0	0	0	1	0	0	0	0	0
0400	33	0	27	4	0	1	0	0	0	0	0	0	0	1
0500	91	0	77	10	0	1	0	0	1	2	0	0	0	0
0600	178	0	134	27	2	2	3	0	1	9	0	0	0	0
0700	353	1	289	47	2	4	1	1	2	3	0	0	1	2
0800	390	3	293	74	2	2	3	0	0	12	0	0	0	1
0900	322	1	218	76	0	9	4	1	3	8	0	0	1	1
1000	290	2	198	70	1	4	0	0	2	11	0	1	1	0
1100	384	2	265	87	3	9	5	0	2	9	1	1	0	0
1200	450	3	325	99	1	5	1	0	5	10	0	1	0	0
1300	534	0	389	110	5	4	1	0	6	17	0	0	1	1
1400	776	0	567	178	3	6	2	0	7	11	1	1	0	0
1500	982	2	721	238	1	5	1	0	1	9	1	1	1	1
1600	1348	1	1006	325	1	3	0	0	7	4	0	0	0	1
1700	1346	2	1049	284	3	0	1	0	3	3	0	1	0	0
1800	1036	5	850	165	2	4	0	1	5	4	0	0	0	0
1900	685	3	564	109	1	3	0	1	2	2	0	0	0	0
2000	522	1	429	87	1	1	0	0	1	2	0	0	0	0
2100	409	0	335	71	0	0	0	0	0	2	0	1	0	0
2200	275	1	243	30	0	0	0	0	0	1	0	0	0	0
2300	212	0	184	26	0	0	0	0	0	2	0	0	0	0
07-19	**8211**	**22**	**6170**	**1753**	**24**	**55**	**19**	**3**	**43**	**101**	**3**	**6**	**5**	**7**
06-22	**10005**	**26**	**7632**	**2047**	**28**	**61**	**22**	**4**	**47**	**116**	**3**	**7**	**5**	**7**
06-00	**10492**	**27**	**8059**	**2103**	**28**	**61**	**22**	**4**	**47**	**119**	**3**	**7**	**5**	**7**
00-00	**10801**	**27**	**8318**	**2139**	**31**	**64**	**23**	**4**	**50**	**122**	**3**	**7**	**5**	**8**

Peak step 16:00 (1348) **AM Peak step** 8:00 (390) **PM Peak step** 16:00 (1348)

*** Thursday, February 06, 2014**

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 13
0000	93	0	81	12	0	0	0	0	0	0	0	0	0	0
0100	65	0	52	7	2	0	0	0	0	4	0	0	0	0
0200	29	0	22	5	0	1	0	0	0	1	0	0	0	0
0300	28	0	20	6	0	0	0	0	1	1	0	0	0	0
0400	39	0	28	4	0	2	0	0	1	4	0	0	0	0
0500	103	2	83	13	1	1	1	1	0	1	0	0	0	0
0600	170	1	119	37	1	2	3	0	2	5	0	0	0	0
0700	373	1	303	56	3	2	1	0	0	3	1	1	0	2
0800	349	2	281	54	5	1	0	0	0	4	0	0	0	2
0900	331	1	236	75	6	3	1	0	1	7	0	0	1	0
1000	326	0	216	90	1	3	2	0	6	4	0	0	1	3
1100	381	1	279	83	0	5	1	0	3	7	0	0	1	1
1200	433	4	325	94	1	4	1	0	1	3	0	0	0	0
1300	497	0	380	98	2	6	1	0	1	7	0	1	1	0
1400	617	1	458	137	3	3	1	0	3	9	1	0	1	0
1500	992	0	721	244	1	5	1	1	6	10	0	1	0	2
1600	1272	0	1001	251	4	3	1	1	7	4	0	0	0	0
1700	1280	1	1045	216	1	4	2	2	4	4	0	1	0	0
1800	988	2	794	184	1	1	0	0	2	4	0	0	0	0
1900	686	1	567	116	0	1	0	0	1	0	0	0	0	0
2000	462	0	376	82	1	0	0	0	1	2	0	0	0	0
2100	402	0	344	55	0	0	0	0	1	2	0	0	0	0
2200	233	0	204	27	1	0	0	0	0	1	0	0	0	0
2300	165	0	144	18	1	0	0	0	1	1	0	0	0	0
07-19	**7839**	**13**	**6039**	**1582**	**28**	**40**	**12**	**4**	**34**	**66**	**2**	**4**	**5**	**10**
06-22	**9559**	**15**	**7445**	**1872**	**30**	**43**	**15**	**4**	**39**	**75**	**2**	**4**	**5**	**10**
06-00	**9957**	**15**	**7793**	**1917**	**32**	**43**	**15**	**4**	**40**	**77**	**2**	**4**	**5**	**10**
00-00	**10314**	**17**	**8079**	**1964**	**35**	**47**	**16**	**5**	**42**	**88**	**2**	**4**	**5**	**10**

Peak step 17:00 (1280) **AM Peak step** 11:00 (381) **PM Peak step** 17:00 (1280)

In profile: Vehicles = 31559 / 77321 (40.82%)

Traffic Data Service -- Campbell, CA
Class Report

CustomList-2548 -- English (ENU)

Datasets:

Site: **[1] SR 156 E OF BIXBY RD**
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 0 - 100 mph.
Direction: East (bound)
Name: Default Profile
Scheme: Vehicle classification (Scheme F)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

Column Legend:

0 [Time] 24-hour time (0000 - 2359)
1 [Total] Number in time step
2 [Cls] Class totals

*** Tuesday, February 04, 2014**

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 13
0000	77	0	52	12	0	0	0	0	0	13	0	0	0	0
0100	87	0	45	17	2	0	0	0	0	22	0	1	0	0
0200	48	0	28	6	0	0	0	0	1	13	0	0	0	0
0300	51	0	27	8	1	1	0	0	1	13	0	0	0	0
0400	84	0	50	14	0	0	0	0	0	16	1	3	0	0
0500	210	1	130	51	2	1	0	0	2	18	0	4	0	1
0600	410	0	281	93	4	1	2	0	1	19	0	4	1	4
0700	538	2	402	101	6	2	0	0	4	8	4	1	1	7
0800	539	4	376	112	5	5	1	0	3	27	1	2	0	3
0900	468	2	283	131	2	7	6	0	2	28	0	4	2	1
1000	442	2	249	133	4	5	5	0	2	32	1	6	1	2
1100	487	6	290	121	5	4	6	0	4	41	1	4	1	4
1200	539	4	339	124	8	6	2	0	4	41	0	7	2	2
1300	571	0	365	148	2	4	5	1	1	33	1	9	1	1
1400	629	3	434	144	5	3	4	0	5	26	0	2	2	1
1500	766	1	539	184	5	2	3	0	2	24	3	3	0	0
1600	993	2	703	246	4	5	1	0	5	20	1	1	2	3
1700	1091	4	846	212	3	2	1	0	6	15	2	0	0	0
1800	724	2	547	149	0	0	1	0	0	19	1	3	1	1
1900	395	2	291	78	0	1	1	0	1	16	0	2	1	2
2000	301	3	219	62	2	1	1	0	0	11	0	1	0	1
2100	255	0	188	40	0	0	0	0	0	22	0	4	1	0
2200	163	2	125	17	0	0	0	0	0	16	0	1	1	1
2300	88	1	59	14	0	0	0	0	0	13	0	0	1	0
07-19	**7787**	**32**	**5373**	**1805**	**49**	**45**	**35**	**1**	**38**	**314**	**15**	**42**	**13**	**25**
06-22	**9148**	**37**	**6352**	**2078**	**55**	**48**	**39**	**1**	**40**	**382**	**15**	**53**	**16**	**32**
06-00	**9399**	**40**	**6536**	**2109**	**55**	**48**	**39**	**1**	**40**	**411**	**15**	**54**	**18**	**33**
00-00	**9956**	**41**	**6868**	**2217**	**60**	**50**	**39**	**1**	**44**	**506**	**16**	**62**	**18**	**34**

Peak step 17:00 (1091) **AM Peak step** 8:00 (539) **PM Peak step** 17:00 (1091)

*** Wednesday, February 05, 2014**

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 13
0000	71	0	49	11	1	0	0	0	0	10	0	0	0	0
0100	82	0	50	23	2	0	0	0	2	4	0	1	0	0
0200	37	0	22	6	1	1	0	0	2	4	0	1	0	0
0300	40	0	18	11	1	0	0	0	0	9	0	1	0	0
0400	109	0	57	26	0	1	0	1	0	19	1	4	0	0
0500	202	0	125	51	2	1	1	0	4	11	0	3	0	4
0600	383	1	266	98	2	1	0	0	3	11	0	0	0	1
0700	519	2	384	107	1	6	0	0	0	11	1	2	0	5
0800	512	2	345	137	3	3	0	1	3	12	1	3	0	2
0900	465	2	279	130	3	5	2	0	2	25	2	7	3	5
1000	389	3	245	83	3	5	2	0	5	35	1	4	0	3
1100	450	3	263	119	2	8	5	0	4	36	0	6	0	4
1200	560	0	342	148	5	4	4	0	4	42	3	3	1	4
1300	559	6	365	134	8	5	1	0	2	34	1	1	1	1
1400	709	3	448	200	8	6	5	0	7	24	3	1	0	4
1500	772	3	549	173	6	4	3	0	2	24	0	6	0	2
1600	958	1	700	213	5	2	0	0	3	30	1	0	0	3
1700	1001	2	747	217	2	5	1	0	1	18	0	4	0	4
1800	780	4	584	161	2	2	4	4	1	15	0	1	1	1
1900	434	1	329	79	2	0	1	0	2	19	0	0	1	0
2000	317	1	244	54	1	3	1	0	0	12	0	0	1	0
2100	288	0	207	50	1	0	0	2	1	20	0	5	2	0
2200	157	0	120	25	0	0	0	0	0	11	0	1	0	0
2300	99	0	71	11	0	0	0	0	0	16	0	1	0	0
07-19	**7674**	**31**	**5251**	**1822**	**48**	**55**	**27**	**5**	**34**	**306**	**13**	**38**	**6**	**38**
06-22	**9096**	**34**	**6297**	**2103**	**54**	**59**	**29**	**7**	**40**	**368**	**13**	**43**	**10**	**39**
06-00	**9352**	**34**	**6488**	**2139**	**54**	**59**	**29**	**7**	**40**	**395**	**13**	**45**	**10**	**39**
00-00	**9893**	**34**	**6809**	**2267**	**61**	**62**	**30**	**8**	**48**	**452**	**14**	**55**	**10**	**43**

Peak step 17:00 (1001) **AM Peak step** 7:00 (519) **PM Peak step** 17:00 (1001)

*** Thursday, February 06, 2014**

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 13
0000	80	0	54	10	0	0	1	0	0	13	0	1	1	0
0100	97	0	58	27	1	0	1	0	0	9	0	1	0	0
0200	50	0	32	13	0	0	0	0	1	3	0	1	0	0
0300	37	0	23	7	0	0	0	0	1	6	0	0	0	0
0400	87	1	54	13	0	0	1	0	1	13	0	4	0	0
0500	190	0	120	43	2	3	0	0	3	15	0	4	0	0
0600	343	2	235	80	6	2	0	0	3	9	1	2	1	2
0700	516	1	406	98	0	3	1	0	0	4	1	0	0	2
0800	471	0	337	104	6	3	2	0	0	15	1	1	1	1
0900	416	3	269	104	4	5	1	0	1	20	0	3	1	5
1000	413	1	251	109	3	4	1	0	6	28	1	6	0	3
1100	520	4	318	139	5	6	5	0	4	32	2	2	0	3
1200	520	0	335	139	6	7	0	0	4	23	0	4	0	2
1300	549	0	364	141	8	4	4	0	2	21	1	1	0	3
1400	601	1	414	148	9	4	1	0	0	17	1	0	1	5
1500	802	1	552	208	7	6	1	0	0	19	0	1	0	7
1600	925	2	668	214	5	6	1	0	3	21	2	1	0	2
1700	1083	2	822	231	2	3	3	0	2	16	0	1	0	1
1800	711	1	553	135	0	7	1	0	2	9	0	1	1	1
1900	445	1	336	94	0	3	0	0	1	9	1	0	0	0
2000	304	0	206	66	0	1	1	0	0	22	3	3	2	0
2100	251	0	181	48	1	1	0	0	0	12	1	4	1	2
2200	167	2	120	30	0	0	1	0	0	13	1	0	0	0
2300	101	0	72	17	2	0	0	0	0	9	0	0	1	0
07-19	**7527**	**16**	**5289**	**1770**	**55**	**58**	**21**	**0**	**24**	**225**	**9**	**21**	**4**	**35**
06-22	**8870**	**19**	**6247**	**2058**	**62**	**65**	**22**	**0**	**28**	**277**	**15**	**30**	**8**	**39**
06-00	**9138**	**21**	**6439**	**2105**	**64**	**65**	**23**	**0**	**28**	**299**	**16**	**30**	**9**	**39**
00-00	**9679**	**22**	**6780**	**2218**	**67**	**68**	**26**	**0**	**34**	**358**	**16**	**41**	**10**	**39**

Peak step 17:00 (1083) **AM Peak step** 11:00 (520) **PM Peak step** 17:00 (1083)

In profile: Vehicles = 29528 / 75863 (38.92%)

Traffic Data Service -- Campbell, CA
Class Report

CustomList-2547 -- English (ENU)

Datasets:

Site: **[1] SR 156 E OF BIXBY RD**
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 0 - 100 mph.
Direction: West (bound)
Name: Default Profile
Scheme: Vehicle classification (Scheme F)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

Column Legend:

0 [Time] 24-hour time (0000 - 2359)
1 [Total] Number in time step
2 [Cls] Class totals

*** Tuesday, February 04, 2014**

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 13
0000	43	0	22	11	2	0	0	0	0	8	0	0	0	0
0100	37	0	18	8	1	1	0	0	1	6	0	1	1	0
0200	51	0	35	8	1	1	0	0	0	5	0	0	1	0
0300	111	0	67	20	3	0	5	0	0	11	0	2	3	0
0400	155	0	98	35	1	1	4	0	1	13	0	1	1	0
0500	411	0	272	103	2	3	1	0	3	25	0	1	0	1
0600	968	1	646	261	5	3	1	2	3	31	0	12	0	3
0700	1161	5	827	264	5	7	4	0	1	37	0	5	3	3
0800	808	1	532	214	10	7	2	0	5	26	3	3	3	2
0900	605	1	393	156	3	2	2	1	6	34	1	2	0	4
1000	579	2	346	163	7	2	5	0	3	41	2	4	1	3
1100	564	2	311	161	11	10	10	1	6	35	2	8	0	7
1200	523	4	315	133	7	5	5	0	1	41	1	6	0	5
1300	601	6	351	189	10	4	2	0	2	28	1	3	1	4
1400	734	2	473	207	8	9	2	0	2	23	2	1	3	2
1500	677	3	452	185	1	2	5	0	1	21	0	2	2	3
1600	738	2	517	177	4	2	0	0	4	22	2	1	1	6
1700	741	4	541	171	0	4	2	0	3	10	0	2	0	4
1800	428	1	304	96	2	2	2	0	2	17	0	0	0	2
1900	314	0	208	86	0	3	0	0	1	14	0	0	1	1
2000	195	2	134	44	0	0	0	0	1	13	0	0	0	1
2100	153	0	100	38	0	0	1	0	1	10	0	0	0	3
2200	97	0	74	14	0	0	0	0	0	7	1	0	1	0
2300	83	1	48	14	3	0	2	0	1	14	0	0	0	0
07-19	**8159**	**33**	**5362**	**2116**	**68**	**56**	**41**	**2**	**36**	**335**	**14**	**37**	**14**	**45**
06-22	**9789**	**36**	**6450**	**2545**	**73**	**62**	**43**	**4**	**42**	**403**	**14**	**49**	**15**	**53**
06-00	**9969**	**37**	**6572**	**2573**	**76**	**62**	**45**	**4**	**43**	**424**	**15**	**49**	**16**	**53**
00-00	**10777**	**37**	**7084**	**2758**	**86**	**68**	**55**	**4**	**48**	**492**	**15**	**54**	**22**	**54**

Peak step 7:00 (1161) **AM Peak step** 7:00 (1161) **PM Peak step** 17:00 (741)

*** Wednesday, February 05, 2014**

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 13
0000	41	0	28	10	0	0	0	0	1	2	0	0	0	0
0100	27	0	10	7	2	0	1	0	0	3	0	2	2	0
0200	45	0	28	9	0	1	0	0	1	5	0	1	0	0
0300	98	0	61	21	0	0	0	0	2	10	0	3	0	1
0400	147	0	92	38	0	2	0	0	1	11	0	1	1	1
0500	424	1	269	116	3	2	0	1	2	26	0	2	1	1
0600	933	1	597	276	6	6	2	1	1	32	4	3	2	2
0700	1231	2	869	286	12	4	4	1	5	30	4	5	2	7
0800	782	2	529	198	6	6	2	0	3	26	1	4	1	4
0900	645	0	411	181	5	4	4	1	3	29	1	4	1	1
1000	607	3	366	163	10	7	1	1	3	35	2	12	2	2
1100	595	0	368	157	5	7	2	0	3	41	1	4	1	6
1200	585	3	348	159	10	5	2	1	9	35	3	4	1	5
1300	583	0	381	152	4	5	4	1	4	28	0	1	1	2
1400	653	2	423	173	6	7	3	0	4	26	0	4	0	5
1500	744	2	500	193	3	4	0	0	6	27	2	1	2	4
1600	783	2	534	202	5	4	4	0	2	24	0	1	0	5
1700	765	10	528	184	2	5	7	0	5	13	3	2	3	3
1800	462	2	311	116	2	3	0	0	2	19	2	1	0	4
1900	300	0	199	79	1	2	1	0	3	15	0	0	0	0
2000	224	0	157	59	1	1	0	0	1	4	0	1	0	0
2100	139	0	95	34	0	0	1	0	2	6	0	0	1	0
2200	111	0	82	25	1	0	0	0	0	2	0	0	1	0
2300	74	0	45	17	1	0	0	0	0	11	0	0	0	0
07-19	**8435**	**28**	**5568**	**2164**	**70**	**61**	**33**	**5**	**49**	**333**	**19**	**43**	**14**	**48**
06-22	**10031**	**29**	**6616**	**2612**	**78**	**70**	**37**	**6**	**56**	**390**	**23**	**47**	**17**	**50**
06-00	**10216**	**29**	**6743**	**2654**	**80**	**70**	**37**	**6**	**56**	**403**	**23**	**47**	**18**	**50**
00-00	**10998**	**30**	**7231**	**2855**	**85**	**75**	**38**	**7**	**63**	**460**	**23**	**56**	**22**	**53**

Peak step 7:00 (1231) **AM Peak step** 7:00 (1231) **PM Peak step** 16:00 (783)

*** Thursday, February 06, 2014**

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 13
0000	42	0	21	10	2	0	1	0	0	7	0	1	0	0
0100	23	0	12	4	1	0	0	0	1	3	0	1	1	0
0200	55	0	28	14	2	1	1	0	1	5	0	2	1	0
0300	105	1	62	21	0	0	0	0	1	14	1	3	0	2
0400	161	1	104	37	1	2	0	0	3	11	0	2	0	0
0500	418	0	281	104	4	3	2	0	3	16	0	4	0	1
0600	868	0	583	232	7	3	6	1	3	25	2	4	1	1
0700	1176	3	840	258	15	8	1	0	3	27	4	7	3	7
0800	772	1	507	213	8	4	2	1	1	24	3	5	0	3
0900	710	1	456	202	6	3	3	0	4	27	1	4	0	3
1000	509	1	311	139	10	5	0	1	3	28	3	6	0	2
1100	534	2	334	142	13	2	1	0	2	27	4	6	0	1
1200	493	0	294	149	4	7	3	0	3	26	2	2	1	2
1300	599	0	385	160	7	2	1	0	3	29	5	2	0	5
1400	652	2	428	172	3	4	5	0	3	31	1	0	0	3
1500	670	1	475	161	3	3	5	0	1	12	4	1	0	4
1600	662	2	442	194	2	2	4	0	0	9	0	0	1	6
1700	622	4	440	156	2	3	1	0	1	11	2	0	1	1
1800	448	0	306	116	2	1	2	0	2	16	1	0	1	1
1900	328	1	228	84	1	0	0	0	1	10	2	0	1	0
2000	255	0	148	83	6	1	0	0	2	13	0	1	1	0
2100	202	0	138	55	0	1	0	0	0	6	0	0	1	1
2200	129	0	88	26	1	0	0	0	2	11	0	1	0	0
2300	63	0	41	17	1	0	0	0	0	3	0	1	0	0
07-19	**7847**	**17**	**5218**	**2062**	**75**	**44**	**28**	**2**	**26**	**267**	**30**	**33**	**7**	**38**
06-22	**9500**	**18**	**6315**	**2516**	**89**	**49**	**34**	**3**	**32**	**321**	**34**	**38**	**11**	**40**
06-00	**9692**	**18**	**6444**	**2559**	**91**	**49**	**34**	**3**	**34**	**335**	**34**	**40**	**11**	**40**
00-00	**10496**	**20**	**6952**	**2749**	**101**	**55**	**38**	**3**	**43**	**391**	**35**	**53**	**13**	**43**

Peak step 7:00 (1176) **AM Peak step** 7:00 (1176) **PM Peak step** 15:00 (670)

In profile: Vehicles = 32271 / 75863 (42.54%)

Traffic Data Service -- Campbell, CA
Class Report

CustomList-2553 -- English (ENU)

Datasets:

Site: **[3] UNION RD N OF UNION HEIGHTS**
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 0 - 100 mph.
Direction: North (bound)
Name: Default Profile
Scheme: Vehicle classification (Scheme F)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

Column Legend:

0 [Time] 24-hour time (0000 - 2359)
1 [Total] Number in time step
2 [Cls] Class totals

*** Tuesday, February 04, 2014**

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 13
0000	4	0	2	2	0	0	0	0	0	0	0	0	0	0
0100	5	0	2	2	0	0	0	0	0	1	0	0	0	0
0200	16	0	13	2	1	0	0	0	0	0	0	0	0	0
0300	29	0	24	5	0	0	0	0	0	0	0	0	0	0
0400	60	0	44	14	0	0	2	0	0	0	0	0	0	0
0500	224	0	159	64	0	0	0	0	0	0	0	1	0	0
0600	478	1	364	108	1	2	0	0	0	2	0	0	0	0
0700	562	1	443	107	0	1	2	0	0	6	0	1	1	0
0800	328	2	244	75	1	1	1	0	0	3	1	0	0	0
0900	217	0	158	52	2	0	2	0	0	1	0	2	0	0
1000	211	0	144	54	1	0	4	0	1	6	0	1	0	0
1100	186	0	112	54	3	3	3	0	0	7	0	3	0	1
1200	211	0	159	44	1	0	1	0	0	5	0	0	1	0
1300	227	2	169	47	1	0	1	0	3	3	0	1	0	0
1400	232	3	152	69	0	0	4	0	1	2	0	0	1	0
1500	255	0	181	70	0	0	2	0	1	0	0	1	0	0
1600	246	1	177	61	2	0	1	0	1	2	0	1	0	0
1700	256	1	188	64	1	2	0	0	0	0	0	0	0	0
1800	141	0	104	35	1	0	0	0	0	1	0	0	0	0
1900	106	1	84	20	0	1	0	0	0	0	0	0	0	0
2000	65	0	57	8	0	0	0	0	0	0	0	0	0	0
2100	60	0	46	14	0	0	0	0	0	0	0	0	0	0
2200	23	0	21	2	0	0	0	0	0	0	0	0	0	0
2300	16	0	10	6	0	0	0	0	0	0	0	0	0	0
07-19	**3072**	**10**	**2231**	**732**	**13**	**7**	**21**	**0**	**7**	**36**	**1**	**10**	**3**	**1**
06-22	**3781**	**12**	**2782**	**882**	**14**	**10**	**21**	**0**	**7**	**38**	**1**	**10**	**3**	**1**
06-00	**3820**	**12**	**2813**	**890**	**14**	**10**	**21**	**0**	**7**	**38**	**1**	**10**	**3**	**1**
00-00	**4158**	**12**	**3057**	**979**	**15**	**10**	**23**	**0**	**7**	**39**	**1**	**11**	**3**	**1**

Peak step 7:00 (562) **AM Peak step** 7:00 (562) **PM Peak step** 17:00 (256)

*** Wednesday, February 05, 2014**

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 13
0000	7	0	6	1	0	0	0	0	0	0	0	0	0	0
0100	3	0	2	1	0	0	0	0	0	0	0	0	0	0
0200	18	0	14	4	0	0	0	0	0	0	0	0	0	0
0300	31	0	27	4	0	0	0	0	0	0	0	0	0	0
0400	60	0	43	16	0	0	0	0	0	1	0	0	0	0
0500	228	1	167	58	0	0	0	0	1	1	0	0	0	0
0600	469	1	354	111	1	1	1	0	0	0	0	0	0	0
0700	573	1	438	128	0	2	1	0	0	2	0	1	0	0
0800	353	0	274	70	2	1	1	0	0	4	0	1	0	0
0900	231	1	169	57	0	1	1	0	0	1	0	0	1	0
1000	225	0	161	50	0	2	2	0	1	5	0	4	0	0
1100	200	0	151	46	0	1	0	0	0	1	0	0	0	1
1200	228	2	159	57	1	3	1	0	1	2	0	2	0	0
1300	220	0	164	46	1	1	2	0	3	3	0	0	0	0
1400	188	1	123	53	1	3	1	0	4	1	0	1	0	0
1500	269	1	195	67	1	2	0	0	2	1	0	0	0	0
1600	261	1	191	65	1	0	1	0	1	1	0	0	0	0
1700	256	2	188	63	1	2	0	0	0	0	0	0	0	0
1800	158	0	118	40	0	0	0	0	0	0	0	0	0	0
1900	89	0	64	23	1	0	0	0	0	1	0	0	0	0
2000	70	0	53	17	0	0	0	0	0	0	0	0	0	0
2100	37	0	25	11	0	0	0	0	1	0	0	0	0	0
2200	40	0	36	4	0	0	0	0	0	0	0	0	0	0
2300	10	0	7	3	0	0	0	0	0	0	0	0	0	0
07-19	**3162**	**9**	**2331**	**742**	**8**	**18**	**10**	**0**	**12**	**21**	**0**	**9**	**1**	**1**
06-22	**3827**	**10**	**2827**	**904**	**10**	**19**	**11**	**0**	**13**	**22**	**0**	**9**	**1**	**1**
06-00	**3877**	**10**	**2870**	**911**	**10**	**19**	**11**	**0**	**13**	**22**	**0**	**9**	**1**	**1**
00-00	**4224**	**11**	**3129**	**995**	**10**	**19**	**11**	**0**	**14**	**24**	**0**	**9**	**1**	**1**

Peak step 7:00 (573) **AM Peak step** 7:00 (573) **PM Peak step** 15:00 (269)

*** Thursday, February 06, 2014**

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 13
0000	8	0	6	1	0	0	0	0	0	1	0	0	0	0
0100	6	0	5	1	0	0	0	0	0	0	0	0	0	0
0200	15	0	10	4	0	1	0	0	0	0	0	0	0	0
0300	28	0	21	7	0	0	0	0	0	0	0	0	0	0
0400	64	0	48	15	1	0	0	0	0	0	0	0	0	0
0500	238	0	173	65	0	0	0	0	0	0	0	0	0	0
0600	464	1	358	105	0	0	0	0	0	0	0	0	0	0
0700	512	0	411	94	3	0	1	0	0	2	0	1	0	0
0800	312	0	232	76	2	1	0	0	0	1	0	0	0	0
0900	250	0	202	48	0	0	0	0	0	0	0	0	0	0
1000	174	0	131	35	0	3	0	1	1	1	0	1	0	1
1100	157	0	116	39	0	0	2	0	0	0	0	0	0	0
1200	195	0	140	48	0	2	0	0	1	2	0	0	1	1
1300	194	0	140	49	3	1	0	0	0	1	0	0	0	0
1400	241	1	175	57	2	0	4	0	0	1	0	0	1	0
1500	217	0	159	52	1	1	2	0	1	1	0	0	0	0
1600	204	0	157	45	0	0	2	0	0	0	0	0	0	0
1700	195	1	158	35	0	0	1	0	0	0	0	0	0	0
1800	143	0	113	28	0	0	0	0	0	2	0	0	0	0
1900	87	1	69	17	0	0	0	0	0	0	0	0	0	0
2000	70	0	59	11	0	0	0	0	0	0	0	0	0	0
2100	59	0	47	12	0	0	0	0	0	0	0	0	0	0
2200	27	0	25	2	0	0	0	0	0	0	0	0	0	0
2300	16	0	11	4	0	0	0	0	0	1	0	0	0	0
07-19	**2794**	**2**	**2134**	**606**	**11**	**8**	**12**	**1**	**3**	**11**	**0**	**2**	**2**	**2**
06-22	**3474**	**4**	**2667**	**751**	**11**	**8**	**12**	**1**	**3**	**11**	**0**	**2**	**2**	**2**
06-00	**3517**	**4**	**2703**	**757**	**11**	**8**	**12**	**1**	**3**	**12**	**0**	**2**	**2**	**2**
00-00	**3876**	**4**	**2966**	**850**	**12**	**9**	**12**	**1**	**3**	**13**	**0**	**2**	**2**	**2**

Peak step 7:00 (512) **AM Peak step** 7:00 (512) **PM Peak step** 14:00 (241)

In profile: Vehicles = 12258 / 29239 (41.92%)

Traffic Data Service -- Campbell, CA
Class Report

CustomList-2554 -- English (ENU)

Datasets:

Site: **[3] UNION RD N OF UNION HEIGHTS**
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 0 - 100 mph.
Direction: South (bound)
Name: Default Profile
Scheme: Vehicle classification (Scheme F)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

Column Legend:

0 [Time] 24-hour time (0000 - 2359)
1 [Total] Number in time step
2 [Cls] Class totals

*** Tuesday, February 04, 2014**

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 13
0000	22	0	17	5	0	0	0	0	0	0	0	0	0	0
0100	14	0	8	6	0	0	0	0	0	0	0	0	0	0
0200	6	0	4	1	0	0	0	0	1	0	0	0	0	0
0300	6	0	5	1	0	0	0	0	0	0	0	0	0	0
0400	13	0	7	4	0	0	0	0	0	2	0	0	0	0
0500	42	0	23	19	0	0	0	0	0	0	0	0	0	0
0600	112	0	80	23	0	0	0	0	0	8	0	1	0	0
0700	176	0	120	46	0	0	1	0	2	3	1	1	0	2
0800	203	0	126	66	4	1	2	0	3	1	0	0	0	0
0900	151	0	87	51	0	1	4	0	1	6	0	1	0	0
1000	135	0	61	62	1	1	3	0	2	3	0	2	0	0
1100	171	1	95	58	3	0	1	0	3	9	0	1	0	0
1200	182	1	116	60	0	2	1	0	1	1	0	0	0	0
1300	192	0	124	57	0	0	1	0	2	5	0	3	0	0
1400	241	1	167	68	0	2	1	0	1	0	0	1	0	0
1500	380	0	255	123	0	0	0	0	0	1	1	0	0	0
1600	495	1	345	145	1	0	0	0	1	1	0	0	0	1
1700	571	5	410	155	0	1	0	0	0	0	0	0	0	0
1800	361	0	287	74	0	0	0	0	0	0	0	0	0	0
1900	183	1	137	42	0	1	0	0	1	1	0	0	0	0
2000	126	1	101	23	1	0	0	0	0	0	0	0	0	0
2100	100	0	83	17	0	0	0	0	0	0	0	0	0	0
2200	81	0	69	12	0	0	0	0	0	0	0	0	0	0
2300	35	0	30	5	0	0	0	0	0	0	0	0	0	0
07-19	**3258**	**9**	**2193**	**965**	**9**	**8**	**14**	**0**	**16**	**30**	**2**	**9**	**0**	**3**
06-22	**3779**	**11**	**2594**	**1070**	**10**	**9**	**14**	**0**	**17**	**39**	**2**	**10**	**0**	**3**
06-00	**3895**	**11**	**2693**	**1087**	**10**	**9**	**14**	**0**	**17**	**39**	**2**	**10**	**0**	**3**
00-00	**3998**	**11**	**2757**	**1123**	**10**	**9**	**14**	**0**	**18**	**41**	**2**	**10**	**0**	**3**

Peak step 17:00 (571) **AM Peak step** 8:00 (203) **PM Peak step** 17:00 (571)

*** Wednesday, February 05, 2014**

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 13
0000	21	0	17	4	0	0	0	0	0	0	0	0	0	0
0100	19	0	11	7	0	0	0	0	1	0	0	0	0	0
0200	10	0	7	2	0	0	0	0	1	0	0	0	0	0
0300	7	0	4	2	0	0	0	0	0	1	0	0	0	0
0400	18	0	11	7	0	0	0	0	0	0	0	0	0	0
0500	31	0	17	13	0	0	0	0	0	1	0	0	0	0
0600	111	0	77	31	0	0	0	0	0	3	0	0	0	0
0700	170	0	117	45	1	3	0	0	0	3	0	0	0	1
0800	202	1	136	57	2	1	0	0	1	4	0	0	0	0
0900	149	0	80	59	2	3	2	0	0	2	0	1	0	0
1000	111	0	67	37	1	1	1	0	1	1	0	2	0	0
1100	148	0	94	46	0	3	1	0	1	2	0	1	0	0
1200	204	1	138	58	0	1	3	0	0	2	0	1	0	0
1300	205	1	124	72	0	5	0	0	1	1	0	1	0	0
1400	285	2	190	87	0	1	1	0	3	1	0	0	0	0
1500	365	3	235	120	1	1	2	0	1	1	0	1	0	0
1600	483	0	348	134	1	0	0	0	0	0	0	0	0	0
1700	543	2	402	138	0	0	0	0	1	0	0	0	0	0
1800	389	1	281	106	0	1	0	0	0	0	0	0	0	0
1900	183	0	154	28	0	0	0	0	0	1	0	0	0	0
2000	129	1	100	25	2	1	0	0	0	0	0	0	0	0
2100	138	0	112	26	0	0	0	0	0	0	0	0	0	0
2200	73	0	61	12	0	0	0	0	0	0	0	0	0	0
2300	48	0	39	9	0	0	0	0	0	0	0	0	0	0
07-19	**3254**	**11**	**2212**	**959**	**8**	**20**	**10**	**0**	**9**	**17**	**0**	**7**	**0**	**1**
06-22	**3815**	**12**	**2655**	**1069**	**10**	**21**	**10**	**0**	**9**	**21**	**0**	**7**	**0**	**1**
06-00	**3936**	**12**	**2755**	**1090**	**10**	**21**	**10**	**0**	**9**	**21**	**0**	**7**	**0**	**1**
00-00	**4042**	**12**	**2822**	**1125**	**10**	**21**	**10**	**0**	**11**	**23**	**0**	**7**	**0**	**1**

Peak step 17:00 (543) **AM Peak step** 8:00 (202) **PM Peak step** 17:00 (543)

*** Thursday, February 06, 2014**

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 13
0000	22	0	15	7	0	0	0	0	0	0	0	0	0	0
0100	11	0	10	1	0	0	0	0	0	0	0	0	0	0
0200	10	0	7	2	0	0	0	0	1	0	0	0	0	0
0300	7	0	5	1	0	0	0	0	0	1	0	0	0	0
0400	17	0	7	8	1	0	0	0	0	1	0	0	0	0
0500	28	0	18	9	0	0	0	0	0	1	0	0	0	0
0600	90	1	67	20	0	0	0	0	0	2	0	0	0	0
0700	157	0	121	35	0	0	0	0	0	1	0	0	0	0
0800	136	0	96	38	2	0	0	0	0	0	0	0	0	0
0900	125	0	75	43	1	0	1	1	1	2	0	0	1	0
1000	108	0	59	46	0	0	0	0	2	1	0	0	0	0
1100	187	1	117	63	2	0	0	0	1	1	0	0	0	2
1200	198	0	138	54	1	2	0	1	1	1	0	0	0	0
1300	193	1	121	68	1	0	0	0	1	0	0	0	1	0
1400	247	0	165	76	4	1	0	0	1	0	0	0	0	0
1500	342	0	229	110	2	1	0	0	0	0	0	0	0	0
1600	456	0	323	129	1	1	0	0	2	0	0	0	0	0
1700	520	0	377	141	0	1	0	0	0	1	0	0	0	0
1800	347	0	268	79	0	0	0	0	0	0	0	0	0	0
1900	200	0	158	41	0	1	0	0	0	0	0	0	0	0
2000	105	0	80	25	0	0	0	0	0	0	0	0	0	0
2100	110	0	88	21	0	0	1	0	0	0	0	0	0	0
2200	66	0	50	15	1	0	0	0	0	0	0	0	0	0
2300	27	0	21	6	0	0	0	0	0	0	0	0	0	0
07-19	**3016**	**2**	**2089**	**882**	**14**	**6**	**1**	**2**	**9**	**7**	**0**	**0**	**2**	**2**
06-22	**3521**	**3**	**2482**	**989**	**14**	**7**	**2**	**2**	**9**	**9**	**0**	**0**	**2**	**2**
06-00	**3614**	**3**	**2553**	**1010**	**15**	**7**	**2**	**2**	**9**	**9**	**0**	**0**	**2**	**2**
00-00	**3709**	**3**	**2615**	**1038**	**16**	**7**	**2**	**2**	**10**	**12**	**0**	**0**	**2**	**2**

Peak step 17:00 (520) **AM Peak step** 11:00 (187) **PM Peak step** 17:00 (520)

In profile: Vehicles = 11749 / 29239 (40.18%)

APPENDIX B: LOS CALCULATION SHEETS

Intersection	
Intersection Delay, s/veh	12.4
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	0	317	76	0	37	130	0	0	0	0	0
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	5	5	5	2	5	5	5	2	5	5	5
Mvmt Flow	0	0	377	90	0	44	155	0	0	0	0	0
Number of Lanes	0	0	1	1	0	1	1	0	0	0	1	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	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	2	2
HCM Control Delay	14.3	10.4	0
HCM LOS	B	B	-

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	100%	0%	0%	100%	0%	0%
Vol Right, %	0%	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	317	76	37	130	56	157
LT Vol	0	0	0	37	0	56	0
Through Vol	0	317	0	0	130	0	0
RT Vol	0	0	76	0	0	0	157
Lane Flow Rate	0	377	90	44	155	67	187
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0	0.578	0.121	0.078	0.254	0.126	0.291
Departure Headway (Hd)	6.811	5.63	4.922	6.415	5.908	6.815	5.603
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	645	733	560	610	529	645
Service Time	4.831	3.33	2.622	4.131	3.625	4.523	3.311
HCM Lane V/C Ratio	0	0.584	0.123	0.079	0.254	0.127	0.29
HCM Control Delay	9.8	15.8	8.3	9.7	10.6	10.5	10.6
HCM Lane LOS	N	C	A	A	B	B	B
HCM 95th-tile Q	0	3.7	0.4	0.3	1	0.4	1.2

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	56	0	157
Peak Hour Factor	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	5	5	5
Mvmt Flow	0	67	0	187
Number of Lanes	0	0	1	1

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	10.6
HCM LOS	B

Lane

Intersection	
Int Delay, s/veh	6.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	132	241	65	90	77	113
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	350	315	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	176	321	87	120	103	151

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	176	0	469	176
Stage 1	-	-	-	-	176	-
Stage 2	-	-	-	-	293	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	0	1382	-	547	859
Stage 1	-	0	-	-	847	-
Stage 2	-	0	-	-	750	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	1382	-	513	859
Mov Cap-2 Maneuver	-	-	-	-	513	-
Stage 1	-	-	-	-	847	-
Stage 2	-	-	-	-	703	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.3	13.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	675	-	1382	-
HCM Lane V/C Ratio	0.375	-	0.063	-
HCM Control Delay (s)	13.5	-	7.8	-
HCM Lane LOS	B	-	A	-
HCM 95th %tile Q(veh)	1.7	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	41	452	26	5	945	131	53	44	18	83	29	73
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	1810	1810	1900	1810	1810	1810	1900	1810	1810	1810	1810	1900
Adj Flow Rate, veh/h	45	497	25	5	1038	0	58	48	0	91	32	13
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	1	1	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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	118	1793	90	20	1656	741	101	84	162	189	134	55
Arrive On Green	0.07	0.54	0.54	0.01	0.48	0.00	0.11	0.11	0.00	0.11	0.11	0.11
Sat Flow, veh/h	1723	3332	167	1723	3438	1538	964	798	1538	1723	1224	497
Grp Volume(v), veh/h	45	256	266	5	1038	0	106	0	0	91	0	45
Grp Sat Flow(s),veh/h/ln	1723	1719	1780	1723	1719	1538	1761	0	1538	1723	0	1722
Q Serve(g_s), s	2.2	7.1	7.1	0.3	19.7	0.0	5.0	0.0	0.0	4.4	0.0	2.1
Cycle Q Clear(g_c), s	2.2	7.1	7.1	0.3	19.7	0.0	5.0	0.0	0.0	4.4	0.0	2.1
Prop In Lane	1.00		0.09	1.00		1.00	0.55		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	118	925	958	20	1656	741	185	0	162	189	0	189
V/C Ratio(X)	0.38	0.28	0.28	0.25	0.63	0.00	0.57	0.00	0.00	0.48	0.00	0.24
Avail Cap(c_a), veh/h	431	1525	1579	431	3050	1364	561	0	490	784	0	783
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	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.2	11.0	11.0	43.1	16.9	0.0	37.5	0.0	0.0	36.8	0.0	35.8
Incr Delay (d2), s/veh	2.0	0.2	0.2	6.2	0.6	0.0	2.8	0.0	0.0	1.9	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(-26165%),veh/ln	1.1	3.4	3.5	0.2	9.4	0.0	2.6	0.0	0.0	2.2	0.0	1.0
LnGrp Delay(d),s/veh	41.2	11.3	11.3	49.2	17.5	0.0	40.2	0.0	0.0	38.7	0.0	36.4
LnGrp LOS	D	B	B	D	B		D			D		D
Approach Vol, veh/h		567			1043			106			136	
Approach Delay, s/veh		13.6			17.6			40.2			37.9	
Approach LOS		B			B			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	4.7	53.7		14.5	9.7	48.7		14.9
Change Period (Y+Rc), s	3.7	6.4		5.3	3.7	6.4		5.3
Max Green Setting (Gmax), s	22.0	78.0		28.0	22.0	78.0		40.0
Max Q Clear Time (g_c+I1), s	2.3	9.1		7.0	4.2	21.7		6.4
Green Ext Time (p_c), s	0.0	21.7		0.5	0.1	20.6		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	19.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	5	525	0	0	1225	15	0	1	0	1	5	5
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	140	-	-	-	-	-	-	-	-	-	-	-
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	5	547	0	0	1276	16	0	1	0	1	5	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1292	0	0	547	0	0	1846	1849	547	1842	1841	1284
Stage 1	-	-	-	-	-	-	557	557	-	1284	1284	-
Stage 2	-	-	-	-	-	-	1289	1292	-	558	557	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	527	-	-	1007	-	-	56	73	531	57	74	198
Stage 1	-	-	-	-	-	-	509	507	-	200	232	-
Stage 2	-	-	-	-	-	-	198	230	-	509	507	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	527	-	-	1007	-	-	51	72	531	56	73	198
Mov Cap-2 Maneuver	-	-	-	-	-	-	51	72	-	56	73	-
Stage 1	-	-	-	-	-	-	504	502	-	198	232	-
Stage 2	-	-	-	-	-	-	188	230	-	503	502	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	55.7	46.1
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	72	527	-	-	1007	-	-	99
HCM Lane V/C Ratio	0.014	0.01	-	-	-	-	-	0.116
HCM Control Delay (s)	55.7	11.9	-	-	0	-	-	46.1
HCM Lane LOS	F	B	-	-	A	-	-	E
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	339	185	44	691	24	524	9	14	36	19	2
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	1810	1810	1810	1810	1810	1900	1900	1810	1810	1900	1810	1810
Adj Flow Rate, veh/h	1	346	0	45	705	23	535	9	0	37	19	0
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	1
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	3	756	642	79	804	26	536	9	486	58	30	77
Arrive On Green	0.00	0.42	0.00	0.05	0.46	0.46	0.32	0.32	0.00	0.05	0.05	0.00
Sat Flow, veh/h	1723	1810	1538	1723	1743	57	1696	29	1538	1157	594	1538
Grp Volume(v), veh/h	1	346	0	45	0	728	544	0	0	56	0	0
Grp Sat Flow(s),veh/h/ln	1723	1810	1538	1723	0	1799	1725	0	1538	1752	0	1538
Q Serve(g_s), s	0.1	16.1	0.0	3.0	0.0	42.9	36.9	0.0	0.0	3.7	0.0	0.0
Cycle Q Clear(g_c), s	0.1	16.1	0.0	3.0	0.0	42.9	36.9	0.0	0.0	3.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.03	0.98		1.00	0.66		1.00
Lane Grp Cap(c), veh/h	3	756	642	79	0	831	545	0	486	88	0	77
V/C Ratio(X)	0.30	0.46	0.00	0.57	0.00	0.88	1.00	0.00	0.00	0.64	0.00	0.00
Avail Cap(c_a), veh/h	353	1266	1076	279	0	1259	545	0	486	508	0	446
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	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.4	24.6	0.0	54.8	0.0	28.5	40.1	0.0	0.0	54.6	0.0	0.0
Incr Delay (d2), s/veh	44.9	0.5	0.0	6.3	0.0	5.3	38.3	0.0	0.0	7.5	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(-26165%),veh/ln	0.1	8.2	0.0	1.6	0.0	22.5	23.3	0.0	0.0	2.0	0.0	0.0
LnGrp Delay(d),s/veh	103.3	25.1	0.0	61.0	0.0	33.8	78.4	0.0	0.0	62.1	0.0	0.0
LnGrp LOS	F	C		E		C	E			E		
Approach Vol, veh/h		347			773			544			56	
Approach Delay, s/veh		25.3			35.4			78.4			62.1	
Approach LOS		C			D			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	9.1	55.3		10.5	3.9	60.5		42.3
Change Period (Y+Rc), s	3.7	6.4		4.6	3.7	6.4		5.3
Max Green Setting (Gmax), s	19.0	82.0		34.0	24.0	82.0		37.0
Max Q Clear Time (g_c+I1), s	5.0	18.1		5.7	2.1	44.9		38.9
Green Ext Time (p_c), s	0.1	9.8		0.2	0.0	9.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	47.8
HCM 2010 LOS	D

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	421	61	204	0	22	338
Number	7	14	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	1810	1810	1810	0	1810	1810
Adj Flow Rate, veh/h	439	0	212	0	23	352
Adj No. of Lanes	2	1	1	0	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	0	5	5
Cap, veh/h	700	322	562	0	59	856
Arrive On Green	0.21	0.00	0.31	0.00	0.03	0.47
Sat Flow, veh/h	3343	1538	1810	0	1723	1810
Grp Volume(v), veh/h	439	0	212	0	23	352
Grp Sat Flow(s),veh/h/ln	1672	1538	1810	0	1723	1810
Q Serve(g_s), s	4.3	0.0	3.3	0.0	0.5	4.6
Cycle Q Clear(g_c), s	4.3	0.0	3.3	0.0	0.5	4.6
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	700	322	562	0	59	856
V/C Ratio(X)	0.63	0.00	0.38	0.00	0.39	0.41
Avail Cap(c_a), veh/h	2049	943	3378	0	576	3378
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	12.9	0.0	9.7	0.0	17.0	6.2
Incr Delay (d2), s/veh	0.9	0.0	0.7	0.0	4.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	2.0	0.0	1.7	0.0	0.3	2.4
LnGrp Delay(d),s/veh	13.8	0.0	10.4	0.0	21.1	6.7
LnGrp LOS	B		B		C	A
Approach Vol, veh/h	439		212			375
Approach Delay, s/veh	13.8		10.4			7.6
Approach LOS	B		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	5.8	17.9		12.1		23.8		
Change Period (Y+Rc), s	4.6	6.8		4.6		6.8		
Max Green Setting (Gmax), s	12.0	67.0		22.0		67.0		
Max Q Clear Time (g_c+I1), s	2.5	5.3		6.3		6.6		
Green Ext Time (p_c), s	0.0	5.9		1.3		5.9		

