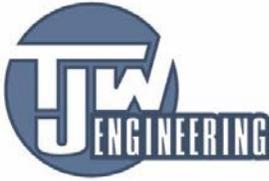


Centre City Shopping Center Traffic Impact Analysis City of Escondido, California

Prepared for:
OnPoint Development
7514 Girard Ave, Suite 1515
La Jolla, CA 92037

Prepared by:
TJW ENGINEERING, INC.
6 Venture, Suite 265
Irvine, CA 92618

January 27, 2017
Revised: March 20, 2017
Revised: May 1, 2017
Revised: May 5, 2017
Revised: June 21, 2017



June 21, 2017

Mr. Todd Dwyer
OnPoint Development
7514 Girard Ave., Suite 1515
La Jolla, CA 92037

Subject: Revised Traffic Impact Analysis: Centre City Shopping Center, Escondido CA

Dear Mr. Dwyer:

TJW ENGINEERING, INC. (TJW) is pleased to present you with this revised traffic impact analysis for the proposed **Centre City Shopping Center** project in the City of Escondido. The proposed project is located at 425 and 427 West Mission Avenue, at the southeast corner of the Centre City Parkway/Mission Avenue intersection.

This revised traffic study has been prepared to meet the published traffic study requirements for the City of Escondido and incorporates comments provided by City staff on the first three drafts of the traffic analysis. This report is being submitted to you for review and forwarding to the City of Escondido.

Please contact us at (949) 878-3509 if you have any questions regarding this analysis.

Sincerely,

Thomas Wheat, PE, TE
President

Registered Civil Engineer #69467
Registered Traffic Engineer #2565



Jeff Weckstein
Transportation Planner



**CENTRE CITY SHOPPING CENTER
TRAFFIC IMPACT ANALYSIS**
Escondido, California

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1.0 EXECUTIVE SUMMARY

This traffic impact analysis (TIA) analyzes the projected traffic operations associated with the proposed **Centre City Shopping Center** project in the City of Escondido. The purpose of this TIA is to evaluate the potential circulation system deficiencies that may result from development of the proposed project, and to recommend improvements to achieve acceptable operations, if applicable. This analysis has been prepared pursuant to applicable regionally adopted San Diego Traffic Engineers' Council (SANTEC) traffic impact analysis guidelines as well as the City of Escondido's traffic impact analysis guidelines.

The 2.24± site is currently occupied by a vacant restaurant (former Wagon Wheel restaurant) and the Palm Tree Motor Lodge at the southeast corner of the Centre City Parkway/Mission Avenue intersection. The project would demolish the existing uses on-site and construct a commercial development that would consist of three buildings. Building A would consist of 3,500 square feet of retail space (Stanton Optical) and a 2,874-square-foot restaurant with a drive-through. Building B would consist of a 2,004-square-foot restaurant/coffee shop with a drive-through, a 2,400-square-foot restaurant without a drive-through, and 1,000 square feet of retail space. Building C would consist of a 4,308-square-foot SuperStar carwash.

The proposed project is anticipated to be built and generating trips in 2018.

The proposed project is projected to generate 5,931 daily trips, 347 AM peak hour trips, 347 Mid-day peak hour trips, and 437 PM peak hour trips at the project driveways. After accounting for pass-by trips, the proposed project is projected to generate 5,794 daily trips, 347 AM peak hour trips, 347 Mid-day peak hour trips, and 300 PM peak hour trips on the surrounding roadway network.

The existing and proposed zoning for the site is CG (General Commercial).

Site access for the proposed project is planned at one right-in/right-out only driveway on Centre City Parkway and one right-in/right-out only driveway on Mission Avenue. The project features the following improvements to northbound Centre City Parkway and the Centre City Parkway/Mission Avenue intersection along the project frontage:

- Creation of a third northbound through lane on Centre City Parkway along the project frontage and through the Centre City Parkway/Mission Avenue intersection.
- Creation of a northbound right-turn pocket at the project's driveway on Centre City Parkway to facilitate turns into the project site without hindering northbound through traffic on Centre City Parkway.

Consistent with the City's traffic ANALYSIS guidelines, potential impacts to traffic and circulation were assessed by evaluating the following scenarios:

- (1) *Existing Condition*
- (2) *Existing Condition + Project Traffic*
- (3) *Existing Condition + Cumulative Projects*
- (4) *Existing Condition + Cumulative Projects + Project Traffic*

1.1 SUMMARY OF ANALYSIS RESULTS

Existing Conditions

- The study intersections are currently operating at an acceptable LOS (LOS D or better) during the AM, Mid-day and PM peak hours with the exception of the Centre City Parkway/El Norte Parkway intersection which is operating at LOS E during the AM and PM peak hour.
- The study roadway segments are currently operating at an acceptable LOS (LOS D or better) for existing conditions.
- The ramp meter for the westbound SR-78 on-ramp from northbound Centre City Parkway is currently operating with acceptable delays and queues based on observed conditions. If Caltrans were to utilize the most restrictive meter rate at the ramp meter there would be excess demand of 97 vehicles per hour in the general purpose lane with a 16.5 minute delay and 2,425 foot queue during the AM peak hour for *existing conditions*.

Existing Plus Project Conditions

- The study intersections are projected to continue to operate at an acceptable LOS (LOS D or better) during the AM, Mid-day and PM peak hours for *existing plus project* conditions with the exception of the Centre City Parkway/El Norte Parkway intersection which is projected to continue to operate at LOS E during the AM and PM peak hour.
- The study roadway segments are projected to continue to operate at an acceptable LOS (LOS D or better) for *existing plus project* conditions.

Existing Plus Cumulative Conditions

- The study intersections are projected to continue to operate at an acceptable LOS (LOS D or better) during the AM, Mid-day and PM peak hours for *existing plus cumulative* conditions with the exception of the Centre City Parkway/El Norte Parkway intersection which is operating at LOS E during the AM and PM peak hour and the Centre City parkway/Mission Avenue intersection which is projected to operate at LOS E during the PM peak hour.
- The study roadway segments are projected to continue to operate at an acceptable LOS (LOS D or better) for *existing plus cumulative* conditions.

Existing Plus Cumulative Plus Project Conditions

- The study intersections are projected to continue to operate at an acceptable LOS (LOS D or better) during the AM, Mid-day and PM peak hours for *existing plus cumulative plus project* conditions with the exception of the Centre City Parkway/El Norte Parkway intersection which is operating at LOS E during the AM and PM peak hour.
- The proposed project's improvements to the Centre City Parkway/Mission Avenue intersection are projected to improve the intersection's LOS during their PM peak hour from LOS E without the project to LOS D with the project.
- The study roadway segments are projected to continue to operate at an acceptable LOS (LOS D or better) for *existing plus cumulative plus project* conditions.

1.2 SUMMARY OF IMPACTS

Existing Plus Project Conditions

- Based on the City's thresholds of significance the addition of project generated trips is projected to have no significant impact at any of the study intersections.
- Based on the City's thresholds of significance the addition of project generated trips is projected to have a significant impact at the following roadway segments
 - Mission Avenue between Quince Street and Centre City Parkway since the project is projected to increase the V/C ratio of the segment by 2.5% and the segment is operating at LOS D.
- Based on SANTEC thresholds of significance the addition of project generated trips is projected to have no significant impact at the study freeway ramp meter.

Existing Plus Cumulative Plus Project Conditions

- Based on the City's thresholds of significance the addition of project generated trips is projected to have no significant impact at the study intersections.
- Based on the City's thresholds of significance the addition of project generated trips is projected to have a significant impact at the following roadway segments
 - Mission Avenue between Quince Street and Centre City Parkway since the project is projected to increase the V/C ratio of the segment by 2.6% and the segment is operating at LOS D.
 - Mission Avenue between Centre City Parkway and Escondido Boulevard since the project is projected to increase the V/C ratio of the segment by 5.2% and the segment is operating at LOS D.
- Based on SANTEC thresholds of significance the addition of project generated trips is projected to have no significant impact at the study freeway ramp meter.

1.3 SUMMARY OF RECOMMENDED IMPROVEMENTS

Recommended Improvement: The City of Escondido has a planned Capital Improvement Project to add a second eastbound left-turn lane at the intersection of Centre City Parkway/Mission Avenue. The project is widening Mission Avenue along its project frontage to allow the eastbound through lanes to align across the intersection after the CIP project is completed. A second westbound left-turn lane would improve operations at the intersection. As such, the project should build its project frontage in the ultimate location and construct improvements including the median and striping modifications required for the second westbound left-turn lane. Further, new signal timing plans will be required as part of improvement to adjust for the change in capacity. The project applicant fund new signal timings at the intersections of Centre City Parkway/Mission Avenue, Mission Avenue/Quince Street, and Mission Avenue/Escondido Boulevard.

The following changes would occur under the existing plus project plus mitigation scenario:

- Centre City Parkway/Mission Avenue intersection
 - Addition of second westbound left-turn (project applicant)
 - Signal timing modifications (project applicant)
 - Lengthen the dual northbound left-turn pocket by 25 feet (project applicant)
 - Lengthen the dual southbound left-turn pocket by 40 feet (project applicant)
- Mission Avenue/Quince Street intersection
 - Signal timing modifications (project applicant)
- Mission Avenue/Escondido Boulevard intersection
 - Signal timing modifications (project applicant)

The following additional changes would occur under the existing plus cumulative plus project plus mitigation scenario:

- Centre City Parkway/Mission Avenue intersection
 - Addition of second eastbound left-turn (project applicant contribution to City CIP)
 - Signal timing modifications (project applicant contribution to City CIP)
- Mission Avenue/Quince Street intersection
 - Signal timing modifications (project applicant contribution to City CIP)
- Mission Avenue/Escondido Boulevard intersection
 - Signal timing modifications (project applicant contribution to City CIP)

The following improvements are recommended to enhance the pedestrian experience at the Centre City Parkway/Mission Avenue intersection:

- Striping of a crosswalk across the northbound right-turn lane, clearly delineating the pedestrian path of travel.
- Installation of signs on northbound Centre City Parkway indicating that vehicles should yield to pedestrians crossing the northbound free-right turn lane. The appropriate signs should be based on the latest Manual on Uniform Traffic Control Devices as amended by the state of California (CA MUTCD) and in consultation with City staff.
- Striping of crosswalks on all legs of the intersection.
- Installation of countdown pedestrian timers at the intersection.

1.4 SITE ACCESS AND CIRCULATION

The proposed Centre City Shopping Center project has site access on Centre City Parkway and Mission Avenue. Both driveways will be right-turn in/right-turn out only and should be designed in accordance with City of Escondido specifications and standards for driveway design.

Sight distance at each project access point should be reviewed with respect to standard Caltrans and City sight distance standards at the time of final grading, landscaping and street improvement plans.

2.0 INTRODUCTION

This traffic impact analysis (TIA) analyzes the projected traffic operations associated with the proposed **Centre City Shopping Center** project in the City of Escondido. The purpose of this TIA is to evaluate the potential circulation system deficiencies that may result from development of the proposed project, and to recommend improvements to achieve acceptable operations, if applicable. This analysis has been prepared pursuant to applicable regionally adopted San Diego Traffic Engineers' Council (SANTEC) traffic impact analysis guidelines as well as the City of Escondido's published traffic impact analysis guidelines.

2.1 PROJECT DESCRIPTION

The 2.24± site is currently occupied by a vacant restaurant (former Wagon Wheel restaurant) and the Palm Tree Motor Lodge at the southeast corner of the Centre City Parkway/Mission Avenue intersection. The project would demolish the existing uses on-site and construct a commercial development that would consist of three buildings. Building A would consist of 3,500 square feet of retail space (Stanton Optical) and a 2,874-square-foot restaurant with a drive-through. Building B would consist of a 2,004-square-foot restaurant/coffee shop with a drive-through, a 2,400-square-foot restaurant without a drive-through, and 1,000 square feet of retail space. Building C would consist of a 4,308-square-foot SuperStar carwash.

The proposed project is anticipated to be built and generating trips in 2018.

The proposed project is projected to generate 5,931 daily trips, 347 AM peak hour trips, 347 Mid-day peak hour trips, and 437 PM peak hour trips at the project driveways. After accounting for pass-by trips, the proposed project is projected to generate 5,794 daily trips, 347 AM peak hour trips, 347 Mid-day peak hour trips, and 300 PM peak hour trips on the surrounding roadway network.

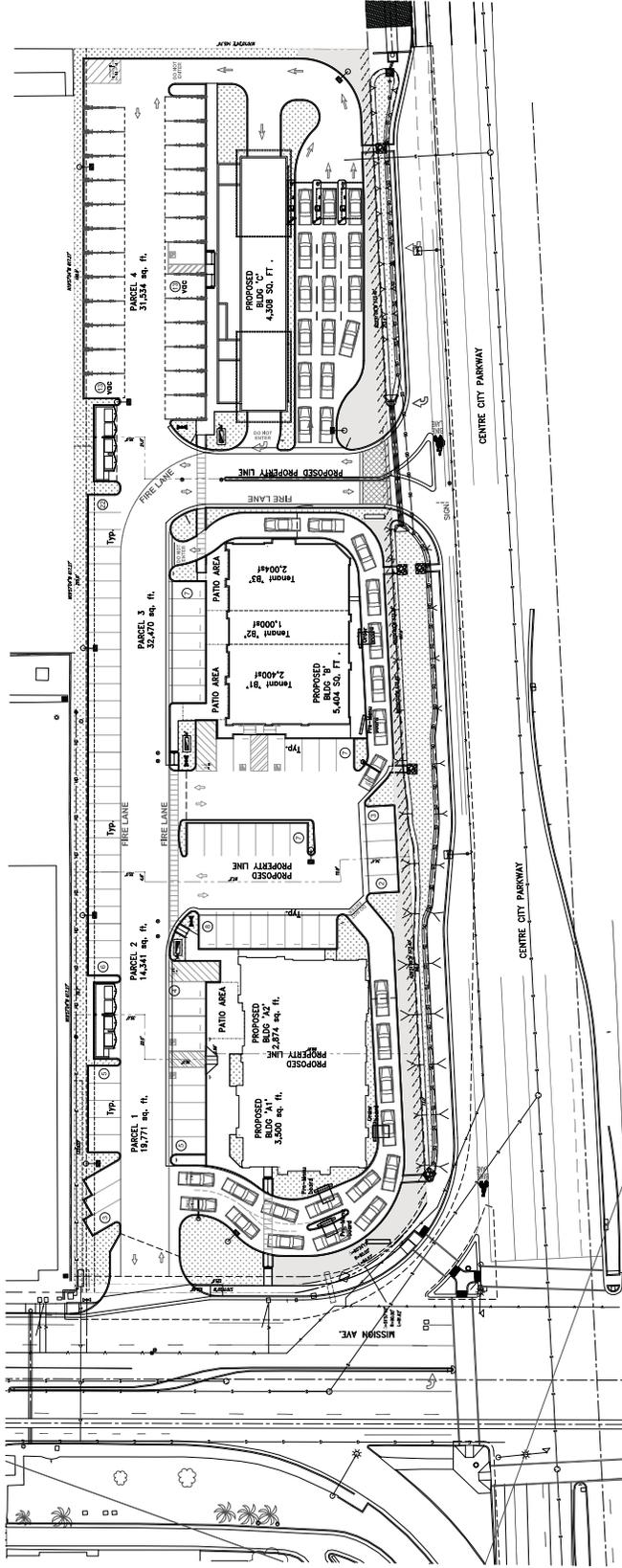
The existing and proposed zoning for the site is CG (General Commercial).