Intersection Summary	
HCM 2010 Ctrl Delay	10.8
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	15	190	2	16	472	5	3	0	13	4	0	7
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	225	-	-	195	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	209	2	18	519	5	3	0	14	4	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	524	0	0	211	0	0	800	802	210	800	801	521
Stage 1	-	-	-	-	-	-	243	243	-	557	557	-
Stage 2	-	-	-	-	-	-	557	559	-	243	244	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1043	-	-	1360	-	-	303	317	830	303	318	555
Stage 1	-	-	-	-	-	-	761	705	-	515	512	-
Stage 2	-	-	-	-	-	-	515	511	-	761	704	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1043	-	-	1360	-	-	292	308	830	291	309	555
Mov Cap-2 Maneuver	-	-	-	-	-	-	292	308	-	291	309	-
Stage 1	-	-	-	-	-	-	749	694	-	507	505	-
Stage 2	-	-	-	-	-	-	501	504	-	736	693	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.2	10.9	13.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	292	830	1043	-	-	1360	-	-	291	555
HCM Lane V/C Ratio	0.011	0.017	0.016	-	-	0.013	-	-	0.015	0.014
HCM Control Delay (s)	17.5	9.4	8.5	-	-	7.7	-	-	17.6	11.6
HCM Lane LOS	C	A	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0	0.1	0	-	-	0	-	-	0	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	4	0	1	543	245	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	135	0	220	-	-	190
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	4	0	1	610	275	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	887	275	275	0	-	0
Stage 1	275	-	-	-	-	-
Stage 2	612	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	315	764	1288	-	-	-
Stage 1	771	-	-	-	-	-
Stage 2	541	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	315	764	1288	-	-	-
Mov Cap-2 Maneuver	315	-	-	-	-	-
Stage 1	771	-	-	-	-	-
Stage 2	541	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1288	-	315	-	-	-
HCM Lane V/C Ratio	0.001	-	0.014	-	-	-
HCM Control Delay (s)	7.8	-	16.6	0	-	-
HCM Lane LOS	A	-	C	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	19	156	532	38	17	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	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	181	619	44	20	50

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	663	0	-	0	867	641
Stage 1	-	-	-	-	641	-
Stage 2	-	-	-	-	226	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	926	-	-	-	323	475
Stage 1	-	-	-	-	525	-
Stage 2	-	-	-	-	812	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	926	-	-	-	315	475
Mov Cap-2 Maneuver	-	-	-	-	315	-
Stage 1	-	-	-	-	525	-
Stage 2	-	-	-	-	793	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	15.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	926	-	-	-	415
HCM Lane V/C Ratio	0.024	-	-	-	0.168
HCM Control Delay (s)	9	-	-	-	15.4
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	108	157	462	299	185	172
Number	5	2	6	16	7	14
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	130	189	557	0	223	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	171	1104	724	615	287	256
Arrive On Green	0.10	0.59	0.39	0.00	0.16	0.00
Sat Flow, veh/h	1774	1863	1863	1583	1774	1583
Grp Volume(v), veh/h	130	189	557	0	223	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1863	1583	1774	1583
Q Serve(g_s), s	3.3	2.1	12.1	0.0	5.6	0.0
Cycle Q Clear(g_c), s	3.3	2.1	12.1	0.0	5.6	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	171	1104	724	615	287	256
V/C Ratio(X)	0.76	0.17	0.77	0.00	0.78	0.00
Avail Cap(c_a), veh/h	574	1378	1378	1171	547	488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	20.4	4.3	12.4	0.0	18.6	0.0
Incr Delay (d2), s/veh	6.8	0.1	1.8	0.0	4.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	1.9	1.1	6.5	0.0	3.1	0.0
LnGrp Delay(d),s/veh	27.2	4.4	14.1	0.0	23.2	0.0
LnGrp LOS	C	A	B		C	
Approach Vol, veh/h		319	557		223	
Approach Delay, s/veh		13.7	14.1		23.2	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		33.2		13.2	9.5	23.7		
Change Period (Y+Rc), s		5.7		5.7	5.0	5.7		
Max Green Setting (Gmax), s		34.3		14.3	15.0	34.3		
Max Q Clear Time (g_c+I1), s		4.1		7.6	5.3	14.1		
Green Ext Time (p_c), s		4.3		0.4	0.2	3.9		

Intersection Summary	
HCM 2010 Ctrl Delay	15.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	112	144	90	23	309	191	204	285	25	109	124	112
Number	3	8	18	7	4	14	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	1900
Adj Flow Rate, veh/h	126	162	82	26	347	197	229	320	0	122	139	93
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	0
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	302	199	101	537	338	192	268	450	383	156	186	124
Arrive On Green	0.17	0.17	0.17	0.30	0.30	0.30	0.15	0.24	0.00	0.09	0.18	0.18
Sat Flow, veh/h	1774	1168	591	1774	1117	634	1774	1863	1583	1774	1042	697
Grp Volume(v), veh/h	126	0	244	26	0	544	229	320	0	122	0	232
Grp Sat Flow(s),veh/h/ln	1774	0	1758	1774	0	1751	1774	1863	1583	1774	0	1740
Q Serve(g_s), s	6.1	0.0	12.8	1.0	0.0	29.0	12.0	15.1	0.0	6.5	0.0	12.1
Cycle Q Clear(g_c), s	6.1	0.0	12.8	1.0	0.0	29.0	12.0	15.1	0.0	6.5	0.0	12.1
Prop In Lane	1.00		0.34	1.00		0.36	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	302	0	300	537	0	530	268	450	383	156	0	310
V/C Ratio(X)	0.42	0.00	0.81	0.05	0.00	1.03	0.85	0.71	0.00	0.78	0.00	0.75
Avail Cap(c_a), veh/h	722	0	716	537	0	530	500	914	777	685	0	854
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	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.5	0.0	38.3	23.6	0.0	33.4	39.6	33.2	0.0	42.8	0.0	37.3
Incr Delay (d2), s/veh	0.9	0.0	5.3	0.0	0.0	45.9	7.6	2.1	0.0	8.4	0.0	3.6
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(-26165%),veh/ln	3.1	0.0	6.7	0.5	0.0	20.6	6.5	8.0	0.0	3.5	0.0	6.1
LnGrp Delay(d),s/veh	36.4	0.0	43.6	23.7	0.0	79.3	47.2	35.3	0.0	51.2	0.0	40.9
LnGrp LOS	D		D	C		F	D	D		D		D
Approach Vol, veh/h		370			570			549			354	
Approach Delay, s/veh		41.2			76.8			40.3			44.5	
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	12.1	29.2		33.6	18.2	23.1		20.9
Change Period (Y+Rc), s	3.7	6.0		4.6	3.7	6.0		4.6
Max Green Setting (Gmax), s	37.3	47.0		29.0	27.0	47.0		39.0
Max Q Clear Time (g_c+I1), s	8.1	17.1		31.0	14.0	14.1		14.8
Green Ext Time (p_c), s	0.3	2.9		0.0	0.5	3.0		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	52.5
HCM 2010 LOS	D

Intersection	
Intersection Delay, s/veh	13.1
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	0	325	113	0	99	127	0	0	0	0	0
Peak Hour Factor	0.92	0.94	0.94	0.94	0.92	0.94	0.94	0.94	0.92	0.94	0.94	0.94
Heavy Vehicles, %	2	3	3	3	2	3	3	3	2	3	3	3
Mvmt Flow	0	0	346	120	0	105	135	0	0	0	0	0
Number of Lanes	0	0	1	1	0	1	1	0	0	0	1	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	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	2	2
HCM Control Delay	14.8	11.1	0
HCM LOS	B	B	-

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	100%	0%	0%	100%	0%	0%
Vol Right, %	0%	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	325	113	99	127	107	241
LT Vol	0	0	0	99	0	107	0
Through Vol	0	325	0	0	127	0	0
RT Vol	0	0	113	0	0	0	241
Lane Flow Rate	0	346	120	105	135	114	256
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0	0.578	0.177	0.199	0.236	0.219	0.407
Departure Headway (Hd)	7.168	6.022	5.312	6.8	6.291	6.934	5.721
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	598	674	528	570	518	628
Service Time	5.234	3.759	3.049	4.544	4.035	4.676	3.462
HCM Lane V/C Ratio	0	0.579	0.178	0.199	0.237	0.22	0.408
HCM Control Delay	10.2	16.7	9.2	11.2	11	11.6	12.4
HCM Lane LOS	N	C	A	B	B	B	B
HCM 95th-tile Q	0	3.7	0.6	0.7	0.9	0.8	2

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	107	0	241
Peak Hour Factor	0.92	0.94	0.94	0.94
Heavy Vehicles, %	2	3	3	3
Mvmt Flow	0	114	0	256
Number of Lanes	0	0	1	1

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	12.2
HCM LOS	B

Lane

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	232	200	72	176	50	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	350	315	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	234	202	73	178	51	30

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	234	0	557	234
Stage 1	-	-	-	-	234	-
Stage 2	-	-	-	-	323	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	0	1328	-	490	803
Stage 1	-	0	-	-	802	-
Stage 2	-	0	-	-	732	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	1328	-	463	803
Mov Cap-2 Maneuver	-	-	-	-	463	-
Stage 1	-	-	-	-	802	-
Stage 2	-	-	-	-	692	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.3	12.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	550	-	1328	-
HCM Lane V/C Ratio	0.147	-	0.055	-
HCM Control Delay (s)	12.7	-	7.9	-
HCM Lane LOS	B	-	A	-
HCM 95th %tile Q(veh)	0.5	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	41	830	42	12	666	118	27	24	12	126	43	50
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	1845	1845	1900	1845	1845	1845	1900	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	46	933	44	13	748	0	30	27	0	142	48	25
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	1	1	0
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	125	1738	82	49	1636	732	84	75	139	213	138	72
Arrive On Green	0.07	0.51	0.51	0.03	0.47	0.00	0.09	0.09	0.00	0.12	0.12	0.12
Sat Flow, veh/h	1757	3408	161	1757	3505	1568	946	851	1568	1757	1144	596
Grp Volume(v), veh/h	46	480	497	13	748	0	57	0	0	142	0	73
Grp Sat Flow(s),veh/h/ln	1757	1752	1816	1757	1752	1568	1797	0	1568	1757	0	1740
Q Serve(g_s), s	2.0	15.2	15.2	0.6	11.9	0.0	2.4	0.0	0.0	6.3	0.0	3.2
Cycle Q Clear(g_c), s	2.0	15.2	15.2	0.6	11.9	0.0	2.4	0.0	0.0	6.3	0.0	3.2
Prop In Lane	1.00		0.09	1.00		1.00	0.53		1.00	1.00		0.34
Lane Grp Cap(c), veh/h	125	893	926	49	1636	732	159	0	139	213	0	210
V/C Ratio(X)	0.37	0.54	0.54	0.26	0.46	0.00	0.36	0.00	0.00	0.67	0.00	0.35
Avail Cap(c_a), veh/h	471	1666	1727	471	3333	1491	614	0	535	857	0	848
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	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.3	13.6	13.6	39.0	14.8	0.0	35.2	0.0	0.0	34.5	0.0	33.1
Incr Delay (d2), s/veh	1.8	0.7	0.7	2.8	0.3	0.0	1.4	0.0	0.0	3.6	0.0	1.0
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(-26165%),veh/ln	1.1	7.5	7.8	0.3	5.8	0.0	1.3	0.0	0.0	3.3	0.0	1.6
LnGrp Delay(d),s/veh	38.1	14.3	14.3	41.8	15.1	0.0	36.5	0.0	0.0	38.1	0.0	34.1
LnGrp LOS	D	B	B	D	B		D			D		C
Approach Vol, veh/h		1023			761			57			215	
Approach Delay, s/veh		15.3			15.6			36.5			36.7	
Approach LOS		B			B			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	6.0	48.2		12.6	9.5	44.7		15.2
Change Period (Y+Rc), s	3.7	6.4		5.3	3.7	6.4		5.3
Max Green Setting (Gmax), s	22.0	78.0		28.0	22.0	78.0		40.0
Max Q Clear Time (g_c+I1), s	2.6	17.2		4.4	4.0	13.9		8.3
Green Ext Time (p_c), s	0.0	24.0		0.2	0.1	24.4		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	18.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	15	961	0	0	855	8	0	0	0	3	0	14
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	140	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	99	99	99	99	99	99	99	99	99	99	99	99
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	15	971	0	0	864	8	0	0	0	3	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	872	0	0	971	0	0	1876	1873	971	1869	1869	868
Stage 1	-	-	-	-	-	-	1001	1001	-	868	868	-
Stage 2	-	-	-	-	-	-	875	872	-	1001	1001	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	769	-	-	706	-	-	54	71	305	55	72	350
Stage 1	-	-	-	-	-	-	291	319	-	346	368	-
Stage 2	-	-	-	-	-	-	343	367	-	291	319	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	769	-	-	706	-	-	51	70	305	54	71	350
Mov Cap-2 Maneuver	-	-	-	-	-	-	51	70	-	54	71	-
Stage 1	-	-	-	-	-	-	285	313	-	339	368	-
Stage 2	-	-	-	-	-	-	329	367	-	285	313	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	0	27.4
HCM LOS			A	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	769	-	-	706	-	-	178
HCM Lane V/C Ratio	-	0.02	-	-	-	-	-	0.096
HCM Control Delay (s)	0	9.8	-	-	0	-	-	27.4
HCM Lane LOS	A	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	572	414	18	530	10	326	12	53	102	60	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	1845	1845	1845	1845	1845	1900	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	2	629	107	20	582	10	358	13	0	112	66	0
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	7	787	669	51	818	14	402	15	371	137	81	191
Arrive On Green	0.00	0.43	0.43	0.03	0.45	0.45	0.24	0.24	0.00	0.12	0.12	0.00
Sat Flow, veh/h	1757	1845	1568	1757	1808	31	1698	62	1568	1125	663	1568
Grp Volume(v), veh/h	2	629	107	20	0	592	371	0	0	178	0	0
Grp Sat Flow(s),veh/h/ln	1757	1845	1568	1757	0	1839	1760	0	1568	1788	0	1568
Q Serve(g_s), s	0.1	32.0	4.5	1.2	0.0	28.1	22.0	0.0	0.0	10.5	0.0	0.0
Cycle Q Clear(g_c), s	0.1	32.0	4.5	1.2	0.0	28.1	22.0	0.0	0.0	10.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.02	0.96		1.00	0.63		1.00
Lane Grp Cap(c), veh/h	7	787	669	51	0	832	417	0	371	218	0	191
V/C Ratio(X)	0.30	0.80	0.16	0.39	0.00	0.71	0.89	0.00	0.00	0.82	0.00	0.00
Avail Cap(c_a), veh/h	390	1401	1191	309	0	1397	603	0	537	563	0	494
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	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	53.6	26.9	19.0	51.5	0.0	23.9	39.9	0.0	0.0	46.2	0.0	0.0
Incr Delay (d2), s/veh	23.6	2.3	0.1	4.7	0.0	1.4	11.3	0.0	0.0	7.3	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(-26165%),veh/ln	0.1	16.8	2.0	0.7	0.0	14.5	12.0	0.0	0.0	5.6	0.0	0.0
LnGrp Delay(d),s/veh	77.2	29.2	19.2	56.2	0.0	25.3	51.2	0.0	0.0	53.5	0.0	0.0
LnGrp LOS	E	C	B	E		C	D			D		
Approach Vol, veh/h		738			612			371			178	
Approach Delay, s/veh		27.9			26.3			51.2			53.5	
Approach LOS		C			C			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	6.9	52.5		17.8	4.1	55.2		30.9
Change Period (Y+Rc), s	3.7	6.4		4.6	3.7	6.4		5.3
Max Green Setting (Gmax), s	19.0	82.0		34.0	24.0	82.0		37.0
Max Q Clear Time (g_c+I1), s	3.2	34.0		12.5	2.1	30.1		24.0
Green Ext Time (p_c), s	0.0	12.0		0.8	0.0	12.2		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	34.3
HCM 2010 LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	250	39	343	0	68	308
Number	7	14	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	1845	1845	1845	0	1845	1845
Adj Flow Rate, veh/h	284	0	390	0	77	350
Adj No. of Lanes	2	1	1	0	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	0	3	3
Cap, veh/h	474	218	740	0	148	1095
Arrive On Green	0.14	0.00	0.40	0.00	0.08	0.59
Sat Flow, veh/h	3408	1568	1845	0	1757	1845
Grp Volume(v), veh/h	284	0	390	0	77	350
Grp Sat Flow(s),veh/h/ln	1704	1568	1845	0	1757	1845
Q Serve(g_s), s	3.3	0.0	6.8	0.0	1.8	4.1
Cycle Q Clear(g_c), s	3.3	0.0	6.8	0.0	1.8	4.1
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	474	218	740	0	148	1095
V/C Ratio(X)	0.60	0.00	0.53	0.00	0.52	0.32
Avail Cap(c_a), veh/h	1760	810	2900	0	495	2900
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	0.0	9.7	0.0	18.7	4.3
Incr Delay (d2), s/veh	1.2	0.0	1.0	0.0	2.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	1.6	0.0	3.7	0.0	1.0	2.1
LnGrp Delay(d),s/veh	18.4	0.0	10.7	0.0	21.5	4.6
LnGrp LOS	B		B		C	A
Approach Vol, veh/h	284		390			427
Approach Delay, s/veh	18.4		10.7			7.7
Approach LOS	B		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	8.2	23.9		10.5		32.1		
Change Period (Y+Rc), s	4.6	6.8		4.6		6.8		
Max Green Setting (Gmax), s	12.0	67.0		22.0		67.0		
Max Q Clear Time (g_c+I1), s	3.8	8.8		5.3		6.1		
Green Ext Time (p_c), s	0.1	8.3		0.8		8.3		

Intersection Summary	
HCM 2010 Ctrl Delay	11.5
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	10	438	4	16	272	2	4	1	20	3	1	13
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	225	-	-	195	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	12	528	5	19	328	2	5	1	24	4	1	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	330	0	0	533	0	0	922	923	530	922	924	329
Stage 1	-	-	-	-	-	-	554	554	-	367	367	-
Stage 2	-	-	-	-	-	-	368	369	-	555	557	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1224	-	-	1030	-	-	250	269	547	250	268	710
Stage 1	-	-	-	-	-	-	515	512	-	650	620	-
Stage 2	-	-	-	-	-	-	650	619	-	514	511	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1224	-	-	1030	-	-	238	261	547	233	260	710
Mov Cap-2 Maneuver	-	-	-	-	-	-	238	261	-	233	260	-
Stage 1	-	-	-	-	-	-	510	507	-	644	609	-
Stage 2	-	-	-	-	-	-	623	608	-	485	506	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.5	13.6	12.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	242	547	1224	-	-	1030	-	-	239	710
HCM Lane V/C Ratio	0.025	0.044	0.01	-	-	0.019	-	-	0.02	0.022
HCM Control Delay (s)	20.3	11.9	8	-	-	8.6	-	-	20.4	10.2
HCM Lane LOS	C	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.1	0.1	0	-	-	0.1	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	45	13	6	346	487	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	135	0	220	-	-	190
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	51	15	7	393	553	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	960	553	553	0	-	0
Stage 1	553	-	-	-	-	-
Stage 2	407	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	284	531	1012	-	-	-
Stage 1	574	-	-	-	-	-
Stage 2	670	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	282	531	1012	-	-	-
Mov Cap-2 Maneuver	282	-	-	-	-	-
Stage 1	574	-	-	-	-	-
Stage 2	665	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.7	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1012	-	282	531	-	-
HCM Lane V/C Ratio	0.007	-	0.181	0.028	-	-
HCM Control Delay (s)	8.6	-	20.6	12	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0	-	0.7	0.1	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	29	533	267	16	15	20
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	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	561	281	17	16	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	298	0	-	0	911	289
Stage 1	-	-	-	-	289	-
Stage 2	-	-	-	-	622	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1263	-	-	-	304	750
Stage 1	-	-	-	-	760	-
Stage 2	-	-	-	-	535	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1263	-	-	-	297	750
Mov Cap-2 Maneuver	-	-	-	-	297	-
Stage 1	-	-	-	-	760	-
Stage 2	-	-	-	-	522	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	13.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1263	-	-	-	454
HCM Lane V/C Ratio	0.024	-	-	-	0.081
HCM Control Delay (s)	7.9	-	-	-	13.6
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	191	459	247	101	170	128
Number	7	4	8	18	1	16
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	205	494	266	0	183	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	270	1052	525	446	243	217
Arrive On Green	0.15	0.56	0.28	0.00	0.14	0.00
Sat Flow, veh/h	1774	1863	1863	1583	1774	1583
Grp Volume(v), veh/h	205	494	266	0	183	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1863	1583	1774	1583
Q Serve(g_s), s	4.2	6.0	4.6	0.0	3.8	0.0
Cycle Q Clear(g_c), s	4.2	6.0	4.6	0.0	3.8	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	270	1052	525	446	243	217
V/C Ratio(X)	0.76	0.47	0.51	0.00	0.75	0.00
Avail Cap(c_a), veh/h	696	1671	1671	1420	664	592
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	15.5	4.9	11.5	0.0	15.9	0.0
Incr Delay (d2), s/veh	4.4	0.3	0.8	0.0	4.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	2.4	3.1	2.4	0.0	2.1	0.0
LnGrp Delay(d),s/veh	19.9	5.3	12.3	0.0	20.6	0.0
LnGrp LOS	B	A	B		C	
Approach Vol, veh/h		699	266		183	
Approach Delay, s/veh		9.5	12.3		20.6	
Approach LOS		A	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				27.3		10.9	10.8	16.5
Change Period (Y+Rc), s				5.7		5.7	5.0	5.7
Max Green Setting (Gmax), s				34.3		14.3	15.0	34.3
Max Q Clear Time (g_c+I1), s				8.0		5.8	6.2	6.6
Green Ext Time (p_c), s				4.2		0.3	0.3	4.2

Intersection Summary	
HCM 2010 Ctrl Delay	11.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	125	219	159	27	92	108	128	227	25	221	333	115
Number	3	8	18	7	4	14	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	1900
Adj Flow Rate, veh/h	132	231	146	28	97	82	135	239	0	233	351	109
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	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	449	271	171	237	125	106	171	457	389	277	416	129
Arrive On Green	0.25	0.25	0.25	0.13	0.13	0.13	0.10	0.25	0.00	0.16	0.31	0.31
Sat Flow, veh/h	1774	1068	675	1774	934	790	1774	1863	1583	1774	1364	424
Grp Volume(v), veh/h	132	0	377	28	0	179	135	239	0	233	0	460
Grp Sat Flow(s),veh/h/ln	1774	0	1744	1774	0	1723	1774	1863	1583	1774	0	1788
Q Serve(g_s), s	5.4	0.0	18.4	1.2	0.0	9.0	6.7	9.9	0.0	11.4	0.0	21.5
Cycle Q Clear(g_c), s	5.4	0.0	18.4	1.2	0.0	9.0	6.7	9.9	0.0	11.4	0.0	21.5
Prop In Lane	1.00		0.39	1.00		0.46	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	449	0	441	237	0	230	171	457	389	277	0	546
V/C Ratio(X)	0.29	0.00	0.85	0.12	0.00	0.78	0.79	0.52	0.00	0.84	0.00	0.84
Avail Cap(c_a), veh/h	774	0	761	576	0	559	536	980	833	735	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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.9	0.0	31.8	34.1	0.0	37.4	39.5	29.2	0.0	36.6	0.0	29.0
Incr Delay (d2), s/veh	0.4	0.0	4.8	0.2	0.0	5.6	7.8	0.9	0.0	6.8	0.0	3.6
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(-26165%),veh/ln	2.7	0.0	9.4	0.6	0.0	4.6	3.6	5.2	0.0	6.1	0.0	11.2
LnGrp Delay(d),s/veh	27.3	0.0	36.6	34.3	0.0	43.0	47.3	30.1	0.0	43.4	0.0	32.7
LnGrp LOS	C		D	C		D	D	C		D		C
Approach Vol, veh/h		509			207			374			693	
Approach Delay, s/veh		34.2			41.8			36.3			36.3	
Approach LOS		C			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	17.7	27.9		16.5	12.3	33.3		27.2
Change Period (Y+Rc), s	3.7	6.0		4.6	3.7	6.0		4.6
Max Green Setting (Gmax), s	37.0	47.0		29.0	27.0	47.0		39.0
Max Q Clear Time (g_c+I1), s	13.4	11.9		11.0	8.7	23.5		20.4
Green Ext Time (p_c), s	0.6	4.0		1.0	0.3	3.8		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	36.3
HCM 2010 LOS	D

Intersection	
Intersection Delay, s/veh	12.6
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	0	321	76	0	37	134	0	0	0	0	0
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	5	5	5	2	5	5	5	2	5	5	5
Mvmt Flow	0	0	382	90	0	44	160	0	0	0	0	0
Number of Lanes	0	0	1	1	0	1	1	0	0	0	1	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	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	2	2
HCM Control Delay	14.5	10.5	0
HCM LOS	B	B	-

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	100%	0%	0%	100%	0%	0%
Vol Right, %	0%	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	321	76	37	134	56	157
LT Vol	0	0	0	37	0	56	0
Through Vol	0	321	0	0	134	0	0
RT Vol	0	0	76	0	0	0	157
Lane Flow Rate	0	382	90	44	160	67	187
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0	0.586	0.121	0.079	0.262	0.127	0.292
Departure Headway (Hd)	6.842	5.641	4.933	6.425	5.918	6.839	5.627
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	646	731	559	609	527	641
Service Time	4.863	3.341	2.633	4.142	3.635	4.549	3.336
HCM Lane V/C Ratio	0	0.591	0.123	0.079	0.263	0.127	0.292
HCM Control Delay	9.9	16	8.3	9.7	10.7	10.5	10.6
HCM Lane LOS	N	C	A	A	B	B	B
HCM 95th-tile Q	0	3.8	0.4	0.3	1	0.4	1.2

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	56	0	157
Peak Hour Factor	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	5	5	5
Mvmt Flow	0	67	0	187
Number of Lanes	0	0	1	1

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	10.6
HCM LOS	B

Lane

Intersection	
Int Delay, s/veh	6.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	136	241	65	94	77	113
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	350	315	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	181	321	87	125	103	151

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	181	0	480	181
Stage 1	-	-	-	-	181	-
Stage 2	-	-	-	-	299	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	0	1376	-	539	854
Stage 1	-	0	-	-	843	-
Stage 2	-	0	-	-	746	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	1376	-	505	854
Mov Cap-2 Maneuver	-	-	-	-	505	-
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	699	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.2	13.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	667	-	1376	-
HCM Lane V/C Ratio	0.38	-	0.063	-
HCM Control Delay (s)	13.7	-	7.8	-
HCM Lane LOS	B	-	A	-
HCM 95th %tile Q(veh)	1.8	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	41	508	26	5	1005	148	53	44	18	99	29	73
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	1810	1810	1900	1810	1810	1810	1900	1810	1810	1810	1810	1900
Adj Flow Rate, veh/h	45	558	26	5	1104	0	58	48	0	109	32	13
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	1	1	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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	115	1871	87	20	1734	776	97	80	155	182	129	53
Arrive On Green	0.07	0.56	0.56	0.01	0.50	0.00	0.10	0.10	0.00	0.11	0.11	0.11
Sat Flow, veh/h	1723	3345	156	1723	3438	1538	964	798	1538	1723	1224	497
Grp Volume(v), veh/h	45	286	298	5	1104	0	106	0	0	109	0	45
Grp Sat Flow(s),veh/h/ln	1723	1719	1782	1723	1719	1538	1761	0	1538	1723	0	1722
Q Serve(g_s), s	2.3	8.2	8.2	0.3	21.8	0.0	5.4	0.0	0.0	5.6	0.0	2.2
Cycle Q Clear(g_c), s	2.3	8.2	8.2	0.3	21.8	0.0	5.4	0.0	0.0	5.6	0.0	2.2
Prop In Lane	1.00		0.09	1.00		1.00	0.55		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	115	961	996	20	1734	776	177	0	155	182	0	182
V/C Ratio(X)	0.39	0.30	0.30	0.25	0.64	0.00	0.60	0.00	0.00	0.60	0.00	0.25
Avail Cap(c_a), veh/h	408	1443	1496	408	2887	1291	531	0	464	742	0	741
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	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.6	10.8	10.8	45.5	16.8	0.0	40.0	0.0	0.0	39.7	0.0	38.2
Incr Delay (d2), s/veh	2.2	0.2	0.2	6.2	0.6	0.0	3.2	0.0	0.0	3.1	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(-26165%),veh/ln	1.2	3.9	4.1	0.2	10.4	0.0	2.7	0.0	0.0	2.8	0.0	1.1
LnGrp Delay(d),s/veh	43.7	11.1	11.1	51.7	17.4	0.0	43.2	0.0	0.0	42.8	0.0	38.9
LnGrp LOS	D	B	B	D	B		D			D		D
Approach Vol, veh/h		629			1109			106			154	
Approach Delay, s/veh		13.4			17.5			43.2			41.6	
Approach LOS		B			B			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	4.8	58.3		14.7	9.9	53.3		15.1
Change Period (Y+Rc), s	3.7	6.4		5.3	3.7	6.4		5.3
Max Green Setting (Gmax), s	22.0	78.0		28.0	22.0	78.0		40.0
Max Q Clear Time (g_c+I1), s	2.3	10.2		7.4	4.3	23.8		7.6
Green Ext Time (p_c), s	0.0	24.8		0.5	0.1	23.1		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	19.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	5	597	0	0	1302	15	0	1	0	1	5	5
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	140	-	-	-	-	-	-	-	-	-	-	-
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	5	622	0	0	1356	16	0	1	0	1	5	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1372	0	0	622	0	0	2001	2004	622	1997	1996	1364
Stage 1	-	-	-	-	-	-	632	632	-	1364	1364	-
Stage 2	-	-	-	-	-	-	1369	1372	-	633	632	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	491	-	-	944	-	-	44	58	481	44	59	178
Stage 1	-	-	-	-	-	-	463	469	-	180	212	-
Stage 2	-	-	-	-	-	-	178	211	-	463	469	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	491	-	-	944	-	-	39	57	481	43	58	178
Mov Cap-2 Maneuver	-	-	-	-	-	-	39	57	-	43	58	-
Stage 1	-	-	-	-	-	-	458	464	-	178	212	-
Stage 2	-	-	-	-	-	-	169	211	-	457	464	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	69.3	57.4
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	57	491	-	-	944	-	-	80
HCM Lane V/C Ratio	0.018	0.011	-	-	-	-	-	0.143
HCM Control Delay (s)	69.3	12.4	-	-	0	-	-	57.4
HCM Lane LOS	F	B	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	339	257	102	691	24	601	9	75	36	19	2
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	1810	1810	1810	1810	1810	1900	1900	1810	1810	1900	1810	1810
Adj Flow Rate, veh/h	1	346	0	104	705	23	613	9	0	37	19	0
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	1
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	3	703	598	129	804	26	537	8	486	58	30	77
Arrive On Green	0.00	0.39	0.00	0.08	0.46	0.46	0.32	0.32	0.00	0.05	0.05	0.00
Sat Flow, veh/h	1723	1810	1538	1723	1743	57	1700	25	1538	1157	594	1538
Grp Volume(v), veh/h	1	346	0	104	0	728	622	0	0	56	0	0
Grp Sat Flow(s),veh/h/ln	1723	1810	1538	1723	0	1799	1725	0	1538	1752	0	1538
Q Serve(g_s), s	0.1	16.9	0.0	7.0	0.0	42.9	37.0	0.0	0.0	3.7	0.0	0.0
Cycle Q Clear(g_c), s	0.1	16.9	0.0	7.0	0.0	42.9	37.0	0.0	0.0	3.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.03	0.99		1.00	0.66		1.00
Lane Grp Cap(c), veh/h	3	703	598	129	0	831	544	0	486	88	0	77
V/C Ratio(X)	0.30	0.49	0.00	0.80	0.00	0.88	1.14	0.00	0.00	0.64	0.00	0.00
Avail Cap(c_a), veh/h	353	1266	1076	279	0	1259	544	0	486	508	0	446
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	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.4	27.1	0.0	53.3	0.0	28.5	40.1	0.0	0.0	54.6	0.0	0.0
Incr Delay (d2), s/veh	44.9	0.6	0.0	11.0	0.0	5.3	84.2	0.0	0.0	7.5	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(-26165%),veh/ln	0.1	8.6	0.0	3.7	0.0	22.5	30.3	0.0	0.0	2.0	0.0	0.0
LnGrp Delay(d),s/veh	103.3	27.7	0.0	64.3	0.0	33.8	124.3	0.0	0.0	62.1	0.0	0.0
LnGrp LOS	F	C		E		C	F			E		
Approach Vol, veh/h		347			832			622			56	
Approach Delay, s/veh		28.0			37.6			124.3			62.1	
Approach LOS		C			D			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.5	51.9		10.5	3.9	60.5		42.3
Change Period (Y+Rc), s	3.7	6.4		4.6	3.7	6.4		5.3
Max Green Setting (Gmax), s	19.0	82.0		34.0	24.0	82.0		37.0
Max Q Clear Time (g_c+I1), s	9.0	18.9		5.7	2.1	44.9		39.0
Green Ext Time (p_c), s	0.1	9.8		0.2	0.0	9.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	65.6
HCM 2010 LOS	E

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	470	61	214	0	22	347
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	1810	1810	1810	0	1810	1810
Adj Flow Rate, veh/h	490	64	223	0	23	361
Adj No. of Lanes	2	1	1	0	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	0	5	5
Cap, veh/h	766	353	565	0	59	847
Arrive On Green	0.23	0.23	0.31	0.00	0.03	0.47
Sat Flow, veh/h	3343	1538	1810	0	1723	1810
Grp Volume(v), veh/h	490	64	223	0	23	361
Grp Sat Flow(s),veh/h/ln	1672	1538	1810	0	1723	1810
Q Serve(g_s), s	5.0	1.3	3.6	0.0	0.5	5.0
Cycle Q Clear(g_c), s	5.0	1.3	3.6	0.0	0.5	5.0
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	766	353	565	0	59	847
V/C Ratio(X)	0.64	0.18	0.39	0.00	0.39	0.43
Avail Cap(c_a), veh/h	1952	898	3217	0	549	3217
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	13.1	11.7	10.2	0.0	17.8	6.7
Incr Delay (d2), s/veh	0.9	0.2	0.8	0.0	4.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	2.3	0.6	1.9	0.0	0.3	2.5
LnGrp Delay(d),s/veh	14.0	11.9	10.9	0.0	22.0	7.2
LnGrp LOS	B	B	B		C	A
Approach Vol, veh/h	554		223			384
Approach Delay, s/veh	13.8		10.9			8.1
Approach LOS	B		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	5.9	18.6				24.4		13.2
Change Period (Y+Rc), s	4.6	6.8				6.8		4.6
Max Green Setting (Gmax), s	12.0	67.0				67.0		22.0
Max Q Clear Time (g_c+I1), s	2.5	5.6				7.0		7.0
Green Ext Time (p_c), s	0.0	6.1				6.1		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	11.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	15	242	2	16	521	5	3	0	13	4	0	7
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	225	-	-	195	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	266	2	18	573	5	3	0	14	4	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	578	0	0	268	0	0	910	913	267	910	911	575
Stage 1	-	-	-	-	-	-	300	300	-	610	610	-
Stage 2	-	-	-	-	-	-	610	613	-	300	301	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	996	-	-	1296	-	-	255	273	772	255	274	518
Stage 1	-	-	-	-	-	-	709	666	-	482	485	-
Stage 2	-	-	-	-	-	-	482	483	-	709	665	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	996	-	-	1296	-	-	246	265	772	245	266	518
Mov Cap-2 Maneuver	-	-	-	-	-	-	246	265	-	245	266	-
Stage 1	-	-	-	-	-	-	698	655	-	474	478	-
Stage 2	-	-	-	-	-	-	468	476	-	685	654	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.2	11.7	15
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	246	772	996	-	-	1296	-	-	245	518
HCM Lane V/C Ratio	0.013	0.019	0.017	-	-	0.014	-	-	0.018	0.015
HCM Control Delay (s)	19.8	9.8	8.7	-	-	7.8	-	-	20	12.1
HCM Lane LOS	C	A	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0	0.1	0.1	-	-	0	-	-	0.1	0

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	142	54	52	543	245	133
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	135	0	220	-	-	190
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	154	59	57	590	266	145

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	969	266	266	0	-	0
Stage 1	266	-	-	-	-	-
Stage 2	703	-	-	-	-	-
Critical Hdwy	6.45	6.25	4.15	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	2.245	-	-	-
Pot Cap-1 Maneuver	278	765	1281	-	-	-
Stage 1	772	-	-	-	-	-
Stage 2	485	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	266	765	1281	-	-	-
Mov Cap-2 Maneuver	266	-	-	-	-	-
Stage 1	772	-	-	-	-	-
Stage 2	463	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	28.6	0.7	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1281	-	266	765	-	-
HCM Lane V/C Ratio	0.044	-	0.58	0.077	-	-
HCM Control Delay (s)	7.9	-	35.7	10.1	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0.1	-	3.3	0.2	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	19	210	583	38	17	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	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	244	678	44	20	50

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	722	0	-	0	988	700
Stage 1	-	-	-	-	700	-
Stage 2	-	-	-	-	288	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	880	-	-	-	274	439
Stage 1	-	-	-	-	493	-
Stage 2	-	-	-	-	761	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	880	-	-	-	267	439
Mov Cap-2 Maneuver	-	-	-	-	267	-
Stage 1	-	-	-	-	493	-
Stage 2	-	-	-	-	742	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	16.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	880	-	-	-	371
HCM Lane V/C Ratio	0.025	-	-	-	0.188
HCM Control Delay (s)	9.2	-	-	-	16.9
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	143	176	480	299	185	205
Number	7	4	8	18	1	16
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	172	212	578	41	223	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	223	1150	734	624	283	252
Arrive On Green	0.13	0.62	0.39	0.39	0.16	0.00
Sat Flow, veh/h	1774	1863	1863	1583	1774	1583
Grp Volume(v), veh/h	172	212	578	41	223	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1863	1583	1774	1583
Q Serve(g_s), s	4.8	2.5	13.9	0.8	6.2	0.0
Cycle Q Clear(g_c), s	4.8	2.5	13.9	0.8	6.2	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	223	1150	734	624	283	252
V/C Ratio(X)	0.77	0.18	0.79	0.07	0.79	0.00
Avail Cap(c_a), veh/h	520	1250	1250	1062	496	443
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	21.6	4.2	13.6	9.6	20.7	0.0
Incr Delay (d2), s/veh	5.5	0.1	1.9	0.0	4.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	2.7	1.3	7.5	0.4	3.4	0.0
LnGrp Delay(d),s/veh	27.2	4.3	15.5	9.7	25.5	0.0
LnGrp LOS	C	A	B	A	C	
Approach Vol, veh/h		384	619		223	
Approach Delay, s/veh		14.5	15.2		25.5	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				37.3		13.8	11.4	25.8
Change Period (Y+Rc), s				5.7		5.7	5.0	5.7
Max Green Setting (Gmax), s				34.3		14.3	15.0	34.3
Max Q Clear Time (g_c+I1), s				4.5		8.2	6.8	15.9
Green Ext Time (p_c), s				4.7		0.3	0.3	4.2

Intersection Summary	
HCM 2010 Ctrl Delay	16.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	127	144	94	23	309	191	208	285	25	109	124	126
Number	3	8	18	7	4	14	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	1900
Adj Flow Rate, veh/h	143	162	86	26	347	197	234	320	0	122	139	106
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	0
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	306	198	105	524	330	187	272	469	399	155	182	139
Arrive On Green	0.17	0.17	0.17	0.30	0.30	0.30	0.15	0.25	0.00	0.09	0.19	0.19
Sat Flow, veh/h	1774	1147	609	1774	1117	634	1774	1863	1583	1774	982	749
Grp Volume(v), veh/h	143	0	248	26	0	544	234	320	0	122	0	245
Grp Sat Flow(s),veh/h/ln	1774	0	1755	1774	0	1751	1774	1863	1583	1774	0	1731
Q Serve(g_s), s	7.1	0.0	13.4	1.0	0.0	29.0	12.6	15.2	0.0	6.6	0.0	13.2
Cycle Q Clear(g_c), s	7.1	0.0	13.4	1.0	0.0	29.0	12.6	15.2	0.0	6.6	0.0	13.2
Prop In Lane	1.00		0.35	1.00		0.36	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	306	0	303	524	0	517	272	469	399	155	0	321
V/C Ratio(X)	0.47	0.00	0.82	0.05	0.00	1.05	0.86	0.68	0.00	0.79	0.00	0.76
Avail Cap(c_a), veh/h	705	0	698	524	0	517	488	892	758	669	0	829
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	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.5	0.0	39.1	24.7	0.0	34.6	40.5	33.2	0.0	43.9	0.0	37.9
Incr Delay (d2), s/veh	1.1	0.0	5.4	0.0	0.0	53.8	7.7	1.8	0.0	8.5	0.0	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(-26165%),veh/ln	3.6	0.0	6.9	0.5	0.0	21.7	6.8	8.1	0.0	3.6	0.0	6.7
LnGrp Delay(d),s/veh	37.6	0.0	44.5	24.8	0.0	88.3	48.2	34.9	0.0	52.4	0.0	41.7
LnGrp LOS	D		D	C		F	D	C		D		D
Approach Vol, veh/h		391			570			554			367	
Approach Delay, s/veh		42.0			85.4			40.5			45.2	
Approach LOS		D			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	12.3	30.7		33.6	18.8	24.2		21.5
Change Period (Y+Rc), s	3.7	6.0		4.6	3.7	6.0		4.6
Max Green Setting (Gmax), s	37.3	47.0		29.0	27.0	47.0		39.0
Max Q Clear Time (g_c+I1), s	9.1	17.2		31.0	14.6	15.2		15.4
Green Ext Time (p_c), s	0.3	3.0		0.0	0.5	3.0		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	55.4
HCM 2010 LOS	E

Intersection	
Intersection Delay, s/veh	13.3
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	0	330	113	0	99	133	0	0	0	0	0
Peak Hour Factor	0.92	0.94	0.94	0.94	0.92	0.94	0.94	0.94	0.92	0.94	0.94	0.94
Heavy Vehicles, %	2	3	3	3	2	3	3	3	2	3	3	3
Mvmt Flow	0	0	351	120	0	105	141	0	0	0	0	0
Number of Lanes	0	0	1	1	0	1	1	0	0	0	1	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	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	2	2
HCM Control Delay	15.1	11.2	0
HCM LOS	C	B	-

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	100%	0%	0%	100%	0%	0%
Vol Right, %	0%	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	330	113	99	133	107	241
LT Vol	0	0	0	99	0	107	0
Through Vol	0	330	0	0	133	0	0
RT Vol	0	0	113	0	0	0	241
Lane Flow Rate	0	351	120	105	141	114	256
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0	0.589	0.178	0.199	0.248	0.22	0.41
Departure Headway (Hd)	7.21	6.038	5.328	6.815	6.306	6.966	5.752
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	597	673	527	569	516	626
Service Time	5.279	3.777	3.066	4.562	4.053	4.709	3.494
HCM Lane V/C Ratio	0	0.588	0.178	0.199	0.248	0.221	0.409
HCM Control Delay	10.3	17.1	9.2	11.3	11.1	11.7	12.5
HCM Lane LOS	N	C	A	B	B	B	B
HCM 95th-tile Q	0	3.8	0.6	0.7	1	0.8	2

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	107	0	241
Peak Hour Factor	0.92	0.94	0.94	0.94
Heavy Vehicles, %	2	3	3	3
Mvmt Flow	0	114	0	256
Number of Lanes	0	0	1	1

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	12.3
HCM LOS	B

Lane

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	237	200	72	182	50	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	350	315	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	239	202	73	184	51	30

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	239	0	568	239
Stage 1	-	-	-	-	239	-
Stage 2	-	-	-	-	329	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	0	1322	-	483	797
Stage 1	-	0	-	-	798	-
Stage 2	-	0	-	-	727	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	1322	-	456	797
Mov Cap-2 Maneuver	-	-	-	-	456	-
Stage 1	-	-	-	-	798	-
Stage 2	-	-	-	-	687	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.2	12.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	543	-	1322	-
HCM Lane V/C Ratio	0.149	-	0.055	-
HCM Control Delay (s)	12.8	-	7.9	-
HCM Lane LOS	B	-	A	-
HCM 95th %tile Q(veh)	0.5	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	41	914	42	12	757	144	27	24	12	150	43	50
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	1845	1845	1900	1845	1845	1845	1900	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	46	1027	44	13	851	0	30	27	0	169	48	25
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	1	1	0
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	119	1844	79	49	1746	781	79	71	131	219	143	74
Arrive On Green	0.07	0.54	0.54	0.03	0.50	0.00	0.08	0.08	0.00	0.12	0.12	0.12
Sat Flow, veh/h	1757	3424	147	1757	3505	1568	946	851	1568	1757	1144	596
Grp Volume(v), veh/h	46	526	545	13	851	0	57	0	0	169	0	73
Grp Sat Flow(s),veh/h/ln	1757	1752	1819	1757	1752	1568	1797	0	1568	1757	0	1740
Q Serve(g_s), s	2.3	18.1	18.1	0.7	14.8	0.0	2.8	0.0	0.0	8.5	0.0	3.5
Cycle Q Clear(g_c), s	2.3	18.1	18.1	0.7	14.8	0.0	2.8	0.0	0.0	8.5	0.0	3.5
Prop In Lane	1.00		0.08	1.00		1.00	0.53		1.00	1.00		0.34
Lane Grp Cap(c), veh/h	119	943	979	49	1746	781	150	0	131	219	0	217
V/C Ratio(X)	0.39	0.56	0.56	0.27	0.49	0.00	0.38	0.00	0.00	0.77	0.00	0.34
Avail Cap(c_a), veh/h	421	1490	1546	421	2980	1333	549	0	479	766	0	758
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	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.9	14.0	14.0	43.7	15.2	0.0	39.8	0.0	0.0	38.9	0.0	36.7
Incr Delay (d2), s/veh	2.0	0.7	0.7	2.9	0.3	0.0	1.6	0.0	0.0	5.6	0.0	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(-26165%),veh/ln	1.2	9.0	9.3	0.4	7.2	0.0	1.4	0.0	0.0	4.5	0.0	1.7
LnGrp Delay(d),s/veh	43.0	14.7	14.7	46.6	15.6	0.0	41.4	0.0	0.0	44.5	0.0	37.6
LnGrp LOS	D	B	B	D	B		D			D		D
Approach Vol, veh/h		1117			864			57			242	
Approach Delay, s/veh		15.9			16.0			41.4			42.4	
Approach LOS		B			B			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	6.2	55.8		13.0	9.9	52.1		16.8
Change Period (Y+Rc), s	3.7	6.4		5.3	3.7	6.4		5.3
Max Green Setting (Gmax), s	22.0	78.0		28.0	22.0	78.0		40.0
Max Q Clear Time (g_c+I1), s	2.7	20.1		4.8	4.3	16.8		10.5
Green Ext Time (p_c), s	0.0	28.3		0.2	0.1	29.0		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	19.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	15	1069	0	0	972	8	0	0	0	3	0	14
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	140	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	99	99	99	99	99	99	99	99	99	99	99	99
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	15	1080	0	0	982	8	0	0	0	3	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	990	0	0	1080	0	0	2103	2100	1080	2096	2096	986
Stage 1	-	-	-	-	-	-	1110	1110	-	986	986	-
Stage 2	-	-	-	-	-	-	993	990	-	1110	1110	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	694	-	-	642	-	-	37	51	264	38	52	299
Stage 1	-	-	-	-	-	-	253	284	-	297	325	-
Stage 2	-	-	-	-	-	-	294	323	-	253	284	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	694	-	-	642	-	-	35	50	264	37	51	299
Mov Cap-2 Maneuver	-	-	-	-	-	-	35	50	-	37	51	-
Stage 1	-	-	-	-	-	-	248	278	-	291	325	-
Stage 2	-	-	-	-	-	-	280	323	-	248	278	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	0	36
HCM LOS			A	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	694	-	-	642	-	-	133
HCM Lane V/C Ratio	-	0.022	-	-	-	-	-	0.129
HCM Control Delay (s)	0	10.3	-	-	0	-	-	36
HCM Lane LOS	A	B	-	-	A	-	-	E
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	572	522	104	530	10	443	12	146	102	60	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	1845	1845	1845	1845	1845	1900	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	2	602	128	109	558	10	466	13	65	107	63	0
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	7	721	613	133	836	15	467	13	428	127	75	177
Arrive On Green	0.00	0.39	0.39	0.08	0.46	0.46	0.27	0.27	0.27	0.11	0.11	0.00
Sat Flow, veh/h	1757	1845	1568	1757	1807	32	1711	48	1568	1126	663	1568
Grp Volume(v), veh/h	2	602	128	109	0	568	479	0	65	170	0	0
Grp Sat Flow(s),veh/h/ln	1757	1845	1568	1757	0	1839	1759	0	1568	1788	0	1568
Q Serve(g_s), s	0.2	40.0	7.3	8.3	0.0	32.5	36.9	0.0	4.3	12.6	0.0	0.0
Cycle Q Clear(g_c), s	0.2	40.0	7.3	8.3	0.0	32.5	36.9	0.0	4.3	12.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.02	0.97		1.00	0.63		1.00
Lane Grp Cap(c), veh/h	7	721	613	133	0	851	480	0	428	202	0	177
V/C Ratio(X)	0.30	0.83	0.21	0.82	0.00	0.67	1.00	0.00	0.15	0.84	0.00	0.00
Avail Cap(c_a), veh/h	311	1116	948	246	0	1112	480	0	428	448	0	393
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	67.4	37.3	27.4	61.8	0.0	28.3	49.2	0.0	37.4	59.0	0.0	0.0
Incr Delay (d2), s/veh	24.0	3.8	0.2	11.7	0.0	1.2	40.5	0.0	0.2	9.1	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(-26165%),veh/ln	0.1	21.2	3.2	4.5	0.0	16.8	23.2	0.0	1.9	6.7	0.0	0.0
LnGrp Delay(d),s/veh	91.3	41.1	27.6	73.4	0.0	29.4	89.7	0.0	37.6	68.1	0.0	0.0
LnGrp LOS	F	D	C	E		C	F		D	E		
Approach Vol, veh/h		732			677			544			170	
Approach Delay, s/veh		38.9			36.5			83.5			68.1	
Approach LOS		D			D			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	59.4		19.9	4.2	69.2		42.3
Change Period (Y+Rc), s	3.7	6.4		4.6	3.7	6.4		5.3
Max Green Setting (Gmax), s	19.0	82.0		34.0	24.0	82.0		37.0
Max Q Clear Time (g_c+I1), s	10.3	42.0		14.6	2.2	34.5		38.9
Green Ext Time (p_c), s	0.1	11.0		0.7	0.0	11.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	51.9
HCM 2010 LOS	D

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	323	39	358	0	68	322
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	1845	1845	1845	0	1845	1845
Adj Flow Rate, veh/h	367	44	407	0	77	366
Adj No. of Lanes	2	1	1	0	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	0	3	3
Cap, veh/h	575	265	743	0	143	1077
Arrive On Green	0.17	0.17	0.40	0.00	0.08	0.58
Sat Flow, veh/h	3408	1568	1845	0	1757	1845
Grp Volume(v), veh/h	367	44	407	0	77	366
Grp Sat Flow(s),veh/h/ln	1704	1568	1845	0	1757	1845
Q Serve(g_s), s	4.6	1.1	7.8	0.0	1.9	4.7
Cycle Q Clear(g_c), s	4.6	1.1	7.8	0.0	1.9	4.7
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	575	265	743	0	143	1077
V/C Ratio(X)	0.64	0.17	0.55	0.00	0.54	0.34
Avail Cap(c_a), veh/h	1627	748	2681	0	457	2681
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	16.4	10.6	0.0	20.3	5.0
Incr Delay (d2), s/veh	1.2	0.3	1.1	0.0	3.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	2.2	0.5	4.2	0.0	1.1	2.4
LnGrp Delay(d),s/veh	19.0	16.7	11.6	0.0	23.4	5.3
LnGrp LOS	B	B	B		C	A
Approach Vol, veh/h	411		407			443
Approach Delay, s/veh	18.8		11.6			8.4
Approach LOS	B		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.4	25.4				33.7		12.4
Change Period (Y+Rc), s	4.6	6.8				6.8		4.6
Max Green Setting (Gmax), s	12.0	67.0				67.0		22.0
Max Q Clear Time (g_c+I1), s	3.9	9.8				6.7		6.6
Green Ext Time (p_c), s	0.1	8.8				8.8		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	12.8
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	10	517	4	16	345	2	4	1	20	3	1	13
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	225	-	-	195	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	12	623	5	19	416	2	5	1	24	4	1	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	418	0	0	628	0	0	1105	1106	625	1105	1107	417
Stage 1	-	-	-	-	-	-	649	649	-	455	455	-
Stage 2	-	-	-	-	-	-	456	457	-	650	652	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1136	-	-	949	-	-	187	210	483	187	209	634
Stage 1	-	-	-	-	-	-	457	464	-	583	567	-
Stage 2	-	-	-	-	-	-	582	566	-	456	463	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1136	-	-	949	-	-	177	204	483	173	203	634
Mov Cap-2 Maneuver	-	-	-	-	-	-	177	204	-	173	203	-
Stage 1	-	-	-	-	-	-	452	459	-	577	556	-
Stage 2	-	-	-	-	-	-	555	555	-	428	458	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.4	15.3	14.3
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	182	483	1136	-	-	949	-	-	180	634
HCM Lane V/C Ratio	0.033	0.05	0.011	-	-	0.02	-	-	0.027	0.025
HCM Control Delay (s)	25.5	12.8	8.2	-	-	8.9	-	-	25.6	10.8
HCM Lane LOS	D	B	A	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	0.1	0.2	0	-	-	0.1	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	35.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	255	95	82	346	487	198
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	135	0	220	-	-	190
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	277	103	89	376	529	215

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1083	529	529	0	-	0
Stage 1	529	-	-	-	-	-
Stage 2	554	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	~ 239	548	1033	-	-	-
Stage 1	589	-	-	-	-	-
Stage 2	574	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 218	548	1033	-	-	-
Mov Cap-2 Maneuver	~ 218	-	-	-	-	-
Stage 1	589	-	-	-	-	-
Stage 2	525	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	147.4	1.7	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1033	-	218	548	-	-
HCM Lane V/C Ratio	0.086	-	1.271	0.188	-	-
HCM Control Delay (s)	8.8	-	197.4	13.1	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	0.3	-	14.5	0.7	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	29	615	343	16	15	20
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	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	647	361	17	16	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	378	0	-	0	1077	369
Stage 1	-	-	-	-	369	-
Stage 2	-	-	-	-	708	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1180	-	-	-	242	677
Stage 1	-	-	-	-	699	-
Stage 2	-	-	-	-	488	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1180	-	-	-	236	677
Mov Cap-2 Maneuver	-	-	-	-	236	-
Stage 1	-	-	-	-	699	-
Stage 2	-	-	-	-	475	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	15.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1180	-	-	-	376
HCM Lane V/C Ratio	0.026	-	-	-	0.098
HCM Control Delay (s)	8.1	-	-	-	15.6
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	244	488	274	101	170	177
Number	7	4	8	18	1	16
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	262	525	295	0	183	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	334	1109	539	458	241	215
Arrive On Green	0.19	0.60	0.29	0.00	0.14	0.00
Sat Flow, veh/h	1774	1863	1863	1583	1774	1583
Grp Volume(v), veh/h	262	525	295	0	183	0
Grp Sat Flow(s),veh/h/ln	1774	1863	1863	1583	1774	1583
Q Serve(g_s), s	6.0	6.7	5.7	0.0	4.2	0.0
Cycle Q Clear(g_c), s	6.0	6.7	5.7	0.0	4.2	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	334	1109	539	458	241	215
V/C Ratio(X)	0.78	0.47	0.55	0.00	0.76	0.00
Avail Cap(c_a), veh/h	627	1506	1506	1280	598	534
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	16.4	4.8	12.7	0.0	17.7	0.0
Incr Delay (d2), s/veh	4.1	0.3	0.9	0.0	4.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	3.3	3.5	3.0	0.0	2.4	0.0
LnGrp Delay(d),s/veh	20.5	5.2	13.6	0.0	22.5	0.0
LnGrp LOS	C	A	B		C	
Approach Vol, veh/h		787	295		183	
Approach Delay, s/veh		10.2	13.6		22.5	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				31.0		11.5	13.0	18.0
Change Period (Y+Rc), s				5.7		5.7	5.0	5.7
Max Green Setting (Gmax), s				34.3		14.3	15.0	34.3
Max Q Clear Time (g_c+I1), s				8.7		6.2	8.0	7.7
Green Ext Time (p_c), s				4.6		0.3	0.4	4.6

Intersection Summary	
HCM 2010 Ctrl Delay	12.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	148	219	165	27	92	108	133	227	25	221	333	137
Number	3	8	18	7	4	14	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	1900
Adj Flow Rate, veh/h	156	231	152	28	97	82	140	239	0	233	351	130
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	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	452	268	176	234	123	104	175	483	411	275	409	151
Arrive On Green	0.26	0.26	0.26	0.13	0.13	0.13	0.10	0.26	0.00	0.15	0.32	0.32
Sat Flow, veh/h	1774	1050	691	1774	934	790	1774	1863	1583	1774	1297	481
Grp Volume(v), veh/h	156	0	383	28	0	179	140	239	0	233	0	481
Grp Sat Flow(s),veh/h/ln	1774	0	1741	1774	0	1723	1774	1863	1583	1774	0	1778
Q Serve(g_s), s	6.8	0.0	20.0	1.3	0.0	9.6	7.3	10.4	0.0	12.1	0.0	24.1
Cycle Q Clear(g_c), s	6.8	0.0	20.0	1.3	0.0	9.6	7.3	10.4	0.0	12.1	0.0	24.1
Prop In Lane	1.00		0.40	1.00		0.46	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	452	0	444	234	0	227	175	483	411	275	0	560
V/C Ratio(X)	0.34	0.00	0.86	0.12	0.00	0.79	0.80	0.49	0.00	0.85	0.00	0.86
Avail Cap(c_a), veh/h	729	0	715	542	0	526	504	922	784	691	0	880
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	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.9	0.0	33.8	36.4	0.0	39.9	41.9	29.9	0.0	39.1	0.0	30.5
Incr Delay (d2), s/veh	0.5	0.0	6.3	0.2	0.0	6.0	8.1	0.8	0.0	7.2	0.0	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(-26165%),veh/ln	3.4	0.0	10.4	0.7	0.0	4.9	4.0	5.4	0.0	6.5	0.0	12.6
LnGrp Delay(d),s/veh	29.3	0.0	40.1	36.6	0.0	45.9	49.9	30.7	0.0	46.2	0.0	35.7
LnGrp LOS	C		D	D		D	D	C		D		D
Approach Vol, veh/h		539			207			379			714	
Approach Delay, s/veh		37.0			44.6			37.8			39.2	
Approach LOS		D			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	18.4	30.6		17.1	13.1	35.9		28.8
Change Period (Y+Rc), s	3.7	6.0		4.6	3.7	6.0		4.6
Max Green Setting (Gmax), s	37.0	47.0		29.0	27.0	47.0		39.0
Max Q Clear Time (g_c+I1), s	14.1	12.4		11.6	9.3	26.1		22.0
Green Ext Time (p_c), s	0.6	4.2		1.0	0.3	3.8		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	38.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	339	257	102	691	24	601	9	75	36	19	2
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	1810	1810	1810	1810	1810	1900	1810	1810	1900	1900	1810	1810
Adj Flow Rate, veh/h	1	346	0	104	705	23	613	9	0	37	19	0
Adj No. of Lanes	1	1	1	1	1	0	2	1	0	0	1	1
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	3	741	630	133	845	28	743	402	0	69	36	92
Arrive On Green	0.00	0.41	0.00	0.08	0.48	0.48	0.22	0.22	0.00	0.06	0.06	0.00
Sat Flow, veh/h	1723	1810	1538	1723	1743	57	3343	1810	0	1157	594	1538
Grp Volume(v), veh/h	1	346	0	104	0	728	613	9	0	56	0	0
Grp Sat Flow(s),veh/h/ln	1723	1810	1538	1723	0	1799	1672	1810	0	1752	0	1538
Q Serve(g_s), s	0.1	12.1	0.0	5.1	0.0	30.3	15.1	0.3	0.0	2.7	0.0	0.0
Cycle Q Clear(g_c), s	0.1	12.1	0.0	5.1	0.0	30.3	15.1	0.3	0.0	2.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.03	1.00		0.00	0.66		1.00
Lane Grp Cap(c), veh/h	3	741	630	133	0	872	743	402	0	105	0	92
V/C Ratio(X)	0.30	0.47	0.00	0.78	0.00	0.83	0.83	0.02	0.00	0.53	0.00	0.00
Avail Cap(c_a), veh/h	478	1716	1458	379	0	1706	1430	774	0	689	0	605
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	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	43.1	18.6	0.0	39.2	0.0	19.3	32.0	26.3	0.0	39.5	0.0	0.0
Incr Delay (d2), s/veh	44.5	0.6	0.0	9.5	0.0	2.6	2.4	0.0	0.0	4.2	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(-26165%),veh/ln	0.1	6.1	0.0	2.8	0.0	15.6	7.2	0.2	0.0	1.4	0.0	0.0
LnGrp Delay(d),s/veh	87.6	19.2	0.0	48.7	0.0	21.9	34.4	26.3	0.0	43.6	0.0	0.0
LnGrp LOS	F	B		D		C	C	C		D		
Approach Vol, veh/h		347			832			622			56	
Approach Delay, s/veh		19.4			25.2			34.3			43.6	
Approach LOS		B			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	10.4	41.8		9.8	3.9	48.3		24.5
Change Period (Y+Rc), s	3.7	6.4		4.6	3.7	6.4		5.3
Max Green Setting (Gmax), s	19.0	82.0		34.0	24.0	82.0		37.0
Max Q Clear Time (g_c+I1), s	7.1	14.1		4.7	2.1	32.3		17.1
Green Ext Time (p_c), s	0.2	9.9		0.2	0.0	9.7		2.1

Intersection Summary	
HCM 2010 Ctrl Delay	27.7
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	142	54	52	543	245	133
Number	7	14	5	2	6	16
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	1810	1810	1810	1810	1810	1810
Adj Flow Rate, veh/h	154	0	57	590	266	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5	5	5	5
Cap, veh/h	206	184	89	1050	685	582
Arrive On Green	0.12	0.00	0.05	0.58	0.38	0.00
Sat Flow, veh/h	1723	1538	1723	1810	1810	1538
Grp Volume(v), veh/h	154	0	57	590	266	0
Grp Sat Flow(s),veh/h/ln	1723	1538	1723	1810	1810	1538
Q Serve(g_s), s	2.3	0.0	0.9	5.4	2.9	0.0
Cycle Q Clear(g_c), s	2.3	0.0	0.9	5.4	2.9	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	206	184	89	1050	685	582
V/C Ratio(X)	0.75	0.00	0.64	0.56	0.39	0.00
Avail Cap(c_a), veh/h	1424	1271	259	4077	3058	2599
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	11.3	0.0	12.4	3.5	6.0	0.0
Incr Delay (d2), s/veh	5.4	0.0	7.4	0.5	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	1.4	0.0	0.6	2.8	1.5	0.0
LnGrp Delay(d),s/veh	16.7	0.0	19.8	4.0	6.4	0.0
LnGrp LOS	B		B	A	A	
Approach Vol, veh/h	154			647	266	
Approach Delay, s/veh	16.7			5.4	6.4	
Approach LOS	B			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		19.5		7.2	5.4	14.1		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		60.0		22.0	4.0	45.0		
Max Q Clear Time (g_c+I1), s		7.4		4.3	2.9	4.9		
Green Ext Time (p_c), s		5.3		0.4	0.0	5.2		

Intersection Summary	
HCM 2010 Ctrl Delay	7.3
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	127	144	94	23	309	191	208	285	25	109	124	126
Number	3	8	18	7	4	14	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	1863	1863	1863	1900
Adj Flow Rate, veh/h	143	162	0	26	347	197	234	320	0	122	139	106
Adj No. of Lanes	1	1	1	1	1	0	1	1	1	1	1	0
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	210	221	188	572	360	204	276	485	412	157	186	142
Arrive On Green	0.12	0.12	0.00	0.32	0.32	0.32	0.16	0.26	0.00	0.09	0.19	0.19
Sat Flow, veh/h	1774	1863	1583	1774	1117	634	1774	1863	1583	1774	982	749
Grp Volume(v), veh/h	143	162	0	26	0	544	234	320	0	122	0	245
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	0	1751	1774	1863	1583	1774	0	1731
Q Serve(g_s), s	6.9	7.5	0.0	0.9	0.0	27.5	11.5	13.8	0.0	6.1	0.0	12.0
Cycle Q Clear(g_c), s	6.9	7.5	0.0	0.9	0.0	27.5	11.5	13.8	0.0	6.1	0.0	12.0
Prop In Lane	1.00		1.00	1.00		0.36	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	210	221	188	572	0	565	276	485	412	157	0	328
V/C Ratio(X)	0.68	0.73	0.00	0.05	0.00	0.96	0.85	0.66	0.00	0.78	0.00	0.75
Avail Cap(c_a), veh/h	769	808	687	572	0	565	527	974	828	730	0	905
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	0.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.0	38.3	0.0	20.9	0.0	29.9	36.9	29.7	0.0	40.1	0.0	34.4
Incr Delay (d2), s/veh	3.8	4.7	0.0	0.0	0.0	28.8	7.1	1.5	0.0	8.0	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(-26165%),veh/ln	2.6	4.2	0.0	0.4	0.0	17.8	6.2	7.3	0.0	3.3	0.0	6.0
LnGrp Delay(d),s/veh	41.8	42.9	0.0	21.0	0.0	58.7	44.0	31.2	0.0	48.2	0.0	37.8
LnGrp LOS	D	D		C		E	D	C		D		D
Approach Vol, veh/h		305			570			554			367	
Approach Delay, s/veh		42.4			57.0			36.7			41.2	
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	11.6	29.4		33.6	18.0	23.1		15.3
Change Period (Y+Rc), s	3.7	6.0		4.6	4.0	6.0		4.6
Max Green Setting (Gmax), s	37.0	47.0		29.0	26.7	47.0		39.0
Max Q Clear Time (g_c+I1), s	8.9	15.8		29.5	13.5	14.0		9.5
Green Ext Time (p_c), s	0.3	3.0		0.0	0.5	3.0		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	45.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	572	522	104	530	10	443	12	146	102	60	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	1845	1845	1845	1845	1845	1900	1845	1845	1900	1900	1845	1845
Adj Flow Rate, veh/h	2	602	128	109	558	10	466	13	0	107	63	0
Adj No. of Lanes	1	1	1	1	1	0	2	1	0	0	1	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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	7	779	662	139	898	16	577	312	0	135	79	188
Arrive On Green	0.00	0.42	0.42	0.08	0.50	0.50	0.17	0.17	0.00	0.12	0.12	0.00
Sat Flow, veh/h	1757	1845	1568	1757	1807	32	3408	1845	0	1126	663	1568
Grp Volume(v), veh/h	2	602	128	109	0	568	466	13	0	170	0	0
Grp Sat Flow(s),veh/h/ln	1757	1845	1568	1757	0	1839	1704	1845	0	1788	0	1568
Q Serve(g_s), s	0.1	26.7	4.9	5.8	0.0	21.4	12.5	0.6	0.0	8.8	0.0	0.0
Cycle Q Clear(g_c), s	0.1	26.7	4.9	5.8	0.0	21.4	12.5	0.6	0.0	8.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.02	1.00		0.00	0.63		1.00
Lane Grp Cap(c), veh/h	7	779	662	139	0	915	577	312	0	214	0	188
V/C Ratio(X)	0.30	0.77	0.19	0.79	0.00	0.62	0.81	0.04	0.00	0.79	0.00	0.00
Avail Cap(c_a), veh/h	442	1586	1348	350	0	1581	1322	716	0	638	0	559
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	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	47.4	23.6	17.3	43.1	0.0	17.4	38.1	33.1	0.0	40.8	0.0	0.0
Incr Delay (d2), s/veh	23.4	2.0	0.2	9.4	0.0	0.8	2.7	0.1	0.0	6.5	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(-26165%),veh/ln	0.1	14.0	2.1	3.2	0.0	11.1	6.1	0.3	0.0	4.7	0.0	0.0
LnGrp Delay(d),s/veh	70.7	25.6	17.5	52.5	0.0	18.3	40.9	33.2	0.0	47.3	0.0	0.0
LnGrp LOS	E	C	B	D		B	D	C		D		
Approach Vol, veh/h		732			677			479			170	
Approach Delay, s/veh		24.3			23.8			40.6			47.3	
Approach LOS		C			C			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	11.2	46.7		16.0	4.1	53.8		21.4
Change Period (Y+Rc), s	3.7	6.4		4.6	3.7	6.4		5.3
Max Green Setting (Gmax), s	19.0	82.0		34.0	24.0	82.0		37.0
Max Q Clear Time (g_c+I1), s	7.8	28.7		10.8	2.1	23.4		14.5
Green Ext Time (p_c), s	0.2	11.6		0.7	0.0	11.7		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	29.9
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	255	95	82	346	487	198
Number	7	14	5	2	6	16
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	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	277	0	89	376	529	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	367	327	111	1083	778	661
Arrive On Green	0.21	0.00	0.06	0.59	0.42	0.00
Sat Flow, veh/h	1757	1568	1757	1845	1845	1568
Grp Volume(v), veh/h	277	0	89	376	529	0
Grp Sat Flow(s),veh/h/ln	1757	1568	1757	1845	1845	1568
Q Serve(g_s), s	5.8	0.0	2.0	4.1	9.1	0.0
Cycle Q Clear(g_c), s	5.8	0.0	2.0	4.1	9.1	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	367	327	111	1083	778	661
V/C Ratio(X)	0.76	0.00	0.80	0.35	0.68	0.00
Avail Cap(c_a), veh/h	1255	1120	179	2918	2212	1880
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	14.6	0.0	18.1	4.2	9.2	0.0
Incr Delay (d2), s/veh	3.2	0.0	12.3	0.2	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	3.1	0.0	1.3	2.1	4.8	0.0
LnGrp Delay(d),s/veh	17.7	0.0	30.4	4.4	10.2	0.0
LnGrp LOS	B		C	A	B	
Approach Vol, veh/h	277			465	529	
Approach Delay, s/veh	17.7			9.4	10.2	
Approach LOS	B			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		27.0		12.2	6.5	20.5		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		62.0		28.0	4.0	47.0		
Max Q Clear Time (g_c+I1), s		6.1		7.8	4.0	11.1		
Green Ext Time (p_c), s		5.6		0.8	0.0	5.4		

Intersection Summary	
HCM 2010 Ctrl Delay	11.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	148	219	165	27	92	108	133	227	25	221	333	137
Number	3	8	18	7	4	14	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	1863	1863	1863	1900
Adj Flow Rate, veh/h	156	231	10	28	97	82	140	239	0	233	351	130
Adj No. of Lanes	1	1	1	1	1	0	1	1	1	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	290	305	259	239	126	106	187	506	430	284	423	157
Arrive On Green	0.16	0.16	0.16	0.13	0.13	0.13	0.11	0.27	0.00	0.16	0.33	0.33
Sat Flow, veh/h	1774	1863	1583	1774	934	790	1774	1863	1583	1774	1297	481
Grp Volume(v), veh/h	156	231	10	28	0	179	140	239	0	233	0	481
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	0	1723	1774	1863	1583	1774	0	1778
Q Serve(g_s), s	6.3	9.3	0.4	1.1	0.0	7.9	6.0	8.4	0.0	10.0	0.0	19.6
Cycle Q Clear(g_c), s	6.3	9.3	0.4	1.1	0.0	7.9	6.0	8.4	0.0	10.0	0.0	19.6
Prop In Lane	1.00		1.00	1.00		0.46	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	290	305	259	239	0	232	187	506	430	284	0	580
V/C Ratio(X)	0.54	0.76	0.04	0.12	0.00	0.77	0.75	0.47	0.00	0.82	0.00	0.83
Avail Cap(c_a), veh/h	880	924	786	655	0	636	558	1114	947	783	0	1063
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	0.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.1	31.4	27.7	29.9	0.0	32.8	34.1	23.9	0.0	31.9	0.0	24.5
Incr Delay (d2), s/veh	1.5	3.9	0.1	0.2	0.0	5.3	5.8	0.7	0.0	5.9	0.0	3.1
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(-26165%),veh/ln	2.2	5.1	0.2	0.6	0.0	4.1	3.3	4.4	0.0	5.3	0.0	10.1
LnGrp Delay(d),s/veh	31.7	35.3	27.7	30.1	0.0	38.1	39.9	24.6	0.0	37.8	0.0	27.6
LnGrp LOS	C	D	C	C		D	D	C		D		C
Approach Vol, veh/h		397			207			379			714	
Approach Delay, s/veh		33.7			37.1			30.3			30.9	
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	18.6	27.4		15.2	14.3	31.6		17.5
Change Period (Y+Rc), s	6.0	6.0		4.6	6.0	6.0		4.6
Max Green Setting (Gmax), s	34.7	47.0		29.0	24.7	47.0		39.0
Max Q Clear Time (g_c+I1), s	12.0	10.4		9.9	8.0	21.6		11.3
Green Ext Time (p_c), s	0.6	4.2		0.8	0.3	4.0		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	32.2
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	12.4
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	0	317	76	0	37	130	0	0	0	0	0
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	5	5	5	2	5	5	5	2	5	5	5
Mvmt Flow	0	0	377	90	0	44	155	0	0	0	0	0
Number of Lanes	0	0	1	1	0	1	1	0	0	0	1	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	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	2	2
HCM Control Delay	14.3	10.4	0
HCM LOS	B	B	-

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	100%	0%	0%	100%	0%	0%
Vol Right, %	0%	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	317	76	37	130	56	157
LT Vol	0	0	0	37	0	56	0
Through Vol	0	317	0	0	130	0	0
RT Vol	0	0	76	0	0	0	157
Lane Flow Rate	0	377	90	44	155	67	187
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0	0.578	0.121	0.078	0.254	0.126	0.291
Departure Headway (Hd)	6.811	5.63	4.922	6.415	5.908	6.815	5.603
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	645	733	560	610	529	645
Service Time	4.831	3.33	2.622	4.131	3.625	4.523	3.311
HCM Lane V/C Ratio	0	0.584	0.123	0.079	0.254	0.127	0.29
HCM Control Delay	9.8	15.8	8.3	9.7	10.6	10.5	10.6
HCM Lane LOS	N	C	A	A	B	B	B
HCM 95th-tile Q	0	3.7	0.4	0.3	1	0.4	1.2

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	56	0	157
Peak Hour Factor	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	5	5	5
Mvmt Flow	0	67	0	187
Number of Lanes	0	0	1	1

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	10.6
HCM LOS	B

Lane

Intersection	
Int Delay, s/veh	6.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	132	241	65	90	77	113
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	350	315	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	176	321	87	120	103	151

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	176	0	469	176
Stage 1	-	-	-	-	176	-
Stage 2	-	-	-	-	293	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	0	1382	-	547	859
Stage 1	-	0	-	-	847	-
Stage 2	-	0	-	-	750	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	1382	-	513	859
Mov Cap-2 Maneuver	-	-	-	-	513	-
Stage 1	-	-	-	-	847	-
Stage 2	-	-	-	-	703	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.3	13.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	675	-	1382	-
HCM Lane V/C Ratio	0.375	-	0.063	-
HCM Control Delay (s)	13.5	-	7.8	-
HCM Lane LOS	B	-	A	-
HCM 95th %tile Q(veh)	1.7	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	41	537	26	5	1190	131	53	44	18	83	29	73
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	1810	1810	1900	1810	1810	1810	1900	1810	1810	1810	1810	1900
Adj Flow Rate, veh/h	45	590	26	5	1308	11	58	48	0	91	32	13
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	1	1	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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	108	2024	89	20	1898	849	88	73	141	162	115	47
Arrive On Green	0.06	0.60	0.60	0.01	0.55	0.55	0.09	0.09	0.00	0.09	0.09	0.09
Sat Flow, veh/h	1723	3355	148	1723	3438	1538	964	798	1538	1723	1224	497
Grp Volume(v), veh/h	45	302	314	5	1308	11	106	0	0	91	0	45
Grp Sat Flow(s),veh/h/ln	1723	1719	1783	1723	1719	1538	1761	0	1538	1723	0	1722
Q Serve(g_s), s	2.6	8.8	8.8	0.3	28.6	0.3	6.0	0.0	0.0	5.3	0.0	2.5
Cycle Q Clear(g_c), s	2.6	8.8	8.8	0.3	28.6	0.3	6.0	0.0	0.0	5.3	0.0	2.5
Prop In Lane	1.00		0.08	1.00		1.00	0.55		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	108	1037	1076	20	1898	849	161	0	141	162	0	162
V/C Ratio(X)	0.41	0.29	0.29	0.25	0.69	0.01	0.66	0.00	0.00	0.56	0.00	0.28
Avail Cap(c_a), veh/h	365	1289	1338	365	2579	1154	474	0	414	663	0	662
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	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	46.9	9.9	9.9	50.9	16.8	10.5	45.6	0.0	0.0	45.0	0.0	43.8
Incr Delay (d2), s/veh	2.5	0.2	0.2	6.3	0.7	0.0	4.5	0.0	0.0	3.0	0.0	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(-26165%),veh/ln	1.3	4.2	4.3	0.2	13.6	0.1	3.1	0.0	0.0	2.6	0.0	1.2
LnGrp Delay(d),s/veh	49.4	10.1	10.1	57.3	17.5	10.5	50.1	0.0	0.0	48.0	0.0	44.7
LnGrp LOS	D	B	B	E	B	B	D			D		D
Approach Vol, veh/h		661			1324			106			136	
Approach Delay, s/veh		12.8			17.6			50.1			46.9	
Approach LOS		B			B			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	4.9	69.1		14.8	10.2	63.8		15.1
Change Period (Y+Rc), s	3.7	6.4		5.3	3.7	6.4		5.3
Max Green Setting (Gmax), s	22.0	78.0		28.0	22.0	78.0		40.0
Max Q Clear Time (g_c+I1), s	2.3	10.8		8.0	4.6	30.6		7.3
Green Ext Time (p_c), s	0.0	31.7		0.5	0.1	26.8		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	19.5
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	5	610	0	0	1470	15	0	1	0	1	5	5
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	140	-	-	-	-	-	-	-	-	-	-	-
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	5	635	0	0	1531	16	0	1	0	1	5	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1547	0	0	635	0	0	2190	2193	635	2185	2185	1539
Stage 1	-	-	-	-	-	-	646	646	-	1539	1539	-
Stage 2	-	-	-	-	-	-	1544	1547	-	646	646	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	420	-	-	934	-	-	32	44	473	32	45	140
Stage 1	-	-	-	-	-	-	455	462	-	142	174	-
Stage 2	-	-	-	-	-	-	141	173	-	455	462	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	420	-	-	934	-	-	28	43	473	31	44	140
Mov Cap-2 Maneuver	-	-	-	-	-	-	28	43	-	31	44	-
Stage 1	-	-	-	-	-	-	450	457	-	140	174	-
Stage 2	-	-	-	-	-	-	132	173	-	449	457	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	90.8	77.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	43	420	-	-	934	-	-	61
HCM Lane V/C Ratio	0.024	0.012	-	-	-	-	-	0.188
HCM Control Delay (s)	90.8	13.7	-	-	0	-	-	77.2
HCM Lane LOS	F	B	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	378	268	44	806	24	733	9	14	36	19	2
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	1810	1810	1810	1810	1810	1900	1900	1810	1810	1900	1810	1810
Adj Flow Rate, veh/h	1	386	35	45	822	23	748	9	0	37	19	0
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	1
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	3	863	733	74	907	25	480	6	433	54	28	71
Arrive On Green	0.00	0.48	0.48	0.04	0.52	0.52	0.28	0.28	0.00	0.05	0.05	0.00
Sat Flow, veh/h	1723	1810	1538	1723	1752	49	1704	21	1538	1157	594	1538
Grp Volume(v), veh/h	1	386	35	45	0	845	757	0	0	56	0	0
Grp Sat Flow(s),veh/h/ln	1723	1810	1538	1723	0	1801	1724	0	1538	1752	0	1538
Q Serve(g_s), s	0.1	18.6	1.6	3.4	0.0	56.0	37.0	0.0	0.0	4.1	0.0	0.0
Cycle Q Clear(g_c), s	0.1	18.6	1.6	3.4	0.0	56.0	37.0	0.0	0.0	4.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.03	0.99		1.00	0.66		1.00
Lane Grp Cap(c), veh/h	3	863	733	74	0	933	486	0	433	81	0	71
V/C Ratio(X)	0.30	0.45	0.05	0.61	0.00	0.91	1.56	0.00	0.00	0.69	0.00	0.00
Avail Cap(c_a), veh/h	315	1129	960	249	0	1124	486	0	433	453	0	398
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	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	65.5	22.9	18.4	61.8	0.0	28.8	47.2	0.0	0.0	61.7	0.0	0.0
Incr Delay (d2), s/veh	45.1	0.4	0.0	7.8	0.0	9.6	261.5	0.0	0.0	9.9	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(-26165%),veh/ln	0.1	9.4	0.7	1.8	0.0	30.2	52.8	0.0	0.0	2.2	0.0	0.0
LnGrp Delay(d),s/veh	110.6	23.3	18.4	69.6	0.0	38.4	308.7	0.0	0.0	71.6	0.0	0.0
LnGrp LOS	F	C	B	E		D	F			E		
Approach Vol, veh/h		422			890			757			56	
Approach Delay, s/veh		23.1			39.9			308.7			71.6	
Approach LOS		C			D			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.3	69.1		10.7	4.0	74.4		42.3
Change Period (Y+Rc), s	3.7	6.4		4.6	3.7	6.4		5.3
Max Green Setting (Gmax), s	19.0	82.0		34.0	24.0	82.0		37.0
Max Q Clear Time (g_c+I1), s	5.4	20.6		6.1	2.1	58.0		39.0
Green Ext Time (p_c), s	0.1	13.0		0.2	0.0	10.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	133.2
HCM 2010 LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	536	61	204	0	22	338
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	1810	1810	1810	0	1810	1810
Adj Flow Rate, veh/h	558	64	212	0	23	352
Adj No. of Lanes	2	1	1	0	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	0	5	5
Cap, veh/h	839	386	539	0	59	818
Arrive On Green	0.25	0.25	0.30	0.00	0.03	0.45
Sat Flow, veh/h	3343	1538	1810	0	1723	1810
Grp Volume(v), veh/h	558	64	212	0	23	352
Grp Sat Flow(s),veh/h/ln	1672	1538	1810	0	1723	1810
Q Serve(g_s), s	5.8	1.2	3.6	0.0	0.5	5.1
Cycle Q Clear(g_c), s	5.8	1.2	3.6	0.0	0.5	5.1
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	839	386	539	0	59	818
V/C Ratio(X)	0.66	0.17	0.39	0.00	0.39	0.43
Avail Cap(c_a), veh/h	1917	882	3160	0	539	3160
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	12.9	11.2	10.7	0.0	18.1	7.2
Incr Delay (d2), s/veh	0.9	0.2	0.8	0.0	4.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	2.7	0.6	1.9	0.0	0.3	2.6
LnGrp Delay(d),s/veh	13.8	11.4	11.5	0.0	22.4	7.8
LnGrp LOS	B	B	B		C	A
Approach Vol, veh/h	622		212			375
Approach Delay, s/veh	13.6		11.5			8.7
Approach LOS	B		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	5.9	18.2				24.1		14.2
Change Period (Y+Rc), s	4.6	6.8				6.8		4.6
Max Green Setting (Gmax), s	12.0	67.0				67.0		22.0
Max Q Clear Time (g_c+I1), s	2.5	5.6				7.1		7.8
Green Ext Time (p_c), s	0.0	5.9				5.9		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	11.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	15	229	2	16	587	5	3	0	13	4	0	7
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	225	-	-	195	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	252	2	18	645	5	3	0	14	4	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	651	0	0	254	0	0	969	972	253	969	970	648
Stage 1	-	-	-	-	-	-	286	286	-	683	683	-
Stage 2	-	-	-	-	-	-	683	686	-	286	287	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	935	-	-	1311	-	-	233	252	786	233	253	470
Stage 1	-	-	-	-	-	-	721	675	-	439	449	-
Stage 2	-	-	-	-	-	-	439	448	-	721	674	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	935	-	-	1311	-	-	224	244	786	223	245	470
Mov Cap-2 Maneuver	-	-	-	-	-	-	224	244	-	223	245	-
Stage 1	-	-	-	-	-	-	709	663	-	431	443	-
Stage 2	-	-	-	-	-	-	426	442	-	696	662	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.2	11.9	16
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	224	786	935	-	-	1311	-	-	223	470
HCM Lane V/C Ratio	0.015	0.018	0.018	-	-	0.013	-	-	0.02	0.016
HCM Control Delay (s)	21.3	9.7	8.9	-	-	7.8	-	-	21.5	12.8
HCM Lane LOS	C	A	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0	0.1	0.1	-	-	0	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	4	0	1	752	328	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	135	0	220	-	-	190
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	4	0	1	845	369	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1216	369	369	0	-	0
Stage 1	369	-	-	-	-	-
Stage 2	847	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	200	677	1190	-	-	-
Stage 1	699	-	-	-	-	-
Stage 2	420	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	200	677	1190	-	-	-
Mov Cap-2 Maneuver	200	-	-	-	-	-
Stage 1	699	-	-	-	-	-
Stage 2	420	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1190	-	200	-	-	-
HCM Lane V/C Ratio	0.001	-	0.022	-	-	-
HCM Control Delay (s)	8	-	23.4	0	-	-
HCM Lane LOS	A	-	C	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	19	239	741	38	17	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	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	278	862	44	20	50

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	906	0	-	0	1206	884
Stage 1	-	-	-	-	884	-
Stage 2	-	-	-	-	322	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	751	-	-	-	203	344
Stage 1	-	-	-	-	404	-
Stage 2	-	-	-	-	735	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	751	-	-	-	197	344
Mov Cap-2 Maneuver	-	-	-	-	197	-
Stage 1	-	-	-	-	404	-
Stage 2	-	-	-	-	713	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	21.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	751	-	-	-	284
HCM Lane V/C Ratio	0.029	-	-	-	0.246
HCM Control Delay (s)	9.9	-	-	-	21.8
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	156	193	553	301	191	290
Number	7	4	8	18	1	16
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	188	233	666	68	230	49
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	237	1179	763	649	288	257
Arrive On Green	0.13	0.63	0.41	0.41	0.16	0.16
Sat Flow, veh/h	1774	1863	1863	1583	1774	1583
Grp Volume(v), veh/h	188	233	666	68	230	49
Grp Sat Flow(s),veh/h/ln	1774	1863	1863	1583	1774	1583
Q Serve(g_s), s	5.7	2.9	18.3	1.5	6.9	1.5
Cycle Q Clear(g_c), s	5.7	2.9	18.3	1.5	6.9	1.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	237	1179	763	649	288	257
V/C Ratio(X)	0.79	0.20	0.87	0.10	0.80	0.19
Avail Cap(c_a), veh/h	478	1179	1147	975	456	407
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	23.4	4.3	15.1	10.1	22.4	20.2
Incr Delay (d2), s/veh	2.3	0.0	3.5	0.0	2.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	2.9	1.5	10.0	0.6	3.6	1.4
LnGrp Delay(d),s/veh	25.7	4.3	18.6	10.2	24.6	20.3
LnGrp LOS	C	A	B	B	C	C
Approach Vol, veh/h		421	734		279	
Approach Delay, s/veh		13.9	17.8		23.8	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				40.9		14.7	12.4	28.5
Change Period (Y+Rc), s				5.7		5.7	5.0	5.7
Max Green Setting (Gmax), s				34.3		14.3	15.0	34.3
Max Q Clear Time (g_c+I1), s				4.9		8.9	7.7	20.3
Green Ext Time (p_c), s				3.2		0.2	0.1	2.5

Intersection Summary	
HCM 2010 Ctrl Delay	17.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	134	161	102	24	343	191	223	330	29	109	194	173
Number	3	8	18	7	4	14	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	1900
Adj Flow Rate, veh/h	151	181	95	27	385	197	251	371	5	122	218	161
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	0
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	325	211	111	430	282	144	282	617	524	151	257	190
Arrive On Green	0.18	0.18	0.18	0.24	0.24	0.24	0.16	0.33	0.33	0.09	0.26	0.26
Sat Flow, veh/h	1774	1152	604	1774	1163	595	1774	1863	1583	1774	997	736
Grp Volume(v), veh/h	151	0	276	27	0	582	251	371	5	122	0	379
Grp Sat Flow(s),veh/h/ln	1774	0	1756	1774	0	1758	1774	1863	1583	1774	0	1733
Q Serve(g_s), s	9.1	0.0	18.2	1.4	0.0	29.0	16.6	19.9	0.3	8.1	0.0	24.9
Cycle Q Clear(g_c), s	9.1	0.0	18.2	1.4	0.0	29.0	16.6	19.9	0.3	8.1	0.0	24.9
Prop In Lane	1.00		0.34	1.00		0.34	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	325	0	322	430	0	426	282	617	524	151	0	446
V/C Ratio(X)	0.46	0.00	0.86	0.06	0.00	1.37	0.89	0.60	0.01	0.81	0.00	0.85
Avail Cap(c_a), veh/h	579	0	573	430	0	426	401	732	622	549	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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	43.6	0.0	47.3	34.8	0.0	45.3	49.3	33.4	26.8	53.7	0.0	42.2
Incr Delay (d2), s/veh	1.0	0.0	6.6	0.1	0.0	178.9	16.2	1.0	0.0	9.7	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(-26165%),veh/ln	4.5	0.0	9.4	0.7	0.0	35.2	9.4	10.4	0.1	4.4	0.0	12.7
LnGrp Delay(d),s/veh	44.6	0.0	54.0	34.9	0.0	224.2	65.5	34.4	26.8	63.4	0.0	48.5
LnGrp LOS	D		D	C		F	E	C	C	E		D
Approach Vol, veh/h		427			609			627			501	
Approach Delay, s/veh		50.7			215.8			46.8			52.2	
Approach LOS		D			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	13.9	45.6		33.6	22.7	36.8		26.5
Change Period (Y+Rc), s	3.7	6.0		4.6	3.7	6.0		4.6
Max Green Setting (Gmax), s	37.0	47.0		29.0	27.0	47.0		39.0
Max Q Clear Time (g_c+I1), s	11.1	21.9		31.0	18.6	26.9		20.2
Green Ext Time (p_c), s	0.3	4.1		0.0	0.4	3.9		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	96.4
HCM 2010 LOS	F

Intersection	
Intersection Delay, s/veh	13.1
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	0	325	113	0	99	127	0	0	0	0	0
Peak Hour Factor	0.92	0.94	0.94	0.94	0.92	0.94	0.94	0.94	0.92	0.94	0.94	0.94
Heavy Vehicles, %	2	3	3	3	2	3	3	3	2	3	3	3
Mvmt Flow	0	0	346	120	0	105	135	0	0	0	0	0
Number of Lanes	0	0	1	1	0	1	1	0	0	0	1	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	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	2	2
HCM Control Delay	14.8	11.1	0
HCM LOS	B	B	-

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	100%	0%	0%	100%	0%	0%
Vol Right, %	0%	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	325	113	99	127	107	241
LT Vol	0	0	0	99	0	107	0
Through Vol	0	325	0	0	127	0	0
RT Vol	0	0	113	0	0	0	241
Lane Flow Rate	0	346	120	105	135	114	256
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0	0.578	0.177	0.199	0.236	0.219	0.407
Departure Headway (Hd)	7.168	6.022	5.312	6.8	6.291	6.934	5.721
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	598	674	528	570	518	628
Service Time	5.234	3.759	3.049	4.544	4.035	4.676	3.462
HCM Lane V/C Ratio	0	0.579	0.178	0.199	0.237	0.22	0.408
HCM Control Delay	10.2	16.7	9.2	11.2	11	11.6	12.4
HCM Lane LOS	N	C	A	B	B	B	B
HCM 95th-tile Q	0	3.7	0.6	0.7	0.9	0.8	2

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	107	0	241
Peak Hour Factor	0.92	0.94	0.94	0.94
Heavy Vehicles, %	2	3	3	3
Mvmt Flow	0	114	0	256
Number of Lanes	0	0	1	1

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	12.2
HCM LOS	B

Lane

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	232	200	72	176	50	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	350	315	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	234	202	73	178	51	30