Site access for the proposed project is planned at one right-in/right-out only driveway on Centre City Parkway and one right-in/right-out only driveway on Mission Avenue. The project features the following improvements to northbound Centre City Parkway and the Centre City Parkway/Mission Avenue intersection along the project frontage:

- Creation of a third northbound through lane on Centre City Parkway along the project frontage and through the Centre City Parkway/Mission Avenue intersection.
- Creation of a northbound right-turn pocket at the project's driveway on Centre City Parkway to facilitate turns into the project site without hindering northbound through traffic on Centre City Parkway.

Exhibit 1 shows the proposed site plan.

Figure 1 shows the project site location.



SITE PLAN



Exhibit 1: Proposed Project Site Plan

ONP-16-002 Centre City Shopping Center TIA

Not to Scale

Figure 1– Project Location



2.2 STUDY AREA

In order to determine the proposed project trip distribution and study area for the traffic analysis, TJW Engineering (“TJW”) obtained a select zone model run for the proposed project from SANDAG, based on the SANDAG Series 12 Transportation Model. The select zone model run is included in **Appendix A**. TJW utilized the City of Escondido Traffic Impact Analysis guidelines in conjunction with the model run and consultation with City of Escondido staff to determine the study area. The City of Escondido’s TIA guidelines contain thresholds for determining the intersections and roadway segments to be studied in the traffic impact analysis. These thresholds are summarized below in **Table 1** and **Table 2**.

Table 1
City of Escondido Thresholds for Roadway Segment Analysis

| Street Classification | Lanes | Cross Sections (ft.) | TIA Trigger-Points (ADT generation) |
|-------------------------------|------------------------|------------------------------|--|
| Prime Arterial | (8 lanes) (6 lanes) | 116/136 (NP) 106/126 (NP) | 900 800 |
| Major Road | (6 lanes) (4 lanes) | 90/110 (NP) 82/102 (NP) | 700 500 |
| Collector | (4 lanes) (4 lanes) | 64/84 (NP) (WP) | 500 250 |
| Local Collector and all other | (2 lanes) | 42/66 (NP) (WP) | 200 |

Table 2
City of Escondido Thresholds for Intersection Analysis

| Intersection Classification (Minor leg of the intersection) | TIA Trigger-Points (AM or PM peak hour trips added to any leg) |
|--|---|
| Prime Arterial | 50 |
| Major Road | 40 |
| Collector | 30 |
| Local Collector | 20 |

The following thirteen (13) signalized intersections in the vicinity of the project site have been included in the intersection level of service (LOS) analysis:

- Rock Springs Road (NS) at Mission Avenue (EW)
- Quince Street (NS) at Mission Avenue (EW)
- Quince Street (NS) at Washington Avenue (EW)
- Centre City Parkway (NS) at El Norte Parkway (EW)
- Centre City Parkway (NS) at Decatur (EW)
- Centre City Parkway (NS) at Mission Avenue (EW)
- Centre City Parkway (NS) at Washington Avenue (EW)
- Centre City Parkway (NS) at Valley Parkway (EW)
- Escondido Boulevard (NS) at Mission Avenue (EW)
- Escondido Boulevard (NS) at Washington Avenue (EW)
- Escondido Boulevard (NS) at Woodward Avenue (EW)
- Broadway (NS) at Mission Avenue (EW)
- Broadway (NS) at Washington Avenue (EW)

The following fifteen (15) roadway segments in the vicinity of the project site have been included in the roadway segment analysis:

- Mission Avenue between Rock Springs Road and Quince Street
- Mission Avenue between Quince Street and Centre City Parkway
- Mission Avenue between Centre City Parkway and Escondido Boulevard
- Mission Avenue between Escondido Boulevard and Broadway
- Centre City Parkway between El Norte Parkway and Decatur;
- Centre City Parkway between Decatur & SR-78
- Centre City Parkway between SR-78 and Mission Avenue
- Centre City Parkway between Mission Avenue and Washington Avenue
- Centre City Parkway between Washington Avenue and Valley Parkway
- Escondido Boulevard between Mission Avenue and Washington Avenue
- Escondido Boulevard south of Washington Avenue
- Washington Avenue between Quince and Centre City Parkway
- Washington Avenue between Centre City Parkway and Escondido Boulevard
- Washington Avenue between Escondido Boulevard and Broadway
- Washington Avenue east of Broadway

The study intersections and roadway segments are located within the City of Escondido.

Based on review of Caltrans' *Guidelines for the Preparation of Traffic Impact Studies (Caltrans, 2002)*, the proposed project does not trigger the threshold requirement for mainline freeway segment analysis at any freeway mainline location.

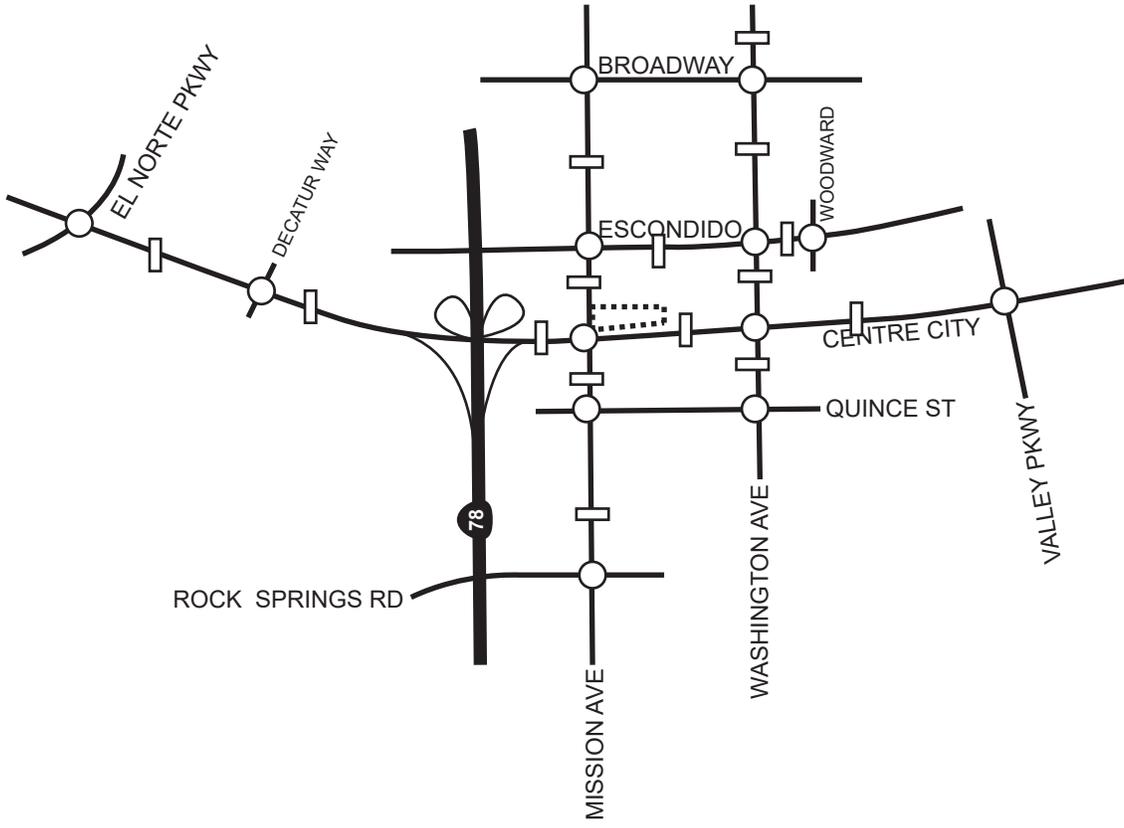
The following freeway ramp meter in the vicinity of the project site has been included in the analysis:

- Northbound Centre City Parkway/SR-78 westbound loop on-ramp.

This traffic analysis follows applicable City of Escondido, SANTEC, and Caltrans Traffic Impact Analysis guidelines.

Exhibit 2 shows the location of the study facilities, which are analyzed for the following study scenarios:

- (1) *Existing Condition*
- (2) *Existing Condition + Project Traffic*
- (3) *Existing Condition + Cumulative Projects*
- (4) *Existing Condition + Cumulative Projects + Project Traffic*



- Legend:
-  Project Site
 -  Study Intersection
 -  Study Roadway Segment

Exhibit 2: Study Area

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

Intersection traffic operations are evaluated for the following time periods:

- Weekday AM Peak Hour occurring within 7:00 AM to 9:00 AM;
- Weekday Mid-day Peak Hour occurring within 11:00 AM to 1:00 PM; and
- Weekday PM Peak Hour occurring within 4:00 PM to 6:00 PM.

2.3 ANALYSIS METHODOLOGY

2.3.1 Intersection Analysis - City of Escondido

Level of Service (LOS) is commonly used to describe the quality of flow on roadways and at intersections using a range of LOS from LOS A (free flow with little congestion) to LOS F (severely congested conditions). The definitions for LOS for interruption of traffic flow differ depending on the type of traffic control (traffic signal, unsignalized intersection with side street stops, unsignalized intersection with all-way stops). The Highway Capacity Manual (HCM) 2010 (Transportation Research Board, 2010) methodology expresses the LOS of an intersection in terms of delay time for the intersection approaches. The HCM methodology utilizes different procedures for different types of intersection control.

The SANTEC traffic study guidelines require intersection operations to be analyzed utilizing the HCM 2010 methodology. Intersection LOS for signalized intersections is based on average control delay for all movements at the intersection during the peak hour. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Table 3 describes the general characteristics of traffic flow and accompanying delay ranges at signalized intersections.

Table 3
HCM – LOS & Delay Ranges – Signalized Intersections

| LEVEL OF SERVICE | DESCRIPTION | DELAY (in seconds) |
|------------------|--|--------------------|
| A | Very favorable progression; most vehicles arrive during green signal and do not stop. Short cycle lengths. | 0 – 10.00 |
| B | Good progression, short cycle lengths. More vehicles stop than for LOS A. | 10.01 – 20.00 |
| C | Fair progression; longer cycle lengths. Individual cycle failures may begin to appear. The number of vehicles stopping is significant, though many vehicles still pass through without stopping. | 20.01 – 35.00 |
| D | Progression less favorable, longer cycle length and high flow/capacity ratio. The proportion of vehicles that pass through without stopping diminishes. Individual cycle failures are obvious. | 35.01 – 55.00 |
| E | Severe congestion with some long standing queues on critical approaches. Poor progression, long cycle lengths and high flow/capacity ratio. Individual cycle failures are frequent. | 55.01 – 80.00 |
| F | Very poor progression, long cycle lengths and many individual cycle failures. Arrival flow rates exceed capacity of intersection. | > 80.01 |

Source: Transportation Research Board, *Highway Capacity Manual*, HCM2010 Edition (Washington D.C., 2010).

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

Table 4 describes the general characteristics of traffic flow and accompanying delay ranges at unsignalized intersections.

Table 4
HCM – LOS & Delay Ranges – Unsignalized Intersections

| LEVEL OF SERVICE | DESCRIPTION | DELAY (in seconds) |
|------------------|---|--------------------|
| A | Little or no delays. | 0 – 10.00 |
| B | Short traffic delays. | 10.01 – 15.00 |
| C | Average traffic delays. | 15.01 – 25.00 |
| D | Long traffic delays. Multiple vehicles in queue. | 25.01 – 35.00 |
| E | Very long delays. Demand approaching capacity of intersection | 35.01 – 50.00 |
| F | Very constrained flow with extreme delays and intersection capacity exceeded. | > 50.01 |

Source: Transportation Research Board, *Highway Capacity Manual*, HCM2010 Edition (Washington D.C., 2010).

Collected peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. It is a common practice in LOS analysis to conservatively use a peak 15-

minute flow rate applied to the entire hour to derive flow rates in vehicles per hour that are used in the LOS analysis. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume. $PHF = \text{[Hourly Volume]} / [4 * \text{Peak 15-Minute Volume}]$. The use of a 15-minute PHF produces a more detailed and conservative analysis compared to analyzing vehicles per hour. Existing PHFs, obtained from the existing traffic counts have been used for existing and near-term analysis scenarios in this study. Pedestrian walk/flushing don't walk times at City intersections have been input from signal timing sheets provided by the City. Pedestrian walk/flushing don't walk times at Caltrans intersections have been calculated using a walking speed of 3.5 feet per second.

To account for increased northbound to southbound and westbound to eastbound U-turns at the Centre City Parkway/Mission Avenue intersection, saturation flow rates for the northbound and westbound left-turn movements have been reduced by approximately 10%. This is consistent with recent research into the effects of u-turns on saturation flow rates contained in *Effects of U-turns on capacity at signalized intersections and simulation of U-turning movement by synchro* (Wang, 2008) and *Signalized Intersection Capacity Adjustment Factors for Makkah, Saudi Arabia* (Bin Alam, Osa, Al-Bar and Zahran, 2011) which recommend adjusting the saturation flow rate of left-turn movements to account for the effects of U-turns based on the percentage of U-turns at each movement. The research recommends an adjustment factor of 8% for a movement with 40% U-turns. With the proposed project, and the Latitude II cumulative project, approximately 25% of northbound left-turns at the Centre City Parkway/Mission Avenue intersection are projected to be u-turn movements. Approximately 33% of westbound left-turns are projected to be u-turns. Since Therefore, the saturation flow rate of all left-turn lanes for the northbound and westbound left-turn movements has been adjusted down from 1900 to 1700 (10.5%) to take a conservatively large adjustment to saturation flow rates to account for these u-turn movements.

This analysis utilizes the Synchro 9 analysis software for all study intersections. Synchro is a macroscopic traffic software program that is based on the signalized intersection capacity analysis specified in Chapter 16 of the HCM. The level of service and capacity analysis performed within Synchro takes the optimization and coordination of signalized intersections within a network into consideration.