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	234	0	557	234
Stage 1	-	-	-	-	234	-
Stage 2	-	-	-	-	323	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	0	1328	-	490	803
Stage 1	-	0	-	-	802	-
Stage 2	-	0	-	-	732	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	1328	-	463	803
Mov Cap-2 Maneuver	-	-	-	-	463	-
Stage 1	-	-	-	-	802	-
Stage 2	-	-	-	-	692	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.3	12.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	550	-	1328	-
HCM Lane V/C Ratio	0.147	-	0.055	-
HCM Control Delay (s)	12.7	-	7.9	-
HCM Lane LOS	B	-	A	-
HCM 95th %tile Q(veh)	0.5	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	41	1087	42	12	823	118	27	24	12	126	43	50
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	1845	1845	1900	1845	1845	1845	1900	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	46	1221	45	13	925	0	30	27	0	142	48	25
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	1	1	0
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	114	1999	74	48	1900	850	75	68	125	187	122	64
Arrive On Green	0.06	0.58	0.58	0.03	0.54	0.00	0.08	0.08	0.00	0.11	0.11	0.11
Sat Flow, veh/h	1757	3448	127	1757	3505	1568	946	851	1568	1757	1144	596
Grp Volume(v), veh/h	46	620	646	13	925	0	57	0	0	142	0	73
Grp Sat Flow(s),veh/h/ln	1757	1752	1822	1757	1752	1568	1797	0	1568	1757	0	1740
Q Serve(g_s), s	2.5	23.0	23.1	0.7	16.4	0.0	3.0	0.0	0.0	7.9	0.0	3.9
Cycle Q Clear(g_c), s	2.5	23.0	23.1	0.7	16.4	0.0	3.0	0.0	0.0	7.9	0.0	3.9
Prop In Lane	1.00		0.07	1.00		1.00	0.53		1.00	1.00		0.34
Lane Grp Cap(c), veh/h	114	1016	1057	48	1900	850	143	0	125	187	0	186
V/C Ratio(X)	0.40	0.61	0.61	0.27	0.49	0.00	0.40	0.00	0.00	0.76	0.00	0.39
Avail Cap(c_a), veh/h	386	1365	1420	386	2731	1222	503	0	439	702	0	695
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	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.0	13.7	13.7	47.7	14.3	0.0	43.8	0.0	0.0	43.5	0.0	41.7
Incr Delay (d2), s/veh	2.3	0.9	0.8	3.0	0.3	0.0	1.8	0.0	0.0	6.1	0.0	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(-26165%),veh/ln	1.3	11.3	11.7	0.4	7.9	0.0	1.6	0.0	0.0	4.1	0.0	2.0
LnGrp Delay(d),s/veh	47.2	14.5	14.5	50.7	14.5	0.0	45.6	0.0	0.0	49.6	0.0	43.0
LnGrp LOS	D	B	B	D	B		D			D		D
Approach Vol, veh/h		1312			938			57			215	
Approach Delay, s/veh		15.7			15.0			45.6			47.4	
Approach LOS		B			B			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	6.4	64.5		13.3	10.2	60.7		16.0
Change Period (Y+Rc), s	3.7	6.4		5.3	3.7	6.4		5.3
Max Green Setting (Gmax), s	22.0	78.0		28.0	22.0	78.0		40.0
Max Q Clear Time (g_c+I1), s	2.7	25.1		5.0	4.5	18.4		9.9
Green Ext Time (p_c), s	0.0	33.0		0.2	0.1	35.3		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	18.8
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	15	1218	0	0	1012	8	0	0	0	3	0	14
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	140	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	99	99	99	99	99	99	99	99	99	99	99	99
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	15	1230	0	0	1022	8	0	0	0	3	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1030	0	0	1230	0	0	2294	2291	1230	2287	2287	1026
Stage 1	-	-	-	-	-	-	1261	1261	-	1026	1026	-
Stage 2	-	-	-	-	-	-	1033	1030	-	1261	1261	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	671	-	-	563	-	-	27	39	216	28	39	284
Stage 1	-	-	-	-	-	-	208	240	-	282	311	-
Stage 2	-	-	-	-	-	-	279	309	-	208	240	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	671	-	-	563	-	-	25	38	216	28	38	284
Mov Cap-2 Maneuver	-	-	-	-	-	-	25	38	-	28	38	-
Stage 1	-	-	-	-	-	-	203	235	-	276	311	-
Stage 2	-	-	-	-	-	-	265	309	-	203	235	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	0	44.1
HCM LOS			A	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	671	-	-	563	-	-	109
HCM Lane V/C Ratio	-	0.023	-	-	-	-	-	0.158
HCM Control Delay (s)	0	10.5	-	-	0	-	-	44.1
HCM Lane LOS	A	B	-	-	A	-	-	E
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	696	637	18	604	10	469	12	53	102	60	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	1845	1845	1845	1845	1845	1900	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	2	765	311	20	664	10	515	13	0	112	66	0
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	7	877	745	46	903	14	426	11	389	130	77	182
Arrive On Green	0.00	0.48	0.48	0.03	0.50	0.50	0.25	0.25	0.00	0.12	0.12	0.00
Sat Flow, veh/h	1757	1845	1568	1757	1813	27	1716	43	1568	1125	663	1568
Grp Volume(v), veh/h	2	765	311	20	0	674	528	0	0	178	0	0
Grp Sat Flow(s),veh/h/ln	1757	1845	1568	1757	0	1840	1759	0	1568	1788	0	1568
Q Serve(g_s), s	0.2	55.4	19.3	1.7	0.0	43.2	37.0	0.0	0.0	14.6	0.0	0.0
Cycle Q Clear(g_c), s	0.2	55.4	19.3	1.7	0.0	43.2	37.0	0.0	0.0	14.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	0.98		1.00	0.63		1.00
Lane Grp Cap(c), veh/h	7	877	745	46	0	916	437	0	389	207	0	182
V/C Ratio(X)	0.31	0.87	0.42	0.43	0.00	0.74	1.21	0.00	0.00	0.86	0.00	0.00
Avail Cap(c_a), veh/h	283	1015	863	224	0	1012	437	0	389	408	0	358
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	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	74.0	35.0	25.6	71.4	0.0	29.6	56.0	0.0	0.0	64.7	0.0	0.0
Incr Delay (d2), s/veh	24.2	7.9	0.5	6.2	0.0	2.7	113.8	0.0	0.0	10.0	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(-26165%),veh/ln	0.1	30.0	8.5	0.9	0.0	22.6	31.8	0.0	0.0	7.8	0.0	0.0
LnGrp Delay(d),s/veh	98.2	42.9	26.0	77.6	0.0	32.3	169.8	0.0	0.0	74.6	0.0	0.0
LnGrp LOS	F	D	C	E		C	F			E		
Approach Vol, veh/h		1078			694			528			178	
Approach Delay, s/veh		38.1			33.6			169.8			74.6	
Approach LOS		D			C			F			E	

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	77.2		21.9	4.3	80.6		42.3
Change Period (Y+Rc), s	3.7	6.4		4.6	3.7	6.4		5.3
Max Green Setting (Gmax), s	19.0	82.0		34.0	24.0	82.0		37.0
Max Q Clear Time (g_c+I1), s	3.7	57.4		16.6	2.2	45.2		39.0
Green Ext Time (p_c), s	0.0	13.4		0.7	0.0	16.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	67.6
HCM 2010 LOS	E

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	324	39	343	0	68	308
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	1845	1845	1845	0	1845	1845
Adj Flow Rate, veh/h	368	0	390	0	77	350
Adj No. of Lanes	2	1	1	0	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	0	3	3
Cap, veh/h	571	263	723	0	145	1065
Arrive On Green	0.17	0.00	0.39	0.00	0.08	0.58
Sat Flow, veh/h	3408	1568	1845	0	1757	1845
Grp Volume(v), veh/h	368	0	390	0	77	350
Grp Sat Flow(s),veh/h/ln	1704	1568	1845	0	1757	1845
Q Serve(g_s), s	4.5	0.0	7.3	0.0	1.9	4.4
Cycle Q Clear(g_c), s	4.5	0.0	7.3	0.0	1.9	4.4
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	571	263	723	0	145	1065
V/C Ratio(X)	0.64	0.00	0.54	0.00	0.53	0.33
Avail Cap(c_a), veh/h	1676	771	2763	0	471	2763
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	0.0	10.5	0.0	19.7	4.9
Incr Delay (d2), s/veh	1.2	0.0	1.1	0.0	3.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	2.2	0.0	3.9	0.0	1.0	2.3
LnGrp Delay(d),s/veh	18.6	0.0	11.6	0.0	22.7	5.2
LnGrp LOS	B		B		C	A
Approach Vol, veh/h	368		390			427
Approach Delay, s/veh	18.6		11.6			8.4
Approach LOS	B		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.3	24.3				32.6		12.1
Change Period (Y+Rc), s	4.6	6.8				6.8		4.6
Max Green Setting (Gmax), s	12.0	67.0				67.0		22.0
Max Q Clear Time (g_c+I1), s	3.9	9.3				6.4		6.5
Green Ext Time (p_c), s	0.1	8.2				8.3		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	12.6
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	10	562	4	16	346	2	4	1	20	3	1	13
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	225	-	-	195	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	12	677	5	19	417	2	5	1	24	4	1	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	419	0	0	682	0	0	1161	1162	680	1161	1163	418
Stage 1	-	-	-	-	-	-	704	704	-	457	457	-
Stage 2	-	-	-	-	-	-	457	458	-	704	706	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1135	-	-	906	-	-	171	194	449	171	194	633
Stage 1	-	-	-	-	-	-	426	438	-	581	566	-
Stage 2	-	-	-	-	-	-	581	565	-	426	437	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1135	-	-	906	-	-	162	188	449	157	188	633
Mov Cap-2 Maneuver	-	-	-	-	-	-	162	188	-	157	188	-
Stage 1	-	-	-	-	-	-	421	433	-	575	554	-
Stage 2	-	-	-	-	-	-	554	553	-	398	432	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.4	16.3	14.8
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	167	449	1135	-	-	906	-	-	164	633
HCM Lane V/C Ratio	0.036	0.054	0.011	-	-	0.021	-	-	0.029	0.025
HCM Control Delay (s)	27.4	13.5	8.2	-	-	9.1	-	-	27.6	10.8
HCM Lane LOS	D	B	A	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	0.1	0.2	0	-	-	0.1	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	45	13	6	489	710	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	135	0	220	-	-	190
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	51	15	7	556	807	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1376	807	807	0	-	0
Stage 1	807	-	-	-	-	-
Stage 2	569	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	159	380	814	-	-	-
Stage 1	437	-	-	-	-	-
Stage 2	564	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	158	380	814	-	-	-
Mov Cap-2 Maneuver	158	-	-	-	-	-
Stage 1	437	-	-	-	-	-
Stage 2	559	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	33.1	0.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	814	-	158	380	-	-
HCM Lane V/C Ratio	0.008	-	0.324	0.039	-	-
HCM Control Delay (s)	9.5	-	38.3	14.9	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0	-	1.3	0.1	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	29	756	410	16	15	20
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	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	796	432	17	16	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	448	0	-	0	1297	440
Stage 1	-	-	-	-	440	-
Stage 2	-	-	-	-	857	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1112	-	-	-	179	617
Stage 1	-	-	-	-	649	-
Stage 2	-	-	-	-	416	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1112	-	-	-	174	617
Mov Cap-2 Maneuver	-	-	-	-	174	-
Stage 1	-	-	-	-	649	-
Stage 2	-	-	-	-	404	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	18.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1112	-	-	-	295
HCM Lane V/C Ratio	0.027	-	-	-	0.125
HCM Control Delay (s)	8.3	-	-	-	18.9
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	316	557	309	107	173	209
Number	7	4	8	18	1	16
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	340	599	332	0	186	35
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	406	1134	503	428	249	222
Arrive On Green	0.23	0.61	0.27	0.00	0.14	0.14
Sat Flow, veh/h	1774	1863	1863	1583	1774	1583
Grp Volume(v), veh/h	340	599	332	0	186	35
Grp Sat Flow(s),veh/h/ln	1774	1863	1863	1583	1774	1583
Q Serve(g_s), s	8.3	8.4	7.2	0.0	4.6	0.9
Cycle Q Clear(g_c), s	8.3	8.4	7.2	0.0	4.6	0.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	406	1134	503	428	249	222
V/C Ratio(X)	0.84	0.53	0.66	0.00	0.75	0.16
Avail Cap(c_a), veh/h	586	1407	1407	1196	559	498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	5.1	14.7	0.0	18.8	17.2
Incr Delay (d2), s/veh	4.9	0.1	0.6	0.0	1.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	4.6	4.2	3.8	0.0	2.3	0.8
LnGrp Delay(d),s/veh	21.6	5.3	15.3	0.0	20.5	17.3
LnGrp LOS	C	A	B		C	B
Approach Vol, veh/h		939	332		221	
Approach Delay, s/veh		11.2	15.3		20.0	
Approach LOS		B	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				33.4		12.1	15.4	18.0
Change Period (Y+Rc), s				5.7		5.7	5.0	5.7
Max Green Setting (Gmax), s				34.3		14.3	15.0	34.3
Max Q Clear Time (g_c+I1), s				10.4		6.6	10.3	9.2
Green Ext Time (p_c), s				3.1		0.2	0.2	3.1

Intersection Summary	
HCM 2010 Ctrl Delay	13.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	188	258	182	31	119	108	145	307	27	221	399	155
Number	3	8	18	7	4	14	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	1900
Adj Flow Rate, veh/h	198	272	171	33	125	82	153	323	2	233	420	149
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	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	485	292	184	247	146	96	181	548	466	263	448	159
Arrive On Green	0.27	0.27	0.27	0.14	0.14	0.14	0.10	0.29	0.29	0.15	0.34	0.34
Sat Flow, veh/h	1774	1071	673	1774	1051	690	1774	1863	1583	1774	1314	466
Grp Volume(v), veh/h	198	0	443	33	0	207	153	323	2	233	0	569
Grp Sat Flow(s),veh/h/ln	1774	0	1744	1774	0	1741	1774	1863	1583	1774	0	1780
Q Serve(g_s), s	11.9	0.0	32.3	2.1	0.0	15.1	11.1	19.3	0.1	16.8	0.0	40.4
Cycle Q Clear(g_c), s	11.9	0.0	32.3	2.1	0.0	15.1	11.1	19.3	0.1	16.8	0.0	40.4
Prop In Lane	1.00		0.39	1.00		0.40	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	485	0	476	247	0	242	181	548	466	263	0	607
V/C Ratio(X)	0.41	0.00	0.93	0.13	0.00	0.85	0.85	0.59	0.00	0.89	0.00	0.94
Avail Cap(c_a), veh/h	531	0	522	395	0	387	367	671	571	503	0	642
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	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.8	0.0	46.2	49.2	0.0	54.8	57.5	39.3	32.5	54.4	0.0	41.6
Incr Delay (d2), s/veh	0.6	0.0	22.4	0.2	0.0	10.2	10.3	1.0	0.0	9.6	0.0	21.0
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(-26165%),veh/ln	5.9	0.0	18.5	1.1	0.0	8.0	6.0	10.1	0.1	8.9	0.0	23.3
LnGrp Delay(d),s/veh	39.3	0.0	68.6	49.5	0.0	65.0	67.8	40.3	32.5	64.1	0.0	62.6
LnGrp LOS	D		E	D		E	E	D	C	E		E
Approach Vol, veh/h		641			240			478			802	
Approach Delay, s/veh		59.5			62.9			49.1			63.1	
Approach LOS		E			E			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	23.0	44.4		22.7	17.0	50.4		40.2
Change Period (Y+Rc), s	3.7	6.0		4.6	3.7	6.0		4.6
Max Green Setting (Gmax), s	37.0	47.0		29.0	27.0	47.0		39.0
Max Q Clear Time (g_c+I1), s	13.8	21.3		17.1	13.1	42.4		34.3
Green Ext Time (p_c), s	0.6	5.2		1.0	0.3	2.1		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	58.9
HCM 2010 LOS	E

Intersection	
Intersection Delay, s/veh	12.6
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	0	321	76	0	37	134	0	0	0	0	0
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	5	5	5	2	5	5	5	2	5	5	5
Mvmt Flow	0	0	382	90	0	44	160	0	0	0	0	0
Number of Lanes	0	0	1	1	0	1	1	0	0	0	1	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	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	2	2
HCM Control Delay	14.5	10.5	0
HCM LOS	B	B	-

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	100%	0%	0%	100%	0%	0%
Vol Right, %	0%	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	321	76	37	134	56	157
LT Vol	0	0	0	37	0	56	0
Through Vol	0	321	0	0	134	0	0
RT Vol	0	0	76	0	0	0	157
Lane Flow Rate	0	382	90	44	160	67	187
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0	0.586	0.121	0.079	0.262	0.127	0.292
Departure Headway (Hd)	6.842	5.641	4.933	6.425	5.918	6.839	5.627
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	646	731	559	609	527	641
Service Time	4.863	3.341	2.633	4.142	3.635	4.549	3.336
HCM Lane V/C Ratio	0	0.591	0.123	0.079	0.263	0.127	0.292
HCM Control Delay	9.9	16	8.3	9.7	10.7	10.5	10.6
HCM Lane LOS	N	C	A	A	B	B	B
HCM 95th-tile Q	0	3.8	0.4	0.3	1	0.4	1.2

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	56	0	157
Peak Hour Factor	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	5	5	5
Mvmt Flow	0	67	0	187
Number of Lanes	0	0	1	1

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	10.6
HCM LOS	B

Lane

Intersection	
Int Delay, s/veh	6.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	136	241	65	94	77	113
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	350	315	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	181	321	87	125	103	151

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	181	0	480	181
Stage 1	-	-	-	-	181	-
Stage 2	-	-	-	-	299	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	0	1376	-	539	854
Stage 1	-	0	-	-	843	-
Stage 2	-	0	-	-	746	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	1376	-	505	854
Mov Cap-2 Maneuver	-	-	-	-	505	-
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	699	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.2	13.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	667	-	1376	-
HCM Lane V/C Ratio	0.38	-	0.063	-
HCM Control Delay (s)	13.7	-	7.8	-
HCM Lane LOS	B	-	A	-
HCM 95th %tile Q(veh)	1.8	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	41	593	26	5	1249	148	53	44	18	99	29	73
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	1810	1810	1900	1810	1810	1810	1900	1810	1810	1810	1810	1900
Adj Flow Rate, veh/h	45	652	26	5	1373	19	58	48	0	109	32	13
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	1	1	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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	106	2080	83	20	1950	872	85	71	136	158	112	45
Arrive On Green	0.06	0.62	0.62	0.01	0.57	0.57	0.09	0.09	0.00	0.09	0.09	0.09
Sat Flow, veh/h	1723	3371	134	1723	3438	1538	964	798	1538	1723	1224	497
Grp Volume(v), veh/h	45	332	346	5	1373	19	106	0	0	109	0	45
Grp Sat Flow(s),veh/h/ln	1723	1719	1786	1723	1719	1538	1761	0	1538	1723	0	1722
Q Serve(g_s), s	2.7	9.9	9.9	0.3	31.2	0.6	6.3	0.0	0.0	6.6	0.0	2.6
Cycle Q Clear(g_c), s	2.7	9.9	9.9	0.3	31.2	0.6	6.3	0.0	0.0	6.6	0.0	2.6
Prop In Lane	1.00		0.08	1.00		1.00	0.55		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	106	1061	1102	20	1950	872	156	0	136	158	0	157
V/C Ratio(X)	0.42	0.31	0.31	0.25	0.70	0.02	0.68	0.00	0.00	0.69	0.00	0.29
Avail Cap(c_a), veh/h	350	1238	1287	350	2477	1108	456	0	398	637	0	636
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	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.9	9.8	9.8	53.0	16.9	10.3	47.9	0.0	0.0	47.7	0.0	45.9
Incr Delay (d2), s/veh	2.7	0.2	0.2	6.4	0.8	0.0	5.1	0.0	0.0	5.3	0.0	1.0
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(-26165%),veh/ln	1.4	4.8	5.0	0.2	14.9	0.3	3.3	0.0	0.0	3.4	0.0	1.3
LnGrp Delay(d),s/veh	51.6	10.1	10.1	59.4	17.7	10.3	53.0	0.0	0.0	53.0	0.0	46.9
LnGrp LOS	D	B	B	E	B	B	D			D		D
Approach Vol, veh/h		723			1397			106			154	
Approach Delay, s/veh		12.7			17.8			53.0			51.2	
Approach LOS		B			B			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	5.0	73.2		14.9	10.4	67.8		15.2
Change Period (Y+Rc), s	3.7	6.4		5.3	3.7	6.4		5.3
Max Green Setting (Gmax), s	22.0	78.0		28.0	22.0	78.0		40.0
Max Q Clear Time (g_c+I1), s	2.3	11.9		8.3	4.7	33.2		8.6
Green Ext Time (p_c), s	0.0	35.0		0.5	0.1	28.2		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	19.9
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	5	682	0	0	1546	15	0	1	0	1	5	5
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	140	-	-	-	-	-	-	-	-	-	-	-
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	5	710	0	0	1610	16	0	1	0	1	5	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1626	0	0	710	0	0	2344	2347	710	2339	2339	1618
Stage 1	-	-	-	-	-	-	721	721	-	1618	1618	-
Stage 2	-	-	-	-	-	-	1623	1626	-	721	721	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	392	-	-	875	-	-	25	35	429	25	36	125
Stage 1	-	-	-	-	-	-	414	427	-	128	159	-
Stage 2	-	-	-	-	-	-	127	158	-	414	427	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	392	-	-	875	-	-	21	35	429	24	36	125
Mov Cap-2 Maneuver	-	-	-	-	-	-	21	35	-	24	36	-
Stage 1	-	-	-	-	-	-	409	422	-	126	159	-
Stage 2	-	-	-	-	-	-	118	158	-	408	422	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	111	97.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	35	392	-	-	875	-	-	50
HCM Lane V/C Ratio	0.03	0.013	-	-	-	-	-	0.229
HCM Control Delay (s)	111	14.3	-	-	0	-	-	97.2
HCM Lane LOS	F	B	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	378	341	102	806	24	810	9	75	36	19	2
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	1810	1810	1810	1810	1810	1900	1900	1810	1810	1900	1810	1810
Adj Flow Rate, veh/h	1	386	36	104	822	23	827	9	0	37	19	0
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	1
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	3	807	686	128	907	25	480	5	433	54	28	71
Arrive On Green	0.00	0.45	0.45	0.07	0.52	0.52	0.28	0.28	0.00	0.05	0.05	0.00
Sat Flow, veh/h	1723	1810	1538	1723	1752	49	1706	19	1538	1157	594	1538
Grp Volume(v), veh/h	1	386	36	104	0	845	836	0	0	56	0	0
Grp Sat Flow(s),veh/h/ln	1723	1810	1538	1723	0	1801	1724	0	1538	1752	0	1538
Q Serve(g_s), s	0.1	19.7	1.7	7.8	0.0	56.0	37.0	0.0	0.0	4.1	0.0	0.0
Cycle Q Clear(g_c), s	0.1	19.7	1.7	7.8	0.0	56.0	37.0	0.0	0.0	4.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.03	0.99		1.00	0.66		1.00
Lane Grp Cap(c), veh/h	3	807	686	128	0	933	486	0	433	81	0	71
V/C Ratio(X)	0.30	0.48	0.05	0.82	0.00	0.91	1.72	0.00	0.00	0.69	0.00	0.00
Avail Cap(c_a), veh/h	315	1129	960	249	0	1124	486	0	433	453	0	398
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	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	65.5	25.6	20.7	60.0	0.0	28.8	47.2	0.0	0.0	61.7	0.0	0.0
Incr Delay (d2), s/veh	45.1	0.5	0.0	11.8	0.0	9.6	333.4	0.0	0.0	9.9	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(-26165%),veh/ln	0.1	10.0	0.7	4.1	0.0	30.2	62.5	0.0	0.0	2.2	0.0	0.0
LnGrp Delay(d),s/veh	110.6	26.2	20.7	71.8	0.0	38.4	380.6	0.0	0.0	71.6	0.0	0.0
LnGrp LOS	F	C	C	E		D	F			E		
Approach Vol, veh/h		423			949			836			56	
Approach Delay, s/veh		25.9			42.0			380.6			71.6	
Approach LOS		C			D			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.4	65.0		10.7	4.0	74.5		42.3
Change Period (Y+Rc), s	3.7	6.4		4.6	3.7	6.4		5.3
Max Green Setting (Gmax), s	19.0	82.0		34.0	24.0	82.0		37.0
Max Q Clear Time (g_c+I1), s	9.8	21.7		6.1	2.1	58.0		39.0
Green Ext Time (p_c), s	0.1	12.9		0.2	0.0	10.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	164.8
HCM 2010 LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	585	61	214	0	22	347
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	1810	1810	1810	0	1810	1810
Adj Flow Rate, veh/h	609	0	223	0	23	361
Adj No. of Lanes	2	1	1	0	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	0	5	5
Cap, veh/h	872	401	547	0	58	818
Arrive On Green	0.26	0.00	0.30	0.00	0.03	0.45
Sat Flow, veh/h	3343	1538	1810	0	1723	1810
Grp Volume(v), veh/h	609	0	223	0	23	361
Grp Sat Flow(s),veh/h/ln	1672	1538	1810	0	1723	1810
Q Serve(g_s), s	6.5	0.0	3.9	0.0	0.5	5.4
Cycle Q Clear(g_c), s	6.5	0.0	3.9	0.0	0.5	5.4
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	872	401	547	0	58	818
V/C Ratio(X)	0.70	0.00	0.41	0.00	0.39	0.44
Avail Cap(c_a), veh/h	1852	852	3052	0	521	3052
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	13.3	0.0	11.0	0.0	18.8	7.4
Incr Delay (d2), s/veh	1.0	0.0	0.8	0.0	4.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	3.1	0.0	2.0	0.0	0.3	2.8
LnGrp Delay(d),s/veh	14.3	0.0	11.9	0.0	23.1	8.1
LnGrp LOS	B		B		C	A
Approach Vol, veh/h	609		223			384
Approach Delay, s/veh	14.3		11.9			9.0
Approach LOS	B		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	5.9	18.8				24.8		15.0
Change Period (Y+Rc), s	4.6	6.8				6.8		4.6
Max Green Setting (Gmax), s	12.0	67.0				67.0		22.0
Max Q Clear Time (g_c+I1), s	2.5	5.9				7.4		8.5
Green Ext Time (p_c), s	0.0	6.1				6.1		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	12.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	15	281	2	16	636	5	3	0	13	4	0	7
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	225	-	-	195	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	309	2	18	699	5	3	0	14	4	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	704	0	0	311	0	0	1080	1083	310	1080	1081	702
Stage 1	-	-	-	-	-	-	343	343	-	737	737	-
Stage 2	-	-	-	-	-	-	737	740	-	343	344	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	894	-	-	1249	-	-	196	217	730	196	218	438
Stage 1	-	-	-	-	-	-	672	637	-	410	425	-
Stage 2	-	-	-	-	-	-	410	423	-	672	637	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	894	-	-	1249	-	-	188	210	730	187	211	438
Mov Cap-2 Maneuver	-	-	-	-	-	-	188	210	-	187	211	-
Stage 1	-	-	-	-	-	-	660	626	-	403	419	-
Stage 2	-	-	-	-	-	-	397	417	-	647	626	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.2	12.7	17.5
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	188	730	894	-	-	1249	-	-	187	438
HCM Lane V/C Ratio	0.018	0.02	0.018	-	-	0.014	-	-	0.024	0.018
HCM Control Delay (s)	24.5	10	9.1	-	-	7.9	-	-	24.7	13.4
HCM Lane LOS	C	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.1	0.1	0.1	-	-	0	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	10.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	142	54	52	752	328	133
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	135	0	220	-	-	190
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	154	59	57	817	357	145

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1287	357	357	0	-	0
Stage 1	357	-	-	-	-	-
Stage 2	930	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	181	687	1202	-	-	-
Stage 1	708	-	-	-	-	-
Stage 2	384	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	172	687	1202	-	-	-
Mov Cap-2 Maneuver	172	-	-	-	-	-
Stage 1	708	-	-	-	-	-
Stage 2	366	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	73.7	0.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1202	-	172	687	-	-
HCM Lane V/C Ratio	0.047	-	0.897	0.085	-	-
HCM Control Delay (s)	8.1	-	97.6	10.7	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	6.6	0.3	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	19	293	792	38	17	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	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	341	921	44	20	50

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	965	0	-	0	1328	943
Stage 1	-	-	-	-	943	-
Stage 2	-	-	-	-	385	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	714	-	-	-	171	318
Stage 1	-	-	-	-	379	-
Stage 2	-	-	-	-	688	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	714	-	-	-	166	318
Mov Cap-2 Maneuver	-	-	-	-	166	-
Stage 1	-	-	-	-	379	-
Stage 2	-	-	-	-	667	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	24.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	714	-	-	-	252
HCM Lane V/C Ratio	0.031	-	-	-	0.277
HCM Control Delay (s)	10.2	-	-	-	24.7
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	190	212	571	301	191	322
Number	7	4	8	18	1	16
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	229	255	688	77	230	49
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	278	1214	768	653	284	253
Arrive On Green	0.16	0.65	0.41	0.41	0.16	0.16
Sat Flow, veh/h	1774	1863	1863	1583	1774	1583
Grp Volume(v), veh/h	229	255	688	77	230	49
Grp Sat Flow(s),veh/h/ln	1774	1863	1863	1583	1774	1583
Q Serve(g_s), s	7.6	3.3	20.8	1.8	7.6	1.6
Cycle Q Clear(g_c), s	7.6	3.3	20.8	1.8	7.6	1.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	278	1214	768	653	284	253
V/C Ratio(X)	0.82	0.21	0.90	0.12	0.81	0.19
Avail Cap(c_a), veh/h	439	1214	1055	897	419	374
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	24.7	4.3	16.6	11.0	24.5	22.0
Incr Delay (d2), s/veh	3.4	0.0	6.4	0.0	4.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	4.0	1.7	11.9	0.8	4.1	1.5
LnGrp Delay(d),s/veh	28.1	4.3	23.0	11.0	28.9	22.2
LnGrp LOS	C	A	C	B	C	C
Approach Vol, veh/h		484	765		279	
Approach Delay, s/veh		15.6	21.8		27.7	
Approach LOS		B	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				45.2		15.4	14.5	30.7
Change Period (Y+Rc), s				5.7		5.7	5.0	5.7
Max Green Setting (Gmax), s				34.3		14.3	15.0	34.3
Max Q Clear Time (g_c+I1), s				5.3		9.6	9.6	22.8
Green Ext Time (p_c), s				3.4		0.2	0.1	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	20.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	149	161	105	24	343	191	226	330	29	109	194	188
Number	3	8	18	7	4	14	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	1900
Adj Flow Rate, veh/h	167	181	97	27	385	197	254	371	5	122	218	175
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	0
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	326	210	113	420	275	141	284	633	538	151	254	204
Arrive On Green	0.18	0.18	0.18	0.24	0.24	0.24	0.16	0.34	0.34	0.08	0.26	0.26
Sat Flow, veh/h	1774	1142	612	1774	1163	595	1774	1863	1583	1774	958	769
Grp Volume(v), veh/h	167	0	278	27	0	582	254	371	5	122	0	393
Grp Sat Flow(s),veh/h/ln	1774	0	1755	1774	0	1758	1774	1863	1583	1774	0	1727
Q Serve(g_s), s	10.4	0.0	18.8	1.4	0.0	29.0	17.2	20.1	0.3	8.3	0.0	26.5
Cycle Q Clear(g_c), s	10.4	0.0	18.8	1.4	0.0	29.0	17.2	20.1	0.3	8.3	0.0	26.5
Prop In Lane	1.00		0.35	1.00		0.34	1.00		1.00	1.00		0.45
Lane Grp Cap(c), veh/h	326	0	323	420	0	416	284	633	538	151	0	457
V/C Ratio(X)	0.51	0.00	0.86	0.06	0.00	1.40	0.89	0.59	0.01	0.81	0.00	0.86
Avail Cap(c_a), veh/h	565	0	559	420	0	416	391	715	608	536	0	663
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	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.0	0.0	48.5	36.2	0.0	46.7	50.4	33.3	26.8	55.1	0.0	42.8
Incr Delay (d2), s/veh	1.2	0.0	6.7	0.1	0.0	193.4	17.7	1.0	0.0	9.9	0.0	7.7
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(-26165%),veh/ln	5.2	0.0	9.7	0.7	0.0	36.3	9.8	10.5	0.1	4.5	0.0	13.6
LnGrp Delay(d),s/veh	46.3	0.0	55.2	36.3	0.0	240.1	68.1	34.3	26.8	65.0	0.0	50.6
LnGrp LOS	D		E	D		F	E	C	C	E		D
Approach Vol, veh/h		445			609			630			515	
Approach Delay, s/veh		51.8			231.1			47.9			54.0	
Approach LOS		D			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	14.1	47.7		33.6	23.3	38.4		27.1
Change Period (Y+Rc), s	3.7	6.0		4.6	3.7	6.0		4.6
Max Green Setting (Gmax), s	37.0	47.0		29.0	27.0	47.0		39.0
Max Q Clear Time (g_c+I1), s	10.3	22.1		31.0	19.2	28.5		20.8
Green Ext Time (p_c), s	0.3	4.2		0.0	0.4	3.9		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	100.8
HCM 2010 LOS	F

Intersection	
Intersection Delay, s/veh	13.3
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	0	330	113	0	99	133	0	0	0	0	0
Peak Hour Factor	0.92	0.94	0.94	0.94	0.92	0.94	0.94	0.94	0.92	0.94	0.94	0.94
Heavy Vehicles, %	2	3	3	3	2	3	3	3	2	3	3	3
Mvmt Flow	0	0	351	120	0	105	141	0	0	0	0	0
Number of Lanes	0	0	1	1	0	1	1	0	0	0	1	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	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	2	2
HCM Control Delay	15.1	11.2	0
HCM LOS	C	B	-

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	100%	0%	0%	100%	0%	0%
Vol Right, %	0%	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	330	113	99	133	107	241
LT Vol	0	0	0	99	0	107	0
Through Vol	0	330	0	0	133	0	0
RT Vol	0	0	113	0	0	0	241
Lane Flow Rate	0	351	120	105	141	114	256
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0	0.589	0.178	0.199	0.248	0.22	0.41
Departure Headway (Hd)	7.21	6.038	5.328	6.815	6.306	6.966	5.752
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	597	673	527	569	516	626
Service Time	5.279	3.777	3.066	4.562	4.053	4.709	3.494
HCM Lane V/C Ratio	0	0.588	0.178	0.199	0.248	0.221	0.409
HCM Control Delay	10.3	17.1	9.2	11.3	11.1	11.7	12.5
HCM Lane LOS	N	C	A	B	B	B	B
HCM 95th-tile Q	0	3.8	0.6	0.7	1	0.8	2

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	107	0	241
Peak Hour Factor	0.92	0.94	0.94	0.94
Heavy Vehicles, %	2	3	3	3
Mvmt Flow	0	114	0	256
Number of Lanes	0	0	1	1

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	12.3
HCM LOS	B

Lane

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	237	200	72	182	50	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	350	315	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	239	202	73	184	51	30

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	239	0	568	239
Stage 1	-	-	-	-	239	-
Stage 2	-	-	-	-	329	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	0	1322	-	483	797
Stage 1	-	0	-	-	798	-
Stage 2	-	0	-	-	727	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	1322	-	456	797
Mov Cap-2 Maneuver	-	-	-	-	456	-
Stage 1	-	-	-	-	798	-
Stage 2	-	-	-	-	687	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.2	12.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	543	-	1322	-
HCM Lane V/C Ratio	0.149	-	0.055	-
HCM Control Delay (s)	12.8	-	7.9	-
HCM Lane LOS	B	-	A	-
HCM 95th %tile Q(veh)	0.5	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	41	1171	42	12	913	144	27	24	12	150	43	50
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	1845	1845	1900	1845	1845	1845	1900	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	46	1316	45	13	1026	0	30	27	0	169	48	25
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	1	1	0
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	109	2034	69	47	1938	867	71	64	118	211	138	72
Arrive On Green	0.06	0.59	0.59	0.03	0.55	0.00	0.08	0.08	0.00	0.12	0.12	0.12
Sat Flow, veh/h	1757	3458	118	1757	3505	1568	946	851	1568	1757	1144	596
Grp Volume(v), veh/h	46	666	695	13	1026	0	57	0	0	169	0	73
Grp Sat Flow(s),veh/h/ln	1757	1752	1824	1757	1752	1568	1797	0	1568	1757	0	1740
Q Serve(g_s), s	2.8	27.6	27.7	0.8	20.2	0.0	3.3	0.0	0.0	10.2	0.0	4.2
Cycle Q Clear(g_c), s	2.8	27.6	27.7	0.8	20.2	0.0	3.3	0.0	0.0	10.2	0.0	4.2
Prop In Lane	1.00		0.06	1.00		1.00	0.53		1.00	1.00		0.34
Lane Grp Cap(c), veh/h	109	1031	1073	47	1938	867	135	0	118	211	0	209
V/C Ratio(X)	0.42	0.65	0.65	0.28	0.53	0.00	0.42	0.00	0.00	0.80	0.00	0.35
Avail Cap(c_a), veh/h	354	1251	1302	354	2501	1119	460	0	402	643	0	637
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	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.4	15.0	15.0	52.1	15.4	0.0	48.3	0.0	0.0	46.8	0.0	44.1
Incr Delay (d2), s/veh	2.6	1.1	1.1	3.1	0.3	0.0	2.1	0.0	0.0	6.8	0.0	1.0
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(-26165%),veh/ln	1.4	13.6	14.2	0.4	9.8	0.0	1.7	0.0	0.0	5.4	0.0	2.1
LnGrp Delay(d),s/veh	52.0	16.1	16.1	55.2	15.8	0.0	50.3	0.0	0.0	53.6	0.0	45.1
LnGrp LOS	D	B	B	E	B		D			D		D
Approach Vol, veh/h		1407			1039			57			242	
Approach Delay, s/veh		17.2			16.3			50.3			51.1	
Approach LOS		B			B			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	6.6	70.7		13.5	10.5	66.8		18.4
Change Period (Y+Rc), s	3.7	6.4		5.3	3.7	6.4		5.3
Max Green Setting (Gmax), s	22.0	78.0		28.0	22.0	78.0		40.0
Max Q Clear Time (g_c+I1), s	2.8	29.7		5.3	4.8	22.2		12.2
Green Ext Time (p_c), s	0.0	34.6		0.2	0.1	38.2		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	20.5
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	15	1326	0	0	1128	8	0	0	0	3	0	14
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	140	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	99	99	99	99	99	99	99	99	99	99	99	99
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	15	1339	0	0	1139	8	0	0	0	3	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1147	0	0	1339	0	0	2521	2517	1339	2513	2513	1143
Stage 1	-	-	-	-	-	-	1370	1370	-	1143	1143	-
Stage 2	-	-	-	-	-	-	1151	1147	-	1370	1370	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	605	-	-	512	-	-	19	28	186	19	28	242
Stage 1	-	-	-	-	-	-	180	213	-	242	274	-
Stage 2	-	-	-	-	-	-	240	272	-	180	213	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	605	-	-	512	-	-	18	27	186	19	27	242
Mov Cap-2 Maneuver	-	-	-	-	-	-	18	27	-	19	27	-
Stage 1	-	-	-	-	-	-	176	208	-	236	274	-
Stage 2	-	-	-	-	-	-	226	272	-	176	208	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	0	62.8
HCM LOS			A	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	605	-	-	512	-	-	79
HCM Lane V/C Ratio	-	0.025	-	-	-	-	-	0.217
HCM Control Delay (s)	0	11.1	-	-	0	-	-	62.8
HCM Lane LOS	A	B	-	-	A	-	-	F
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	696	745	104	604	10	586	12	146	102	60	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	1845	1845	1845	1845	1845	1900	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	2	733	339	109	636	10	617	13	65	107	63	0
Adj No. of Lanes	1	1	1	1	1	0	0	1	1	0	1	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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	7	835	710	130	948	15	406	9	369	124	73	173
Arrive On Green	0.00	0.45	0.45	0.07	0.52	0.52	0.24	0.24	0.24	0.11	0.11	0.00
Sat Flow, veh/h	1757	1845	1568	1757	1811	28	1722	36	1568	1126	663	1568
Grp Volume(v), veh/h	2	733	339	109	0	646	630	0	65	170	0	0
Grp Sat Flow(s),veh/h/ln	1757	1845	1568	1757	0	1840	1759	0	1568	1788	0	1568
Q Serve(g_s), s	0.2	56.7	23.7	9.6	0.0	40.5	37.0	0.0	5.2	14.7	0.0	0.0
Cycle Q Clear(g_c), s	0.2	56.7	23.7	9.6	0.0	40.5	37.0	0.0	5.2	14.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.02	0.98		1.00	0.63		1.00
Lane Grp Cap(c), veh/h	7	835	710	130	0	962	414	0	369	197	0	173
V/C Ratio(X)	0.31	0.88	0.48	0.84	0.00	0.67	1.52	0.00	0.18	0.86	0.00	0.00
Avail Cap(c_a), veh/h	268	963	818	212	0	962	414	0	369	387	0	339
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	78.1	39.0	30.0	71.8	0.0	27.5	60.0	0.0	47.9	68.7	0.0	0.0
Incr Delay (d2), s/veh	24.3	8.6	0.6	14.1	0.0	1.9	246.6	0.0	0.2	10.5	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(-26165%),veh/ln	0.1	30.9	10.4	5.2	0.0	21.2	46.3	0.0	2.3	7.8	0.0	0.0
LnGrp Delay(d),s/veh	102.3	47.7	30.6	85.9	0.0	29.5	306.6	0.0	48.1	79.2	0.0	0.0
LnGrp LOS	F	D	C	F		C	F		D	E		
Approach Vol, veh/h		1074			755			695			170	
Approach Delay, s/veh		42.4			37.6			282.4			79.2	
Approach LOS		D			D			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.3	77.5		21.9	4.3	88.6		42.3
Change Period (Y+Rc), s	3.7	6.4		4.6	3.7	6.4		5.3
Max Green Setting (Gmax), s	19.0	82.0		34.0	24.0	82.0		37.0
Max Q Clear Time (g_c+I1), s	11.6	58.7		16.7	2.2	42.5		39.0
Green Ext Time (p_c), s	0.1	12.4		0.7	0.0	16.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	105.3
HCM 2010 LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	396	39	358	0	68	322
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	1845	1845	1845	0	1845	1845
Adj Flow Rate, veh/h	450	0	407	0	77	366
Adj No. of Lanes	2	1	1	0	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	0	3	3
Cap, veh/h	652	300	729	0	141	1054
Arrive On Green	0.19	0.00	0.40	0.00	0.08	0.57
Sat Flow, veh/h	3408	1568	1845	0	1757	1845
Grp Volume(v), veh/h	450	0	407	0	77	366
Grp Sat Flow(s),veh/h/ln	1704	1568	1845	0	1757	1845
Q Serve(g_s), s	5.9	0.0	8.2	0.0	2.0	5.1
Cycle Q Clear(g_c), s	5.9	0.0	8.2	0.0	2.0	5.1
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	652	300	729	0	141	1054
V/C Ratio(X)	0.69	0.00	0.56	0.00	0.55	0.35
Avail Cap(c_a), veh/h	1561	718	2574	0	439	2574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	18.1	0.0	11.3	0.0	21.2	5.5
Incr Delay (d2), s/veh	1.3	0.0	1.2	0.0	3.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	2.9	0.0	4.4	0.0	1.1	2.6
LnGrp Delay(d),s/veh	19.4	0.0	12.4	0.0	24.5	5.8
LnGrp LOS	B		B		C	A
Approach Vol, veh/h	450		407			443
Approach Delay, s/veh	19.4		12.4			9.1
Approach LOS	B		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.5	25.8				34.2		13.8
Change Period (Y+Rc), s	4.6	6.8				6.8		4.6
Max Green Setting (Gmax), s	12.0	67.0				67.0		22.0
Max Q Clear Time (g_c+I1), s	4.0	10.2				7.1		7.9
Green Ext Time (p_c), s	0.1	8.8				8.8		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	13.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	10	641	4	16	418	2	4	1	20	3	1	13
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	225	-	-	195	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	12	772	5	19	504	2	5	1	24	4	1	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	506	0	0	777	0	0	1343	1344	775	1342	1344	505
Stage 1	-	-	-	-	-	-	799	799	-	543	543	-
Stage 2	-	-	-	-	-	-	544	545	-	799	801	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1054	-	-	835	-	-	128	151	396	129	151	565
Stage 1	-	-	-	-	-	-	378	396	-	522	518	-
Stage 2	-	-	-	-	-	-	521	517	-	378	395	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1054	-	-	835	-	-	120	146	396	117	146	565
Mov Cap-2 Maneuver	-	-	-	-	-	-	120	146	-	117	146	-
Stage 1	-	-	-	-	-	-	374	391	-	516	506	-
Stage 2	-	-	-	-	-	-	494	505	-	350	391	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	18.9	17.2
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	124	396	1054	-	-	835	-	-	123	565
HCM Lane V/C Ratio	0.049	0.061	0.011	-	-	0.023	-	-	0.039	0.028
HCM Control Delay (s)	35.5	14.7	8.5	-	-	9.4	-	-	35.5	11.6
HCM Lane LOS	E	B	A	-	-	A	-	-	E	B
HCM 95th %tile Q(veh)	0.2	0.2	0	-	-	0.1	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	92.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	255	95	82	489	710	198
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	135	0	220	-	-	190
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	277	103	89	532	772	215

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1482	772	772	0	-	0
Stage 1	772	-	-	-	-	-
Stage 2	710	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	~ 137	398	839	-	-	-
Stage 1	454	-	-	-	-	-
Stage 2	485	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 122	398	839	-	-	-
Mov Cap-2 Maneuver	~ 122	-	-	-	-	-
Stage 1	454	-	-	-	-	-
Stage 2	434	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 482.2	1.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	839	-	122	398	-	-
HCM Lane V/C Ratio	0.106	-	2.272	0.259	-	-
HCM Control Delay (s)	9.8	-	$ 655.5	17.2	-	-
HCM Lane LOS	A	-	F	C	-	-
HCM 95th %tile Q(veh)	0.4	-	23.8	1	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	29	838	486	16	15	20
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	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	882	512	17	16	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	528	0	-	0	1463	520
Stage 1	-	-	-	-	520	-
Stage 2	-	-	-	-	943	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1039	-	-	-	142	556
Stage 1	-	-	-	-	597	-
Stage 2	-	-	-	-	379	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1039	-	-	-	138	556
Mov Cap-2 Maneuver	-	-	-	-	138	-
Stage 1	-	-	-	-	597	-
Stage 2	-	-	-	-	368	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	22.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1039	-	-	-	242
HCM Lane V/C Ratio	0.029	-	-	-	0.152
HCM Control Delay (s)	8.6	-	-	-	22.5
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	369	586	336	107	173	258
Number	7	4	8	18	1	16
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	397	630	361	0	186	34
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	455	1183	520	442	245	218
Arrive On Green	0.26	0.64	0.28	0.00	0.14	0.14
Sat Flow, veh/h	1774	1863	1863	1583	1774	1583
Grp Volume(v), veh/h	397	630	361	0	186	34
Grp Sat Flow(s),veh/h/ln	1774	1863	1863	1583	1774	1583
Q Serve(g_s), s	10.8	9.4	8.7	0.0	5.1	1.0
Cycle Q Clear(g_c), s	10.8	9.4	8.7	0.0	5.1	1.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	455	1183	520	442	245	218
V/C Ratio(X)	0.87	0.53	0.69	0.00	0.76	0.16
Avail Cap(c_a), veh/h	530	1272	1272	1081	505	451
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	17.9	5.1	16.2	0.0	20.8	19.1
Incr Delay (d2), s/veh	12.1	0.1	0.6	0.0	1.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	6.7	4.8	4.5	0.0	2.6	0.9
LnGrp Delay(d),s/veh	30.0	5.2	16.8	0.0	22.7	19.2
LnGrp LOS	C	A	B		C	B
Approach Vol, veh/h		1027	361		220	
Approach Delay, s/veh		14.8	16.8		22.1	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				37.6		12.6	17.9	19.7
Change Period (Y+Rc), s				5.7		5.7	5.0	5.7
Max Green Setting (Gmax), s				34.3		14.3	15.0	34.3
Max Q Clear Time (g_c+I1), s				11.4		7.1	12.8	10.7
Green Ext Time (p_c), s				3.3		0.2	0.2	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	16.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	211	258	188	31	119	108	150	307	27	221	399	177
Number	3	8	18	7	4	14	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	1900
Adj Flow Rate, veh/h	222	272	176	33	125	82	158	323	2	233	420	170
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	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	485	289	187	245	145	95	185	561	477	262	435	176
Arrive On Green	0.27	0.27	0.27	0.14	0.14	0.14	0.10	0.30	0.30	0.15	0.34	0.34
Sat Flow, veh/h	1774	1058	684	1774	1051	690	1774	1863	1583	1774	1262	511
Grp Volume(v), veh/h	222	0	448	33	0	207	158	323	2	233	0	590
Grp Sat Flow(s),veh/h/ln	1774	0	1742	1774	0	1741	1774	1863	1583	1774	0	1773
Q Serve(g_s), s	14.1	0.0	34.1	2.2	0.0	15.8	11.9	19.9	0.1	17.5	0.0	44.3
Cycle Q Clear(g_c), s	14.1	0.0	34.1	2.2	0.0	15.8	11.9	19.9	0.1	17.5	0.0	44.3
Prop In Lane	1.00		0.39	1.00		0.40	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	485	0	476	245	0	241	185	561	477	262	0	611
V/C Ratio(X)	0.46	0.00	0.94	0.13	0.00	0.86	0.85	0.58	0.00	0.89	0.00	0.97
Avail Cap(c_a), veh/h	511	0	502	380	0	373	354	646	549	485	0	615
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	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.9	0.0	48.1	51.2	0.0	57.1	59.6	40.0	33.1	56.6	0.0	43.6
Incr Delay (d2), s/veh	0.7	0.0	25.5	0.2	0.0	11.7	10.6	0.9	0.0	10.0	0.0	27.8
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(-26165%),veh/ln	7.0	0.0	19.8	1.1	0.0	8.4	6.4	10.4	0.1	9.3	0.0	26.3
LnGrp Delay(d),s/veh	41.5	0.0	73.7	51.5	0.0	68.8	70.3	40.9	33.1	66.6	0.0	71.4
LnGrp LOS	D		E	D		E	E	D	C	E		E
Approach Vol, veh/h		670			240			483			823	
Approach Delay, s/veh		63.0			66.4			50.5			70.0	
Approach LOS		E			E			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	23.7	46.8		23.3	17.8	52.7		41.6
Change Period (Y+Rc), s	3.7	6.0		4.6	3.7	6.0		4.6
Max Green Setting (Gmax), s	37.0	47.0		29.0	27.0	47.0		39.0
Max Q Clear Time (g_c+I1), s	19.5	21.9		17.8	13.9	46.3		36.1
Green Ext Time (p_c), s	0.5	5.4		1.0	0.3	0.4		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	63.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	378	341	102	806	24	810	9	75	36	19	2
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	1810	1810	1810	1810	1810	1900	1810	1810	1900	1900	1810	1810
Adj Flow Rate, veh/h	1	386	36	104	822	23	827	9	0	37	19	0
Adj No. of Lanes	1	1	1	1	1	0	2	1	0	0	1	1
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	3	814	692	128	915	26	897	486	0	55	28	74
Arrive On Green	0.00	0.45	0.45	0.07	0.52	0.52	0.27	0.27	0.00	0.05	0.05	0.00
Sat Flow, veh/h	1723	1810	1538	1723	1752	49	3343	1810	0	1157	594	1538
Grp Volume(v), veh/h	1	386	36	104	0	845	827	9	0	56	0	0
Grp Sat Flow(s),veh/h/ln	1723	1810	1538	1723	0	1801	1672	1810	0	1752	0	1538
Q Serve(g_s), s	0.1	18.7	1.7	7.5	0.0	53.0	30.2	0.5	0.0	3.9	0.0	0.0
Cycle Q Clear(g_c), s	0.1	18.7	1.7	7.5	0.0	53.0	30.2	0.5	0.0	3.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.03	1.00		0.00	0.66		1.00
Lane Grp Cap(c), veh/h	3	814	692	128	0	941	897	486	0	84	0	74
V/C Ratio(X)	0.30	0.47	0.05	0.81	0.00	0.90	0.92	0.02	0.00	0.67	0.00	0.00
Avail Cap(c_a), veh/h	330	1182	1005	261	0	1177	986	533	0	475	0	417
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	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	62.5	24.1	19.4	57.2	0.0	27.0	44.6	33.8	0.0	58.8	0.0	0.0
Incr Delay (d2), s/veh	45.0	0.5	0.0	11.5	0.0	8.3	12.9	0.0	0.0	8.8	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(-26165%),veh/ln	0.1	9.4	0.7	4.0	0.0	28.5	15.5	0.2	0.0	2.1	0.0	0.0
LnGrp Delay(d),s/veh	107.6	24.7	19.5	68.7	0.0	35.3	57.5	33.8	0.0	67.6	0.0	0.0
LnGrp LOS	F	C	B	E		D	E	C		E		
Approach Vol, veh/h		423			949			836			56	
Approach Delay, s/veh		24.4			38.9			57.3			67.6	
Approach LOS		C			D			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	13.0	62.9		10.6	3.9	72.0		39.0
Change Period (Y+Rc), s	3.7	6.4		4.6	3.7	6.4		5.3
Max Green Setting (Gmax), s	19.0	82.0		34.0	24.0	82.0		37.0
Max Q Clear Time (g_c+I1), s	9.5	20.7		5.9	2.1	55.0		32.2
Green Ext Time (p_c), s	0.1	13.0		0.2	0.0	10.6		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	43.7
HCM 2010 LOS	D

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	142	54	52	752	328	133
Number	7	14	5	2	6	16
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	154	0	57	817	357	0
Adj No. of Lanes	1	1	1	1	1	1
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	208	186	88	1182	859	730
Arrive On Green	0.12	0.00	0.05	0.63	0.46	0.00
Sat Flow, veh/h	1774	1583	1774	1863	1863	1583
Grp Volume(v), veh/h	154	0	57	817	357	0
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1863	1863	1583
Q Serve(g_s), s	2.7	0.0	1.0	9.2	4.1	0.0
Cycle Q Clear(g_c), s	2.7	0.0	1.0	9.2	4.1	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	208	186	88	1182	859	730
V/C Ratio(X)	0.74	0.00	0.65	0.69	0.42	0.00
Avail Cap(c_a), veh/h	1100	981	220	3579	3579	3043
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	13.8	0.0	15.1	3.8	5.8	0.0
Incr Delay (d2), s/veh	5.1	0.0	7.8	0.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	1.6	0.0	0.7	4.8	2.2	0.0
LnGrp Delay(d),s/veh	18.9	0.0	22.8	4.6	6.1	0.0
LnGrp LOS	B		C	A	A	
Approach Vol, veh/h	154			874	357	
Approach Delay, s/veh	18.9			5.8	6.1	
Approach LOS	B			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		24.5		7.8	5.6	18.9		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		62.0		20.0	4.0	62.0		
Max Q Clear Time (g_c+I1), s		11.2		4.7	3.0	6.1		
Green Ext Time (p_c), s		8.7		0.3	0.0	8.8		

Intersection Summary	
HCM 2010 Ctrl Delay	7.3
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	149	161	105	24	343	191	226	330	29	109	194	188
Number	3	8	18	7	4	14	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	1900
Adj Flow Rate, veh/h	167	181	15	27	385	197	254	371	5	122	218	175
Adj No. of Lanes	1	2	0	1	1	0	1	1	1	1	1	0
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	217	405	33	477	312	160	289	648	551	153	260	209
Arrive On Green	0.12	0.12	0.12	0.27	0.27	0.27	0.16	0.35	0.35	0.09	0.27	0.27
Sat Flow, veh/h	1774	3312	272	1774	1163	595	1774	1863	1583	1774	958	769
Grp Volume(v), veh/h	167	96	100	27	0	582	254	371	5	122	0	393
Grp Sat Flow(s),veh/h/ln	1774	1770	1815	1774	0	1758	1774	1863	1583	1774	0	1727
Q Serve(g_s), s	9.8	5.4	5.5	1.2	0.0	29.0	15.1	17.5	0.2	7.3	0.0	23.2
Cycle Q Clear(g_c), s	9.8	5.4	5.5	1.2	0.0	29.0	15.1	17.5	0.2	7.3	0.0	23.2
Prop In Lane	1.00		0.15	1.00		0.34	1.00		1.00	1.00		0.45
Lane Grp Cap(c), veh/h	217	216	222	477	0	472	289	648	551	153	0	469
V/C Ratio(X)	0.77	0.44	0.45	0.06	0.00	1.23	0.88	0.57	0.01	0.80	0.00	0.84
Avail Cap(c_a), veh/h	641	639	656	477	0	472	444	811	689	608	0	752
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.9	44.0	44.0	29.3	0.0	39.5	44.2	28.7	23.0	48.4	0.0	37.1
Incr Delay (d2), s/veh	5.7	1.4	1.4	0.0	0.0	122.0	12.3	0.8	0.0	9.0	0.0	4.7
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(-26165%),veh/ln	5.2	2.8	2.9	0.6	0.0	30.0	8.4	9.1	0.1	3.9	0.0	11.6
LnGrp Delay(d),s/veh	51.6	45.4	45.5	29.4	0.0	161.4	56.4	29.5	23.0	57.4	0.0	41.8
LnGrp LOS	D	D	D	C		F	E	C	C	E		D
Approach Vol, veh/h		363			609			630			515	
Approach Delay, s/veh		48.3			155.6			40.3			45.5	
Approach LOS		D			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	13.0	43.5		33.6	21.3	35.3		17.8
Change Period (Y+Rc), s	3.7	6.0		4.6	3.7	6.0		4.6
Max Green Setting (Gmax), s	37.0	47.0		29.0	27.0	47.0		39.0
Max Q Clear Time (g_c+I1), s	11.3	19.5		31.0	17.1	25.2		11.8
Green Ext Time (p_c), s	0.3	4.3		0.0	0.5	4.1		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	76.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	696	745	104	604	10	586	12	146	102	60	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	1845	1845	1845	1845	1845	1900	1845	1845	1900	1900	1845	1845
Adj Flow Rate, veh/h	2	733	339	109	636	10	617	13	0	107	63	0
Adj No. of Lanes	1	1	1	1	1	0	2	1	0	0	1	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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	7	863	734	132	977	15	691	374	0	126	74	176
Arrive On Green	0.00	0.47	0.47	0.08	0.54	0.54	0.20	0.20	0.00	0.11	0.11	0.00
Sat Flow, veh/h	1757	1845	1568	1757	1811	28	3408	1845	0	1126	663	1568
Grp Volume(v), veh/h	2	733	339	109	0	646	617	13	0	170	0	0
Grp Sat Flow(s),veh/h/ln	1757	1845	1568	1757	0	1840	1704	1845	0	1788	0	1568
Q Serve(g_s), s	0.2	49.4	20.7	8.6	0.0	35.1	24.8	0.8	0.0	13.1	0.0	0.0
Cycle Q Clear(g_c), s	0.2	49.4	20.7	8.6	0.0	35.1	24.8	0.8	0.0	13.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.02	1.00		0.00	0.63		1.00
Lane Grp Cap(c), veh/h	7	863	734	132	0	992	691	374	0	201	0	176
V/C Ratio(X)	0.30	0.85	0.46	0.82	0.00	0.65	0.89	0.03	0.00	0.85	0.00	0.00
Avail Cap(c_a), veh/h	300	1075	914	237	0	1072	896	485	0	432	0	379
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	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	69.9	33.1	25.4	64.2	0.0	23.0	54.6	45.1	0.0	61.3	0.0	0.0
Incr Delay (d2), s/veh	24.0	5.7	0.5	12.0	0.0	1.4	9.4	0.0	0.0	9.5	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(-26165%),veh/ln	0.1	26.4	9.1	4.6	0.0	18.1	12.6	0.4	0.0	7.0	0.0	0.0
LnGrp Delay(d),s/veh	94.0	38.8	26.0	76.2	0.0	24.4	64.0	45.1	0.0	70.8	0.0	0.0
LnGrp LOS	F	D	C	E		C	E	D		E		
Approach Vol, veh/h		1074			755			630			170	
Approach Delay, s/veh		34.9			31.9			63.6			70.8	
Approach LOS		C			C			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	14.3	72.2		20.4	4.2	82.3		33.8
Change Period (Y+Rc), s	3.7	6.4		4.6	3.7	6.4		5.3
Max Green Setting (Gmax), s	19.0	82.0		34.0	24.0	82.0		37.0
Max Q Clear Time (g_c+I1), s	10.6	51.4		15.1	2.2	37.1		26.8
Green Ext Time (p_c), s	0.1	14.5		0.7	0.0	16.8		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	43.2
HCM 2010 LOS	D

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	255	95	82	489	710	198
Number	7	14	5	2	6	16
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	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	277	0	89	532	772	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	344	307	113	1228	982	834
Arrive On Green	0.20	0.00	0.06	0.67	0.53	0.00
Sat Flow, veh/h	1757	1568	1757	1845	1845	1568
Grp Volume(v), veh/h	277	0	89	532	772	0
Grp Sat Flow(s),veh/h/ln	1757	1568	1757	1845	1845	1568
Q Serve(g_s), s	8.7	0.0	2.9	7.8	19.4	0.0
Cycle Q Clear(g_c), s	8.7	0.0	2.9	7.8	19.4	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	344	307	113	1228	982	834
V/C Ratio(X)	0.81	0.00	0.79	0.43	0.79	0.00
Avail Cap(c_a), veh/h	821	733	122	1757	1757	1493
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	22.2	0.0	26.6	4.5	10.9	0.0
Incr Delay (d2), s/veh	4.5	0.0	26.8	0.2	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	4.7	0.0	2.2	3.9	10.0	0.0
LnGrp Delay(d),s/veh	26.6	0.0	53.4	4.8	12.3	0.0
LnGrp LOS	C		D	A	B	
Approach Vol, veh/h	277			621	772	
Approach Delay, s/veh	26.6			11.7	12.3	
Approach LOS	C			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		42.4		15.3	7.7	34.7		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		55.0		27.0	4.0	55.0		
Max Q Clear Time (g_c+I1), s		9.8		10.7	4.9	21.4		
Green Ext Time (p_c), s		9.8		0.7	0.0	9.3		

Intersection Summary	
HCM 2010 Ctrl Delay	14.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	211	258	188	31	119	108	150	307	27	221	399	177
Number	3	8	18	7	4	14	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	1863	1863	1863	1900
Adj Flow Rate, veh/h	222	272	31	33	125	82	158	323	2	233	420	170
Adj No. of Lanes	1	1	1	1	1	0	1	1	1	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	320	336	285	256	152	100	194	617	524	273	474	192
Arrive On Green	0.18	0.18	0.18	0.14	0.14	0.14	0.11	0.33	0.33	0.15	0.38	0.38
Sat Flow, veh/h	1774	1863	1583	1774	1051	690	1774	1863	1583	1774	1262	511
Grp Volume(v), veh/h	222	272	31	33	0	207	158	323	2	233	0	590
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	0	1741	1774	1863	1583	1774	0	1773
Q Serve(g_s), s	11.6	13.9	1.6	1.6	0.0	11.5	8.7	13.9	0.1	12.7	0.0	30.9
Cycle Q Clear(g_c), s	11.6	13.9	1.6	1.6	0.0	11.5	8.7	13.9	0.1	12.7	0.0	30.9
Prop In Lane	1.00		1.00	1.00		0.40	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	320	336	285	256	0	252	194	617	524	273	0	666
V/C Ratio(X)	0.69	0.81	0.11	0.13	0.00	0.82	0.82	0.52	0.00	0.85	0.00	0.89
Avail Cap(c_a), veh/h	696	731	622	518	0	508	482	881	749	661	0	839
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.1	39.1	34.0	37.0	0.0	41.3	43.3	26.9	22.3	41.0	0.0	29.0
Incr Delay (d2), s/veh	2.7	4.7	0.2	0.2	0.0	6.6	8.1	0.7	0.0	7.5	0.0	9.5
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(-26165%),veh/ln	6.0	7.6	0.7	0.8	0.0	6.0	4.7	7.3	0.0	6.8	0.0	16.8
LnGrp Delay(d),s/veh	40.9	43.8	34.2	37.3	0.0	47.9	51.4	27.6	22.3	48.5	0.0	38.5
LnGrp LOS	D	D	C	D		D	D	C	C	D		D
Approach Vol, veh/h		525			240			483			823	
Approach Delay, s/veh		42.0			46.4			35.3			41.3	
Approach LOS		D			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	19.0	38.9		19.0	14.5	43.3		22.5
Change Period (Y+Rc), s	3.7	6.0		4.6	3.7	6.0		4.6
Max Green Setting (Gmax), s	37.0	47.0		29.0	27.0	47.0		39.0
Max Q Clear Time (g_c+I1), s	14.7	15.9		13.5	10.7	32.9		15.9
Green Ext Time (p_c), s	0.6	5.6		0.9	0.3	4.4		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.7
HCM 2010 LOS	D

Intersection	
Intersection Delay, s/veh	34
Intersection LOS	D

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	0	482	116	0	56	198	0	0	0	0	0
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	5	5	5	2	5	5	5	2	5	5	5
Mvmt Flow	0	0	574	138	0	67	236	0	0	0	0	0
Number of Lanes	0	0	1	1	0	1	1	0	0	0	1	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	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	2	2
HCM Control Delay	52.7	14.3	0
HCM LOS	F	B	-

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	100%	0%	0%	100%	0%	0%
Vol Right, %	0%	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	482	116	56	198	85	239
LT Vol	0	0	0	56	0	85	0
Through Vol	0	482	0	0	198	0	0
RT Vol	0	0	116	0	0	0	239
Lane Flow Rate	0	574	138	67	236	101	285
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0	1	0.217	0.138	0.453	0.218	0.518
Departure Headway (Hd)	8.352	6.371	5.659	7.425	6.913	7.771	6.548
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	568	630	489	528	468	555
Service Time	6.299	4.143	3.43	5.08	4.579	5.43	4.233
HCM Lane V/C Ratio	0	1.011	0.219	0.137	0.447	0.216	0.514
HCM Control Delay	11.3	63	10	11.3	15.1	12.6	16
HCM Lane LOS	N	F	A	B	C	B	C
HCM 95th-tile Q	0	14.5	0.8	0.5	2.3	0.8	3

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	85	0	239
Peak Hour Factor	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	5	5	5
Mvmt Flow	0	101	0	285
Number of Lanes	0	0	1	1

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	15.1
HCM LOS	C

Lane

Intersection	
Int Delay, s/veh	10.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	201	366	99	137	117	172
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	350	315	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	251	458	124	171	146	215

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	251	0	670	251
Stage 1	-	-	-	-	251	-
Stage 2	-	-	-	-	419	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	0	1297	-	418	780
Stage 1	-	0	-	-	784	-
Stage 2	-	0	-	-	657	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	1297	-	378	780
Mov Cap-2 Maneuver	-	-	-	-	378	-
Stage 1	-	-	-	-	784	-
Stage 2	-	-	-	-	594	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.4	23.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	545	-	1297	-
HCM Lane V/C Ratio	0.663	-	0.095	-
HCM Control Delay (s)	23.6	-	8.1	-
HCM Lane LOS	C	-	A	-
HCM 95th %tile Q(veh)	4.9	-	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	62	687	40	8	1436	199	81	67	27	126	44	111
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	1810	1810	1900	1810	1810	1810	1900	1810	1810	1810	1810	1900
Adj Flow Rate, veh/h	65	723	38	8	1512	46	85	71	0	133	46	51
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	112	2022	106	30	1929	863	103	86	165	171	78	86
Arrive On Green	0.06	0.61	0.61	0.02	0.56	0.56	0.11	0.11	0.00	0.10	0.10	0.10
Sat Flow, veh/h	1723	3323	175	1723	3438	1538	960	802	1538	1723	785	871
Grp Volume(v), veh/h	65	374	387	8	1512	46	156	0	0	133	0	97
Grp Sat Flow(s),veh/h/ln	1723	1719	1779	1723	1719	1538	1762	0	1538	1723	0	1656
Q Serve(g_s), s	4.5	13.5	13.5	0.6	42.7	1.7	10.7	0.0	0.0	9.3	0.0	6.9
Cycle Q Clear(g_c), s	4.5	13.5	13.5	0.6	42.7	1.7	10.7	0.0	0.0	9.3	0.0	6.9
Prop In Lane	1.00		0.10	1.00		1.00	0.54		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	112	1046	1082	30	1929	863	189	0	165	171	0	165
V/C Ratio(X)	0.58	0.36	0.36	0.27	0.78	0.05	0.82	0.00	0.00	0.78	0.00	0.59
Avail Cap(c_a), veh/h	306	1063	1100	306	2125	951	365	0	319	556	0	535
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	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.3	12.1	12.1	60.1	21.3	12.3	54.1	0.0	0.0	54.5	0.0	53.4
Incr Delay (d2), s/veh	4.7	0.3	0.3	4.6	2.0	0.0	8.6	0.0	0.0	7.4	0.0	3.3
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(-26165%),veh/ln	2.3	6.4	6.6	0.3	20.7	0.7	5.7	0.0	0.0	4.8	0.0	3.3
LnGrp Delay(d),s/veh	61.0	12.4	12.4	64.7	23.3	12.3	62.8	0.0	0.0	61.8	0.0	56.7
LnGrp LOS	E	B	B	E	C	B	E			E		E
Approach Vol, veh/h		826			1566			156			230	
Approach Delay, s/veh		16.2			23.2			62.8			59.7	
Approach LOS		B			C			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	5.9	81.8		18.6	11.7	75.9		17.6
Change Period (Y+Rc), s	3.7	6.4		5.3	3.7	6.4		5.3
Max Green Setting (Gmax), s	22.0	76.6		25.7	22.0	76.6		40.0
Max Q Clear Time (g_c+I1), s	2.6	15.5		12.7	6.5	44.7		11.3
Green Ext Time (p_c), s	0.0	39.6		0.6	0.1	24.8		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	26.4
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	33.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	8	798	5	9	1862	134	4	2	7	51	16	16
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	100	-	150	125	-	-	125	-	-
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	8	831	5	9	1940	140	4	2	7	53	17	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1940	0	0	831	0	0	1845	2806	416	2391	2806	970
Stage 1	-	-	-	-	-	-	848	848	-	1958	1958	-
Stage 2	-	-	-	-	-	-	997	1958	-	433	848	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.6	6.6	7	7.6	6.6	7
Critical Hdwy Stg 1	-	-	-	-	-	-	6.6	5.6	-	6.6	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.6	5.6	-	6.6	5.6	-
Follow-up Hdwy	2.25	-	-	2.25	-	-	3.55	4.05	3.35	3.55	4.05	3.35
Pot Cap-1 Maneuver	287	-	-	778	-	-	45	17	577	~ 17	17	247
Stage 1	-	-	-	-	-	-	316	369	-	63	105	-
Stage 2	-	-	-	-	-	-	256	105	-	563	369	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	287	-	-	778	-	-	-	16	577	~ 15	~ 16	247
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	16	-	~ 15	~ 16	-
Stage 1	-	-	-	-	-	-	307	359	-	61	104	-
Stage 2	-	-	-	-	-	-	198	104	-	537	359	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0		$ 1172.3
HCM LOS			-	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	66	287	-	-	778	-	-	15	30
HCM Lane V/C Ratio	-	0.142	0.029	-	-	0.012	-	-	3.542	1.111
HCM Control Delay (s)	-	68.4	17.9	-	-	9.7	-	-	$ 1659.2	$ 396.2
HCM Lane LOS	-	F	C	-	-	A	-	-	F	F
HCM 95th %tile Q(veh)	-	0.5	0.1	-	-	0	-	-	7.4	3.8

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	515	281	67	1050	36	796	14	21	55	29	3
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	1810	1810	1810	1810	1810	1810	1810	1810	1900	1810	1810	1900
Adj Flow Rate, veh/h	2	526	0	68	1071	0	812	14	0	56	30	1
Adj No. of Lanes	1	2	1	1	2	1	2	1	0	1	1	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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	7	1355	606	101	1543	690	938	513	0	118	112	4
Arrive On Green	0.00	0.39	0.00	0.06	0.45	0.00	0.28	0.28	0.00	0.07	0.06	0.06
Sat Flow, veh/h	1723	3438	1538	1723	3438	1538	3343	1810	0	1723	1741	58
Grp Volume(v), veh/h	2	526	0	68	1071	0	812	14	0	56	0	31
Grp Sat Flow(s),veh/h/ln	1723	1719	1538	1723	1719	1538	1672	1810	0	1723	0	1799
Q Serve(g_s), s	0.1	11.2	0.0	4.0	25.5	0.0	23.6	0.6	0.0	3.2	0.0	1.7
Cycle Q Clear(g_c), s	0.1	11.2	0.0	4.0	25.5	0.0	23.6	0.6	0.0	3.2	0.0	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		0.03
Lane Grp Cap(c), veh/h	7	1355	606	101	1543	690	938	513	0	118	0	116
V/C Ratio(X)	0.31	0.39	0.00	0.67	0.69	0.00	0.87	0.03	0.00	0.47	0.00	0.27
Avail Cap(c_a), veh/h	123	2911	1302	157	2979	1333	1984	1074	0	344	0	359
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	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	50.8	22.2	0.0	47.2	22.6	0.0	35.0	26.5	0.0	45.9	0.0	45.5
Incr Delay (d2), s/veh	24.5	0.2	0.0	7.6	0.7	0.0	2.6	0.0	0.0	2.9	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(-26165%),veh/ln	0.1	5.4	0.0	2.1	12.2	0.0	11.2	0.3	0.0	1.6	0.0	0.9
LnGrp Delay(d),s/veh	75.3	22.4	0.0	54.8	23.3	0.0	37.5	26.5	0.0	48.8	0.0	46.7
LnGrp LOS	E	C		D	C		D	C		D		D
Approach Vol, veh/h		528			1139			826			87	
Approach Delay, s/veh		22.6			25.1			37.4			48.1	
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	9.7	46.7	34.0	11.9	4.1	52.3	11.6	34.3
Change Period (Y+Rc), s	3.7	6.4	5.3	* 5.3	3.7	6.4	4.6	5.3
Max Green Setting (Gmax), s	9.3	86.6	60.7	* 20	7.3	88.6	20.4	60.7
Max Q Clear Time (g_c+I1), s	6.0	13.2	25.6	3.7	2.1	27.5	5.2	2.6
Green Ext Time (p_c), s	0.0	19.0	3.1	0.1	0.0	18.4	0.1	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	29.3
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	640	93	310	0	33	514
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	1810	1810	1810	0	1810	1810
Adj Flow Rate, veh/h	667	0	323	0	34	535
Adj No. of Lanes	2	1	2	0	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	0	5	5
Cap, veh/h	894	411	1175	0	79	881
Arrive On Green	0.27	0.00	0.34	0.00	0.05	0.49
Sat Flow, veh/h	3343	1538	3619	0	1723	1810
Grp Volume(v), veh/h	667	0	323	0	34	535
Grp Sat Flow(s),veh/h/ln	1672	1538	1719	0	1723	1810
Q Serve(g_s), s	8.5	0.0	3.2	0.0	0.9	10.0
Cycle Q Clear(g_c), s	8.5	0.0	3.2	0.0	0.9	10.0
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	894	411	1175	0	79	881
V/C Ratio(X)	0.75	0.00	0.27	0.00	0.43	0.61
Avail Cap(c_a), veh/h	1586	730	4968	0	446	2615
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	15.5	0.0	11.1	0.0	21.5	8.7
Incr Delay (d2), s/veh	1.3	0.0	0.2	0.0	3.7	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	4.0	0.0	1.5	0.0	0.5	5.2
LnGrp Delay(d),s/veh	16.8	0.0	11.3	0.0	25.2	9.8
LnGrp LOS	B		B		C	A
Approach Vol, veh/h	667		323			569
Approach Delay, s/veh	16.8		11.3			10.7
Approach LOS	B		B			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.7	22.6				29.4		17.0
Change Period (Y+Rc), s	4.6	6.8				6.8		4.6
Max Green Setting (Gmax), s	12.0	67.0				67.0		22.0
Max Q Clear Time (g_c+I1), s	12.9	5.2				12.0		10.5
Green Ext Time (p_c), s	0.0	10.7				10.6		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	13.5
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	23	289	3	24	717	8	5	0	20	6	0	11
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	225	-	-	195	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	318	3	26	788	9	5	0	22	7	0	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	797	0	0	321	0	0	1215	1219	319	1215	1216	792
Stage 1	-	-	-	-	-	-	370	370	-	845	845	-
Stage 2	-	-	-	-	-	-	845	849	-	370	371	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	825	-	-	1239	-	-	158	180	722	158	181	389
Stage 1	-	-	-	-	-	-	650	620	-	357	379	-
Stage 2	-	-	-	-	-	-	357	377	-	650	620	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	825	-	-	1239	-	-	147	171	722	147	172	389
Mov Cap-2 Maneuver	-	-	-	-	-	-	147	171	-	147	172	-
Stage 1	-	-	-	-	-	-	630	601	-	346	371	-
Stage 2	-	-	-	-	-	-	339	369	-	611	601	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.3	14.2	20.2
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	147	722	825	-	-	1239	-	-	147	389
HCM Lane V/C Ratio	0.037	0.03	0.031	-	-	0.021	-	-	0.045	0.031
HCM Control Delay (s)	30.4	10.1	9.5	-	-	8	-	-	30.6	14.6
HCM Lane LOS	D	B	A	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	0.1	0.1	0.1	-	-	0.1	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	6	0	2	825	372	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	135	0	220	-	-	190
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	7	0	2	927	418	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	886	209	418	0	-	0
Stage 1	418	-	-	-	-	-
Stage 2	468	-	-	-	-	-
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	284	797	1138	-	-	-
Stage 1	632	-	-	-	-	-
Stage 2	597	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	284	797	1138	-	-	-
Mov Cap-2 Maneuver	284	-	-	-	-	-
Stage 1	632	-	-	-	-	-
Stage 2	596	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1138	-	284	-	-	-
HCM Lane V/C Ratio	0.002	-	0.024	-	-	-
HCM Control Delay (s)	8.2	-	18	0	-	-
HCM Lane LOS	A	-	C	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	29	237	809	58	26	65
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	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	276	941	67	30	76

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1008	0	-	0	1179	504
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	205	-
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	683	-	-	-	183	513
Stage 1	-	-	-	-	327	-
Stage 2	-	-	-	-	809	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	683	-	-	-	174	513
Mov Cap-2 Maneuver	-	-	-	-	174	-
Stage 1	-	-	-	-	327	-
Stage 2	-	-	-	-	769	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	21
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	683	-	-	-	330
HCM Lane V/C Ratio	0.049	-	-	-	0.321
HCM Control Delay (s)	10.5	-	-	-	21
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	164	239	702	454	281	302
Number	7	4	8	18	1	16
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	198	288	846	0	339	50
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	249	1992	1165	521	397	354
Arrive On Green	0.14	0.56	0.33	0.00	0.22	0.22
Sat Flow, veh/h	1774	3632	3632	1583	1774	1583
Grp Volume(v), veh/h	198	288	846	0	339	50
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1583	1774	1583
Q Serve(g_s), s	5.8	2.1	11.3	0.0	9.8	1.4
Cycle Q Clear(g_c), s	5.8	2.1	11.3	0.0	9.8	1.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	249	1992	1165	521	397	354
V/C Ratio(X)	0.80	0.14	0.73	0.00	0.85	0.14
Avail Cap(c_a), veh/h	498	2271	2271	1016	475	424
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	22.2	5.6	15.8	0.0	19.9	16.6
Incr Delay (d2), s/veh	2.2	0.0	0.3	0.0	10.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	3.0	1.0	5.5	0.0	6.0	1.3
LnGrp Delay(d),s/veh	24.4	5.6	16.1	0.0	30.7	16.7
LnGrp LOS	C	A	B		C	B
Approach Vol, veh/h		486	846		389	
Approach Delay, s/veh		13.3	16.1		28.9	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				35.8		17.7	12.5	23.3
Change Period (Y+Rc), s				5.7		5.7	5.0	5.7
Max Green Setting (Gmax), s				34.3		14.3	15.0	34.3
Max Q Clear Time (g_c+I1), s				4.1		11.8	7.8	13.3
Green Ext Time (p_c), s				4.6		0.2	0.1	4.3

Intersection Summary	
HCM 2010 Ctrl Delay	18.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	219	137	35	470	290	310	433	38	166	196	170
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	179	231	0	37	495	0	326	456	0	175	206	0
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	227	816	365	216	828	370	387	830	371	222	502	225
Arrive On Green	0.13	0.23	0.00	0.12	0.23	0.00	0.22	0.23	0.00	0.13	0.14	0.00
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	179	231	0	37	495	0	326	456	0	175	206	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	6.4	3.5	0.0	1.2	8.2	0.0	11.6	7.4	0.0	6.3	3.5	0.0
Cycle Q Clear(g_c), s	6.4	3.5	0.0	1.2	8.2	0.0	11.6	7.4	0.0	6.3	3.5	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	227	816	365	216	828	370	387	830	371	222	502	225
V/C Ratio(X)	0.79	0.28	0.00	0.17	0.60	0.00	0.84	0.55	0.00	0.79	0.41	0.00
Avail Cap(c_a), veh/h	486	2501	1119	216	2027	907	765	2210	989	495	1671	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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	27.8	20.8	0.0	25.9	22.4	0.0	24.6	22.1	0.0	27.9	25.7	0.0
Incr Delay (d2), s/veh	6.1	0.2	0.0	0.4	0.7	0.0	5.1	0.6	0.0	6.1	0.5	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(-26165%),veh/ln	2.5	1.8	0.0	0.6	4.1	0.0	6.2	3.7	0.0	3.4	1.7	0.0
LnGrp Delay(d),s/veh	33.8	21.0	0.0	26.2	23.1	0.0	29.7	22.7	0.0	34.0	26.2	0.0
LnGrp LOS	C	C		C	C		C	C		C	C	
Approach Vol, veh/h		410			532			782			381	
Approach Delay, s/veh		26.6			23.3			25.6			29.8	
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	11.9	21.4	12.6	19.7	18.0	15.3	12.4	20.0
Change Period (Y+Rc), s	3.7	6.0	4.6	4.6	3.7	6.0	4.0	* 4.6
Max Green Setting (Gmax), s	18.3	41.0	8.0	46.4	28.3	31.0	18.0	* 38
Max Q Clear Time (g_c+I1), s	8.3	9.4	3.2	5.5	13.6	5.5	8.4	10.2
Green Ext Time (p_c), s	0.3	4.0	0.0	5.5	0.8	3.8	0.3	5.2

Intersection Summary	
HCM 2010 Ctrl Delay	26.0
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	33.8
Intersection LOS	D

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	0	494	172	0	150	193	0	0	0	0	0
Peak Hour Factor	0.92	0.94	0.94	0.94	0.92	0.94	0.94	0.94	0.92	0.94	0.94	0.94
Heavy Vehicles, %	2	3	3	3	2	3	3	3	2	3	3	3
Mvmt Flow	0	0	526	183	0	160	205	0	0	0	0	0
Number of Lanes	0	0	1	1	0	1	1	0	0	0	1	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	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	2	2
HCM Control Delay	52.5	15.4	0
HCM LOS	F	C	-

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	100%	0%	0%	100%	0%	0%
Vol Right, %	0%	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	494	172	150	193	163	366
LT Vol	0	0	0	150	0	163	0
Through Vol	0	494	0	0	193	0	0
RT Vol	0	0	172	0	0	0	366
Lane Flow Rate	0	526	183	160	205	173	389
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0	1	0.327	0.356	0.429	0.383	0.727
Departure Headway (Hd)	8.969	7.144	6.426	8.031	7.516	7.95	6.724
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	510	564	453	485	458	541
Service Time	6.915	4.844	4.126	5.689	5.188	5.61	4.412
HCM Lane V/C Ratio	0	1.031	0.324	0.353	0.423	0.378	0.719
HCM Control Delay	11.9	66.5	12.2	15	15.7	15.4	25.2
HCM Lane LOS	N	F	B	B	C	C	D
HCM 95th-tile Q	0	13.7	1.4	1.6	2.1	1.8	6

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	163	0	366
Peak Hour Factor	0.92	0.94	0.94	0.94
Heavy Vehicles, %	2	3	3	3
Mvmt Flow	0	173	0	389
Number of Lanes	0	0	1	1

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	22.2
HCM LOS	C

Lane

Intersection	
Int Delay, s/veh	3.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	353	304	109	268	76	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	350	315	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	357	307	110	271	77	46

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	357	0	848	357
Stage 1	-	-	-	-	357	-
Stage 2	-	-	-	-	491	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	0	1196	-	330	685
Stage 1	-	0	-	-	706	-
Stage 2	-	0	-	-	613	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	1196	-	300	685
Mov Cap-2 Maneuver	-	-	-	-	300	-
Stage 1	-	-	-	-	706	-
Stage 2	-	-	-	-	557	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	18.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	381	-	1196	-
HCM Lane V/C Ratio	0.323	-	0.092	-
HCM Control Delay (s)	18.9	-	8.3	-
HCM Lane LOS	C	-	A	-
HCM 95th %tile Q(veh)	1.4	-	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	62	1262	64	18	1012	179	41	36	18	192	65	76
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	1845	1845	1900	1845	1845	1845	1900	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	70	1418	69	20	1137	0	46	40	0	216	73	52
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	1	1	0
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	117	1947	95	64	1899	850	74	64	120	258	148	105
Arrive On Green	0.07	0.57	0.57	0.04	0.54	0.00	0.08	0.08	0.00	0.15	0.15	0.15
Sat Flow, veh/h	1757	3403	165	1757	3505	1568	961	836	1568	1757	1004	715
Grp Volume(v), veh/h	70	729	758	20	1137	0	86	0	0	216	0	125
Grp Sat Flow(s),veh/h/ln	1757	1752	1816	1757	1752	1568	1797	0	1568	1757	0	1719
Q Serve(g_s), s	4.8	37.6	37.9	1.4	27.1	0.0	5.7	0.0	0.0	14.7	0.0	8.3
Cycle Q Clear(g_c), s	4.8	37.6	37.9	1.4	27.1	0.0	5.7	0.0	0.0	14.7	0.0	8.3
Prop In Lane	1.00		0.09	1.00		1.00	0.53		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	117	1003	1039	64	1899	850	138	0	120	258	0	253
V/C Ratio(X)	0.60	0.73	0.73	0.31	0.60	0.00	0.62	0.00	0.00	0.84	0.00	0.49
Avail Cap(c_a), veh/h	313	1088	1128	313	2177	974	374	0	327	570	0	557
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	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.0	19.3	19.4	57.9	19.2	0.0	55.2	0.0	0.0	51.2	0.0	48.4
Incr Delay (d2), s/veh	4.9	2.5	2.5	2.8	0.5	0.0	4.5	0.0	0.0	7.0	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(-26165%),veh/ln	2.5	18.7	19.5	0.7	13.2	0.0	3.0	0.0	0.0	7.6	0.0	4.0
LnGrp Delay(d),s/veh	60.9	21.9	21.9	60.7	19.6	0.0	59.7	0.0	0.0	58.2	0.0	49.9
LnGrp LOS	E	C	C	E	B		E			E		D
Approach Vol, veh/h		1557			1157			86			341	
Approach Delay, s/veh		23.6			20.3			59.7			55.1	
Approach LOS		C			C			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	8.2	77.0		14.8	11.9	73.2		23.4
Change Period (Y+Rc), s	3.7	6.4		5.3	3.7	6.4		5.3
Max Green Setting (Gmax), s	22.0	76.6		25.7	22.0	76.6		40.0
Max Q Clear Time (g_c+I1), s	3.4	39.9		7.7	6.8	29.1		16.7
Green Ext Time (p_c), s	0.0	30.6		0.4	0.1	37.7		1.4

Intersection Summary	
HCM 2010 Ctrl Delay	26.8
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	38

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	46	1461	5	8	1300	85	4	0	6	78	0	20
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	150	-	150	150	-	150	125	-	-	125	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	99	99	99	99	99	99	99	99	99	99	99	99
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	46	1476	5	8	1313	86	4	0	6	79	0	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1313	0	0	1476	0	0	2242	2898	738	2160	2898	657
Stage 1	-	-	-	-	-	-	1569	1569	-	1329	1329	-
Stage 2	-	-	-	-	-	-	673	1329	-	831	1569	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.56	6.56	6.96	7.56	6.56	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-	6.56	5.56	-	6.56	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.56	5.56	-	6.56	5.56	-
Follow-up Hdwy	2.23	-	-	2.23	-	-	3.53	4.03	3.33	3.53	4.03	3.33
Pot Cap-1 Maneuver	517	-	-	447	-	-	23	15	358	~ 26	15	405
Stage 1	-	-	-	-	-	-	115	168	-	162	220	-
Stage 2	-	-	-	-	-	-	409	220	-	328	168	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	517	-	-	447	-	-	20	13	358	~ 23	13	405
Mov Cap-2 Maneuver	-	-	-	-	-	-	20	13	-	~ 23	13	-
Stage 1	-	-	-	-	-	-	105	153	-	148	216	-
Stage 2	-	-	-	-	-	-	382	216	-	294	153	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.1	99.5	$ 1150.3
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	20	358	517	-	-	447	-	-	23	405
HCM Lane V/C Ratio	0.202	0.017	0.09	-	-	0.018	-	-	3.426	0.05
HCM Control Delay (s)	225.9	15.2	12.7	-	-	13.2	-	-	$ 1441.5	14.4
HCM Lane LOS	F	C	B	-	-	B	-	-	F	B
HCM 95th %tile Q(veh)	0.6	0.1	0.3	-	-	0.1	-	-	9.9	0.2

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	869	711	27	806	15	496	18	81	155	91	6
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	1845	1845	1845	1845	1845	1845	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	3	955	122	30	886	0	545	20	0	170	100	6
Adj No. of Lanes	1	2	1	1	2	1	2	1	0	1	1	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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	10	1660	743	70	1780	796	660	302	0	207	139	8
Arrive On Green	0.01	0.47	0.47	0.04	0.51	0.00	0.19	0.16	0.00	0.12	0.08	0.08
Sat Flow, veh/h	1757	3505	1568	1757	3505	1568	3408	1845	0	1757	1723	103
Grp Volume(v), veh/h	3	955	122	30	886	0	545	20	0	170	0	106
Grp Sat Flow(s),veh/h/ln	1757	1752	1568	1757	1752	1568	1704	1845	0	1757	0	1826
Q Serve(g_s), s	0.2	19.3	4.3	1.6	16.3	0.0	15.0	0.9	0.0	9.2	0.0	5.5
Cycle Q Clear(g_c), s	0.2	19.3	4.3	1.6	16.3	0.0	15.0	0.9	0.0	9.2	0.0	5.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		0.06
Lane Grp Cap(c), veh/h	10	1660	743	70	1780	796	660	302	0	207	0	148
V/C Ratio(X)	0.30	0.58	0.16	0.43	0.50	0.00	0.83	0.07	0.00	0.82	0.00	0.72
Avail Cap(c_a), veh/h	131	3108	1390	167	3179	1422	2118	1146	0	367	0	381
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	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.4	18.6	14.7	45.8	15.8	0.0	37.8	34.5	0.0	42.1	0.0	43.8
Incr Delay (d2), s/veh	16.5	0.4	0.1	4.1	0.3	0.0	2.7	0.1	0.0	7.9	0.0	6.4
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(-26165%),veh/ln	0.1	9.4	1.9	0.9	7.9	0.0	7.3	0.5	0.0	4.9	0.0	3.1
LnGrp Delay(d),s/veh	64.8	19.0	14.8	49.9	16.1	0.0	40.5	34.6	0.0	50.0	0.0	50.2
LnGrp LOS	E	B	B	D	B		D	C		D		D
Approach Vol, veh/h		1080			916			565			276	
Approach Delay, s/veh		18.6			17.2			40.3			50.1	
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	52.7	24.2	13.2	4.2	56.0	16.1	21.3
Change Period (Y+Rc), s	3.7	6.4	5.3	* 5.3	3.7	6.4	4.6	5.3
Max Green Setting (Gmax), s	9.3	86.6	60.7	* 20	7.3	88.6	20.4	60.7
Max Q Clear Time (g_c+I1), s	3.6	21.3	17.0	7.5	2.2	18.3	11.2	2.9
Green Ext Time (p_c), s	0.0	25.0	1.9	0.4	0.0	25.5	0.3	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	25.5
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	380	59	521	0	103	468
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	1845	1845	1845	0	1845	1845
Adj Flow Rate, veh/h	432	0	592	0	117	532
Adj No. of Lanes	2	1	2	0	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	0	3	3
Cap, veh/h	608	280	1529	0	161	1129
Arrive On Green	0.18	0.00	0.44	0.00	0.09	0.61
Sat Flow, veh/h	3408	1568	3689	0	1757	1845
Grp Volume(v), veh/h	432	0	592	0	117	532
Grp Sat Flow(s),veh/h/ln	1704	1568	1752	0	1757	1845
Q Serve(g_s), s	6.5	0.0	6.2	0.0	3.5	8.6
Cycle Q Clear(g_c), s	6.5	0.0	6.2	0.0	3.5	8.6
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	608	280	1529	0	161	1129
V/C Ratio(X)	0.71	0.00	0.39	0.00	0.73	0.47
Avail Cap(c_a), veh/h	1378	634	4315	0	387	2271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	0.0	10.4	0.0	24.1	5.8
Incr Delay (d2), s/veh	1.6	0.0	0.3	0.0	6.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	3.2	0.0	3.0	0.0	2.0	4.5
LnGrp Delay(d),s/veh	22.6	0.0	10.7	0.0	30.2	6.3
LnGrp LOS	C		B		C	A
Approach Vol, veh/h	432		592			649
Approach Delay, s/veh	22.6		10.7			10.6
Approach LOS	C		B			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.6	30.5				40.1		14.3
Change Period (Y+Rc), s	4.6	6.8				6.8		4.6
Max Green Setting (Gmax), s	12.0	67.0				67.0		22.0
Max Q Clear Time (g_c+I1), s	5.5	8.2				10.6		8.5
Green Ext Time (p_c), s	0.1	15.5				15.4		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	13.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	15	666	6	24	413	3	6	2	30	5	2	20
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	225	-	-	195	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	18	802	7	29	498	4	7	2	36	6	2	24

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	501	0	0	810	0	0	1400	1401	806	1400	1403	499
Stage 1	-	-	-	-	-	-	842	842	-	557	557	-
Stage 2	-	-	-	-	-	-	558	559	-	843	846	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1058	-	-	811	-	-	117	139	380	117	139	570
Stage 1	-	-	-	-	-	-	357	379	-	513	511	-
Stage 2	-	-	-	-	-	-	512	509	-	357	377	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1058	-	-	811	-	-	106	132	380	100	132	570
Mov Cap-2 Maneuver	-	-	-	-	-	-	106	132	-	100	132	-
Stage 1	-	-	-	-	-	-	351	373	-	504	493	-
Stage 2	-	-	-	-	-	-	471	491	-	315	371	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.5	20.8	19.4
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	111	380	1058	-	-	811	-	-	107	570
HCM Lane V/C Ratio	0.087	0.095	0.017	-	-	0.036	-	-	0.079	0.042
HCM Control Delay (s)	40.5	15.5	8.5	-	-	9.6	-	-	41.5	11.6
HCM Lane LOS	E	C	A	-	-	A	-	-	E	B
HCM 95th %tile Q(veh)	0.3	0.3	0.1	-	-	0.1	-	-	0.3	0.1

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	68	20	9	526	740	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	135	0	220	-	-	190
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	77	23	10	598	841	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1160	420	841	0	-	0
Stage 1	841	-	-	-	-	-
Stage 2	319	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	187	579	784	-	-	-
Stage 1	381	-	-	-	-	-
Stage 2	707	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	185	579	784	-	-	-
Mov Cap-2 Maneuver	185	-	-	-	-	-
Stage 1	381	-	-	-	-	-
Stage 2	698	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	31.7	0.2	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	784	-	185	579	-	-
HCM Lane V/C Ratio	0.013	-	0.418	0.039	-	-
HCM Control Delay (s)	9.7	-	37.7	11.5	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0	-	1.9	0.1	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	44	810	406	24	23	30
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	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	853	427	25	24	32