Existing signal timing at all study intersections under the jurisdiction of the City of Escondido was obtained from the City and utilized in the existing and project opening year traffic analysis.

2.3.2 Intersection Analysis – Caltrans

Caltrans utilizes the analysis methodology contained in the 2010 HCM, which is the same analysis used for study intersections within the City of Escondido. Within the study area, the Broadway/Mission and Broadway/Washington intersections are Caltrans-maintained intersections.

2.3.3 Roadway Segment Capacity Analysis

Roadway segment operations have been evaluated using the roadway segment capacity thresholds contained in the City's traffic impact analysis guidelines. The daily roadway segment capacity for each type of roadway is shown in **Table 5**. Roadway capacities tend to be "rule of thumb" estimated for planning purposes and are affected by factors such as intersection spacing, configuration and

control, access control, roadway grade, design geometrics, sight distance and vehicle mix. Typically when ADT-based roadway segment analysis indicates a deficiency, a review of peak hour operation of the intersections on either end of the segment is undertaken. The more detailed peak hour intersection operation analysis takes into account the factors that affect roadway capacity; unless the peak hour intersection analysis indicates the need for additional through lanes, roadway segment widening is not recommended on the basis of ADT analysis alone.

The *Escondido General Plan Update Traffic Impact Analysis (Linscott, Law & Greenspan, Engineers December 5, 2011)* Significance Criteria Section (Section 4.0, page 13) states "Where LOS E/F street segment operations are calculated, a secondary analysis of the adjacent intersections is conducted to determine the peak hour operations at either end of the segment. The peak hour intersection analysis is a more complicated and robust calculation as compared to the simplistic volume/capacity analysis required for street segments. If the adjacent intersections demonstrate acceptable LOS D or better operations, then it is determined that the street segment impact is in fact not significant, despite the poor V/C calculations, since intersection operations are considered more indicative of actual roadway system operations than street segment analysis."

To fully address the potential roadway segment impact the approach delay for the signalized intersections on either side of a potentially impacted roadway segment should be documented. For purposes of this analysis, the approach delay on both ends of a potentially impacted roadway segment should operate at LOS D to have the roadway segment impact be considered less than significant.

**Table 5
City of Escondido Roadway Classifications, LOS and ADT**

| CLASSIFICATION | LANES | LEVEL OF SERVICE | | | | |
|-----------------|--------------|------------------|------------------|------------------|------------------|------------------|
| | | A (0.00-0.34) | B (0.35-0.54) | C (0.55-0.74) | D (0.75-0.89) | E (0.90-1.00) |
| Prime Arterial | 8 lanes | 23,800 | 37,800 | 51,800 | 62,300 | 70,000 |
| | 6 lanes | 20,400 | 32,400 | 44,400 | 53,400 | 60,000 |
| Major Road | 6 lanes | 17,000 | 27,000 | 37,000 | 43,500 | 50,000 |
| | 4 lanes | 12,600 | 20,000 | 27,400 | 32,900 | 37,000 |
| Collector | 4 lanes (NP) | 11,600 | 18,500 | 25,300 | 30,400 | 34,200 |
| | 4 lanes (WP) | 6,800 | 10,800 | 14,800 | 17,800 | 20,000 |
| Local Collector | 2 lanes (NP) | 5,100 | 8,100 | 11,100 | 13,400 | 15,000 |
| | 2 lanes (WP) | 3,400 | 5,400 | 7,400 | 8,900 | 10,000 |

NP: On-street parking prohibited, WP: On-street parking permitted
(x.xx-x.xx) = Volume-to-Capacity ratio range for level of service category

2.4 CONGESTION MANAGEMENT PROGRAM (CMP)

Federal Highway Administration Code of Federal Regulation, Title 23 Section 450.320 (FHWA 23 CFR 450.320) requires that Transportation Management Areas (TMAs) address congestion management through a process involving analysis of area wide multimodal strategies that are cooperatively

developed to foster safety and integrated management of new and existing transportation facilities eligible for federal funding.

SANDAG is the designated TMA for the San Diego Region. The 2050 Regional Transportation Plan meets the requirements of FHWA 23 CFR 450.320 since it incorporates methods to monitor and evaluate the performance of the multimodal transportation system, land use impact analysis, congestion management tools, identifies improvements and implementation strategies and is integrated with the regional transportation improvement program process.

California State Proposition 111 established a requirement that urbanized areas prepare and regularly update a Congestion Management Program (CMP). The requirements were developed to monitor the performance of the transportation system, develop programs to address near- and long-term congestion and to integrate transportation planning and land use planning to a greater degree than was currently being practiced. SANDAG created a CMP in 1991 and regularly updated it through 2008. In October 2009, the San Diego region elected to exempt itself from the State CMP process; SANDAG has been complying with FHWA 23 CFR 450.320 in its planning efforts to maintain the region's adherence to the Federal congestion management process. Therefore the City of Escondido has been exempted from the requirements of the State process. The City's Growth Management Plan, as well as its participation in SANDAG's Trans Net Local Street Improvement Program, complies with the congestion management requirements to address local near-term and long-term congestion.

2.5 PERFORMANCE CRITERIA

2.5.1 City of Escondido

Both the City of Escondido and the CMP guidelines adopted by SANDAG have established LOS D or better as acceptable LOS, and LOS E or LOS F as unacceptable for both intersections and roadway segments. Within the downtown Specific Plan area, LOS E is considered acceptable.

The study intersections and roadway segments analyzed in this report are outside the downtown Specific Plan area with the exception of the Centre City Parkway/Valley Parkway intersection.

2.5.2 Caltrans

Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State Highway facilities, although Caltrans acknowledges that this may not always be feasible. If an existing State Highway facility is operating at less than this target LOS, the existing LOS should be maintained. In general, the region-wide goal for acceptable LOS on all freeways, roadway segments and intersections is LOS "D." LOS "D" will be used as the target LOS for state highway intersections in this analysis.

2.6 THRESHOLDS OF SIGNIFICANCE

According to California Environmental Quality Act (CEQA) guidelines, a project is considered to cause a significant impact to a transportation system if it:

- Conflicts with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel.
- Results in an increase in projected traffic which is substantial in relation to the existing traffic load and capacity of the street system.
- Adds a substantial amount of traffic to a congested freeway segment, interchange or ramp.
- Conflicts with adopted policies or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decreases the performance or safety of such facilities.

2.6.1 City of Escondido

Per the City of Escondido traffic impact analysis guidelines, and SANTEC requirements, **Table 6** summarizes the thresholds of significance for determining when a project’s impact on a roadway facility is considered significant and when mitigation is required.

**Table 6
City of Escondido Significance Thresholds**

| Level of Service With Project * | Allowable Change Due to Project Impact ** | | |
|---------------------------------|---|-------------|---------------|
| | Roadway Segments | | Intersections |
| | V/C | Speed (mph) | Delay (sec) |
| D, E or F | 0.02 | 1 | 2 |

* Mitigation measures should also be considered for any segment or intersection operating on LOS F

* V: Volume C: Capacity (use LOS E)

Source: City of Escondido Traffic Impact Analysis Requirement Guidelines and Thresholds (October 10, 2013)

2.6.2 Caltrans

Impacts to State Highway intersections will be considered significant if:

- The Project causes the LOS of a State Highway intersection to degrade from LOS D or better to LOS E or F; or
- At State Highway intersections operating at LOS E or F for pre-project conditions, Caltrans threshold of significance is to maintain the pre-project measure of effectiveness for the intersection.
- Ramp meters are considered impacted if a project increases the ramp meter delay by more than two minutes at a freeway segment operating at LOS E or F. Since the SR-78 originates approximately 2,000 feet to the east of the CCP on-ramp, the freeway is not projected to operate at LOS E or F in any analysis scenarios.

3.0 Existing Conditions

3.1 EXISTING CIRCULATION NETWORK/STUDY AREA CONDITIONS

The characteristics of the roadway system in the vicinity of the proposed project site are described below:

Rock Springs Road is a north-south, two-lane, divided roadway with a continuous left-turn lane, classified as a collector in the City of Escondido General Plan Circulation Element. The posted speed limit on Rock Springs Road is 35 miles per hour. Class II bicycle lanes are proposed for Rock Spring Road but do not currently exist. On-street parking is generally prohibited north of Mission Avenue and permitted south of Mission Avenue.

Quince Street is a north-south, four-lane, undivided roadway classified as a collector in the City of Escondido General Plan Circulation Element. The posted speed limit on Quince Street is 35 miles per hour. Class II bicycle lanes are proposed for Quince Street south of Washington Avenue but do not currently exist. On-street parking is generally prohibited north of Washington Avenue and permitted south of Washington Avenue.

Centre City Parkway is a north-south, four-lane, divided roadway with a landscaped median, classified as a major arterial north of Mission Avenue and a super major arterial south of Mission Avenue in the City of Escondido General Plan Circulation Element. There is a Class II bicycle lane on Centre City Parkway throughout the study area and on-street parking is prohibited.

Escondido Boulevard is a north-south, four-lane, divided roadway with a continuous left-turn lane, classified as a collector in the City of Escondido General Plan Circulation Element. The posted speed limit on Escondido Boulevard is 35 miles per hour. Class II bicycle lanes are not proposed on Escondido Boulevard in the study area. On-street parking is generally prohibited.

Broadway is a north-south, four-lane, divided roadway with a continuous left-turn lane, classified as a major arterial in the City of Escondido General Plan Circulation Element. The posted speed limit on Broadway is 35 miles per hour. Class II bicycle lanes are proposed for Broadway but do not currently exist. On-street parking is prohibited.

El Norte Parkway is an east-west, four- to seven-lane, divided roadway with a raised median in the study area. El Norte Parkway is classified as a major arterial in the City of Escondido General Plan Circulation Element. East of Centre City Parkway, El Norte Parkway is a four-lane roadway, and west of Centre City Parkway El Norte Parkway is briefly a seven lane roadway with four westbound lanes before transitioning to a six-lane roadway. The posted speed limit on El Norte Parkway is 45 miles per hour. There is a Class II bicycle lane on El Norte Parkway east of Centre City Parkway, with a Class II bicycle lane planned west of Centre City Parkway. On-street parking is prohibited.

Mission Avenue is an east-west, four-lane, divided roadway with a continuous left-turn lane in the study area. Mission Avenue is classified as a major arterial in the City of Escondido General Plan Circulation Element. The posted speed limit on Mission Avenue is 35 miles per hour. There is a Class II bicycle lane on Mission Avenue in the study area. On-street parking is prohibited.

Washington Avenue is an east-west, four-lane, divided roadway with a continuous left-turn lane in the study area. Washington Avenue is classified as a collector in the City of Escondido General Plan Circulation Element. The posted speed limit on Washington Avenue is 35 miles per hour. A Class II bicycle is planned on Washington Avenue west of Broadway. On-street parking is prohibited.

Valley Parkway within the study area is a one-way westbound roadway that forms a couplet with 2nd Avenue. Valley Parkway, within the couplet is generally a four-lane westbound roadway. The posted speed limit on Valley Parkway in the study area is 35 miles per hour. A Class I multi-use trail is planned on Valley Parkway between Broadway and Centre City Parkway. On-street parking is prohibited.

Exhibit 3 shows existing conditions study area intersection and roadway geometry. **Appendix B** contains the City of Escondido General Plan Circulation Element Map and roadway profiles.

3.2 EXISTING BICYCLE AND PEDESTRIAN FACILITIES

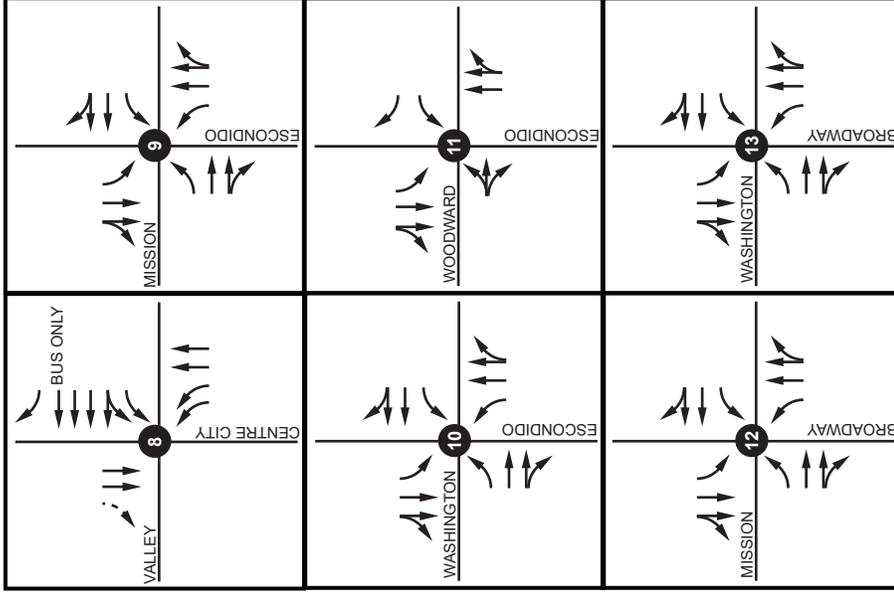
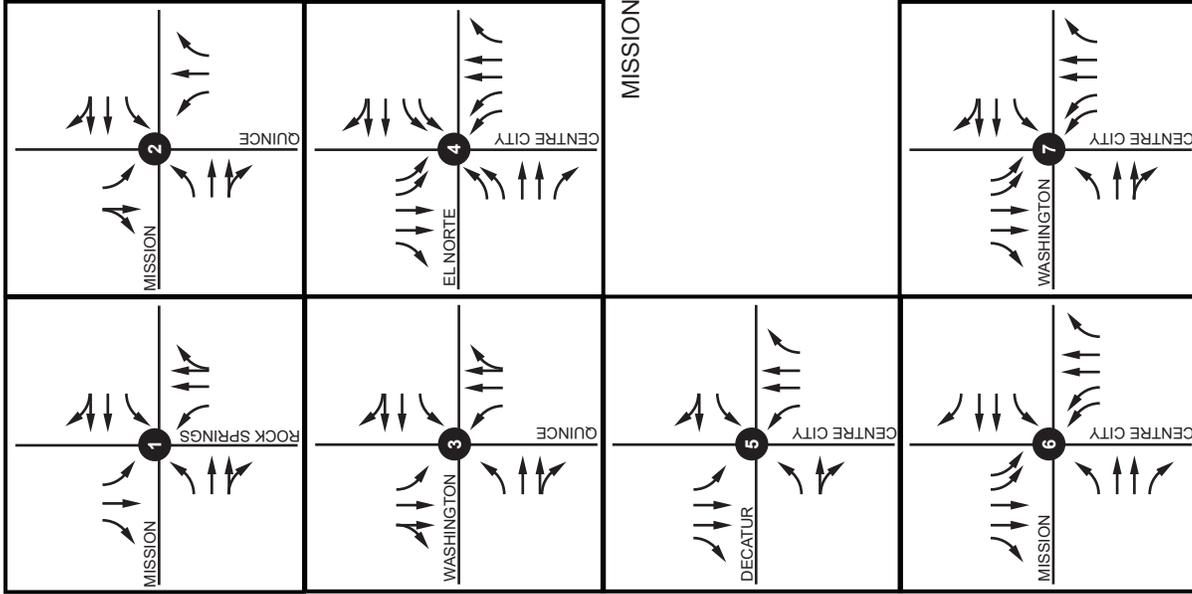
There are Class II bicycle lanes on Centre City Parkway and Mission Avenue throughout the study area and on El Norte Parkway east of Centre City Parkway. Sidewalks and curb ramps typically exist at all intersections in the study area, with the exception of both sides of Centre City Parkway where paved sidewalks are generally not present. Striped crosswalk markings are not present at most intersection crossings in the study area. Bicycle facilities are planned on several roadways in the study area including Class II bicycle lanes on Rock Springs Road, Quince Avenue, Broadway, El Norte Parkway west of Centre City Parkway, and Washington Avenue west of Broadway, and a Class I multi-use trail on Valley Parkway between Broadway and Centre City Parkway. **Appendix B** contains the City of Escondido General Plan Existing and Planned Bikeways map.