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	453	0	-	0	959	226
Stage 1	-	-	-	-	440	-
Stage 2	-	-	-	-	519	-
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	1104	-	-	-	255	777
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	562	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1104	-	-	-	244	777
Mov Cap-2 Maneuver	-	-	-	-	244	-
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	539	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	15.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1104	-	-	-	399
HCM Lane V/C Ratio	0.042	-	-	-	0.14
HCM Control Delay (s)	8.4	-	-	-	15.5
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	336	698	375	154	258	227
Number	7	4	8	18	1	16
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	361	751	403	0	277	34
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	422	2030	825	369	342	305
Arrive On Green	0.24	0.57	0.23	0.00	0.19	0.19
Sat Flow, veh/h	1774	3632	3632	1583	1774	1583
Grp Volume(v), veh/h	361	751	403	0	277	34
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1583	1774	1583
Q Serve(g_s), s	9.5	5.6	4.8	0.0	7.3	0.9
Cycle Q Clear(g_c), s	9.5	5.6	4.8	0.0	7.3	0.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	422	2030	825	369	342	305
V/C Ratio(X)	0.86	0.37	0.49	0.00	0.81	0.11
Avail Cap(c_a), veh/h	546	2489	2489	1113	520	464
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	5.6	16.2	0.0	18.8	16.2
Incr Delay (d2), s/veh	8.4	0.0	0.2	0.0	3.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	5.6	2.7	2.4	0.0	3.8	0.8
LnGrp Delay(d),s/veh	26.2	5.7	16.4	0.0	21.9	16.3
LnGrp LOS	C	A	B		C	B
Approach Vol, veh/h		1112	403		311	
Approach Delay, s/veh		12.3	16.4		21.3	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				33.7		15.1	16.6	17.1
Change Period (Y+Rc), s				5.7		5.7	5.0	5.7
Max Green Setting (Gmax), s				34.3		14.3	15.0	34.3
Max Q Clear Time (g_c+I1), s				7.6		9.3	11.5	6.8
Green Ext Time (p_c), s				4.6		0.2	0.2	4.6

Intersection Summary	
HCM 2010 Ctrl Delay	14.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	190	333	242	41	140	164	195	345	38	336	506	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	200	351	0	43	147	0	205	363	0	354	533	31
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	250	596	267	210	548	245	258	730	326	403	1020	456
Arrive On Green	0.14	0.17	0.00	0.12	0.15	0.00	0.15	0.21	0.00	0.23	0.29	0.29
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	200	351	0	43	147	0	205	363	0	354	533	31
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	7.4	6.2	0.0	1.5	2.5	0.0	7.5	6.1	0.0	13.0	8.5	1.0
Cycle Q Clear(g_c), s	7.4	6.2	0.0	1.5	2.5	0.0	7.5	6.1	0.0	13.0	8.5	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	250	596	267	210	548	245	258	730	326	403	1020	456
V/C Ratio(X)	0.80	0.59	0.00	0.20	0.27	0.00	0.80	0.50	0.00	0.88	0.52	0.07
Avail Cap(c_a), veh/h	525	2432	1088	210	1866	835	744	2149	961	481	1625	727
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.1	25.9	0.0	26.9	25.2	0.0	27.9	23.7	0.0	25.2	20.1	17.5
Incr Delay (d2), s/veh	5.9	0.9	0.0	0.5	0.3	0.0	5.5	0.5	0.0	14.9	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(-26165%),veh/ln	4.0	3.1	0.0	0.8	1.2	0.0	4.1	3.0	0.0	8.0	4.2	0.4
LnGrp Delay(d),s/veh	34.0	26.9	0.0	27.4	25.4	0.0	33.4	24.2	0.0	40.1	20.6	17.5
LnGrp LOS	C	C		C	C		C	C		D	C	B
Approach Vol, veh/h		551			190			568			918	
Approach Delay, s/veh		29.4			25.9			27.6			28.0	
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	19.0	19.9	12.6	16.0	13.5	25.5	13.5	15.1
Change Period (Y+Rc), s	3.7	6.0	4.6	4.6	3.7	6.0	4.0	* 4.6
Max Green Setting (Gmax), s	18.3	41.0	8.0	46.4	28.3	31.0	20.0	* 36
Max Q Clear Time (g_c+I1), s	15.0	8.1	3.5	8.2	9.5	10.5	9.4	4.5
Green Ext Time (p_c), s	0.4	5.8	0.0	3.2	0.5	5.2	0.4	3.1

Intersection Summary	
HCM 2010 Ctrl Delay	28.1
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	34.2
Intersection LOS	D

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	0	486	116	0	56	202	0	0	0	0	0
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	5	5	5	2	5	5	5	2	5	5	5
Mvmt Flow	0	0	579	138	0	67	240	0	0	0	0	0
Number of Lanes	0	0	1	1	0	1	1	0	0	0	1	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	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	2	2
HCM Control Delay	52.9	14.5	0
HCM LOS	F	B	-

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	100%	0%	0%	100%	0%	0%
Vol Right, %	0%	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	486	116	56	202	85	239
LT Vol	0	0	0	56	0	85	0
Through Vol	0	486	0	0	202	0	0
RT Vol	0	0	116	0	0	0	239
Lane Flow Rate	0	579	138	67	240	101	285
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0	1	0.218	0.138	0.463	0.219	0.519
Departure Headway (Hd)	8.389	6.383	5.67	7.438	6.926	7.795	6.572
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	567	630	489	527	466	555
Service Time	6.32	4.155	3.442	5.084	4.583	5.44	4.243
HCM Lane V/C Ratio	0	1.021	0.219	0.137	0.455	0.217	0.514
HCM Control Delay	11.3	63.1	10	11.3	15.4	12.6	16.1
HCM Lane LOS	N	F	A	B	C	B	C
HCM 95th-tile Q	0	14.5	0.8	0.5	2.4	0.8	3

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	85	0	239
Peak Hour Factor	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	5	5	5
Mvmt Flow	0	101	0	285
Number of Lanes	0	0	1	1

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	15.2
HCM LOS	C

Lane

Intersection	
Int Delay, s/veh	10.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	205	366	99	141	117	172
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	350	315	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	256	458	124	176	146	215

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	256	0	680	256
Stage 1	-	-	-	-	256	-
Stage 2	-	-	-	-	424	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	0	1292	-	412	775
Stage 1	-	0	-	-	780	-
Stage 2	-	0	-	-	654	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	1292	-	372	775
Mov Cap-2 Maneuver	-	-	-	-	372	-
Stage 1	-	-	-	-	780	-
Stage 2	-	-	-	-	591	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.3	24.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	539	-	1292	-
HCM Lane V/C Ratio	0.67	-	0.096	-
HCM Control Delay (s)	24.2	-	8.1	-
HCM Lane LOS	C	-	A	-
HCM 95th %tile Q(veh)	5	-	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	62	743	40	8	1496	216	81	67	27	142	44	111
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	1810	1810	1900	1810	1810	1810	1900	1810	1810	1810	1810	1900
Adj Flow Rate, veh/h	65	782	38	8	1575	56	85	71	0	149	46	51
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	109	2022	98	30	1925	861	103	86	164	186	85	94
Arrive On Green	0.06	0.61	0.61	0.02	0.56	0.56	0.11	0.11	0.00	0.11	0.11	0.11
Sat Flow, veh/h	1723	3338	162	1723	3438	1538	960	802	1538	1723	785	871
Grp Volume(v), veh/h	65	403	417	8	1575	56	156	0	0	149	0	97
Grp Sat Flow(s),veh/h/ln	1723	1719	1781	1723	1719	1538	1762	0	1538	1723	0	1656
Q Serve(g_s), s	4.7	15.4	15.4	0.6	47.6	2.1	11.1	0.0	0.0	10.8	0.0	7.1
Cycle Q Clear(g_c), s	4.7	15.4	15.4	0.6	47.6	2.1	11.1	0.0	0.0	10.8	0.0	7.1
Prop In Lane	1.00		0.09	1.00		1.00	0.54		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	109	1042	1079	30	1925	861	188	0	164	186	0	179
V/C Ratio(X)	0.60	0.39	0.39	0.27	0.82	0.07	0.83	0.00	0.00	0.80	0.00	0.54
Avail Cap(c_a), veh/h	296	1042	1079	296	2057	920	354	0	309	539	0	517
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	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.4	13.0	13.0	62.1	22.9	12.9	56.0	0.0	0.0	55.7	0.0	54.1
Incr Delay (d2), s/veh	5.1	0.3	0.3	4.6	2.7	0.0	8.9	0.0	0.0	7.7	0.0	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(-26165%),veh/ln	2.4	7.4	7.6	0.3	23.3	0.9	5.9	0.0	0.0	5.5	0.0	3.4
LnGrp Delay(d),s/veh	63.5	13.3	13.3	66.7	25.6	12.9	64.9	0.0	0.0	63.4	0.0	56.6
LnGrp LOS	E	B	B	E	C	B	E			E		E
Approach Vol, veh/h		885			1639			156			246	
Approach Delay, s/veh		17.0			25.4			64.9			60.8	
Approach LOS		B			C			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	5.9	84.0		19.0	11.8	78.1		19.1
Change Period (Y+Rc), s	3.7	6.4		5.3	3.7	6.4		5.3
Max Green Setting (Gmax), s	22.0	76.6		25.7	22.0	76.6		40.0
Max Q Clear Time (g_c+I1), s	2.6	17.4		13.1	6.7	49.6		12.8
Green Ext Time (p_c), s	0.0	41.5		0.6	0.1	22.1		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	27.9
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	42.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	8	870	5	9	1939	134	4	2	7	51	16	16
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	90	-	90	90	-	90	125	-	-	125	-	-
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	8	906	5	9	2020	140	4	2	7	53	17	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2020	0	0	906	0	0	1960	2962	453	2510	2962	1010
Stage 1	-	-	-	-	-	-	923	923	-	2039	2039	-
Stage 2	-	-	-	-	-	-	1037	2039	-	471	923	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.6	6.6	7	7.6	6.6	7
Critical Hdwy Stg 1	-	-	-	-	-	-	6.6	5.6	-	6.6	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.6	5.6	-	6.6	5.6	-
Follow-up Hdwy	2.25	-	-	2.25	-	-	3.55	4.05	3.35	3.55	4.05	3.35
Pot Cap-1 Maneuver	267	-	-	728	-	-	37	13	546	~ 14	~ 13	233
Stage 1	-	-	-	-	-	-	284	340	-	56	95	-
Stage 2	-	-	-	-	-	-	242	95	-	535	340	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	267	-	-	728	-	-	-	12	546	~ 12	~ 12	233
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	12	-	~ 12	~ 12	-
Stage 1	-	-	-	-	-	-	275	330	-	54	94	-
Stage 2	-	-	-	-	-	-	183	94	-	509	330	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0		$ 1562.6
HCM LOS			-	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	50	267	-	-	728	-	-	12	23
HCM Lane V/C Ratio	-	0.188	0.031	-	-	0.013	-	-	4.427	1.449
HCM Control Delay (s)	-	92.9	18.9	-	-	10	-	-	$ 2168	$ 597.7
HCM Lane LOS	-	F	C	-	-	B	-	-	F	F
HCM 95th %tile Q(veh)	-	0.6	0.1	-	-	0	-	-	7.7	4.2

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	515	353	125	1050	36	873	14	82	55	29	3
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	1810	1810	1810	1810	1810	1810	1810	1810	1900	1810	1810	1900
Adj Flow Rate, veh/h	2	526	0	128	1071	0	891	14	0	56	30	1
Adj No. of Lanes	1	2	1	1	2	1	2	1	0	1	1	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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	7	1232	551	148	1514	677	1014	555	0	111	107	4
Arrive On Green	0.00	0.36	0.00	0.09	0.44	0.00	0.30	0.31	0.00	0.06	0.06	0.06
Sat Flow, veh/h	1723	3438	1538	1723	3438	1538	3343	1810	0	1723	1741	58
Grp Volume(v), veh/h	2	526	0	128	1071	0	891	14	0	56	0	31
Grp Sat Flow(s),veh/h/ln	1723	1719	1538	1723	1719	1538	1672	1810	0	1723	0	1799
Q Serve(g_s), s	0.1	12.6	0.0	7.9	27.4	0.0	27.4	0.6	0.0	3.4	0.0	1.8
Cycle Q Clear(g_c), s	0.1	12.6	0.0	7.9	27.4	0.0	27.4	0.6	0.0	3.4	0.0	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		0.03
Lane Grp Cap(c), veh/h	7	1232	551	148	1514	677	1014	555	0	111	0	111
V/C Ratio(X)	0.31	0.43	0.00	0.87	0.71	0.00	0.88	0.03	0.00	0.50	0.00	0.28
Avail Cap(c_a), veh/h	116	2748	1230	148	2812	1258	1873	1014	0	325	0	339
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	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.8	26.3	0.0	48.9	24.6	0.0	35.8	26.2	0.0	49.0	0.0	48.5
Incr Delay (d2), s/veh	24.6	0.3	0.0	37.9	0.7	0.0	2.6	0.0	0.0	3.5	0.0	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(-26165%),veh/ln	0.1	6.0	0.0	5.3	13.1	0.0	13.0	0.3	0.0	1.7	0.0	0.9
LnGrp Delay(d),s/veh	78.4	26.6	0.0	86.8	25.4	0.0	38.5	26.3	0.0	52.5	0.0	49.9
LnGrp LOS	E	C		F	C		D	C		D		D
Approach Vol, veh/h		528			1199			905			87	
Approach Delay, s/veh		26.8			31.9			38.3			51.6	
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	13.0	45.2	38.2	12.0	4.1	54.1	11.6	38.5
Change Period (Y+Rc), s	3.7	6.4	5.3	* 5.3	3.7	6.4	4.6	5.3
Max Green Setting (Gmax), s	9.3	86.6	60.7	* 20	7.3	88.6	20.4	60.7
Max Q Clear Time (g_c+I1), s	9.9	14.6	29.4	3.8	2.1	29.4	5.4	2.6
Green Ext Time (p_c), s	0.0	18.9	3.4	0.1	0.0	18.3	0.1	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	33.7
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	689	93	320	0	33	523
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	1810	1810	1810	0	1810	1810
Adj Flow Rate, veh/h	718	97	333	0	34	545
Adj No. of Lanes	2	1	2	0	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	0	5	5
Cap, veh/h	946	435	1188	0	78	877
Arrive On Green	0.28	0.28	0.35	0.00	0.05	0.48
Sat Flow, veh/h	3343	1538	3619	0	1723	1810
Grp Volume(v), veh/h	718	97	333	0	34	545
Grp Sat Flow(s),veh/h/ln	1672	1538	1719	0	1723	1810
Q Serve(g_s), s	9.6	2.4	3.4	0.0	0.9	10.9
Cycle Q Clear(g_c), s	9.6	2.4	3.4	0.0	0.9	10.9
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	946	435	1188	0	78	877
V/C Ratio(X)	0.76	0.22	0.28	0.00	0.44	0.62
Avail Cap(c_a), veh/h	1499	689	4693	0	421	2470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	16.1	13.5	11.6	0.0	22.8	9.3
Incr Delay (d2), s/veh	1.3	0.3	0.2	0.0	3.8	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	4.6	1.0	1.7	0.0	0.5	5.6
LnGrp Delay(d),s/veh	17.3	13.7	11.9	0.0	26.6	10.6
LnGrp LOS	B	B	B		C	B
Approach Vol, veh/h	815		333			579
Approach Delay, s/veh	16.9		11.9			11.5
Approach LOS	B		B			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.8	23.8				30.6		18.5
Change Period (Y+Rc), s	4.6	6.8				6.8		4.6
Max Green Setting (Gmax), s	12.0	67.0				67.0		22.0
Max Q Clear Time (g_c+I1), s	12.9	5.4				12.9		11.6
Green Ext Time (p_c), s	0.0	11.0				10.9		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	14.1
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	23	341	3	24	766	8	5	0	20	6	0	11
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	225	-	-	195	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	375	3	26	842	9	5	0	22	7	0	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	851	0	0	378	0	0	1326	1330	376	1326	1328	846
Stage 1	-	-	-	-	-	-	427	427	-	899	899	-
Stage 2	-	-	-	-	-	-	899	903	-	427	429	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	788	-	-	1180	-	-	133	155	670	133	155	362
Stage 1	-	-	-	-	-	-	606	585	-	334	358	-
Stage 2	-	-	-	-	-	-	334	356	-	606	584	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	788	-	-	1180	-	-	123	147	670	123	147	362
Mov Cap-2 Maneuver	-	-	-	-	-	-	123	147	-	123	147	-
Stage 1	-	-	-	-	-	-	587	566	-	323	350	-
Stage 2	-	-	-	-	-	-	316	348	-	568	565	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.2	15.6	22.6
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	123	670	788	-	-	1180	-	-	123	362
HCM Lane V/C Ratio	0.045	0.033	0.032	-	-	0.022	-	-	0.054	0.033
HCM Control Delay (s)	35.6	10.6	9.7	-	-	8.1	-	-	35.9	15.3
HCM Lane LOS	E	B	A	-	-	A	-	-	E	C
HCM 95th %tile Q(veh)	0.1	0.1	0.1	-	-	0.1	-	-	0.2	0.1

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	144	54	53	825	372	135
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	135	0	220	-	-	190
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	157	59	58	897	404	147

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	968	202	404	0	-	0
Stage 1	404	-	-	-	-	-
Stage 2	564	-	-	-	-	-
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	251	805	1151	-	-	-
Stage 1	643	-	-	-	-	-
Stage 2	533	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	238	805	1151	-	-	-
Mov Cap-2 Maneuver	238	-	-	-	-	-
Stage 1	643	-	-	-	-	-
Stage 2	506	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	35.5	0.5	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1151	-	238	805	-	-
HCM Lane V/C Ratio	0.05	-	0.658	0.073	-	-
HCM Control Delay (s)	8.3	-	45.1	9.8	-	-
HCM Lane LOS	A	-	E	A	-	-
HCM 95th %tile Q(veh)	0.2	-	4.1	0.2	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	29	291	860	58	26	65
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	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	338	1000	67	30	76

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1067	0	-	0	1271	534
Stage 1	-	-	-	-	1034	-
Stage 2	-	-	-	-	237	-
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	649	-	-	-	160	491
Stage 1	-	-	-	-	304	-
Stage 2	-	-	-	-	780	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	649	-	-	-	152	491
Mov Cap-2 Maneuver	-	-	-	-	152	-
Stage 1	-	-	-	-	304	-
Stage 2	-	-	-	-	739	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	23.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	649	-	-	-	300
HCM Lane V/C Ratio	0.052	-	-	-	0.353
HCM Control Delay (s)	10.9	-	-	-	23.4
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	199	258	720	454	281	335
Number	7	4	8	18	1	16
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	240	311	867	0	339	50
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	292	2057	1167	522	392	350
Arrive On Green	0.16	0.58	0.33	0.00	0.22	0.22
Sat Flow, veh/h	1774	3632	3632	1583	1774	1583
Grp Volume(v), veh/h	240	311	867	0	339	50
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1583	1774	1583
Q Serve(g_s), s	7.5	2.3	12.5	0.0	10.6	1.5
Cycle Q Clear(g_c), s	7.5	2.3	12.5	0.0	10.6	1.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	292	2057	1167	522	392	350
V/C Ratio(X)	0.82	0.15	0.74	0.00	0.87	0.14
Avail Cap(c_a), veh/h	462	2109	2109	943	441	393
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	23.2	5.5	17.1	0.0	21.6	18.0
Incr Delay (d2), s/veh	3.2	0.0	0.4	0.0	13.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	3.9	1.1	6.1	0.0	6.7	1.4
LnGrp Delay(d),s/veh	26.4	5.6	17.5	0.0	35.4	18.1
LnGrp LOS	C	A	B		D	B
Approach Vol, veh/h		551	867		389	
Approach Delay, s/veh		14.6	17.5		33.2	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				39.2		18.4	14.5	24.7
Change Period (Y+Rc), s				5.7		5.7	5.0	5.7
Max Green Setting (Gmax), s				34.3		14.3	15.0	34.3
Max Q Clear Time (g_c+I1), s				4.3		12.6	9.5	14.5
Green Ext Time (p_c), s				4.8		0.1	0.2	4.5

Intersection Summary	
HCM 2010 Ctrl Delay	20.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	185	219	141	35	470	290	314	433	38	166	196	184
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	208	246	0	39	528	0	353	487	0	187	220	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	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	254	927	415	194	837	374	407	847	379	232	497	222
Arrive On Green	0.14	0.26	0.00	0.11	0.24	0.00	0.23	0.24	0.00	0.13	0.14	0.00
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	208	246	0	39	528	0	353	487	0	187	220	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	8.3	4.0	0.0	1.5	9.8	0.0	14.0	8.9	0.0	7.5	4.2	0.0
Cycle Q Clear(g_c), s	8.3	4.0	0.0	1.5	9.8	0.0	14.0	8.9	0.0	7.5	4.2	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	254	927	415	194	837	374	407	847	379	232	497	222
V/C Ratio(X)	0.82	0.27	0.00	0.20	0.63	0.00	0.87	0.58	0.00	0.81	0.44	0.00
Avail Cap(c_a), veh/h	437	2246	1005	194	1820	814	687	1985	888	444	1501	671
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	30.4	21.4	0.0	29.6	25.1	0.0	27.1	24.5	0.0	30.9	28.8	0.0
Incr Delay (d2), s/veh	6.4	0.2	0.0	0.5	0.8	0.0	6.2	0.6	0.0	6.5	0.6	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(-26165%),veh/ln	4.5	2.0	0.0	0.7	4.9	0.0	7.6	4.4	0.0	4.1	2.1	0.0
LnGrp Delay(d),s/veh	36.8	21.5	0.0	30.1	25.8	0.0	33.3	25.2	0.0	37.4	29.4	0.0
LnGrp LOS	D	C		C	C		C	C		D	C	
Approach Vol, veh/h		454			567			840			407	
Approach Delay, s/veh		28.5			26.1			28.6			33.1	
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	13.3	23.5	12.6	23.8	20.5	16.3	14.5	21.9
Change Period (Y+Rc), s	3.7	6.0	4.6	4.6	3.7	6.0	4.0	* 4.6
Max Green Setting (Gmax), s	18.3	41.0	8.0	46.4	28.3	31.0	18.0	* 38
Max Q Clear Time (g_c+I1), s	10.5	10.9	3.5	6.0	16.0	6.2	10.3	11.8
Green Ext Time (p_c), s	0.3	4.3	0.0	6.0	0.8	4.1	0.3	5.5

Intersection Summary	
HCM 2010 Ctrl Delay	28.8
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	34
Intersection LOS	D

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Vol, veh/h	0	0	499	172	0	150	199	0	0	0	0	0
Peak Hour Factor	0.92	0.94	0.94	0.94	0.92	0.94	0.94	0.94	0.92	0.94	0.94	0.94
Heavy Vehicles, %	2	3	3	3	2	3	3	3	2	3	3	3
Mvmt Flow	0	0	531	183	0	160	212	0	0	0	0	0
Number of Lanes	0	0	1	1	0	1	1	0	0	0	1	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	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	2	2
HCM Control Delay	52.7	15.6	0
HCM LOS	F	C	-

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	100%	0%	0%	100%	0%	0%
Vol Right, %	0%	0%	100%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	499	172	150	199	163	366
LT Vol	0	0	0	150	0	163	0
Through Vol	0	499	0	0	199	0	0
RT Vol	0	0	172	0	0	0	366
Lane Flow Rate	0	531	183	160	212	173	389
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0	1	0.328	0.357	0.443	0.384	0.73
Departure Headway (Hd)	9.016	7.163	6.445	8.049	7.533	7.978	6.752
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	510	562	453	483	458	541
Service Time	6.942	4.863	4.145	5.696	5.195	5.623	4.426
HCM Lane V/C Ratio	0	1.041	0.326	0.353	0.439	0.378	0.719
HCM Control Delay	11.9	66.6	12.3	15.1	16	15.5	25.5
HCM Lane LOS	N	F	B	C	C	C	D
HCM 95th-tile Q	0	13.7	1.4	1.6	2.2	1.8	6.1

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Vol, veh/h	0	163	0	366
Peak Hour Factor	0.92	0.94	0.94	0.94
Heavy Vehicles, %	2	3	3	3
Mvmt Flow	0	173	0	389
Number of Lanes	0	0	1	1

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	22.4
HCM LOS	C

Lane

Intersection	
Int Delay, s/veh	3.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	358	304	109	274	76	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	350	315	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	362	307	110	277	77	46

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	362	0	859	362
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	497	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	0	1191	-	326	680
Stage 1	-	0	-	-	702	-
Stage 2	-	0	-	-	609	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	1191	-	296	680
Mov Cap-2 Maneuver	-	-	-	-	296	-
Stage 1	-	-	-	-	702	-
Stage 2	-	-	-	-	553	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	19.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	376	-	1191	-
HCM Lane V/C Ratio	0.328	-	0.092	-
HCM Control Delay (s)	19.2	-	8.3	-
HCM Lane LOS	C	-	A	-
HCM 95th %tile Q(veh)	1.4	-	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	62	1346	64	18	1103	205	41	36	18	216	65	76
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	1845	1845	1900	1845	1845	1845	1900	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	70	1512	69	20	1239	0	46	40	0	243	73	52
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	1	1	0
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	112	1949	89	63	1903	851	71	61	115	283	162	115
Arrive On Green	0.06	0.57	0.57	0.04	0.54	0.00	0.07	0.07	0.00	0.16	0.16	0.16
Sat Flow, veh/h	1757	3414	155	1757	3505	1568	961	836	1568	1757	1004	715
Grp Volume(v), veh/h	70	774	807	20	1239	0	86	0	0	243	0	125
Grp Sat Flow(s),veh/h/ln	1757	1752	1817	1757	1752	1568	1797	0	1568	1757	0	1719
Q Serve(g_s), s	5.1	44.2	44.6	1.4	32.5	0.0	6.1	0.0	0.0	17.5	0.0	8.6
Cycle Q Clear(g_c), s	5.1	44.2	44.6	1.4	32.5	0.0	6.1	0.0	0.0	17.5	0.0	8.6
Prop In Lane	1.00		0.09	1.00		1.00	0.53		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	112	1001	1038	63	1903	851	132	0	115	283	0	277
V/C Ratio(X)	0.63	0.77	0.78	0.32	0.65	0.00	0.65	0.00	0.00	0.86	0.00	0.45
Avail Cap(c_a), veh/h	297	1031	1069	297	2062	922	355	0	309	540	0	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)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.5	21.5	21.6	61.2	21.0	0.0	58.7	0.0	0.0	53.2	0.0	49.4
Incr Delay (d2), s/veh	5.6	3.9	3.9	2.9	0.8	0.0	5.4	0.0	0.0	7.5	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(-26165%),veh/ln	2.6	22.4	23.3	0.8	15.9	0.0	3.2	0.0	0.0	9.1	0.0	4.2
LnGrp Delay(d),s/veh	65.1	25.3	25.4	64.1	21.8	0.0	64.1	0.0	0.0	60.6	0.0	50.6
LnGrp LOS	E	C	C	E	C		E			E		D
Approach Vol, veh/h		1651			1259			86			368	
Approach Delay, s/veh		27.1			22.5			64.1			57.2	
Approach LOS		C			C			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	8.3	80.7		14.9	12.0	77.1		26.3
Change Period (Y+Rc), s	3.7	6.4		5.3	3.7	6.4		5.3
Max Green Setting (Gmax), s	22.0	76.6		25.7	22.0	76.6		40.0
Max Q Clear Time (g_c+I1), s	3.4	46.6		8.1	7.1	34.5		19.5
Green Ext Time (p_c), s	0.0	26.8		0.3	0.1	36.1		1.4

Intersection Summary	
HCM 2010 Ctrl Delay	29.6
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	51.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	46	1569	5	8	1417	85	4	0	6	78	0	20
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	140	-	90	90	-	90	125	-	-	125	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	99	99	99	99	99	99	99	99	99	99	99	99
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	46	1585	5	8	1431	86	4	0	6	79	0	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1431	0	0	1585	0	0	2410	3125	792	2332	3125	716
Stage 1	-	-	-	-	-	-	1678	1678	-	1447	1447	-
Stage 2	-	-	-	-	-	-	732	1447	-	885	1678	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.56	6.56	6.96	7.56	6.56	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-	6.56	5.56	-	6.56	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.56	5.56	-	6.56	5.56	-
Follow-up Hdwy	2.23	-	-	2.23	-	-	3.53	4.03	3.33	3.53	4.03	3.33
Pot Cap-1 Maneuver	466	-	-	406	-	-	17	11	330	~ 19	11	370
Stage 1	-	-	-	-	-	-	98	148	-	137	193	-
Stage 2	-	-	-	-	-	-	377	193	-	304	148	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	466	-	-	406	-	-	15	10	330	~ 17	10	370
Mov Cap-2 Maneuver	-	-	-	-	-	-	15	10	-	~ 17	10	-
Stage 1	-	-	-	-	-	-	88	133	-	123	189	-
Stage 2	-	-	-	-	-	-	349	189	-	269	133	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.1	136.7	$ 1665.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	15	330	466	-	-	406	-	-	17	370
HCM Lane V/C Ratio	0.269	0.018	0.1	-	-	0.02	-	-	4.635	0.055
HCM Control Delay (s)	$ 317.5	16.1	13.6	-	-	14	-	-	$ 2088.3	15.3
HCM Lane LOS	F	C	B	-	-	B	-	-	F	C
HCM 95th %tile Q(veh)	0.7	0.1	0.3	-	-	0.1	-	-	10.5	0.2

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	869	819	113	806	15	613	18	174	155	91	6
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	1845	1845	1845	1845	1845	1845	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	3	915	122	119	848	0	645	19	30	163	96	5
Adj No. of Lanes	1	2	1	1	2	1	2	1	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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	10	1506	674	145	1776	795	755	125	197	196	133	7
Arrive On Green	0.01	0.43	0.43	0.08	0.51	0.00	0.22	0.19	0.19	0.11	0.08	0.08
Sat Flow, veh/h	1757	3505	1568	1757	3505	1568	3408	646	1019	1757	1738	91
Grp Volume(v), veh/h	3	915	122	119	848	0	645	0	49	163	0	101
Grp Sat Flow(s),veh/h/ln	1757	1752	1568	1757	1752	1568	1704	0	1665	1757	0	1829
Q Serve(g_s), s	0.2	22.0	5.3	7.3	17.2	0.0	19.8	0.0	2.7	9.9	0.0	5.9
Cycle Q Clear(g_c), s	0.2	22.0	5.3	7.3	17.2	0.0	19.8	0.0	2.7	9.9	0.0	5.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.61	1.00		0.05
Lane Grp Cap(c), veh/h	10	1506	674	145	1776	795	755	0	321	196	0	140
V/C Ratio(X)	0.31	0.61	0.18	0.82	0.48	0.00	0.85	0.00	0.15	0.83	0.00	0.72
Avail Cap(c_a), veh/h	117	2780	1244	150	2845	1273	1895	0	926	328	0	342
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	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	54.1	24.0	19.2	49.3	17.5	0.0	40.8	0.0	36.6	47.5	0.0	49.3
Incr Delay (d2), s/veh	16.6	0.5	0.2	28.3	0.2	0.0	2.9	0.0	0.2	8.9	0.0	6.8
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(-26165%),veh/ln	0.1	10.6	2.3	4.7	8.3	0.0	9.6	0.0	1.2	5.3	0.0	3.2
LnGrp Delay(d),s/veh	70.7	24.5	19.4	77.6	17.8	0.0	43.7	0.0	36.8	56.4	0.0	56.1
LnGrp LOS	E	C	B	E	B		D		D	E		E
Approach Vol, veh/h		1040			967			694			264	
Approach Delay, s/veh		24.0			25.1			43.2			56.3	
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	12.7	53.3	29.5	13.7	4.3	61.7	16.8	26.4
Change Period (Y+Rc), s	3.7	6.4	5.3	* 5.3	3.7	6.4	4.6	5.3
Max Green Setting (Gmax), s	9.3	86.6	60.7	* 20	7.3	88.6	20.4	60.7
Max Q Clear Time (g_c+I1), s	9.3	24.0	21.8	7.9	2.2	19.2	11.9	4.7
Green Ext Time (p_c), s	0.0	22.9	2.3	0.5	0.0	23.5	0.2	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	31.8
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	453	59	536	0	103	482
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	1845	1845	1845	0	1845	1845
Adj Flow Rate, veh/h	515	0	609	0	117	548
Adj No. of Lanes	2	1	2	0	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	0	3	3
Cap, veh/h	687	316	1521	0	154	1109
Arrive On Green	0.20	0.00	0.43	0.00	0.09	0.60
Sat Flow, veh/h	3408	1568	3689	0	1757	1845
Grp Volume(v), veh/h	515	0	609	0	117	548
Grp Sat Flow(s),veh/h/ln	1704	1568	1752	0	1757	1845
Q Serve(g_s), s	8.2	0.0	6.9	0.0	3.8	9.7
Cycle Q Clear(g_c), s	8.2	0.0	6.9	0.0	3.8	9.7
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	687	316	1521	0	154	1109
V/C Ratio(X)	0.75	0.00	0.40	0.00	0.76	0.49
Avail Cap(c_a), veh/h	1297	597	4061	0	365	2138
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	21.7	0.0	11.2	0.0	25.8	6.5
Incr Delay (d2), s/veh	1.7	0.0	0.3	0.0	7.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	4.0	0.0	3.4	0.0	2.1	5.1
LnGrp Delay(d),s/veh	23.4	0.0	11.5	0.0	33.1	7.1
LnGrp LOS	C		B		C	A
Approach Vol, veh/h	515		609			665
Approach Delay, s/veh	23.4		11.5			11.7
Approach LOS	C		B			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.7	31.9				41.6		16.2
Change Period (Y+Rc), s	4.6	6.8				6.8		4.6
Max Green Setting (Gmax), s	12.0	67.0				67.0		22.0
Max Q Clear Time (g_c+I1), s	5.8	8.9				11.7		10.2
Green Ext Time (p_c), s	0.1	16.2				16.0		1.4

Intersection Summary	
HCM 2010 Ctrl Delay	15.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	15	745	6	24	486	3	6	2	30	5	2	20
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	225	-	-	195	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	18	898	7	29	586	4	7	2	36	6	2	24

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	589	0	0	905	0	0	1583	1584	901	1584	1586	587
Stage 1	-	-	-	-	-	-	937	937	-	645	645	-
Stage 2	-	-	-	-	-	-	646	647	-	939	941	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	981	-	-	747	-	-	87	108	335	87	108	508
Stage 1	-	-	-	-	-	-	316	342	-	459	466	-
Stage 2	-	-	-	-	-	-	459	465	-	316	341	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	981	-	-	747	-	-	78	102	335	73	102	508
Mov Cap-2 Maneuver	-	-	-	-	-	-	78	102	-	73	102	-
Stage 1	-	-	-	-	-	-	310	336	-	451	448	-
Stage 2	-	-	-	-	-	-	418	447	-	275	335	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.5	24.8	23.7
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	83	335	981	-	-	747	-	-	79	508
HCM Lane V/C Ratio	0.116	0.108	0.018	-	-	0.039	-	-	0.107	0.047
HCM Control Delay (s)	54	17	8.7	-	-	10	-	-	55.9	12.4
HCM Lane LOS	F	C	A	-	-	B	-	-	F	B
HCM 95th %tile Q(veh)	0.4	0.4	0.1	-	-	0.1	-	-	0.3	0.1

Intersection	
Int Delay, s/veh	88

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	278	102	85	526	740	200
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	135	0	220	-	-	190
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	302	111	92	572	804	217

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1275	402	804	0	-	0
Stage 1	804	-	-	-	-	-
Stage 2	471	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	~ 157	595	809	-	-	-
Stage 1	398	-	-	-	-	-
Stage 2	592	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 139	595	809	-	-	-
Mov Cap-2 Maneuver	~ 139	-	-	-	-	-
Stage 1	398	-	-	-	-	-
Stage 2	525	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 444.8	1.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	809	-	139	595	-	-
HCM Lane V/C Ratio	0.114	-	2.174	0.186	-	-
HCM Control Delay (s)	10	-	$ 603.4	12.4	-	-
HCM Lane LOS	B	-	F	B	-	-
HCM 95th %tile Q(veh)	0.4	-	24.9	0.7	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	44	892	482	24	23	30
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	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	939	507	25	24	32

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	533	0	-	0	1082	266
Stage 1	-	-	-	-	520	-
Stage 2	-	-	-	-	562	-
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	1031	-	-	-	212	732
Stage 1	-	-	-	-	561	-
Stage 2	-	-	-	-	534	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1031	-	-	-	203	732
Mov Cap-2 Maneuver	-	-	-	-	203	-
Stage 1	-	-	-	-	561	-
Stage 2	-	-	-	-	510	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	17.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1031	-	-	-	344
HCM Lane V/C Ratio	0.045	-	-	-	0.162
HCM Control Delay (s)	8.7	-	-	-	17.5
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	389	727	402	154	258	276
Number	7	4	8	18	1	16
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	418	782	432	0	277	35
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	471	2106	833	373	337	301
Arrive On Green	0.27	0.60	0.24	0.00	0.19	0.19
Sat Flow, veh/h	1774	3632	3632	1583	1774	1583
Grp Volume(v), veh/h	418	782	432	0	277	35
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1583	1774	1583
Q Serve(g_s), s	12.0	6.1	5.6	0.0	7.9	1.0
Cycle Q Clear(g_c), s	12.0	6.1	5.6	0.0	7.9	1.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	471	2106	833	373	337	301
V/C Ratio(X)	0.89	0.37	0.52	0.00	0.82	0.12
Avail Cap(c_a), veh/h	502	2290	2290	1024	478	427
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	18.7	5.6	17.6	0.0	20.6	17.8
Incr Delay (d2), s/veh	16.0	0.0	0.2	0.0	5.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	7.9	2.9	2.8	0.0	4.3	0.0
LnGrp Delay(d),s/veh	34.7	5.6	17.8	0.0	25.8	17.9
LnGrp LOS	C	A	B		C	B
Approach Vol, veh/h		1200	432		312	
Approach Delay, s/veh		15.8	17.8		24.9	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				37.3		15.8	19.1	18.2
Change Period (Y+Rc), s				5.7		5.7	5.0	5.7
Max Green Setting (Gmax), s				34.3		14.3	15.0	34.3
Max Q Clear Time (g_c+I1), s				8.1		9.9	14.0	7.6
Green Ext Time (p_c), s				4.8		0.2	0.1	4.9

Intersection Summary	
HCM 2010 Ctrl Delay	17.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	213	333	248	41	140	164	200	345	38	336	506	197
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	224	351	0	43	147	0	211	363	0	354	533	60
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	852	381	59	416	186	266	753	337	406	1033	462
Arrive On Green	0.16	0.24	0.00	0.03	0.12	0.00	0.15	0.21	0.00	0.23	0.29	0.29
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	224	351	0	43	147	0	211	363	0	354	533	60
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	7.9	5.4	0.0	1.5	2.5	0.0	7.4	5.8	0.0	12.4	8.1	1.8
Cycle Q Clear(g_c), s	7.9	5.4	0.0	1.5	2.5	0.0	7.4	5.8	0.0	12.4	8.1	1.8
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	277	852	381	59	416	186	266	753	337	406	1033	462
V/C Ratio(X)	0.81	0.41	0.00	0.73	0.35	0.00	0.79	0.48	0.00	0.87	0.52	0.13
Avail Cap(c_a), veh/h	551	2549	1140	237	1956	875	779	2253	1008	504	1703	762
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	20.6	0.0	30.8	26.2	0.0	26.4	22.2	0.0	23.9	19.0	16.8
Incr Delay (d2), s/veh	5.5	0.3	0.0	15.6	0.5	0.0	5.3	0.5	0.0	13.0	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(-26165%),veh/ln	4.3	2.7	0.0	1.0	1.2	0.0	4.0	2.9	0.0	7.5	4.0	0.8
LnGrp Delay(d),s/veh	31.8	20.9	0.0	46.4	26.7	0.0	31.7	22.7	0.0	36.9	19.4	16.9
LnGrp LOS	C	C		D	C		C	C		D	B	B
Approach Vol, veh/h		575			190			574			947	
Approach Delay, s/veh		25.1			31.1			26.0			25.8	
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	18.5	19.7	6.1	20.1	13.4	24.8	14.1	12.2
Change Period (Y+Rc), s	3.7	6.0	4.0	4.6	3.7	6.0	4.0	* 4.6
Max Green Setting (Gmax), s	18.3	41.0	8.6	46.4	28.3	31.0	20.0	* 36
Max Q Clear Time (g_c+I1), s	14.4	7.8	3.5	7.4	9.4	10.1	9.9	4.5
Green Ext Time (p_c), s	0.4	5.9	0.0	3.2	0.5	5.3	0.4	3.1

Intersection Summary	
HCM 2010 Ctrl Delay	26.1
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	144	54	53	825	372	135
Number	7	14	5	2	6	16
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	157	0	58	897	404	0
Adj No. of Lanes	1	1	1	2	2	1
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	210	188	90	2217	1587	710
Arrive On Green	0.12	0.00	0.05	0.63	0.45	0.00
Sat Flow, veh/h	1774	1583	1774	3632	3632	1583
Grp Volume(v), veh/h	157	0	58	897	404	0
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1770	1583
Q Serve(g_s), s	2.7	0.0	1.0	4.0	2.2	0.0
Cycle Q Clear(g_c), s	2.7	0.0	1.0	4.0	2.2	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	210	188	90	2217	1587	710
V/C Ratio(X)	0.75	0.00	0.65	0.40	0.25	0.00
Avail Cap(c_a), veh/h	905	808	226	6320	5417	2423
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	13.4	0.0	14.6	2.9	5.4	0.0
Incr Delay (d2), s/veh	5.2	0.0	7.6	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	1.6	0.0	0.7	1.9	1.1	0.0
LnGrp Delay(d),s/veh	18.6	0.0	22.2	3.1	5.5	0.0
LnGrp LOS	B		C	A	A	
Approach Vol, veh/h	157			955	404	
Approach Delay, s/veh	18.6			4.2	5.5	
Approach LOS	B			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		23.6		7.7	5.6	18.1		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		56.0		16.0	4.0	48.0		
Max Q Clear Time (g_c+I1), s		6.0		4.7	3.0	4.2		
Green Ext Time (p_c), s		10.0		0.3	0.0	9.8		

Intersection Summary	
HCM 2010 Ctrl Delay	6.0
HCM 2010 LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	278	102	85	526	740	200
Number	7	14	5	2	6	16
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	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	302	0	92	572	804	0
Adj No. of Lanes	1	1	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	391	349	117	2060	1495	669
Arrive On Green	0.22	0.00	0.07	0.59	0.43	0.00
Sat Flow, veh/h	1757	1568	1757	3597	3597	1568
Grp Volume(v), veh/h	302	0	92	572	804	0
Grp Sat Flow(s),veh/h/ln	1757	1568	1757	1752	1752	1568
Q Serve(g_s), s	6.8	0.0	2.2	3.4	7.2	0.0
Cycle Q Clear(g_c), s	6.8	0.0	2.2	3.4	7.2	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	391	349	117	2060	1495	669
V/C Ratio(X)	0.77	0.00	0.79	0.28	0.54	0.00
Avail Cap(c_a), veh/h	1084	967	417	3826	2661	1191
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	15.4	0.0	19.4	4.3	9.0	0.0
Incr Delay (d2), s/veh	3.3	0.0	11.0	0.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	3.6	0.0	1.4	1.6	3.5	0.0
LnGrp Delay(d),s/veh	18.7	0.0	30.4	4.3	9.3	0.0
LnGrp LOS	B		C	A	A	
Approach Vol, veh/h	302			664	804	
Approach Delay, s/veh	18.7			8.0	9.3	
Approach LOS	B			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		28.8		13.4	6.8	22.0		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		46.0		26.0	10.0	32.0		
Max Q Clear Time (g_c+I1), s		5.4		8.8	4.2	9.2		
Green Ext Time (p_c), s		10.4		0.8	0.1	8.8		

Intersection Summary	
HCM 2010 Ctrl Delay	10.4
HCM 2010 LOS	B

APPENDIX C: SIGNAL WARRANT SHEETS

FEHR PEERS

Sheet No	1	of	2
Project	San Juan Oaks Specific Plan		
Scenario	Existing plus Project		
Peak Hour	AM		

Major Street	SR-156
Minor Street	Bixby Road

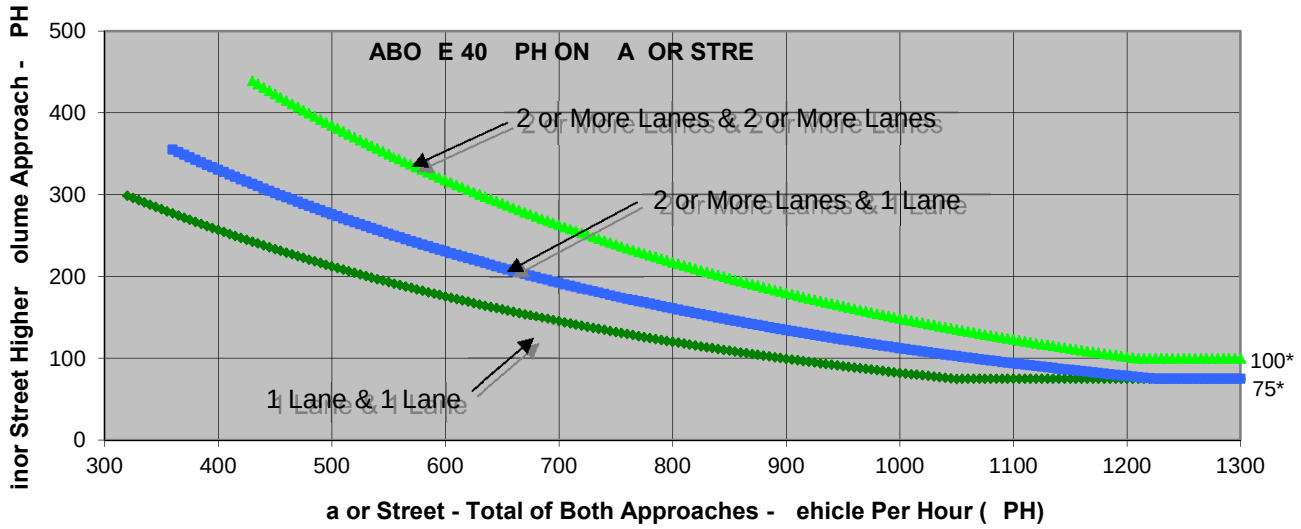
Turn Movement Volumes

	NB	SB	EB	WB
Left	0	1	5	0
Through	1	5	597	1,302
Right	0	5	0	15
Total	1	11	602	1,317

Major Street Direction

	North/South
x	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	SR-156	Bixby Road	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic olume (PH) *	**1, 1**	**11**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	2	of	2

Project	San Juan Oaks Specific Plan
Scenario	Existing plus Project
Peak Hour	PM

Major Street	SR-156
Minor Street	Bixby Road

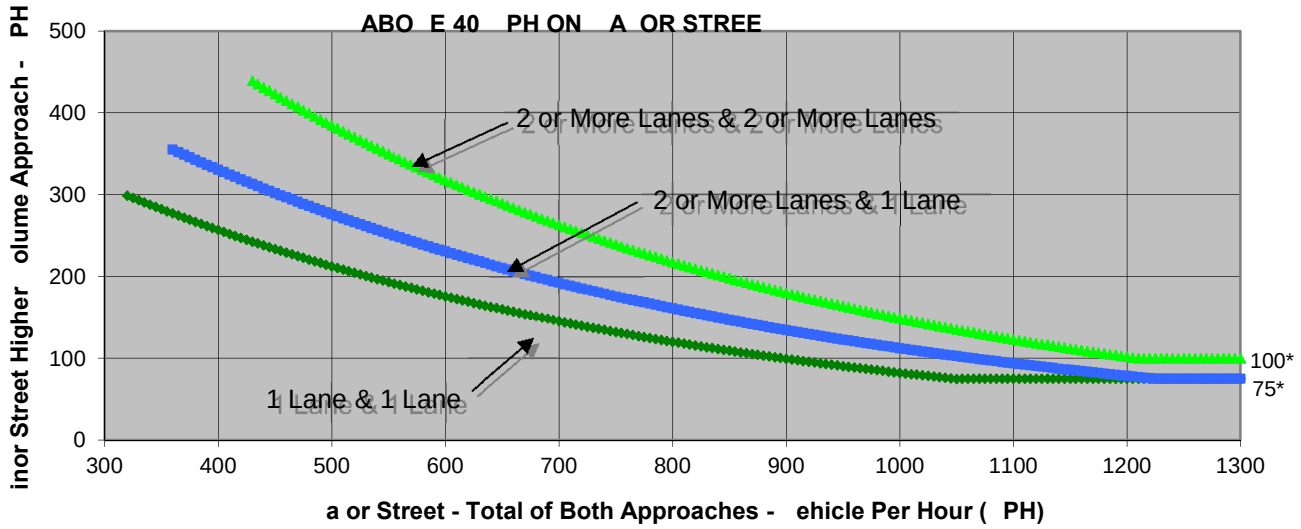
Turn Movement Volumes

	NB	SB	EB	WB
Left	0	3	15	0
Through	0	0	1,069	972
Right	0	14	0	8
Total	0	17	1,084	980