3.3 EXISTING PUBLIC TRANSIT SERVICES

The North County Transit District operates the bus and rail network in northern San Diego County. While there are no routes directly serving the project site, within one-quarter miles the following bus routes are available:

- Bus Routes 354, 356, 357, 358 and 359

Figure 2 shows transit routes in the vicinity of the proposed project site. **Appendix B** contains the City of Escondido General Plan Transit map.



- Legend:
- Project Site
 - Existing Lane
 - Free Right-Turn Movement
 - De-Facto Right-Turn Lane
 - 2-lane Undivided Roadway
 - 2-lane Divided Roadway
 - 4-lane Undivided Roadway
 - 4-lane Divided Roadway
 - 4-lane One-Way Roadway

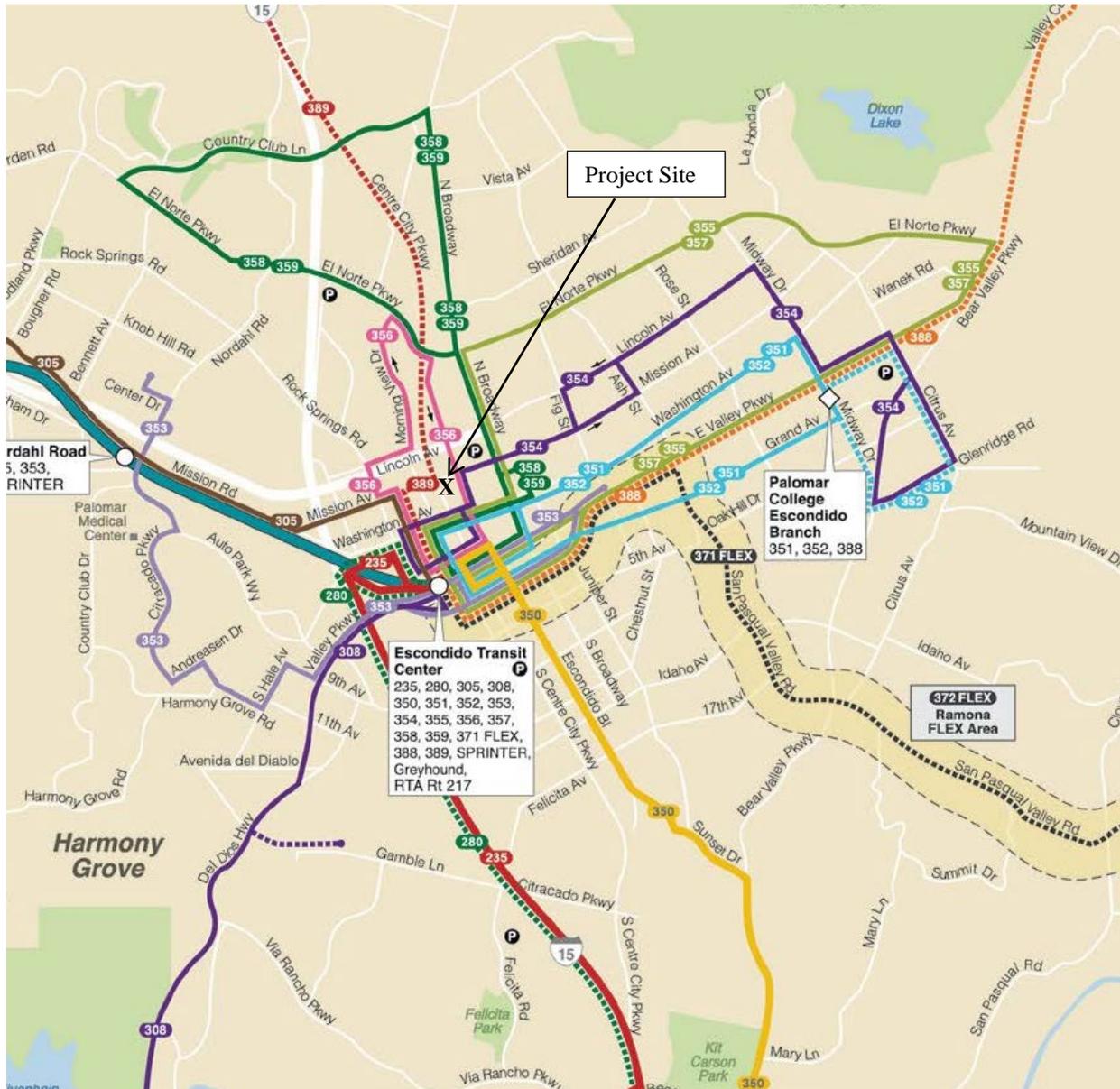
Exhibit 3: Existing Lane Geometry & Intersection Control

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

Figure 2– North County Transit District Routes



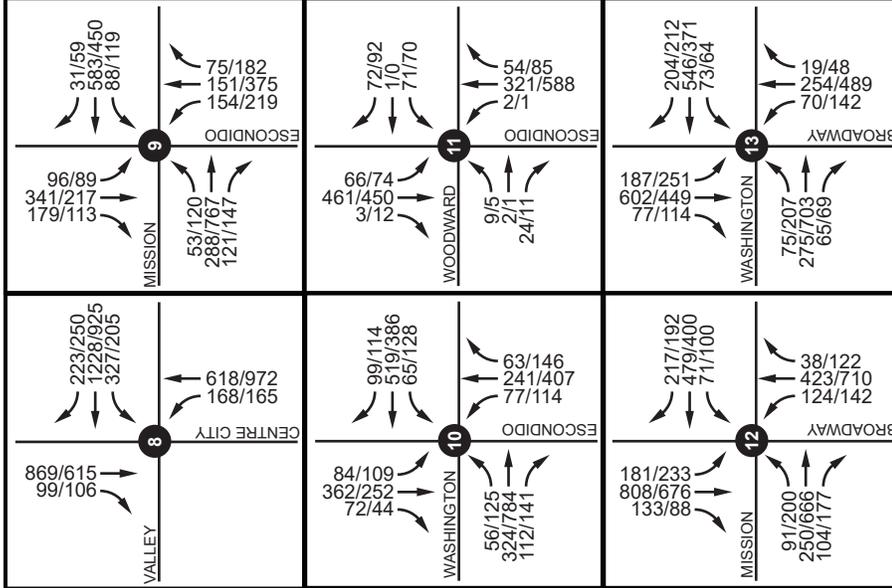
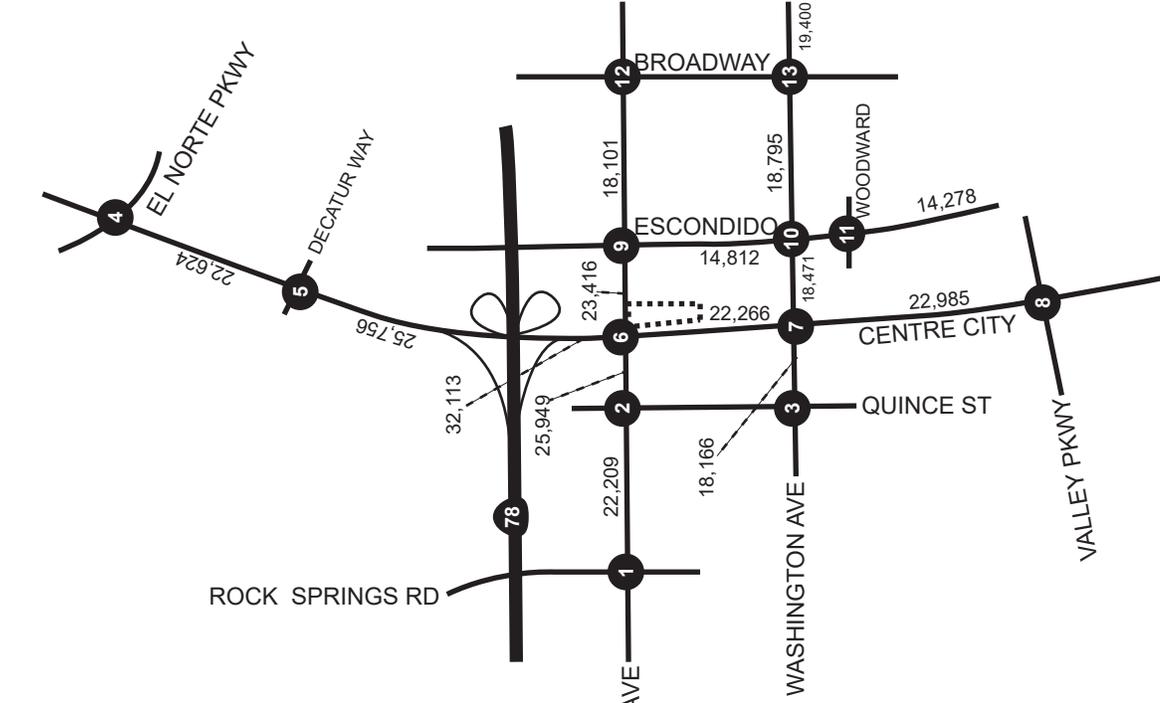
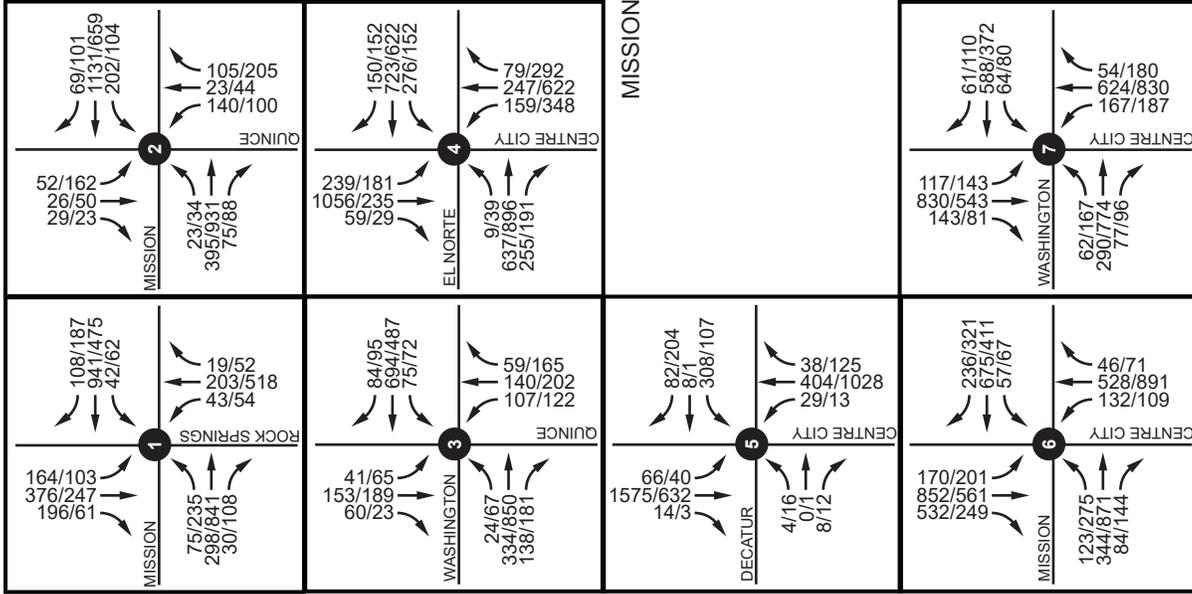
3.4 EXISTING TRAFFIC VOLUMES

To determine the existing operation of the study intersections, AM, Mid-day and PM peak period traffic counts were collected on a typical weekday on Thursday December 8, 2016 or Tuesday December 13, 2016. The traffic volumes used in this analysis are from the highest hour within the peak period counted. Detailed traffic count data is provided in **Appendix C**. Additionally, 24-hour average daily traffic (ADT) volumes for the study roadway segments were collected on Thursday December 8, 2016 or Tuesday December 13, 2016 as well.

Exhibit 4A shows existing AM and PM peak hour volumes at the study intersections and ADT volumes at the study roadway segments. **Exhibit 4B** shows existing Mid-day peak hour volumes at the study intersections.

3.5 EXISTING CONDITIONS INTERSECTION LEVEL OF SERVICE ANALYSIS

Existing conditions AM, Mid-day and PM peak hour intersection analysis is shown in **Table 7**. Calculations are based on the existing geometrics at the study area intersections shown in **Exhibit 3**. HCM analysis sheets are provided in **Appendix D**.



Legend:

- XX/XX AM/PM Peak Hour Volumes
- X,XXX 24-Hour Traffic Volume
- Project Site

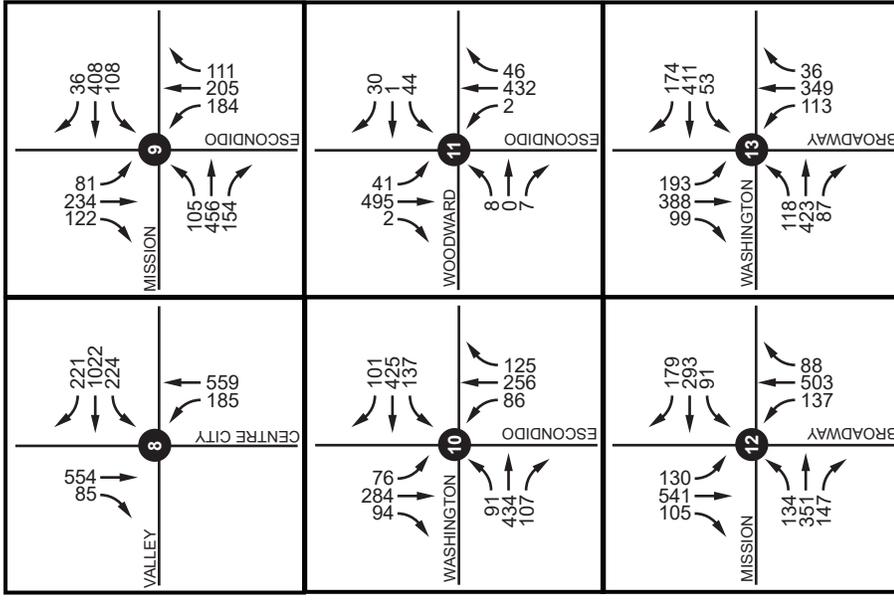
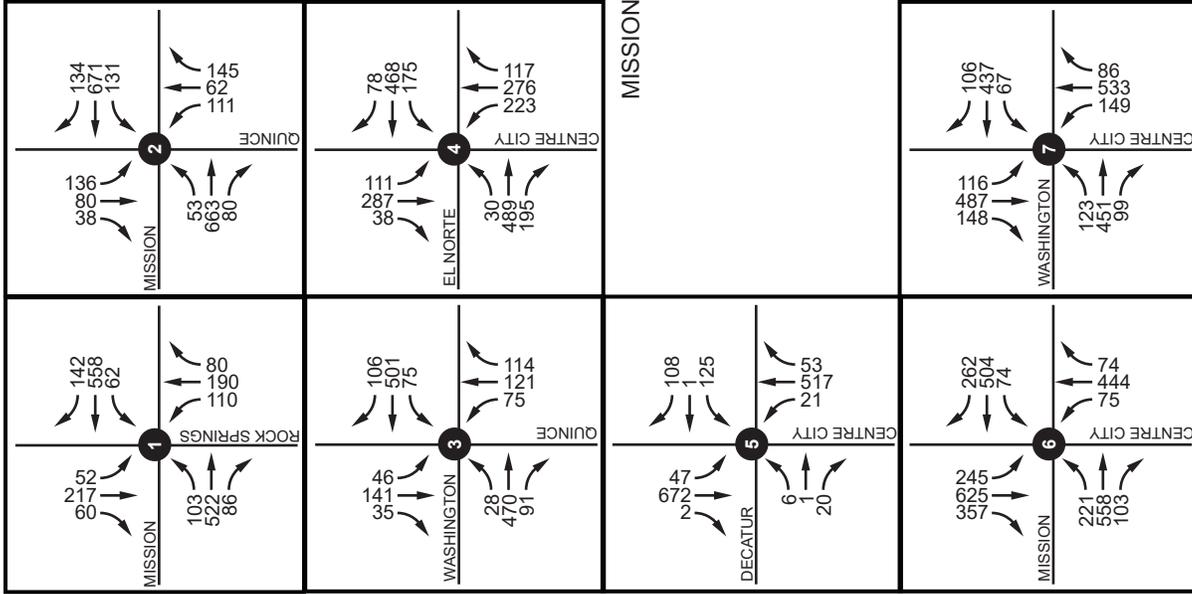


Exhibit 4A: Existing AM/PM Peak Hour Volumes

ONP-16-002 Centre City Shopping Center TIA



Not to Scale



Legend:
 XX Mid-day Peak Hour Volumes
 Project Site



Exhibit 4B: Existing Mid-day Peak Hour Volumes

ONP-16-002 Centre City Shopping Center TIA

Not to Scale

**Table 7
Intersection Analysis – Existing Conditions**

| Intersection | Control Type | Peak Hour | Existing | |
|-----------------------------------|---------------------|-----------|----------|-----|
| | | | Delay | LOS |
| 1 Rock Springs Rd/Mission Ave | Signal | AM | 25.1 | C |
| | | MD | 22.5 | C |
| | | PM | 32.1 | C |
| 2 Quince St/Mission Ave | Signal | AM | 26.5 | C |
| | | MD | 35.7 | D |
| | | PM | 45.1 | D |
| 3 Quince St/Washington Ave | Signal | AM | 14.5 | B |
| | | MD | 15.8 | B |
| | | PM | 24.7 | C |
| 4 Centre City Pkwy/El Norte Pkwy | Signal | AM | 55.0 | E |
| | | MD | 45.7 | D |
| | | PM | 56.5 | E |
| 5 Centre City Pkwy/Decatur | Signal | AM | 23.0 | C |
| | | MD | 23.1 | C |
| | | PM | 32.1 | C |
| 6 Centre City Pkwy/Mission Ave | Signal | AM | 47.0 | D |
| | | MD | 41.9 | D |
| | | PM | 57.3 | E |
| 7 Centre City Pkwy/Washington Ave | Signal | AM | 38.1 | D |
| | | MD | 39.3 | D |
| | | PM | 45.5 | D |
| 8 Centre City Pkwy/Valley Pkwy | Signal | AM | 32.3 | C |
| | | MD | 25.5 | C |
| | | PM | 31.2 | C |
| 9 Escondido Blvd/Mission Ave | Signal | AM | 40.2 | D |
| | | MD | 45.5 | D |
| | | PM | 43.2 | D |
| 10 Escondido Blvd/Washington Ave | Signal | AM | 40.4 | D |
| | | MD | 42.5 | D |
| | | PM | 37.9 | D |
| 11 Escondido Blvd/Woodward Ave | Signal | AM | 11.6 | B |
| | | MD | 7.4 | A |
| | | PM | 12.3 | B |
| 12 Broadway/Mission Ave | Signal | AM | 35.0 | D |
| | | MD | 31.2 | C |
| | | PM | 47.8 | D |
| 13 Broadway/Washington Ave | Signal | AM | 32.1 | C |
| | | MD | 30.4 | C |
| | | PM | 35.3 | D |
| 14 Centre City Pkwy/Project Drwy | OWSC (with project) | AM | N/A | N/A |
| | | MD | N/A | N/A |
| | | PM | N/A | N/A |
| 15 Project Drwy/Mission Ave | OWSC (with project) | AM | N/A | N/A |
| | | MD | N/A | N/A |
| | | PM | N/A | N/A |

Note: OWSC = One-way Stop-Controlled

As shown in **Table 7**, the intersections are currently operating at an acceptable LOS (LOS D or better) during the AM, Mid-day and PM peak hours with the exception of the Centre City Parkway/El Norte Parkway intersection which is operating at LOS E during the AM and PM peak hours.

3.6 EXISTING CONDITIONS ROADWAY SEGMENT LEVEL OF SERVICE ANALYSIS

Table 8 summarizes existing conditions roadway segment analysis based on the LOS E capacities contained in the City of Escondido traffic impact analysis guidelines, previously summarized in **Table 5**.

**Table 8
Roadway Segment Analysis – Existing Conditions**

| Roadway Segment | Functional Class | LOS E Capacity | Existing | | |
|---------------------------------------|------------------|----------------|----------|-------|-----|
| | | | ADT | V/C | LOS |
| Mission – Rock Springs to Quince | 4 – C, NP | 34,200 | 22,209 | 0.649 | C |
| Mission – Quince to Centre City | 4 – C, NP | 34,200 | 25,949 | 0.759 | D |
| Mission – Centre City to Escondido | 4 – C, NP | 34,200 | 23,416 | 0.685 | C |
| Mission – Escondido to Broadway | 4 – C, NP | 34,200 | 18,101 | 0.529 | B |
| Centre City – El Norte to Decatur | 4 – M, NP | 37,000 | 22,624 | 0.611 | C |
| Centre City – Decatur to SR-78 | 4 – M, NP | 37,000 | 25,756 | 0.696 | C |
| Centre City – SR-78 to Mission | 4 – M, NP | 37,000 | 32,113 | 0.868 | D |
| Centre City – Mission to Washington | 4 – SM, NP | 37,000 | 22,266 | 0.602 | C |
| Centre City – Washington to Valley | 4 – SM, NP | 37,000 | 22,985 | 0.621 | C |
| Escondido – Mission to Washington | 4 – C, NP | 34,200 | 14,812 | 0.433 | B |
| Escondido – Washington to Valley | 4 – C, NP | 34,200 | 14,278 | 0.417 | B |
| Washington – Quince to Centre City | 4 – C, NP | 34,200 | 18,166 | 0.531 | B |
| Washington – Centre City to Escondido | 4 – C, NP | 34,200 | 18,471 | 0.540 | B |
| Washington – Escondido to Broadway | 4 – C, NP | 34,200 | 18,795 | 0.550 | C |
| Washington – east of Broadway | 4 – C, NP | 34,200 | 19,400 | 0.567 | C |

Note: 4-M, NP: 4 Lane Major No Parking, 5-M, NP: 5 Lane Major No Parking, 4-SM, NP: 4 Lane Super Major No Parking, 4 – C, NP: 4 Lane Collector No Parking

As shown in **Table 8**, the study roadway segments are currently operating at an acceptable LOS (LOS D or better).

3.7 EXISTING RAMP METER ANALYSIS

Table 9 summarizes the delays and queues for the study ramp meters, based both on the observed meter rate in the field and based on the potential most restrictive meter rates provided by Caltrans. **Appendix C** contains the meter rate information provided by Caltrans as well as the maximum observed queue and maximum observed delay at the ramp meters.

**Table 9
Ramp Meter Analysis – Existing Conditions**

| Least Restrictive Meter Rate | | | | | | |
|-----------------------------------|----------|------------------------|---------------------------|------------------------------|----------------|-----------------|
| Location | | Demand (Veh/Hr/Ln) | Meter Rate (Veh/Hr/Ln) | Excess Demand (Veh/Hr/Ln) | Delay (min) | Queue (feet) |
| Centre City Parkway/SR-78 WB Ramp | AM (HOV) | 120 | 570 | 0 | 0 | 0 |
| | AM (SOV) | 449 | 570 | 0 | 0.0 | 0 |
| | PM | Meter is not turned on | | | | |
| Most Restrictive Meter Rate | | | | | | |
| Location | | Demand (Veh/Hr/Ln) | Meter Rate (Veh/Hr/Ln) | Excess Demand (Veh/Hr/Ln) | Delay (min) | Queue (feet) |
| Centre City Parkway/SR-78 WB Ramp | AM (HOV) | 120 | 352 | 0 | 0 | 0 |
| | AM (SOV) | 449 | 352 | 97 | 16.5 | 2425 |
| | PM | Meter is not turned on | | | | |
| Observed Meter Rate | | | | | | |
| Location | | Demand (Veh/Hr/Ln) | Meter Rate (Veh/Hr/Ln) | Excess Demand (Veh/Hr/Ln) | Delay (min) | Queue (feet) |
| Centre City Parkway/SR-78 WB Ramp | AM (HOV) | 120 | 436 | 0 | 0 | 0 |
| | AM (SOV) | 449 | 436 | 13 | 1.8 | 325 |
| | PM | Meter is not turned on | | | | |

Delay = (Excess Demand Per Lane - Meter Rate) / Meter Rate Per Lane * 60 minutes/hour

Queue per lane = Excess Demand *25 feet/vehicle

As shown in **Table 9** the ramp meter is operating with minimal delay and queue under existing observed conditions. If Caltrans were to utilize the most restrictive meter rate at the ramp meter for the entire peak hour there would be excess demand of 97 vehicles in the general purpose lane.

4.0 Proposed Project

4.1 Project Description

The 2.24± site is currently occupied by a vacant restaurant (former Wagon Wheel restaurant) and the Palm Tree Motor Lodge at the southeast corner of the Centre City Parkway/Mission Avenue intersection. The project would demolish the existing uses on-site and construct a commercial development that would consist of three buildings. Building A would consist of 3,500 square feet of retail space (Stanton Optical) and a 2,874-square-foot restaurant with a drive-through. Building B would consist of a 2,004-square-foot restaurant/coffee shop with a drive-through, a 2,400-square-foot restaurant without a drive-through, and 1,000 square feet of retail space. Building C would consist of a 4,308-square-foot SuperStar carwash.

The proposed project is anticipated to be built and generating trips in 2018.

The proposed project is projected to generate 5,931 daily trips, 347 AM peak hour trips, 347 Mid-day peak hour trips, and 437 PM peak hour trips at the project driveways. After accounting for pass-by trips, the proposed project is projected to generate 5,794 daily trips, 347 AM peak hour trips, 347 Mid-day peak hour trips, and 300 PM peak hour trips on the surrounding roadway network.

The existing and proposed zoning for the site is CG (General Commercial).

Site access for the proposed project is planned at one right-in/right-out only driveway on Centre City Parkway and one right-in/right-out only driveway on Mission Avenue. The project features the following improvements to northbound Centre City Parkway and the Centre City Parkway/Mission Avenue intersection along the project frontage:

- Creation of a third northbound through lane on Centre City Parkway along the project frontage and through the Centre City Parkway/Mission Avenue intersection.
- Creation of a northbound right-turn pocket at the project's driveway on Centre City Parkway to facilitate turns into the project site without hindering northbound through traffic on Centre City Parkway.

4.2 Project Trip Generation

Trip generation represents the amount of traffic, both inbound and outbound, produced by a development. Determining trip generation for a proposed project is based on projecting the amount of traffic that the specific land uses being proposed will produce. TJW has calculated trip generation for the proposed project land uses based on the *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (April, 2002)* with appropriate reductions taken for pass-by trips. While the existing hotel on the site is still operational, no trip generation discount has been taken for displaced land uses. While the proposed project should result in an increase in

walking and bicycle trips from nearby businesses, no transit/walk credit was utilized in the trip generation calculation. **Table 10** summarizes trip generation rates utilized in the analysis.

Table 10
SANDAG Trip Generation Rates

| SANDAG Rates: | ADT | Unit | AM | PM | PM Passby |
|---------------------------------|-----|------|----------|----------|-----------|
| Automated Car Wash | 900 | Site | 4% 50/50 | 9% 50/50 | |
| Fast Food With Drive Through | 650 | TSF | 7% 50/50 | 7% 50/50 | 40% |
| Fast Food Without Drive Through | 700 | TSF | 5% 60/40 | 7% 50/50 | 40% |
| Specialty Retail | 40 | TSF | 3% 60/40 | 9% 50/50 | 10% |

Source: (Not So) Brief Guide of Traffic Generation Rates for the San Diego Region (April, 2002)

Table 11 summarizes the projected trip generation of the proposed project based on the trip generation rates shown in **Table 10**.