Major Street Direction

	North/South
x	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	SR-156	Bixby Road	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic olume (PH) *	**2,064**	**17**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	1	of	2

Project	San Juan Oaks Specific Plan
Scenario	Existing plus Project
Peak Hour	AM

Major Street	Union Road
Minor Street	San Juan Oaks Road

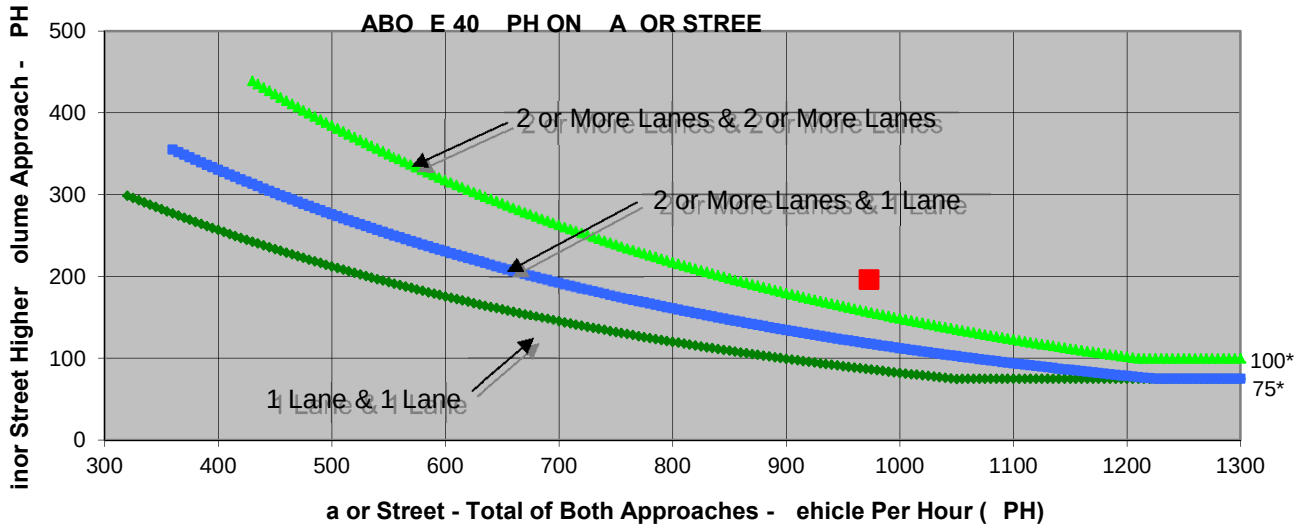
Turn Movement Volumes

	NB	SB	EB	WB
Left	52	0	142	0
Through	543	245	0	0
Right	0	133	54	0
Total	595	378	196	0

Major Street Direction

x	North/South
	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	Union Road	San Juan Oaks Road	
Number of Approach Lanes	**1**	**1**	**YES**
Traffic olume (PH) *	**73**	**1 6**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	2	of	2

Project	San Juan Oaks Specific Plan
Scenario	Existing plus Project
Peak Hour	PM

Major Street	Union Road
Minor Street	San Juan Oaks Road

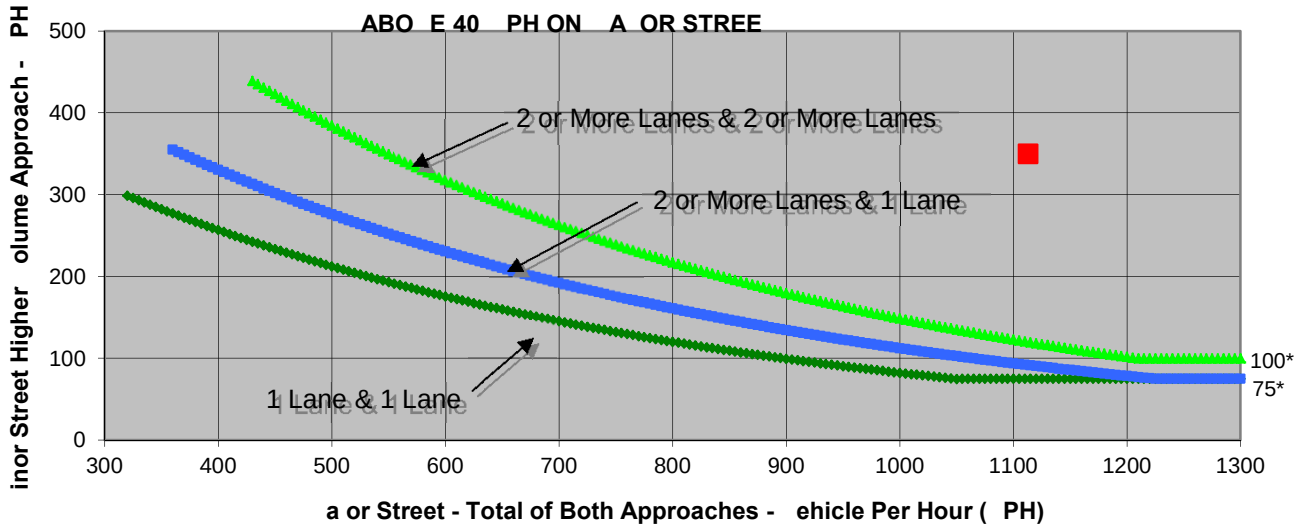
Turn Movement Volumes

	NB	SB	EB	WB
Left	82	0	255	0
Through	346	487	0	0
Right	0	198	95	0
Total	428	685	350	0

Major Street Direction

x	North/South
	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	Union Road	San Juan Oaks Road	
Number of Approach Lanes	**1**	**1**	**YES**
Traffic olume (PH) *	**1,113**	**350**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	1	of	2

Project	San Juan Oaks Specific Plan
Scenario	Background plus Project
Peak Hour	AM

Major Street	SR-156
Minor Street	Bixby Road

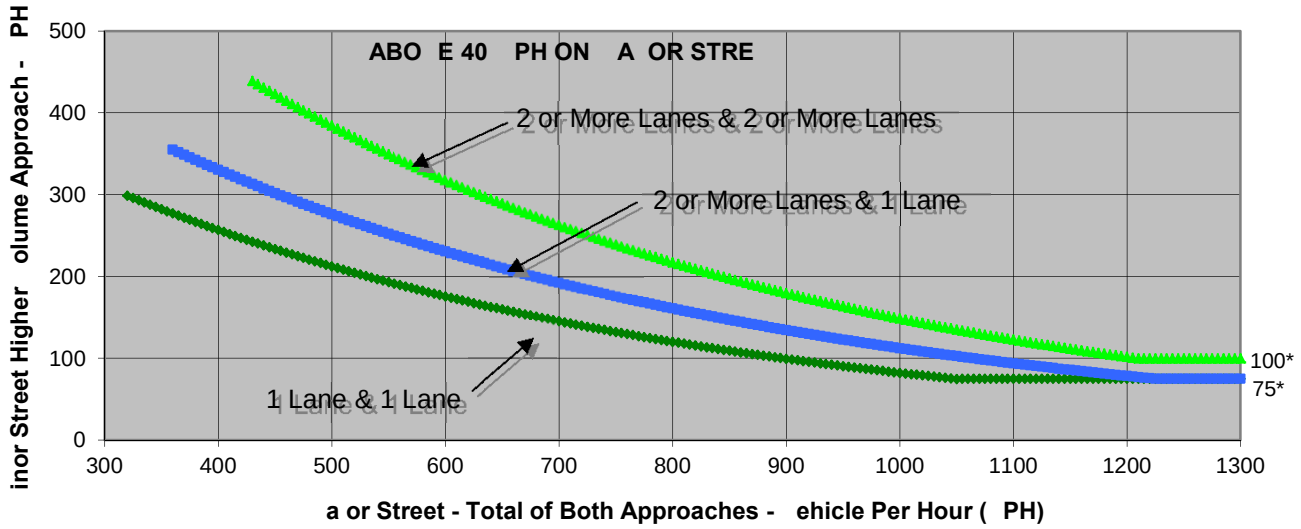
Turn Movement Volumes

	NB	SB	EB	WB
Left	0	1	5	0
Through	1	5	682	1,546
Right	0	5	0	15
Total	1	11	687	1,561

Major Street Direction

	North/South
x	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	SR-156	Bixby Road	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic olume (PH) *	**2,248**	**11**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	2	of	2

Project	San Juan Oaks Specific Plan
Scenario	Background plus Project
Peak Hour	PM

Major Street	SR-156
Minor Street	Bixby Road

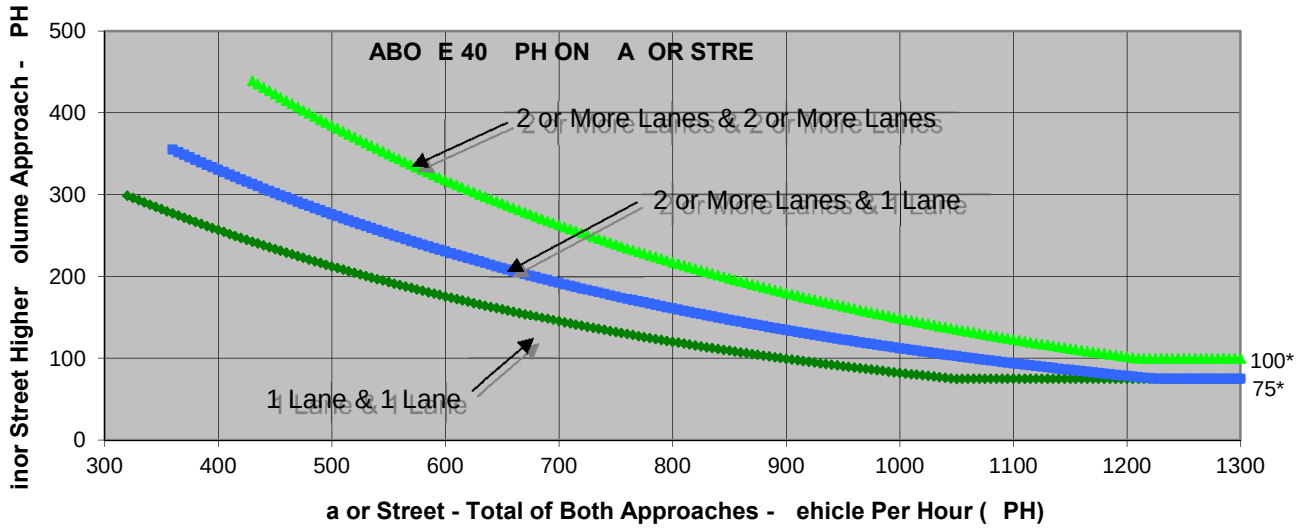
Turn Movement Volumes

	NB	SB	EB	WB
Left	0	3	15	0
Through	0	0	1,326	1,128
Right	0	14	0	8
Total	0	17	1,341	1,136

Major Street Direction

	North/South
x	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	SR-156	Bixby Road	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic olume (PH) *	**2,477**	**17**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	1	of	2

Project	San Juan Oaks Specific Plan
Scenario	Background plus Project
Peak Hour	AM

Major Street	Union Road
Minor Street	San Juan Oaks Road

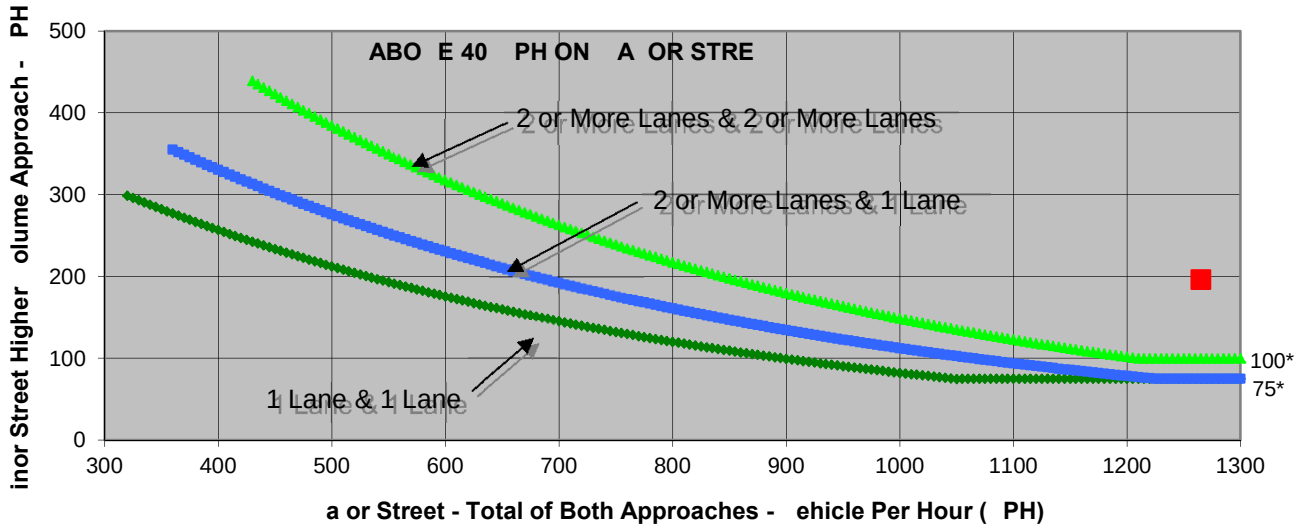
Turn Movement Volumes

	NB	SB	EB	WB
Left	52	0	142	0
Through	752	328	0	0
Right	0	133	54	0
Total	804	461	196	0

Major Street Direction

x	North/South
	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	Union Road	San Juan Oaks Road	
Number of Approach Lanes	**1**	**1**	**YES**
Traffic olume (PH) *	**1,265**	**1 6**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	2	of	2

Project	San Juan Oaks Specific Plan
Scenario	Background plus Project
Peak Hour	PM

Major Street	Union Road
Minor Street	San Juan Oaks Road

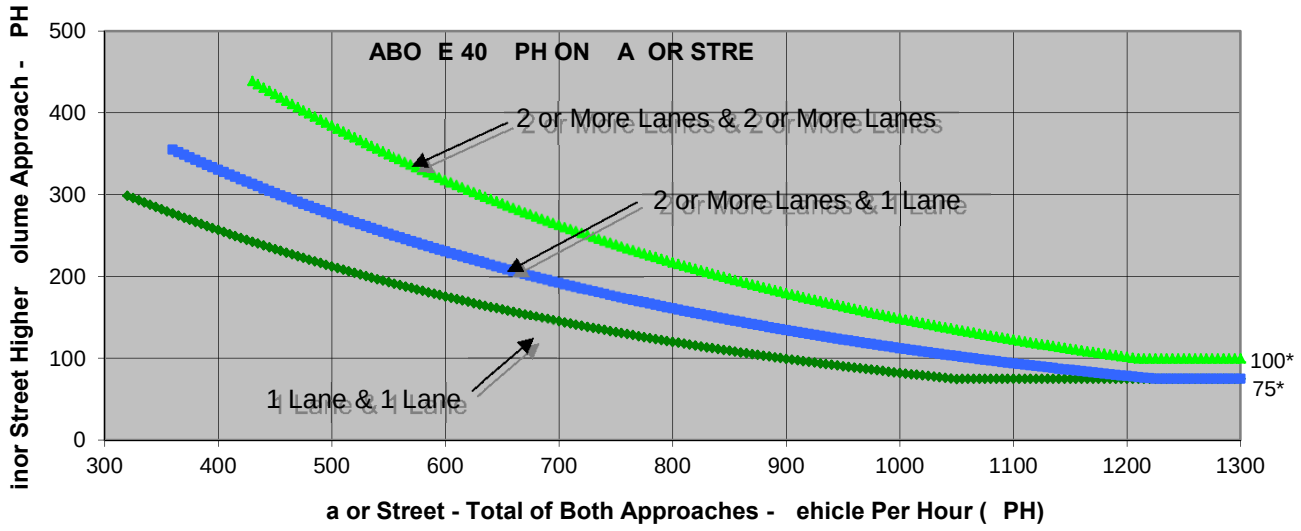
Turn Movement Volumes

	NB	SB	EB	WB
Left	82	0	255	0
Through	489	710	0	0
Right	0	198	95	0
Total	571	908	350	0

Major Street Direction

x	North/South
	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	Union Road	San Juan Oaks Road	
Number of Approach Lanes	**1**	**1**	**YES**
Traffic olume (PH) *	**1,47**	**350**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	1	of	2

Project	San Juan Oaks Specific Plan
Scenario	Cumulative plus Project
Peak Hour	AM

Major Street	Chittenden Road
Minor Street	US-101 Southbound Ramps

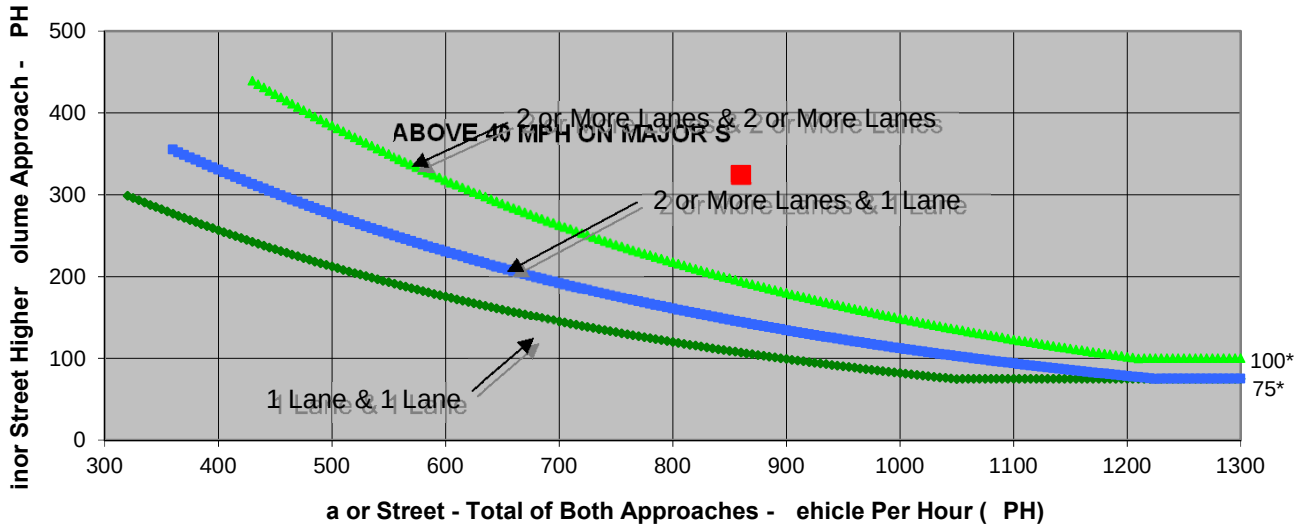
Turn Movement Volumes

	NB	SB	EB	WB
Left	0	85	0	56
Through	0	0	486	202
Right	0	239	116	0
Total	0	324	602	258

Major Street Direction

	North/South
x	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	Chittenden Road	US-101 Southbound Ramps	
Number of Approach Lanes	**1**	**1**	**YES**
Traffic olume (PH) *	**860**	**324**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	2	of	2

Project	San Juan Oaks Specific Plan
Scenario	Cumulative plus Project
Peak Hour	PM

Major Street	Chittenden Road
Minor Street	US-101 Southbound Ramps

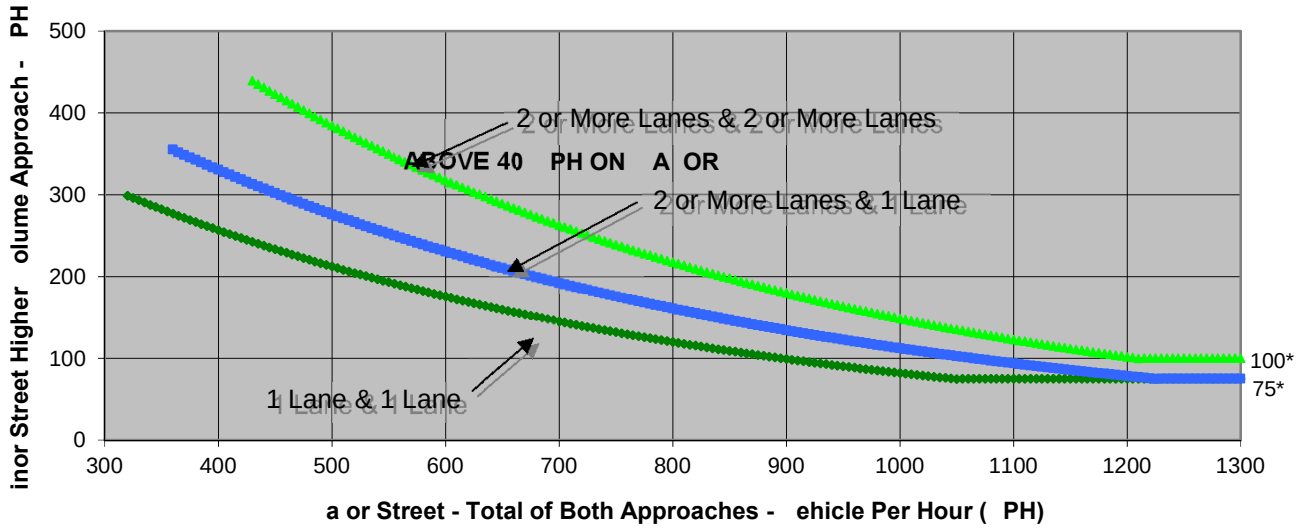
Turn Movement Volumes

	NB	SB	EB	WB
Left	0	163	0	150
Through	0	0	499	199
Right	0	366	172	0
Total	0	529	671	349

Major Street Direction

	North/South
x	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	Chittenden Road	US-101 Southbound Ramps	
Number of Approach Lanes	**1**	**1**	**YES**
Traffic olume (PH) *	**1,020**	**52**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	1	of	2
Project	San Juan Oaks Specific Plan		
Scenario	Cumulative plus Project		
Peak Hour	AM		
Major Street	SR-156		
Minor Street	Bixby Road		

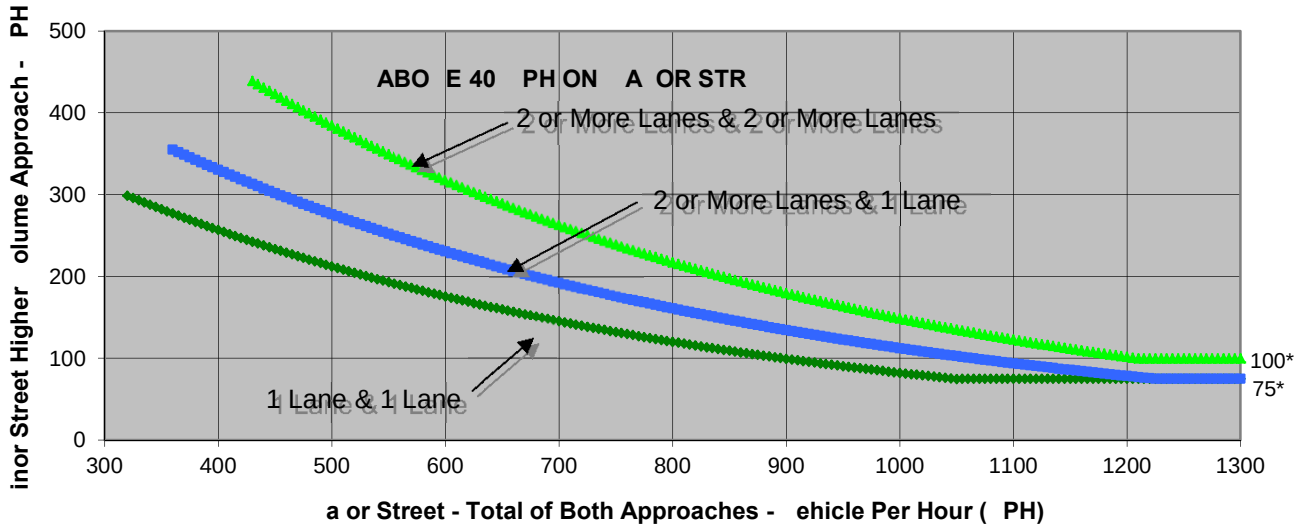
Turn Movement Volumes

	NB	SB	EB	WB
Left	4	51	8	9
Through	2	8	870	1,939
Right	7	11	5	134
Total	13	70	883	2,082

Major Street Direction

	North/South
x	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	SR-156	Bixby Road	
Number of Approach Lanes	**2**	**1**	**NO**
Traffic olume (PH) *	**2, 65**	**70**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	2	of	2

Project	San Juan Oaks Specific Plan
Scenario	Cumulative plus Project
Peak Hour	PM

Major Street	SR-156
Minor Street	Bixby Road

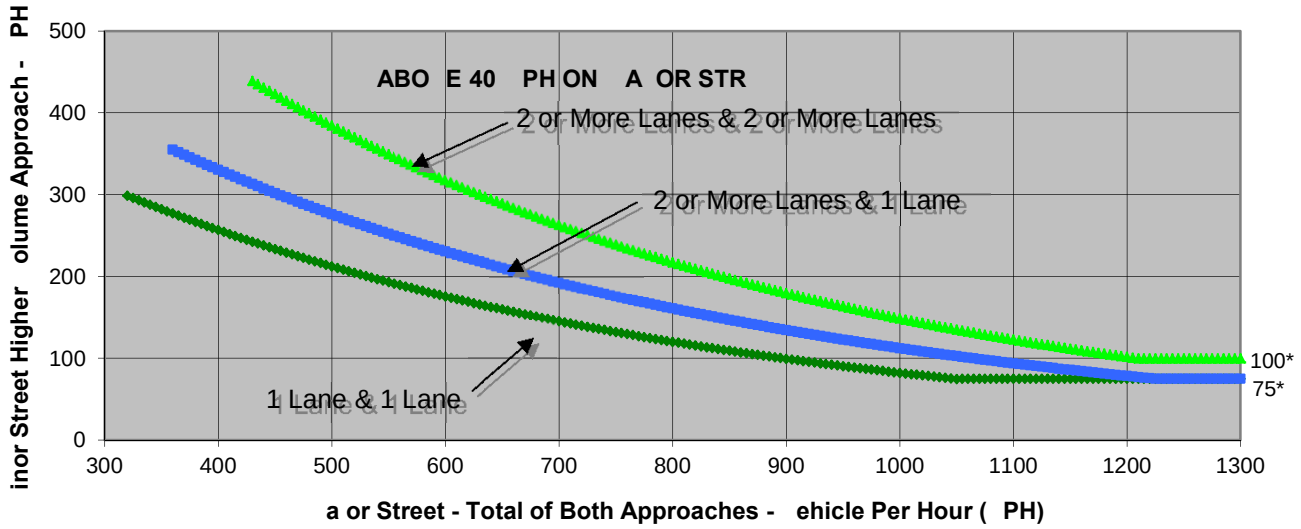
Turn Movement Volumes

	NB	SB	EB	WB
Left	4	78	46	8
Through	0	0	1,569	1,417
Right	6	21	5	85
Total	10	99	1,620	1,510

Major Street Direction

	North/South
x	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	SR-156	Bixby Road	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic olume (PH) *	**3,130**		

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	1	of	2

Project	San Juan Oaks Specific Plan
Scenario	Cumulative plus Project
Peak Hour	AM

Major Street	Union Road
Minor Street	San Juan Oaks Road

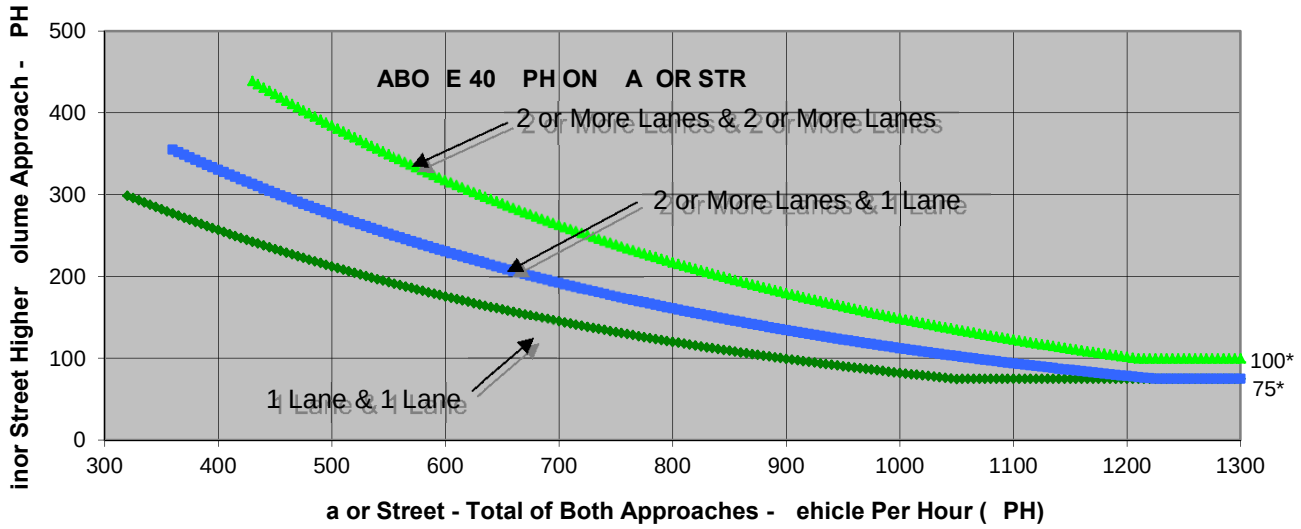
Turn Movement Volumes

	NB	SB	EB	WB
Left	53	0	144	0
Through	825	372	0	0
Right	0	135	54	0
Total	878	507	198	0

Major Street Direction

x	North/South
	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	Union Road	San Juan Oaks Road	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic olume (PH) *	**1,385**	**1 8**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	2	of	2

Project	San Juan Oaks Specific Plan
Scenario	Cumulative plus Project
Peak Hour	PM

Major Street	Union Road
Minor Street	San Juan Oaks Road

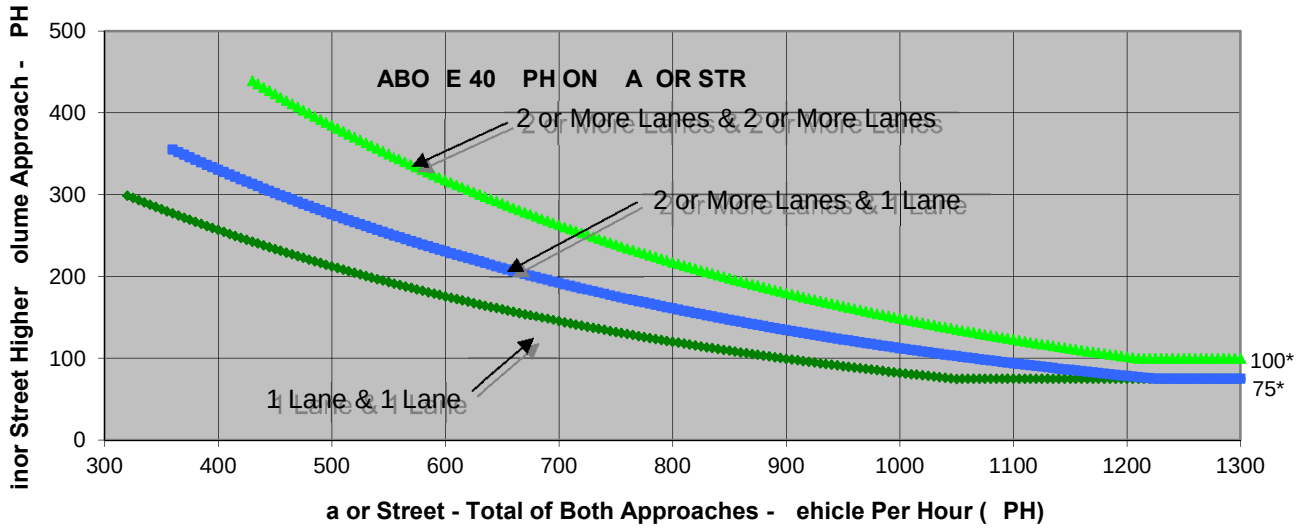
Turn Movement Volumes

	NB	SB	EB	WB
Left	85	0	278	0
Through	526	740	0	0
Right	0	200	102	0
Total	611	940	380	0

Major Street Direction

x	North/South
	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	Union Road	San Juan Oaks Road	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic olume (PH) *	**1,551**	**380**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	1	of	2

Project	San Juan Oaks Specific Plan
Scenario	Plus Project
Peak Hour	AM

Major Street	Intersection A - Major
Minor Street	Intersection A - Minor

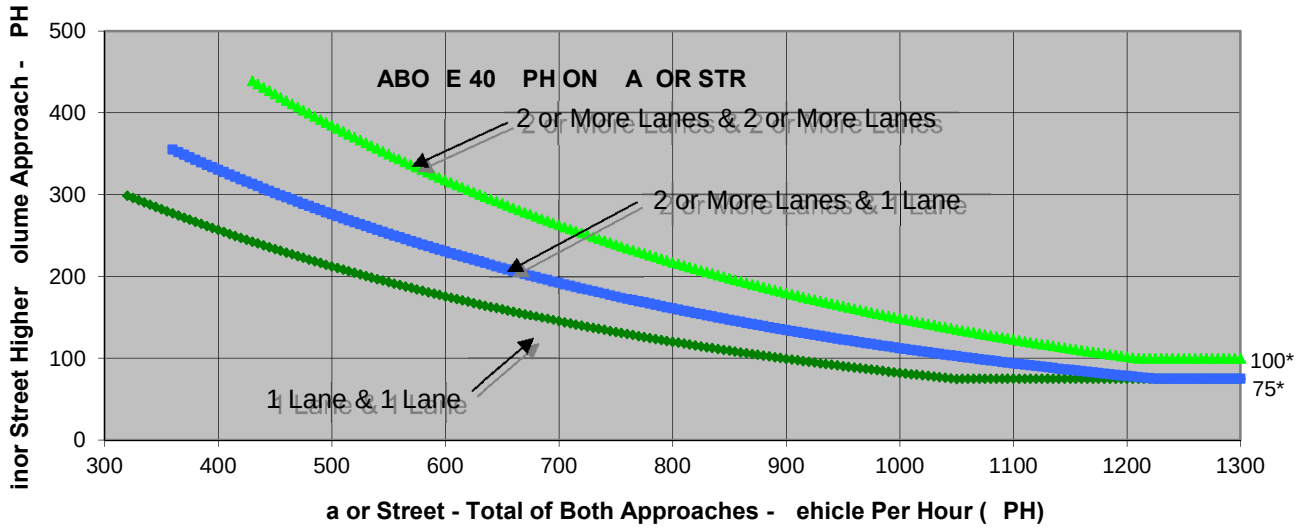
Turn Movement Volumes

	NB	SB	EB	WB
Left	1	0	24	0
Through	11	6	0	0
Right	0	13	2	0
Total	12	19	26	0

Major Street Direction

x	North/South
	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	Intersection A - Major	Intersection A - Minor	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic olume (PH) *	**31**	**26**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	2	of	2

Project	San Juan Oaks Specific Plan
Scenario	Plus Project
Peak Hour	PM

Major Street	Intersection A - Major
Minor Street	Intersection A - Minor

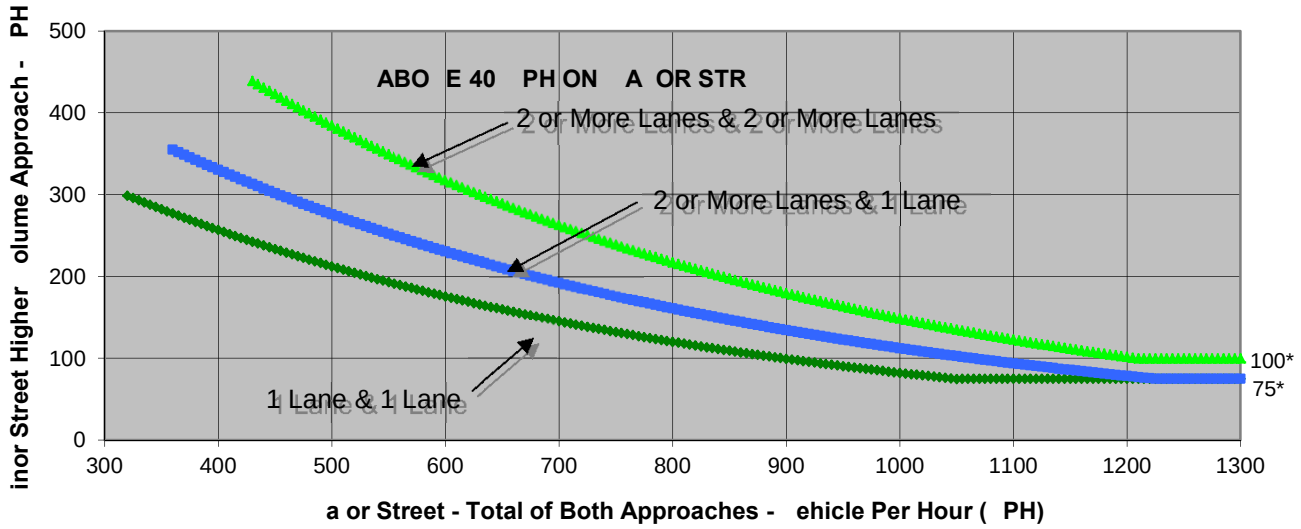
Turn Movement Volumes

	NB	SB	EB	WB
Left	3	0	18	0
Through	8	13	0	0
Right	0	29	2	0
Total	11	42	20	0

Major Street Direction

x	North/South
	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	Intersection A - Major	Intersection A - Minor	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic olume (PH) *	**53**	**20**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	1	of	2
Project	San Juan Oaks Specific Plan		
Scenario	Plus Project		
Peak Hour	AM		

Major Street	Intersection B - Major
Minor Street	Intersection B - Minor

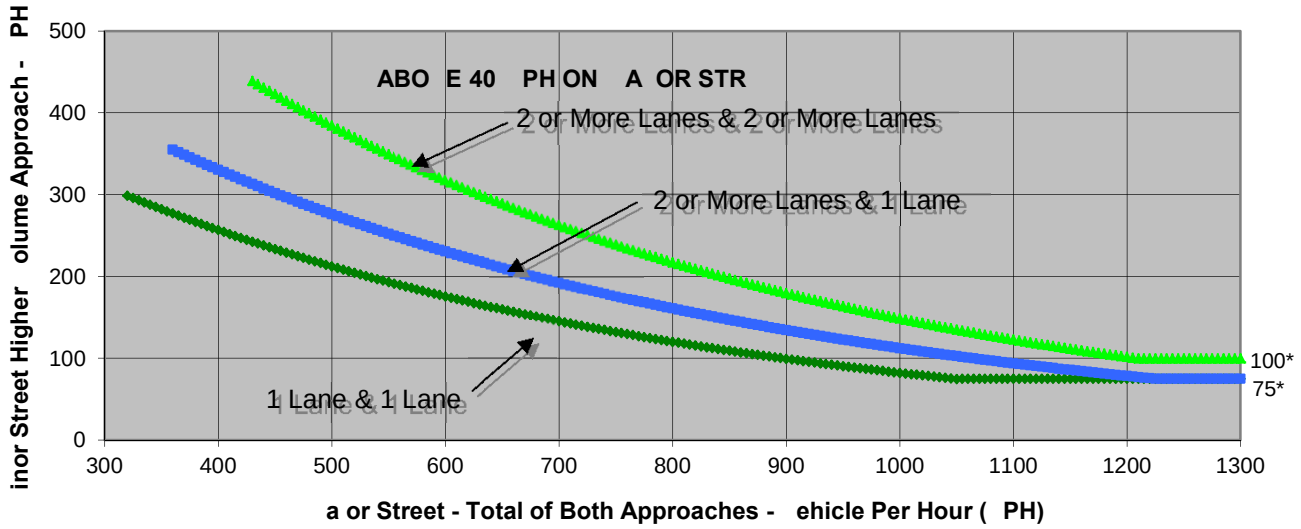
Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	33	0
Through	45	57	0	0
Right	0	18	0	0
Total	45	75	33	0

Major Street Direction

x	North/South
	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	Intersection B - Major	Intersection B - Minor	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic olume (PH) *	**120**	**33**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	2	of	2
Project	San Juan Oaks Specific Plan		
Scenario	Plus Project		
Peak Hour	PM		

Major Street	Intersection B - Major
Minor Street	Intersection B - Minor

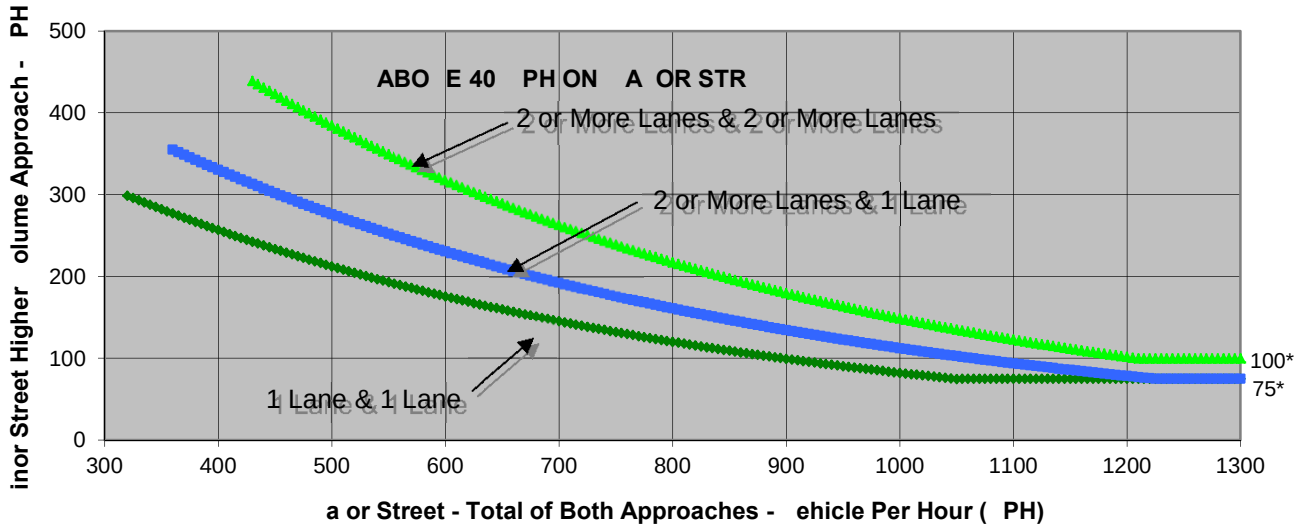
Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	25	0
Through	121	39	0	0
Right	0	71	0	0
Total	121	110	25	0

Major Street Direction

x	North/South
	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	Intersection B - Major	Intersection B - Minor	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic olume (PH) *	**231**	**25**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	1	of	2	
Project	San Juan Oaks Specific Plan			
Scenario	Plus Project			
Peak Hour	AM			

Major Street	Intersection C - Major
Minor Street	Intersection C - Minor

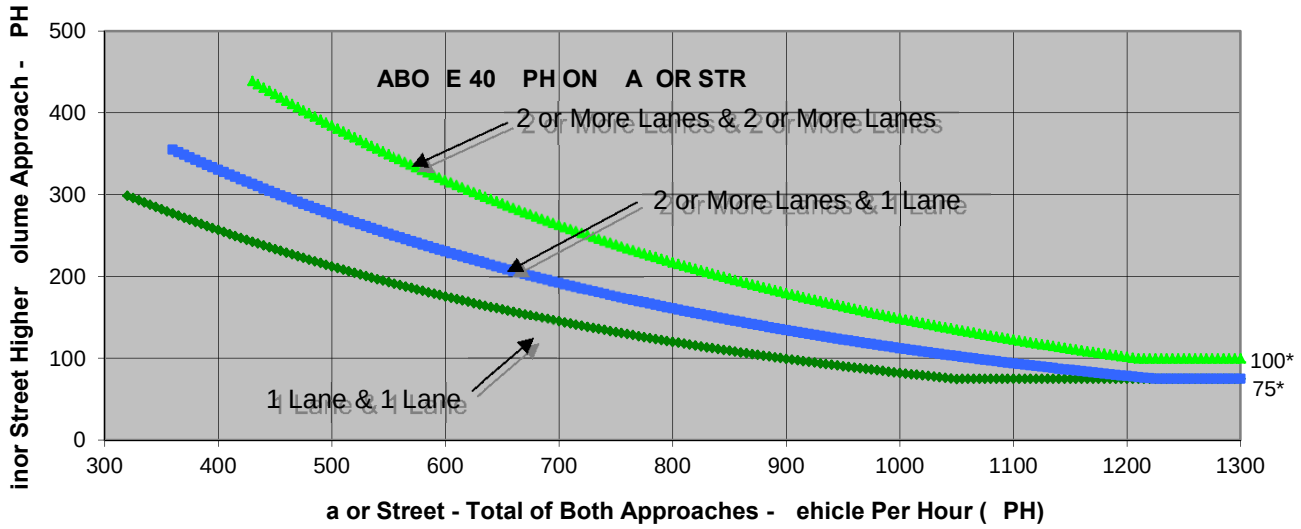
Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	99	0
Through	78	53	0	0
Right	0	74	0	0
Total	78	127	99	0

Major Street Direction

x	North/South
	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	Intersection C - Major	Intersection C - Minor	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic olume (PH) *	**205**		

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	2	of	2
Project	San Juan Oaks Specific Plan		
Scenario	Plus Project		
Peak Hour	PM		

Major Street	Intersection C - Major
Minor Street	Intersection C - Minor

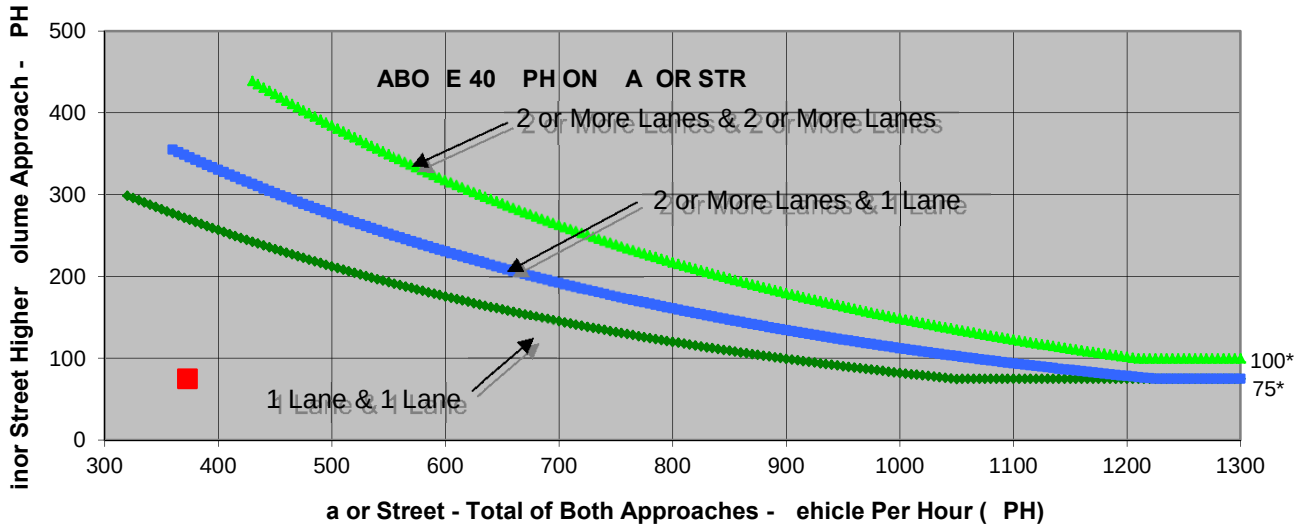
Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	75	0
Through	146	110	0	0
Right	0	117	0	0
Total	146	227	75	0