Table 11
Projected Trip Generation of Proposed Project

| | | AM In | AM Out | AM Total | PM In | PM Out | PM Total | Daily Trips |
|--|------------------|------------|------------|------------|------------|------------|------------|--------------|
| Proposed: | 4.878 TSF | 111 | 111 | 222 | 111 | 111 | 222 | 3,171 |
| Fast Food With Drive-Thru | | | | | | | | |
| Less 40% PM Pass-By | | | | | -44 | -44 | -88 | -88 |
| (A) Subtotal Net FF With DT Trip Generation | | 111 | 111 | 222 | 67 | 67 | 134 | 3,083 |
| Proposed: | 2.4 TSF | 50 | 34 | 84 | 59 | 59 | 118 | 1,680 |
| Fast Food Without Drive-Thru | | | | | | | | |
| Less 40% PM Pass-by | | | | | -24 | -24 | -48 | -48 |
| (B) Subtotal Net FF Without DT Trip Generation | | 50 | 34 | 84 | 35 | 35 | 70 | 1632 |
| Proposed: | 4.500 TSF | 3 | 2 | 5 | 8 | 8 | 16 | 180 |
| Specialty Retail | | | | | | | | |
| Less 10% PM Pass-by | | | | | 0 | -1 | -1 | -1 |
| (C) Subtotal Net Retail | | 3 | 2 | 5 | 8 | 7 | 15 | 179 |
| Proposed: | 4.308 TSF | 18 | 18 | 36 | 41 | 40 | 81 | 900 |
| Automatic Car Wash (D) | | | | | | | | |
| Total Gross Trips (at Driveways) | | 182 | 165 | 347 | 219 | 218 | 437 | 5,931 |
| Total Net New Project Trip Generation (A)+(B)+(C)+(D) | | 182 | 165 | 347 | 151 | 149 | 300 | 5,794 |

As shown in **Table 11**, the proposed project is projected to generate 5,931 daily trips, 347 AM peak hour trips and 437 PM peak hour trips at the project driveways. After accounting for pass-by trips, the proposed project is projected to generation 5,794 daily trips, 347 AM peak hour trips and 300 PM peak hour trips.

Since SANDAG does not publish mid-day peak hour trip generation rates, the analysis utilizes the proposed project's projected AM peak hour trip generation for both the AM peak hour and Mid-day peak hour scenarios.

4.3 Project Trip Distribution

TJW obtained a SANDAG Transportation Model Select Zone run for the proposed project's Traffic Analysis Zone. The Select Zone Model Run was used to determine the trip distribution of project generated trips. The proposed study intersections, study roadway segments, and study freeway ramp meters discussed previously, are based on the results of the SANDAG Select Zone Model run. **Appendix A** contains the raw SANDAG select zone model run output.

Exhibit 5A shows the projected trip distribution of net project trips. **Exhibit 5B** shows the projected distribution of pass-by trips at the project driveways.

4.4 Modal Split

The traffic reducing potential of public transit, walking and bicycling have not been considered in this analysis since there is no fixed route public transit directly serving the project site. While there are sidewalks and Class II bicycle lanes on Centre City Parkway and Mission Avenue adjacent to the project site, this analysis conservatively assumes no reduction in vehicular trip generation due to these alternative modes of transportation.

4.5 Project Trip Assignment

Exhibits 6A and 6B show the corresponding projected AM, Mid-day, and PM peak hour trip and ADT assignment of project trips.

4.6 Cumulative Projects Traffic

CEQA guidelines require that other reasonably foreseeable development projects which are either approved or are currently being processed in the study area also be included as part of a cumulative analysis scenario. TJW worked with City staff to determine a list of appropriate projects to include in the cumulative scenario. Based on these discussions it was determined that there are six potential projects in the study area appropriate to include in the cumulative scenario.

Table 12 summarizes the land use and locations of the cumulative projects. **Exhibit 7** shows the location of the cumulative projects.

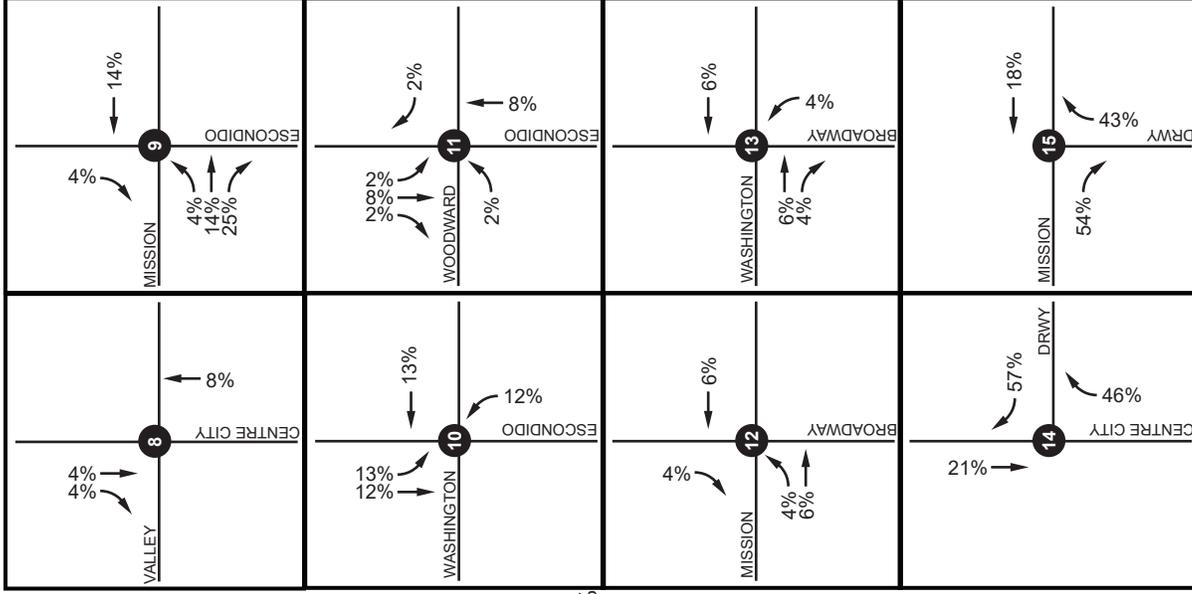
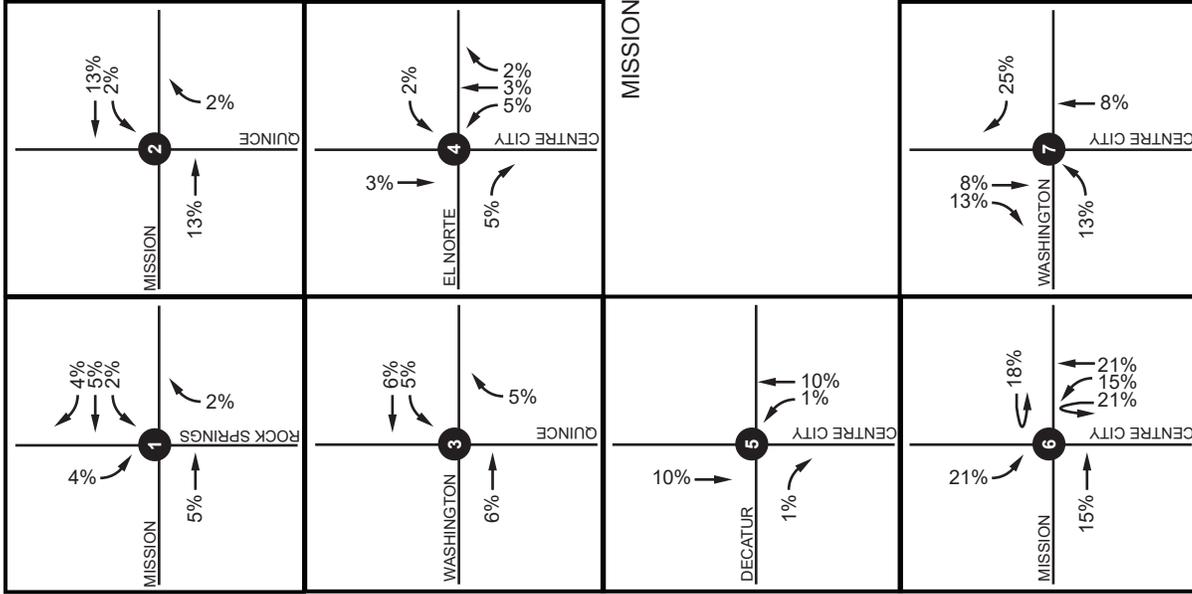
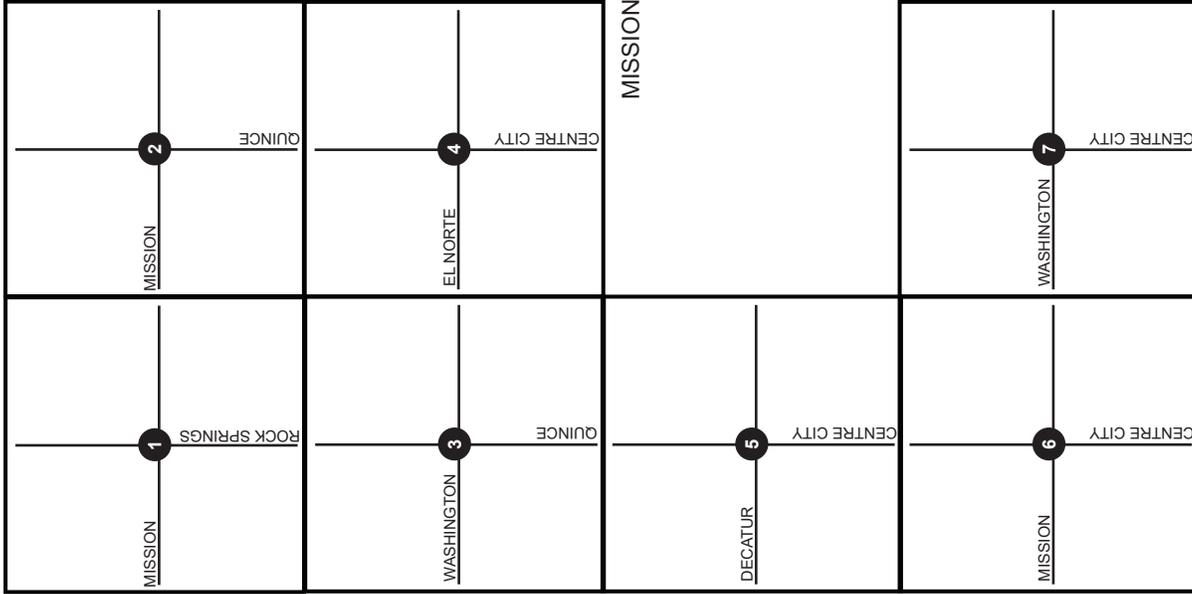


Exhibit 5A: Projected Trip Distribution of Proposed Project Net Trips

ONP-16-002 Centre City Shopping Center TIA



Not to Scale



- Legend:
- XX% Percent Trip Distribution
 - Project Site

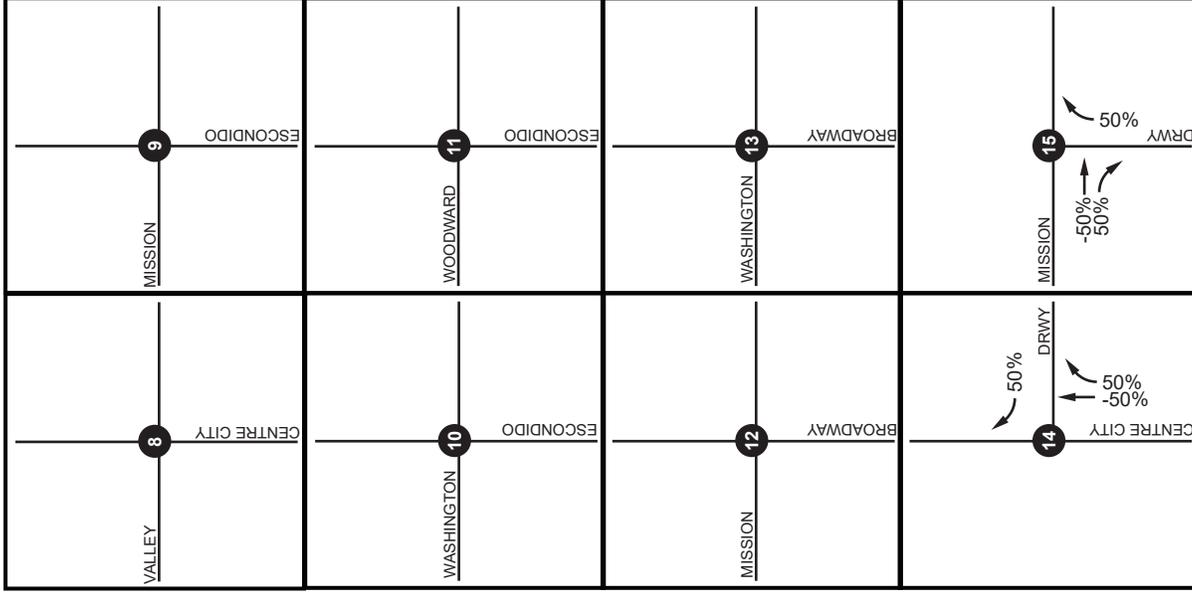
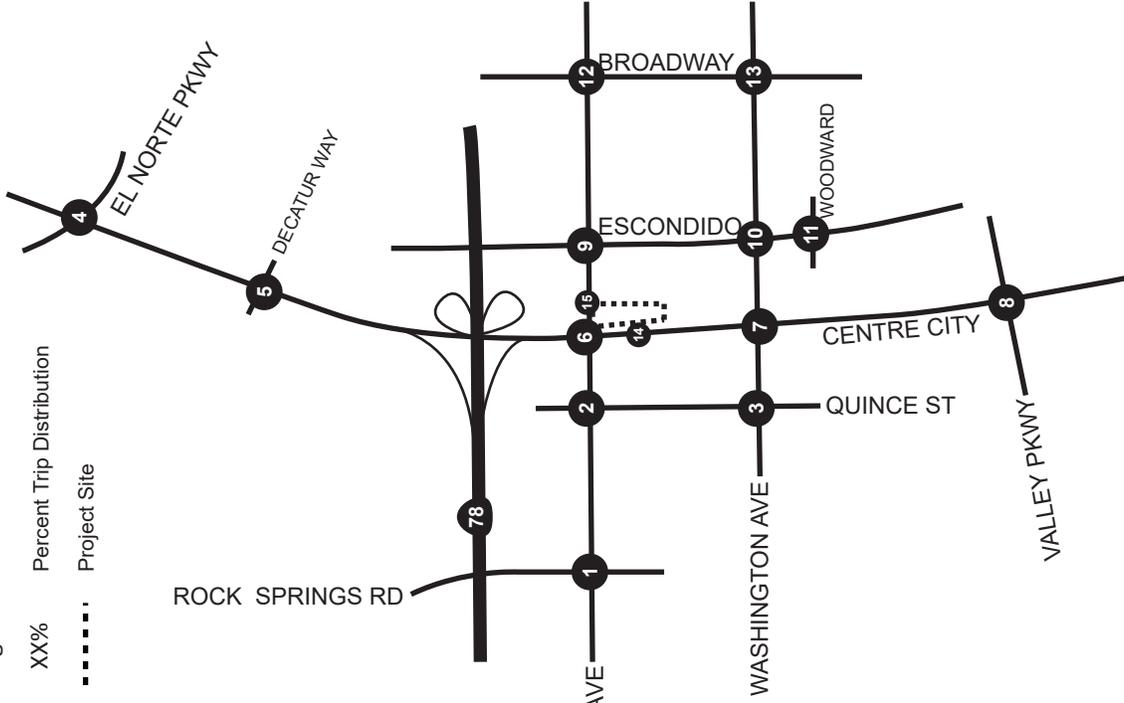


Exhibit 5B: Pass-By Trip Distribution

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

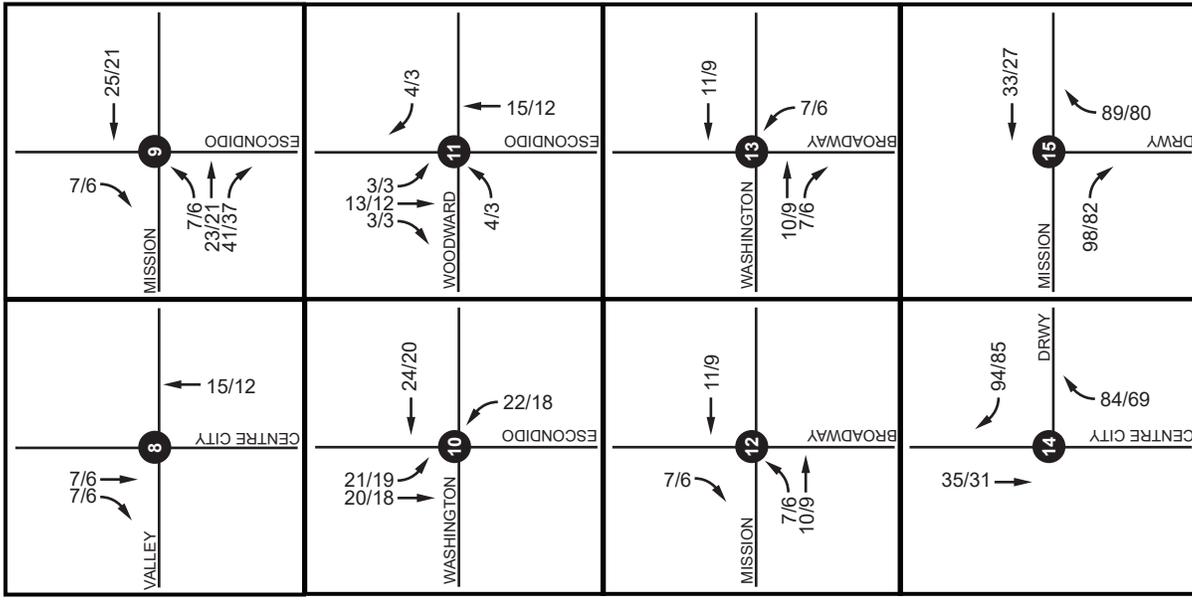
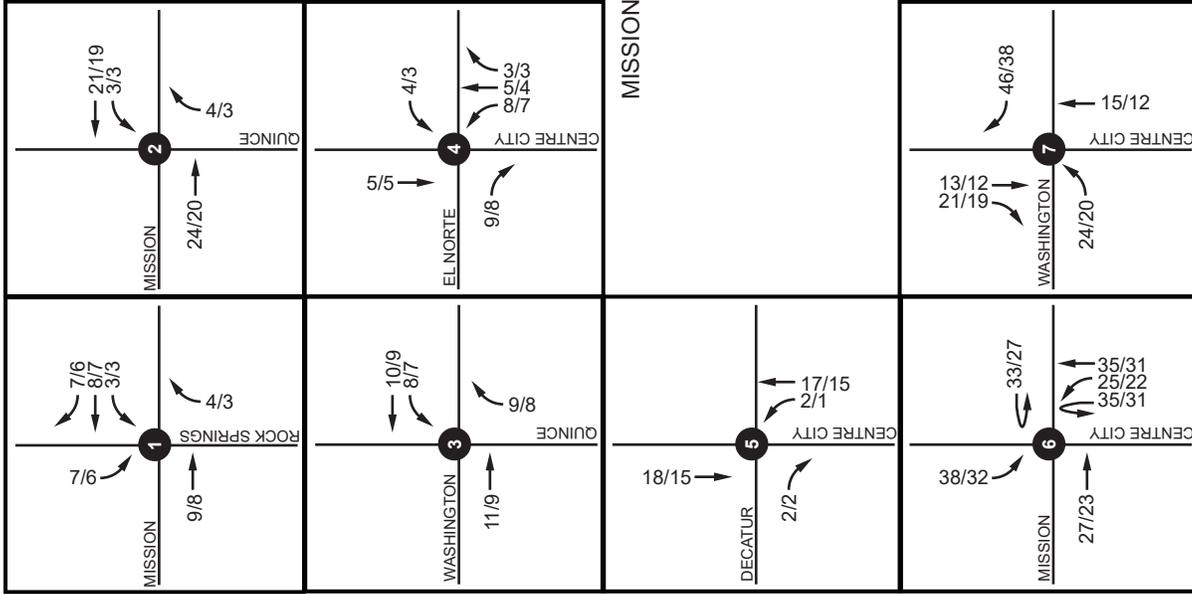
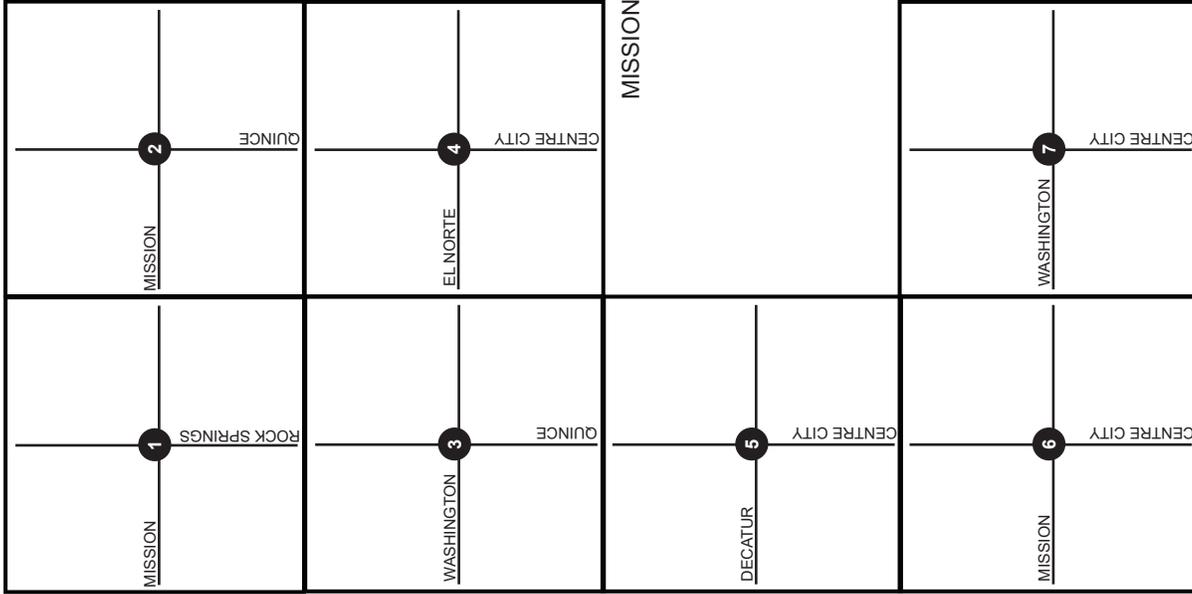


Exhibit 6A: AM-Midday & PM Peak Hour Trip Assignment

ONP-16-002 Centre City Shopping Center TIA



Not to Scale



Legend:
 XX PM Pass-by Volume
 Project Site

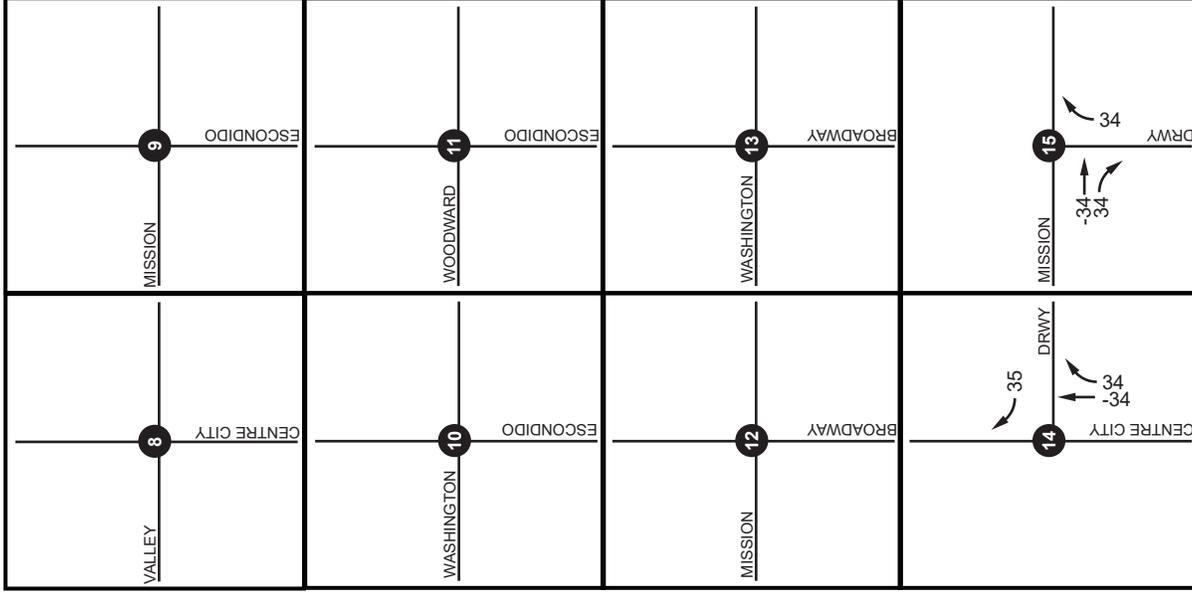
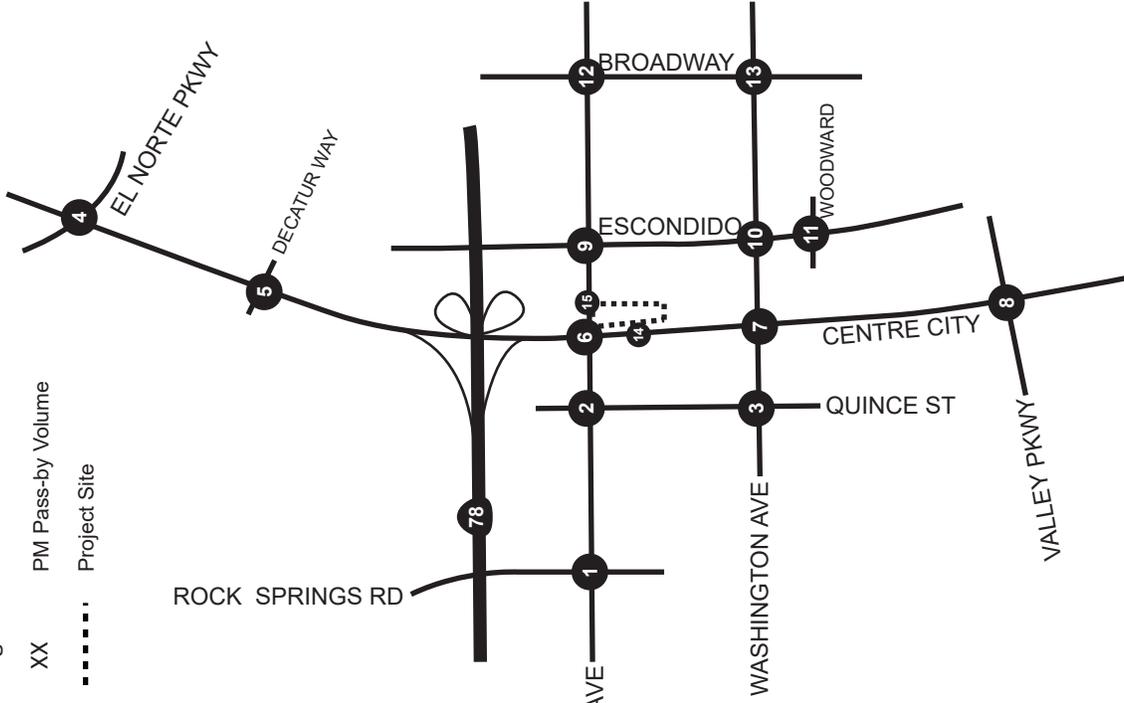
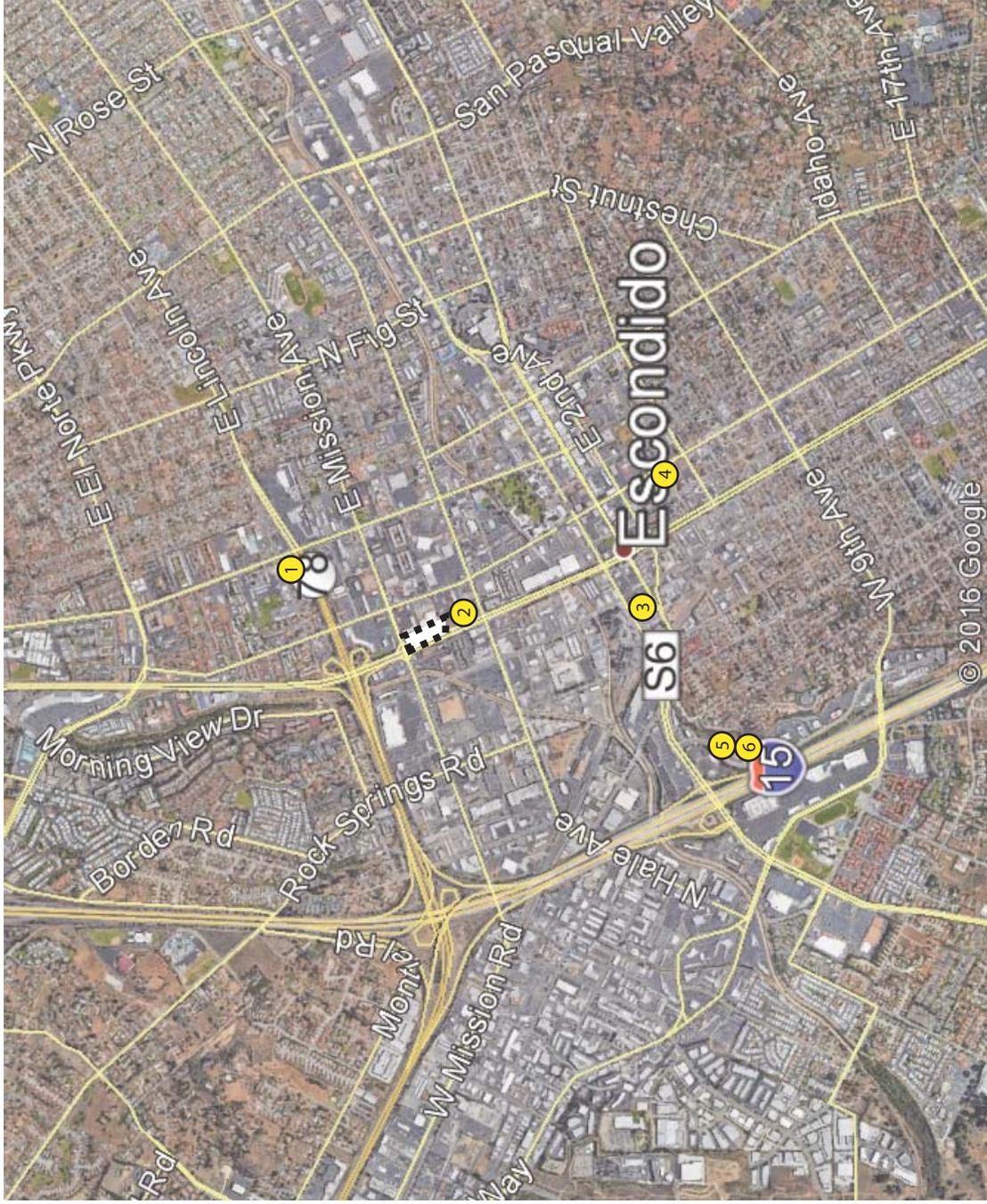