Major Street Direction

x	North/South
	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	Intersection C - Major	Intersection C - Minor	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic olume (PH) *	**373**	**75**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	1	of	2	
Project	San Juan Oaks Specific Plan			
Scenario	Plus Project			
Peak Hour	AM			

Major Street	Intersection D - Major
Minor Street	Intersection D - Minor

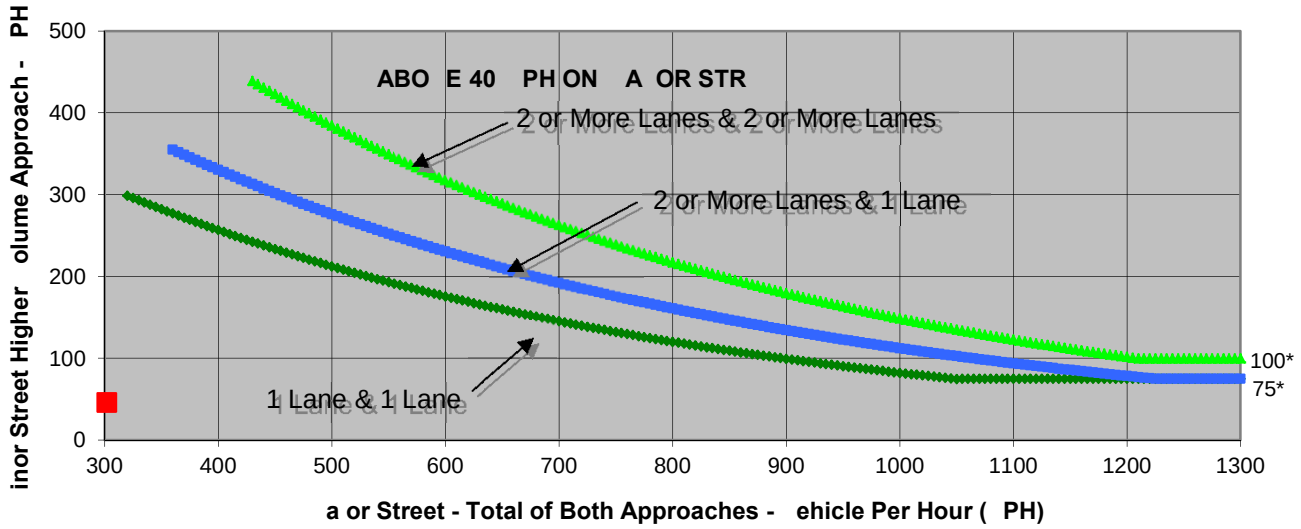
Turn Movement Volumes

	NB	SB	EB	WB
Left	23	0	0	0
Through	0	0	147	104
Right	23	0	30	21
Total	46	0	177	125

Major Street Direction

	North/South
x	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	Intersection D - Major	Intersection D - Minor	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic olume (PH) *	**302**	**46**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	2	of	2
Project	San Juan Oaks Specific Plan		
Scenario	Plus Project		
Peak Hour	PM		

Major Street	Intersection D - Major
Minor Street	Intersection D - Minor

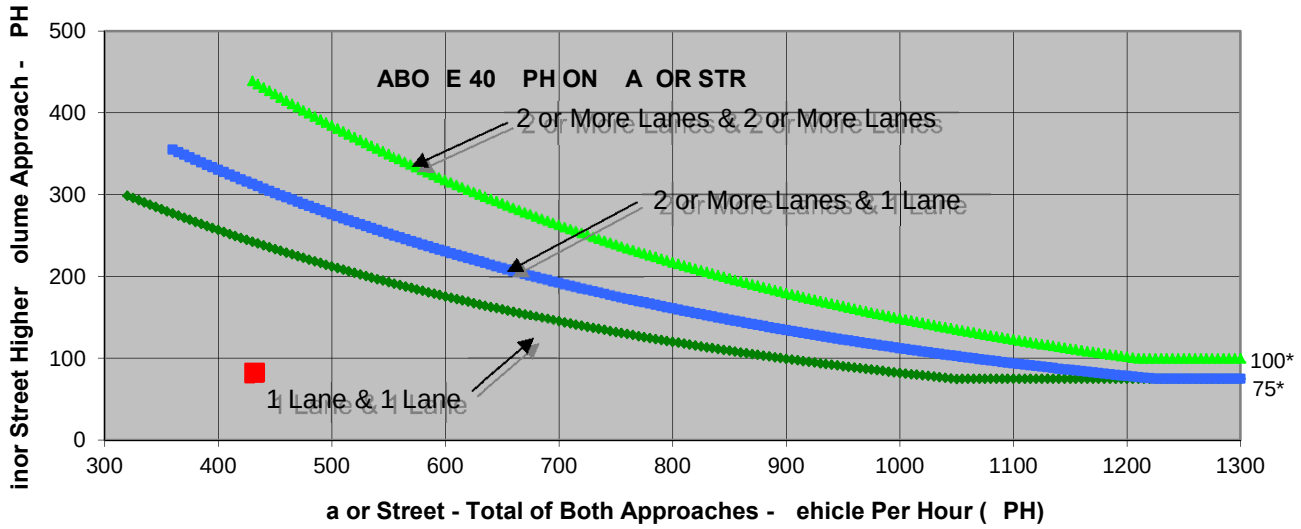
Turn Movement Volumes

	NB	SB	EB	WB
Left	41	0	0	25
Through	0	0	171	186
Right	41	0	50	0
Total	82	0	221	211

Major Street Direction

	North/South
x	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	Intersection D - Major	Intersection D - Minor	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic olume (PH) *	**432**	**82**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	1	of	2
Project	San Juan Oaks Specific Plan		
Scenario	Plus Project		
Peak Hour	AM		

Major Street	Intersection E - Major
Minor Street	Intersection E - Minor

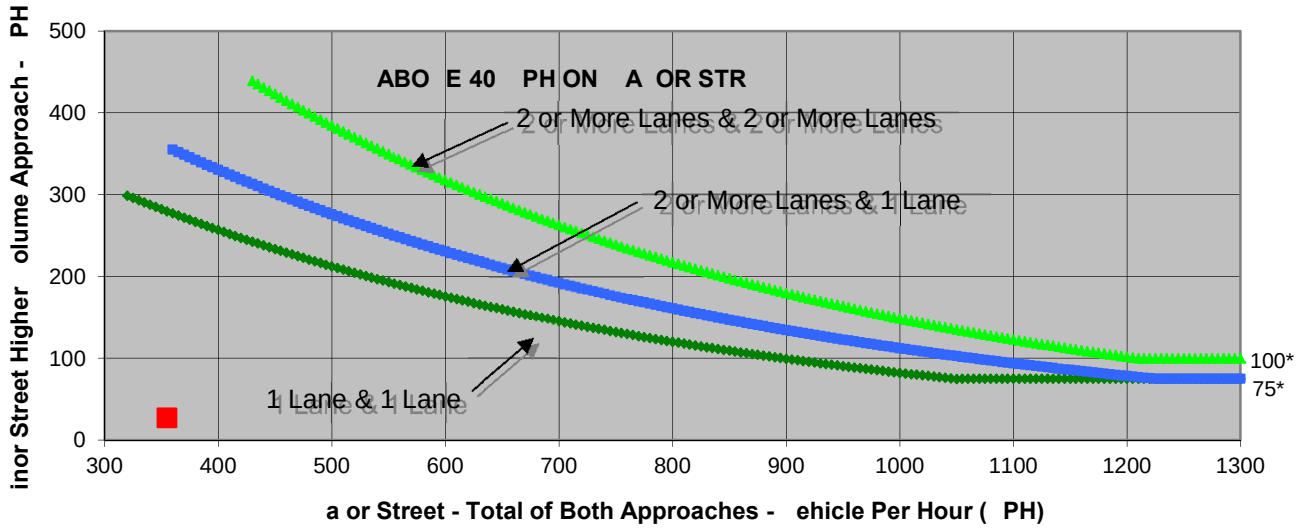
Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	60
Through	0	0	170	125
Right	27	0	0	0
Total	27	0	170	185

Major Street Direction

	North/South
x	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	Intersection E - Major	Intersection E - Minor	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic olume (PH) *	**355**	**27**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Sheet No	2	of	2

Project	San Juan Oaks Specific Plan
Scenario	Plus Project
Peak Hour	PM

Major Street	Intersection E - Major
Minor Street	Intersection E - Minor

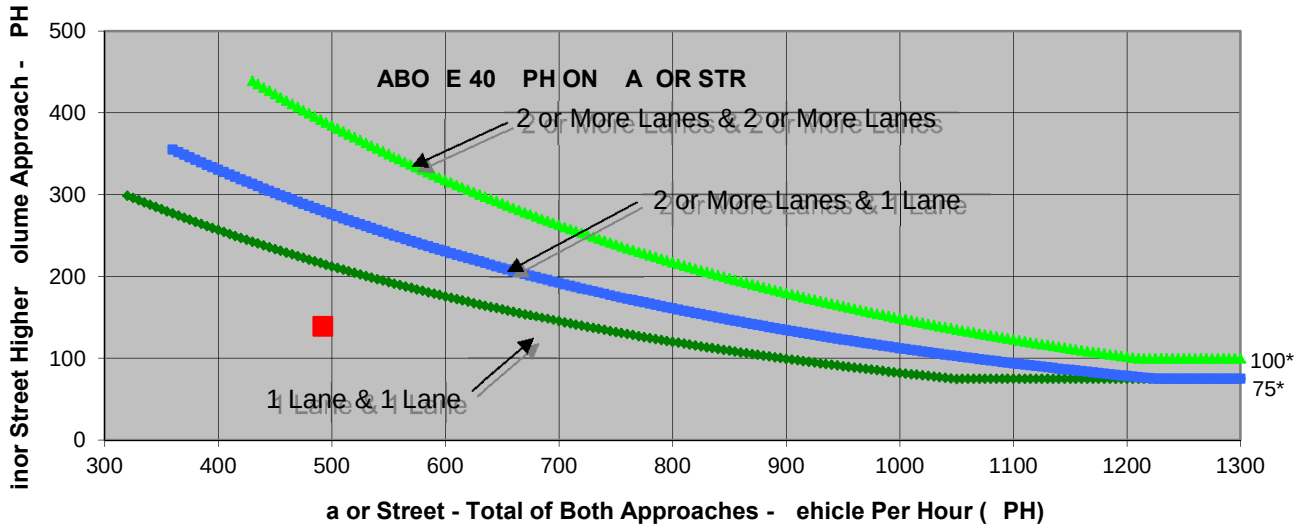
Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	69
Through	0	0	212	211
Right	139	0	0	0
Total	139	0	212	280

Major Street Direction

	North/South
x	East/West

Figure 4C-4 Warrant 3, Pea Hour (70 Factor)
(CO UNITY LESS THAN 10,000 POPULATION OR



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2012

	a or Street	inor Street	Warrant et
	Intersection E - Major	Intersection E - Minor	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic olume (PH) *	**4 2**	**13**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Section 2B.06 STOP Sign Applications

Guidance:

01 *At intersections where a full stop is not necessary at all times, consideration should first be given to using less restrictive measures such as YIELD signs (see Sections 2B.08 and 2B.09).*

02 *The use of STOP signs on the minor-street approaches should be considered if engineering judgment indicates that a stop is always required because of one or more of the following conditions:*

A. The vehicular traffic volumes on the through street or highway exceed 6,000 vehicles per day;

B. A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway; and/or

C. Crash records indicate that three or more crashes that are susceptible to correction by the installation of a STOP sign have been reported within a 12-month period, or that five or more such crashes have been reported within a 2-year period. Such crashes include right-angle collisions involving road users on the minor-street approach failing to yield the right-of-way to traffic on the through street or highway.

Support:

03 The use of STOP signs at grade crossings is described in Sections 8B.04 and 8B.05.

Section 2B.07 Multi-Way Stop Applications

Support:

01 Multi-way stop control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with multi-way stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multi-way stop control is used where the volume of traffic on the intersecting roads is approximately equal.

02 The restrictions on the use of STOP signs described in Section 2B.04 also apply to multi-way stop applications.

Guidance:

03 *The decision to install multi-way stop control should be based on an engineering study.*

04 *The following criteria should be considered in the engineering study for a multi-way STOP sign installation:*

A. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.

B. Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.

C. Minimum volumes:

1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and

2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but

3. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.

D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.

Option:

05 Other criteria that may be considered in an engineering study include:

A. The need to control left-turn conflicts;

B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;

C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and

D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.

APPENDIX D: FREEWAY SEGMENT ANALYSIS SHEETS

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan **Alternative: E isting**
Free ay Corridor: Northbound US-101 **Time Period: A**

Name	Monterey/San Benito County Line to SR-156 Ramps	SR-156 to SR-129	SR-129 to San Benito/Santa Clara County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)			
Accel Length			
Decel Length			
Mainline Volume	1,178	1,730	2,780
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	1,178	1,730	2,780
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	5.0%	5.0%	5.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.930	0.930	0.930
f_P	1.00	1.00	1.00
GP Flow (pcph)	1,333	1,958	3,146
GP Flow (pcphpl)	667	979	1,573
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.28	0.42	0.67
Speed (mph)	65.0	65.0	64.6
Density (pcphpl)	10.3	15.1	24.4
LOS	A	B	C

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan
Free ay Corridor: Northbound US-101

Alternative: E isting plus Pro ect
Time Period: A

Name	Monterey/San Benito County Line to SR-156 Ramps	SR-156 to SR-129	SR-129 to San Benito/Santa Clara County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)			
Accel Length			
Decel Length			
Mainline Volume	1,211	1,755	2,805
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	1,211	1,755	2,805
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	5.0%	5.0%	5.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.930	0.930	0.930
f_P	1.00	1.00	1.00
GP Flow (pcph)	1,370	1,986	3,174
GP Flow (pcphpl)	685	993	1,587
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.29	0.42	0.68
Speed (mph)	65.0	65.0	64.5
Density (pcphpl)	10.5	15.3	24.6
LOS	A	B	C

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan **Alternative: E isting**
Free ay Corridor: Northbound US-101 **Time Period: P**

Name	Monterey/San Benito County Line to SR-156 Ramps	SR-156 to SR-129	SR-129 to San Benito/Santa Clara County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)			
Accel Length			
Decel Length			
Mainline Volume	1,550	1,600	1,870
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	1,550	1,600	1,870
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	5.0%	5.0%	5.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.930	0.930	0.930
f_P	1.00	1.00	1.00
GP Flow (pcph)	1,754	1,811	2,116
GP Flow (pcphpl)	877	905	1,058
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.37	0.39	0.45
Speed (mph)	65.0	65.0	65.0
Density (pcphpl)	13.5	13.9	16.3
LOS	B	B	B

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan **Alternative: E isting plus Pro ect**
Free ay Corridor: Northbound US-101 **Time Period: P**

Name	Monterey/San Benito County Line to SR-156 Ramps	SR-156 to SR-129	SR-129 to San Benito/Santa Clara County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)			
Accel Length			
Decel Length			
Mainline Volume	1,599	1,638	1,908
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	1,599	1,638	1,908
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	5.0%	5.0%	5.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.930	0.930	0.930
f_P	1.00	1.00	1.00
GP Flow (pcph)	1,809	1,854	2,159
GP Flow (pcphpl)	905	927	1,080
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.38	0.39	0.46
Speed (mph)	65.0	65.0	65.0
Density (pcphpl)	13.9	14.3	16.6
LOS	B	B	B

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan **Alternative: E isting**
Free ay Corridor: Southbound US-101 **Time Period: A**

Name	San Benito/Santa Clara County Line to SR-129	SR-129 to SR-156	SR-156 to San Benito / Monterey County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)			
Accel Length			
Decel Length			
Mainline Volume	1,870	1,340	1,140
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	1,870	1,340	1,140
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	5.0%	5.0%	5.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.930	0.930	0.930
f_P	1.00	1.00	1.00
GP Flow (pcph)	2,116	1,516	1,290
GP Flow (pcphpl)	1,058	758	645
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.45	0.32	0.27
Speed (mph)	65.0	65.0	65.0
Density (pcphpl)	16.3	11.7	9.9
LOS	B	B	A

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan **Alternative: E isting plus Pro ect**
Free ay Corridor: Southbound US-101 **Time Period: A**

Name	San Benito/Santa Clara County Line to SR-129	SR-129 to SR-156	SR-156 to San Benito / Monterey County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)			
Accel Length			
Decel Length			
Mainline Volume	1,905	1,364	1,164
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	1,905	1,364	1,164
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	5.0%	5.0%	5.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.930	0.930	0.930
f_P	1.00	1.00	1.00
GP Flow (pcph)	2,156	1,543	1,317
GP Flow (pcphpl)	1,078	772	659
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.46	0.33	0.28
Speed (mph)	65.0	65.0	65.0
Density (pcphpl)	16.6	11.9	10.1
LOS	B	B	A

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan **Alternative: E isting**
Free ay Corridor: Southbound US-101 **Time Period: P**

Name	San Benito/Santa Clara County Line to SR-129	SR-129 to SR-156	SR-156 to San Benito / Monterey County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)			
Accel Length			
Decel Length			
Mainline Volume	3,170	2,000	1,850
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	3,170	2,000	1,850
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	5.0%	5.0%	5.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.930	0.930	0.930
f_P	1.00	1.00	1.00
GP Flow (pcph)	3,587	2,263	2,093
GP Flow (pcphpl)	1,794	1,132	1,047
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.76	0.48	0.45
Speed (mph)	62.8	65.0	65.0
Density (pcphpl)	28.6	17.4	16.1
LOS	D	B	B

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan **Alternative: E isting plus Pro ect**
Free ay Corridor: Southbound US-101 **Time Period: P**

Name	San Benito/Santa Clara County Line to SR-129	SR-129 to SR-156	SR-156 to San Benito / Monterey County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)			
Accel Length			
Decel Length			
Mainline Volume	3,223	2,035	1,885
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	3,223	2,035	1,885
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	5.0%	5.0%	5.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.930	0.930	0.930
f_P	1.00	1.00	1.00
GP Flow (pcph)	3,647	2,303	2,133
GP Flow (pcphpl)	1,824	1,151	1,067
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.78	0.49	0.45
Speed (mph)	62.5	65.0	65.0
Density (pcphpl)	29.2	17.7	16.4
LOS	D	B	B

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan **Alternative: Bac ground**
Free ay Corridor: Northbound US-101 **Time Period: A**

Name	Monterey/San Benito County Line to SR-156 Ramps	SR-156 to SR-129	SR-129 to San Benito/Santa Clara County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)			
Accel Length			
Decel Length			
Mainline Volume	1,250	1,836	2,950
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	1,250	1,836	2,950
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	5.0%	5.0%	5.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.930	0.930	0.930
f_P	1.00	1.00	1.00
GP Flow (pcph)	1,415	2,077	3,338
GP Flow (pcphpl)	707	1,039	1,669
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.30	0.44	0.71
Speed (mph)	65.0	65.0	64.0
Density (pcphpl)	10.9	16.0	26.1
LOS	A	B	D

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan
Free ay Corridor: Northbound US-101

Alternative: Bac ground plus Pro ect
Time Period: A

Name	Monterey/San Benito County Line to SR-156 Ramps	SR-156 to SR-129	SR-129 to San Benito/Santa Clara County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)			
Accel Length			
Decel Length			
Mainline Volume	1,283	1,861	2,975
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	1,283	1,861	2,975
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	5.0%	5.0%	5.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.930	0.930	0.930
f_P	1.00	1.00	1.00
GP Flow (pcph)	1,452	2,106	3,367
GP Flow (pcphpl)	726	1,053	1,683
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.31	0.45	0.72
Speed (mph)	65.0	65.0	63.9
Density (pcphpl)	11.2	16.2	26.4
LOS	B	B	D

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan **Alternative: Bac ground**
Free ay Corridor: Northbound US-101 **Time Period: P**

Name	Monterey/San Benito County Line to SR-156 Ramps	SR-156 to SR-129	SR-129 to San Benito/Santa Clara County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)			
Accel Length			
Decel Length			
Mainline Volume	1,645	1,698	1,984
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	1,645	1,698	1,984
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	5.0%	5.0%	5.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.930	0.930	0.930
f_P	1.00	1.00	1.00
GP Flow (pcph)	1,861	1,921	2,246
GP Flow (pcphpl)	931	961	1,123
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.40	0.41	0.48
Speed (mph)	65.0	65.0	65.0
Density (pcphpl)	14.3	14.8	17.3
LOS	B	B	B

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan **Alternative: Bac ground plus Pro ect**
Free ay Corridor: Northbound US-101 **Time Period: P**

Name	Monterey/San Benito County Line to SR-156 Ramps	SR-156 to SR-129	SR-129 to San Benito/Santa Clara County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)			
Accel Length			
Decel Length			
Mainline Volume	1,694	1,736	2,022
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	1,694	1,736	2,022
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	5.0%	5.0%	5.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.930	0.930	0.930
f_P	1.00	1.00	1.00
GP Flow (pcph)	1,917	1,964	2,289
GP Flow (pcphpl)	958	982	1,144
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.41	0.42	0.49
Speed (mph)	65.0	65.0	65.0
Density (pcphpl)	14.7	15.1	17.6
LOS	B	B	B

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan **Alternative: Bac ground**
Free ay Corridor: Southbound US-101 **Time Period: A**

Name	San Benito/Santa Clara County Line to SR-129	SR-129 to SR-156	SR-156 to San Benito / Monterey County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)			
Accel Length			
Decel Length			
Mainline Volume	1,984	1,422	1,210
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	1,984	1,422	1,210
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	5.0%	5.0%	5.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.930	0.930	0.930
f_P	1.00	1.00	1.00
GP Flow (pcph)	2,246	1,609	1,369
GP Flow (pcphpl)	1,123	805	684
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.48	0.34	0.29
Speed (mph)	65.0	65.0	65.0
Density (pcphpl)	17.3	12.4	10.5
LOS	B	B	A

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan **Alternative: Bac ground plus Pro ect**
Free ay Corridor: Southbound US-101 **Time Period: A**

Name	San Benito/Santa Clara County Line to SR-129	SR-129 to SR-156	SR-156 to San Benito / Monterey County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)			
Accel Length			
Decel Length			
Mainline Volume	2,019	1,446	1,234
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	2,019	1,446	1,234
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	5.0%	5.0%	5.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.930	0.930	0.930
f_P	1.00	1.00	1.00
GP Flow (pcph)	2,285	1,636	1,396
GP Flow (pcphpl)	1,143	818	698
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.49	0.35	0.30
Speed (mph)	65.0	65.0	65.0
Density (pcphpl)	17.6	12.6	10.7
LOS	B	B	A

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan **Alternative: Bac ground**
Free ay Corridor: Southbound US-101 **Time Period: P**

Name	San Benito/Santa Clara County Line to SR-129	SR-129 to SR-156	SR-156 to San Benito / Monterey County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)			
Accel Length			
Decel Length			
Mainline Volume	3,364	2,122	1,963
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	3,364	2,122	1,963
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	5.0%	5.0%	5.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.930	0.930	0.930
f_P	1.00	1.00	1.00
GP Flow (pcph)	3,807	2,402	2,222
GP Flow (pcphpl)	1,903	1,201	1,111
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.81	0.51	0.47
Speed (mph)	61.4	65.0	65.0
Density (pcphpl)	31.0	18.5	17.1
LOS	D	C	B

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan **Alternative: Bac ground plus Pro ect**
Free ay Corridor: Southbound US-101 **Time Period: P**

Name	San Benito/Santa Clara County Line to SR-129	SR-129 to SR-156	SR-156 to San Benito / Monterey County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)			
Accel Length			
Decel Length			
Mainline Volume	3,417	2,157	1,998
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	3,417	2,157	1,998
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	5.0%	5.0%	5.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.930	0.930	0.930
f_P	1.00	1.00	1.00
GP Flow (pcph)	3,867	2,441	2,261
GP Flow (pcphpl)	1,933	1,221	1,131
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.82	0.52	0.48
Speed (mph)	61.0	65.0	65.0
Density (pcphpl)	31.7	18.8	17.4
LOS	D	C	B

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan **Alternative: Cumulative**
Free ay Corridor: Northbound US-101 **Time Period: A**

Name	Monterey/San Benito County Line to SR-156 Ramps	SR-156 to SR-129	SR-129 to San Benito/Santa Clara County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)	15,840	9,504	14,784
Accel Length			
Decel Length			
Mainline Volume	2,021	2,508	2,968
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	2,021	2,508	2,968
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	13.0%	9.0%	9.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.837	0.881	0.881
f_P	1.00	1.00	1.00
GP Flow (pcph)	2,542	2,996	3,546
GP Flow (pcphpl)	1,271	1,498	1,773
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.54	0.64	0.75
Speed (mph)	65.0	64.9	63.0
Density (pcphpl)	19.6	23.1	28.1
LOS	C	C	D

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan
Free ay Corridor: Northbound US-101

Alternative: Cumulative plus Pro ect
Time Period: A

Name	Monterey/San Benito County Line to SR-156 Ramps	SR-156 to SR-129	SR-129 to San Benito/Santa Clara County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)	15,840	9,504	14,784
Accel Length			
Decel Length			
Mainline Volume	2,054	2,533	2,993
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	2,054	2,533	2,993
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	13.0%	9.0%	9.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.837	0.881	0.881
f_P	1.00	1.00	1.00
GP Flow (pcph)	2,584	3,026	3,576
GP Flow (pcphpl)	1,292	1,513	1,788
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.55	0.64	0.76
Speed (mph)	65.0	64.8	62.9
Density (pcphpl)	19.9	23.3	28.4
LOS	C	C	D

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan **Alternative: Cumulative**
Free ay Corridor: Northbound US-101 **Time Period: P**

Name	Monterey/San Benito County Line to SR-156 Ramps	SR-156 to SR-129	SR-129 to San Benito/Santa Clara County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)	15,840	9,504	14,784
Accel Length			
Decel Length			
Mainline Volume	2,674	1,780	1,930
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	2,674	1,780	1,930
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	11.0%	11.0%	11.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.858	0.858	0.858
f_P	1.00	1.00	1.00
GP Flow (pcph)	3,279	2,183	2,367
GP Flow (pcphpl)	1,640	1,091	1,183
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.70	0.46	0.50
Speed (mph)	64.2	65.0	65.0
Density (pcphpl)	25.5	16.8	18.2
LOS	C	B	C

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan
Free ay Corridor: Northbound US-101

Alternative: Cumulative plus Pro ect
Time Period: P

Name	Monterey/San Benito County Line to SR-156 Ramps	SR-156 to SR-129	SR-129 to San Benito/Santa Clara County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)	15,840	9,504	14,784
Accel Length			
Decel Length			
Mainline Volume	2,723	1,818	1,968
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	2,723	1,818	1,968
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	11.0%	11.0%	11.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.858	0.858	0.858
f_P	1.00	1.00	1.00
GP Flow (pcph)	3,339	2,229	2,413
GP Flow (pcphpl)	1,670	1,115	1,207
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.71	0.47	0.51
Speed (mph)	64.0	65.0	65.0
Density (pcphpl)	26.1	17.1	18.6
LOS	D	B	C

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan **Alternative: Cumulative**
Free ay Corridor: Southbound US-101 **Time Period: A**

Name	San Benito/Santa Clara County Line to SR-129	SR-129 to SR-156	SR-156 to San Benito / Monterey County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)	14,784	9,504	15,840
Accel Length			
Decel Length			
Mainline Volume	1,521	1,400	2,602
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	1,521	1,400	2,602
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	9.0%	9.0%	13.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.881	0.881	0.837
f_P	1.00	1.00	1.00
GP Flow (pcph)	1,817	1,673	3,273
GP Flow (pcphpl)	909	836	1,637
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.39	0.36	0.70
Speed (mph)	65.0	65.0	64.2
Density (pcphpl)	14.0	12.9	25.5
LOS	B	B	C

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan **Alternative: Cumulative plus Pro ect**
Free ay Corridor: Southbound US-101 **Time Period: A**

Name	San Benito/Santa Clara County Line to SR-129	SR-129 to SR-156	SR-156 to San Benito / Monterey County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)	14,784	9,504	15,840
Accel Length			
Decel Length			
Mainline Volume	1,556	1,424	2,626
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	1,556	1,424	2,626
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	9.0%	9.0%	13.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.881	0.881	0.837
f_P	1.00	1.00	1.00
GP Flow (pcph)	1,859	1,701	3,303
GP Flow (pcphpl)	930	851	1,652
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.40	0.36	0.70
Speed (mph)	65.0	65.0	64.1
Density (pcphpl)	14.3	13.1	25.8
LOS	B	B	C

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan **Alternative: Cumulative**
Free ay Corridor: Southbound US-101 **Time Period: P**

Name	San Benito/Santa Clara County Line to SR-129	SR-129 to SR-156	SR-156 to San Benito / Monterey County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)	14,784	9,504	15,840
Accel Length			
Decel Length			
Mainline Volume	3,005	2,826	2,839
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	3,005	2,826	2,839
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	11.0%	11.0%	11.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.858	0.858	0.858
f_P	1.00	1.00	1.00
GP Flow (pcph)	3,685	3,466	3,482
GP Flow (pcphpl)	1,843	1,733	1,741
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.78	0.74	0.74
Speed (mph)	62.2	63.4	63.4
Density (pcphpl)	29.6	27.3	27.5
LOS	D	D	D

HC 2010 Basic Free ay Segment Report

Pro ect: San uan Oa s Specific Plan **Alternative: Cumulative plus Pro ect**
Free ay Corridor: Southbound US-101 **Time Period: P**

Name	San Benito/Santa Clara County Line to SR-129	SR-129 to SR-156	SR-156 to San Benito / Monterey County Line
Define Free ay Segment			
Type	Basic	Basic	Basic
Length (ft)	14,784	9,504	15,840
Accel Length			
Decel Length			
Mainline Volume	3,058	2,861	2,874
Calculate Flo Rate in General Purpose Lanes (GP)			
GP Volume (vph)	3,058	2,861	2,874
PHF	0.95	0.95	0.95
GP Lanes	2	2	2
Terrain	Rolling	Rolling	Rolling
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	11.0%	11.0%	11.0%
RV %	0.0%	0.0%	0.0%
E_T	2.5	2.5	2.5
E_R	2.0	2.0	2.0
f_{HV}	0.858	0.858	0.858
f_P	1.00	1.00	1.00
GP Flow (pcph)	3,750	3,508	3,524
GP Flow (pcphpl)	1,875	1,754	1,762
Calculate Speed in General Purpose Lanes			
Lane Width (ft)	12	12	12
Shoulder Width	>6	>6	>6
TRD	1.0	1.0	1.0
f_{LW}	0.0	0.0	0.0
f_{LC}	0.0	0.0	0.0
Calculated FFS	72.2	72.2	72.2
Measured FFS			
FFS Curve	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.80	0.75	0.75
Speed (mph)	61.8	63.2	63.1
Density (pcphpl)	30.3	27.7	27.9
LOS	D	D	D

APPENDIX E: BACKGROUND APPROVED VOLUMES AND TRIPS

TABLE E-1: BACKGROUND APPROVED PROJECTS

Project	Description
Walnut Park 13	196 Single Family
Eden West	55 Single Family
Hillock Ranch	108 Single Family
La Baig 5	48 Single Family
Las Brisas 7	23 Single Family
Las Brisas 8	23 Single Family
Palmtag Subdivision	10 Single Family
Walnut Park 8A	31 Single Family
Walnut Park 8B	27 Single Family
Annoti (Miller Ferriera) Senior Project	170 Single Family
West of Fairview	100 Apartments, 567 Single Family
Valles	50 Apartments
Thorning	10 Single Family, 60 Apartments
Cerrato Estates	241 Apartments
KT Orchard Park	91 Single Family
Ladd Lane	101 Apartments
Rajkovich	100 Apartments, 81 Single Family
Brigantino	154 Single Family
Sywak	8 Single Family
Pacific West Communities	57 Apartments
King	8 Single Family
Taliferro & Scagliotti	5 Single Family
CSDC	15 Apartments
Brigantino & Fuller	105 Single Family
Pivetti	24 Apartments
Saroyan/Howard	97 Apartments
South County Housing/Hillview 2	30 Single Family
Linda and Patrick Dike	39 Single Family
Gibson M. Fam Limited Pact	29 Single Family
Fairview Corners	220 Single Family
Santana Ranch	774 Single Family, 318 Condominium/Townhome, 700 student elementary school, 106,000 square foot commercial building
Fairfield Inn & Suites Marriott Hotel	81 room hotel with all amenities
Ladd Lane / North Florida Development	12,410 square foot medical office building, 20,500 square foot commercial retail building
Community Food Bank of San Benito County	3,072 square feet of office, 10,560 square feet of warehouse
San Felipe Storage	95,200 square feet of storage units
Heritage Plaza Building	4,039 square foot commercial building
Shop & Save	1,140 square foot retail space with 4,560 square foot mini market

Source: City of Hollister, June 2015.

TABLE E-2: BACKGROUND PROJECT TRIP GENERATION

ITE#	Land Use Type	Size	Type	Weekday	AM Peak			PM Peak		
				Daily	Total	In	Out	Total	In	Out
210	Single-Family Detached	2812	units	24,501	2,028	507	1,521	2,433	1,533	900
220	Apartment	845	units	5,244	418	84	334	482	313	169
230	Condominium/Townhome	318	units	1,848	140	24	116	165	111	54
150	Food Bank Warehouse	13.6	ksf	49	4	3	1	4	1	3
151	Self-Storage	95.2	ksf	238	13	7	6	25	13	12
310	Hotel	81	rooms	352	31	19	12	48	25	23
520	Elementary School	700	students	903	294	162	132	196	88	108
720	Medical-Dental Office	12.41	ksf	292	30	24	6	44	12	32
820	Retail	130.5	ksf	5,600	133	81	52	489	235	254
Total Background Trips				**39,027**	**3,091**	**911**	**2,180**	**3,886**	**2,331**	**1,555**

Source: ITE Trip Generation Manual, 9th Edition; Fehr & Peers, June 2015.

APPENDIX F: VMT ANALYSIS

Select Geographic Area Average Western US City

Land Use Type	Units	Method	Daily Trips
Number of Dwelling Units			
Single Family (ITE 210)		Average Rate	
Multi-Family (ITE 220)		Average Rate	
High Rise Condo (ITE 232)		Average Rate	
Other Residential	1084		4452
Retail Floor Space (ksf)			
General Retail other than those listed below (ITE 820)		Average Rate	
Supermarket (ITE 850)		Average Rate	
Bank (ITE 912)		Average Rate	
Health Club (ITE 492)		Average Rate	
Restaurant (non-fast food - ITE 932)		Average Rate	
Fast-Food Restaurant (ITE 934)		Average Rate	
Gas Station (ITE 945)		Average Rate	
Auto Repair (ITE 942)		Average Rate	
Other Retail			2491
Office Floor Space (ksf)			
Non-Medical (ITE 710)		Average Rate	
Medical (ITE 720)		Average Rate	
Other Office			
Industrial Floor Space (ksf)			
Light Industrial (ITE 110)		Average Rate	
Manufacturing (ITE 140)		Average Rate	
Warehousing (ITE 150)		Average Rate	
Other Industrial			
Hotel rooms (ITE 310)		Average Rate	
Movie Screens (ITE 445)		Average Rate	
School Enrollment			
Grade School (ITE 520)		Average Rate	
High School (ITE 530)		Average Rate	
College (ITE 550)		Average Rate	
Misc Floor Space (ksf) not covered above			1866

Total ITE Trips Generated	8809.00
Total HH Trips Generated	4452.00
Total Retail Trips Generated	2491.00
Total Office Trips Generated	0.00
Total Industrial Trips Generated	0.00
Total School Trips Generated	0.00
Total Other Trips Generated	1866.00

Trip Purpose	Internalization Percentage		Description
Home to work trips		%	This is the percentage of onsite residential work trips that go to jobs within the project. For small projects, this percentage will tend to be small. For large projects, this percentage can be fairly large.
Home to other (shopping, services, recreation) trips	57	%	This is the percentage of onsite residential non-work (shopping, dining, recreation) trips that remain within the project area.
Home to school trips		%	This is the percentage of school trips (student drop-off, student drivers) that remain onsite between project homes and schools. For large sites, many of the school trips could remain internal to the project area.
Trips between non-home uses		%	This is the percentage of non-home-based trips that remain onsite. Examples of non-home-based trips include trips from work to lunch, or trips between two retail uses. In this case, only trips between onsite retail and employment are considered.

Reasonableness Checks	Trips	Percentage
Total Home-to-Work Reduction	0.00	
Total Home-to-Other Reduction	1093.04	
Total Home-to-School Reduction	0.00	
Total Non-Home Trip Reduction	0.00	
Total Overall Trip Internalization	1093.04	13%

Retail Pass-by Trip Adjustment	Daily Pass-by Percentage		Daily Pass-by Reduction	
General Retail other than those listed below (ITE 820)		%	0.00	
Supermarket (ITE 850)		%	0.00	
Bank (ITE 912)		%	0.00	
Health Club (ITE 492)		%	0.00	
Restaurant (non-fast food - ITE 932)		%	0.00	
Fast-Food Restaurant (ITE 934)		%	0.00	
Gas Station (ITE 945)		%	0.00	
Auto Repair (ITE 942)		%	0.00	
Other Retail		%	0.00	
Total Daily Retail Pass-by	0	%		0.00

Note: Ensure that adjacent streets can support the level of pass-by trips shown above.

<< Prev

Next >>

Select Geographic Area Average Western US City

Inputs/Assumptions

Home-Based Trip Production Proportions by Trip Purpose

	Total Proportion	Proportion to/from Home End
Home-Based Work (HBW)	.21	0.270
Home-Based Other (HBO)	.52	0.669
Home-Based School (HBS)	.04	0.051
Non-Home Based (NHB)	.23	0.010
	1.00	1.000

Non-Home Trip Purpose Proportions

	Retail	Office	Industrial	School	Other
Home-Based Work (HBW)	.1	.33	.6	.16	.6
Home-Based Other (HBO)	.62	.29	.2	.56	.2
Non-Home Based (NHB)	.28	.38	.2	.28	.2
	1.00	1.00	1.00	1.00	1.00

Residential Weekday Daily Trip Ends

	Trip Ends	Internalization Reductions
Residential HBW	1202.04	0.00
Residential HBO	2978.39	546.52
Residential NHB attracted to home location	44.52	0.00
Residential NHB trips associated with residents of project that are generated elsewhere on network	2545.20	

Non-residential Weekday Daily Trip Ends

	Retail Trip Ends	Office Trip Ends	Industrial Trip Ends	School Trip Ends	Other Trip Ends	Internalization Reductions
HBW	249.10	0.00	0.00	0.00	1119.60	0.00
HBO	1544.42	0.00	0.00	0.00	373.20	546.52
NHB	697.48	0.00	0.00	0.00	373.20	0.00

(d) Note that these trip ends can be double counted for mixed use projects/plans if internalization rate is not properly calculated

Estimated Trip Lengths in miles

	HBW	HBO	NHB
Internal to Internal (II)	.80	.80	.80
Internal to External (IX)	18.27	6.90	8.48
NHB (that occur elsewhere on the network)			8.48

Part A CALCULATION VMT from Internal Project Trips

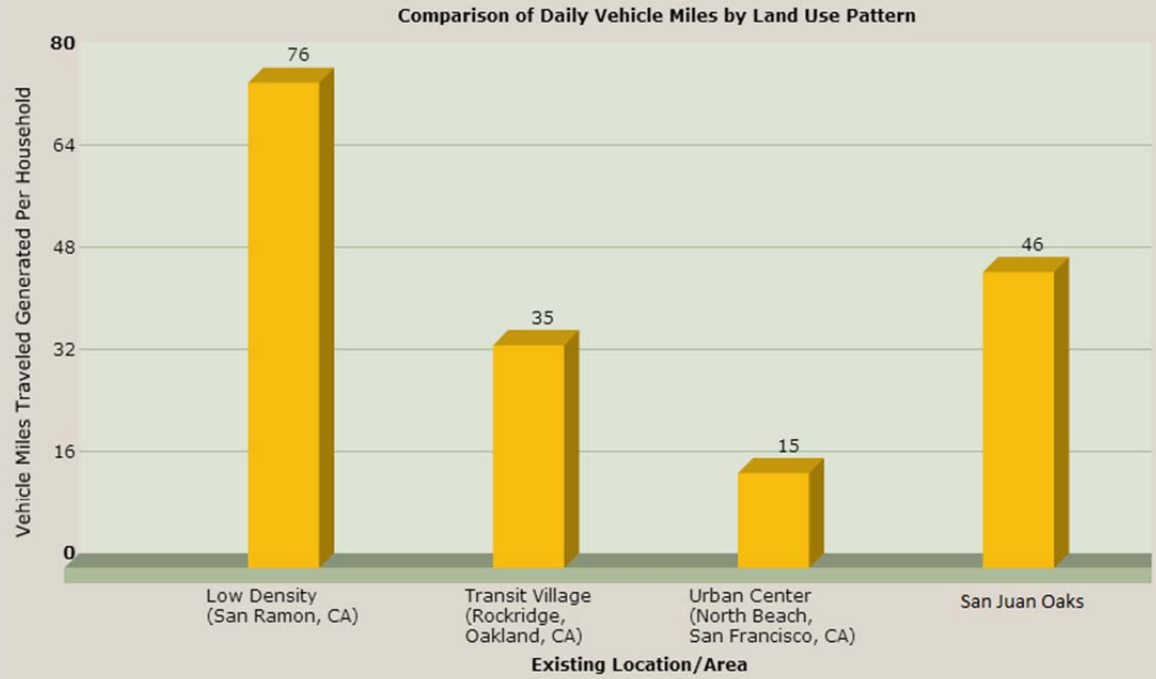
	Internal Residential	Internal Non Residential
HBW	0.00	0.00
HBO	437.22	437.22
NHB	0.00	0.00

Part B CALCULATION VMT from Internal-External Project Trips

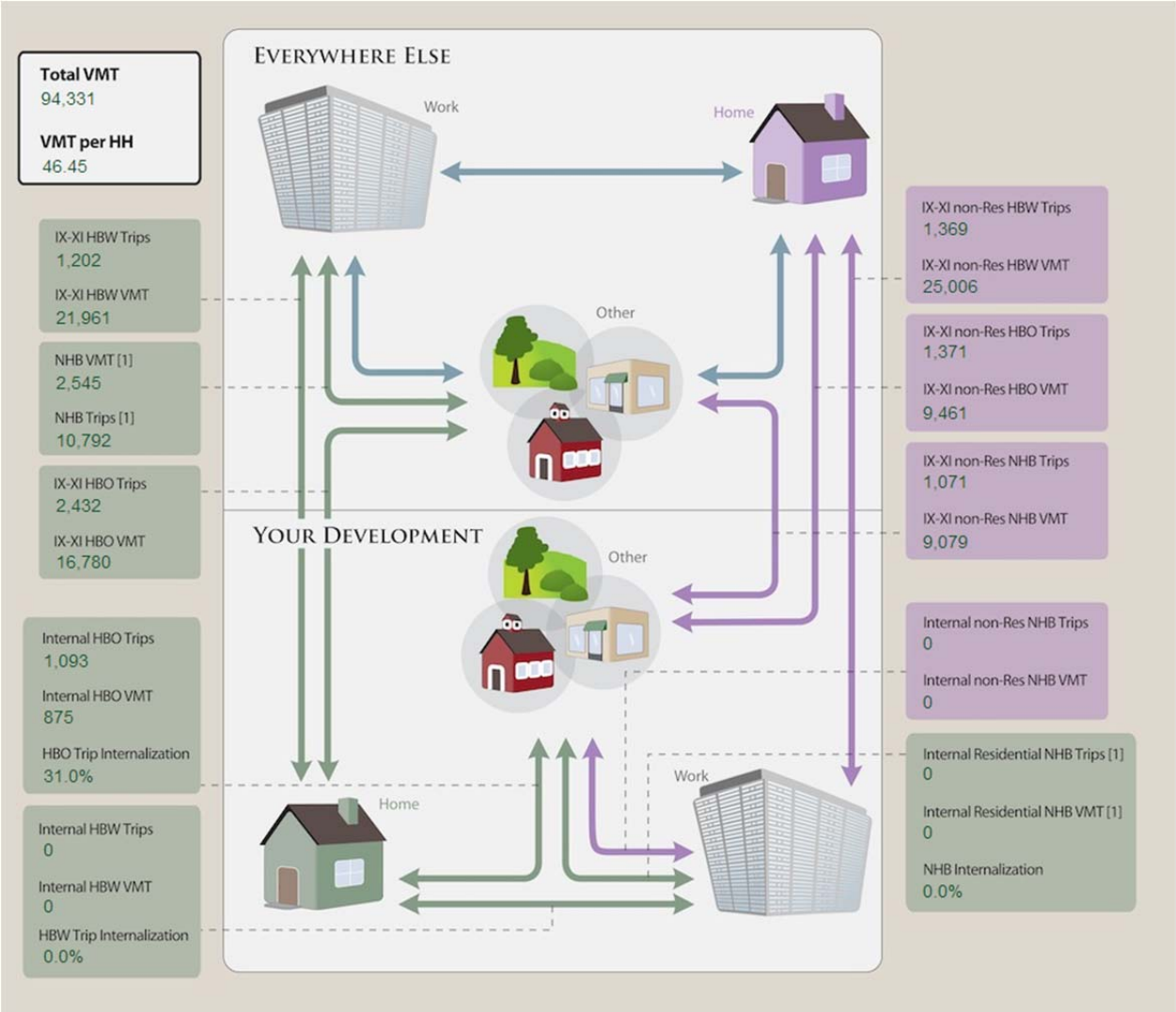
	IX - XI Residential	IX - XI Non Residential
HBW	21961.27	25006.15
HBO	16779.90	9460.59
NHB	11169.18	9079.37

Summary

Total VMT Generation 94,331



Overall VMT Calculation	94,331	
Carbon dioxide emissions factor per gallon of gasoline consumed =	8.8	kilograms
Adjustment factor to account for other greenhouse gasses =	1.0526316	
Combined average fuel economy of cars and light trucks =	22.4	miles per gallon
GHG emissions per average weekday from project/plan =	39.0	metric tons of carbon dioxide equivalent per day


Total VMT
94,331
VMT per HH
46.45
IX-XI HBW Trips
1,202
IX-XI HBW VMT
21,961
NHB VMT [1]
2,545
NHB Trips [1]
10,792
IX-XI HBO Trips
2,432
IX-XI HBO VMT
16,780
Internal HBO Trips
1,093
Internal HBO VMT
875
HBO Trip Internalization
31.0%
Internal HBW Trips
0
Internal HBW VMT
0
HBW Trip Internalization
0.0%
EVERYWHERE ELSE
Work
Home
Other
YOUR DEVELOPMENT
Other
Home
Work
IX-XI non-Res HBW Trips
1,369
IX-XI non-Res HBW VMT
25,006
IX-XI non-Res HBO Trips
1,371
IX-XI non-Res HBO VMT
9,461
IX-XI non-Res NHB Trips
1,071
IX-XI non-Res NHB VMT
9,079
Internal non-Res NHB Trips
0
Internal non-Res NHB VMT
0
Internal Residential NHB Trips [1]
0
Internal Residential NHB VMT [1]
0
NHB Internalization
0.0%