Exhibit 6B: PM Peak Hour Pass-by Trip Assignment

ONP-16-002 Centre City Shopping Center TIA



Not to Scale



Legend:

- ■ ■ ■ Project Site
- ① Centerpointe 78
- ② Latitude II
- ③ Escondido Gateway
- ④ City Plaza
- ⑤ Hotel La Terraza
- ⑥ La Terraza Office



Exhibit 7: Cumulative Project Locations

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

**Table 12
Summary of Cumulative Projects**

| Project | Land Use | AM Peak Hour Trips | | | PM Peak Hour Trips | | | Daily Trips |
|--|----------------------------|--------------------|-------------------|-------------------|--------------------|-------------------|-------------------|----------------------|
| | | In | Out | Total | In | Out | Total | |
| 1) Centerpointe 78 ¹ | 43.5 TSF Supermarket | 183 | 78 | 261 | 196 | 196 | 392 | 6,525 |
| | 3.2 TSF Fast Food | 73 | 73 | 146 | 44 | 44 | 88 | 2,080 |
| <i>Total Project Trips</i> | | <i>256</i> | <i>151</i> | <i>407</i> | <i>240</i> | <i>240</i> | <i>480</i> | <i>8,605</i> |
| 2) Latitude II ^{2,3} | 112 DU Condominiums | 14 | 57 | 72 | 63 | 27 | 90 | 896 |
| 3) Escondido Gateway ³ | 126 DU Apartments | 12 | 48 | 60 | 48 | 20 | 68 | 756 |
| | 1.0 TSF Convenience Store | 20 | 20 | 40 | 20 | 20 | 40 | 500 |
| <i>Total Project Trips</i> | | <i>32</i> | <i>68</i> | <i>100</i> | <i>68</i> | <i>50</i> | <i>108</i> | <i>1256</i> |
| 4) City Plaza ³ | 55 DU Apartments | 5 | 21 | 26 | 21 | 9 | 30 | 330 |
| | 5.198 TSF Specialty Retail | 4 | 2 | 6 | 9 | 9 | 19 | 208 |
| | 4.586 TSF Office | 10 | 1 | 12 | 2 | 9 | 11 | 83 |
| <i>Total Project Trips</i> | | <i>20</i> | <i>25</i> | <i>44</i> | <i>32</i> | <i>27</i> | <i>59</i> | <i>621</i> |
| 5) Hotel La Terraza ³ | 105-key Hotel | 38 | 25 | 63 | 50 | 34 | 84 | 1,050 |
| 6) La Terraza Office ³ | 36.614 TSF Office | 92 | 10 | 102 | 19 | 76 | 95 | 732 |
| <i>Total Cumulative Project Trips</i> | | <i>452</i> | <i>336</i> | <i>788</i> | <i>472</i> | <i>454</i> | <i>916</i> | <i>13,160</i> |

Note: TSF = thousand square feet, DU = dwelling unit

Source: 1 = Centerpointe 78 Traffic Impact Analysis (RK Engineering Group, Inc. August 28, 2014)

2 = Latitude II, Escondido California (Pirzadeh Associates, Inc. June 10, 2015)

3 = Gateway Grand Traffic Impact Analysis Report (Michael Baker International, June 8 2016)

Cumulative project AM, PM and ADT volumes are shown on **Exhibit 8**. Cumulative projects information is contained in **Appendix E**.

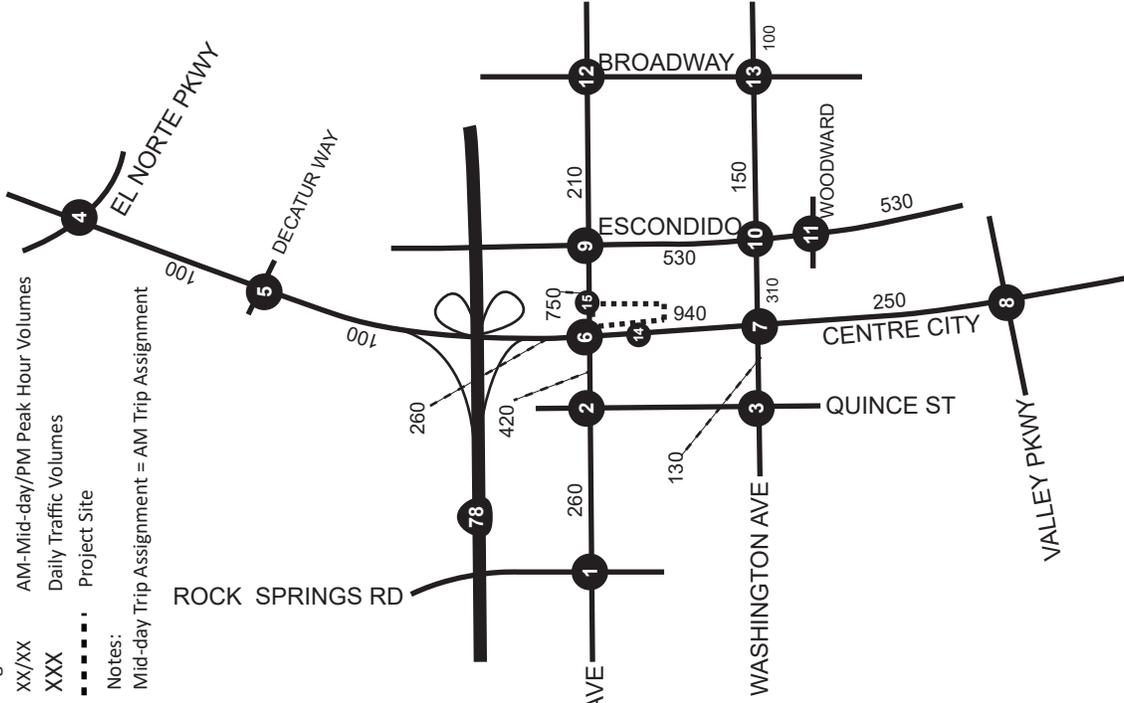
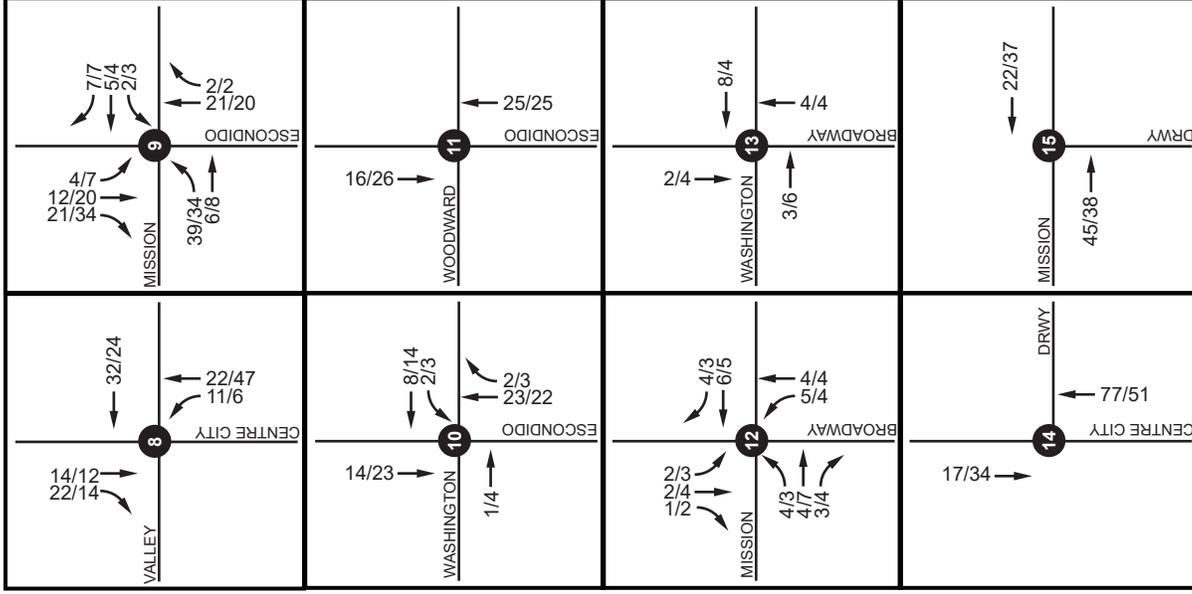
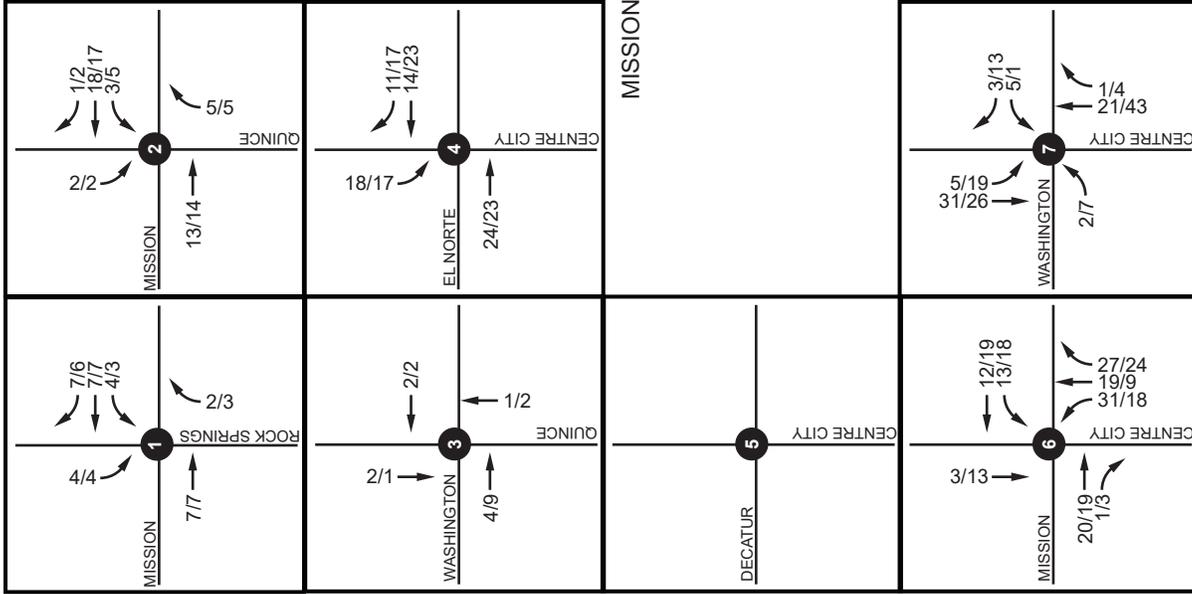


Exhibit 8: Cumulative Project AM/PM Peak Hour and Daily Trip Assignment

ONP-16-002 Centre City Shopping Center TIA

Not to Scale

5.0 Existing Plus Project Conditions

Existing plus project conditions analysis is intended to identify the project-related impacts on the existing circulation system.

5.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for the *existing plus project* scenario are consistent with existing conditions, previously shown in **Exhibit 3**, with the exception of project driveways and other facilities assumed to be constructed by the proposed project to provide site access.

The proposed project features the following improvements to northbound Centre City Parkway and the Centre City Parkway/Mission Avenue intersection along the project frontage:

- Creation of a third northbound through lane on Centre City Parkway along the project frontage and through the Centre City Parkway/Mission Avenue intersection.
- Creation of a northbound right-turn pocket at the project's driveway on Centre City Parkway to facilitate turns into the project site without hindering northbound through traffic on Centre City Parkway.

5.2 EXISTING PLUS PROJECT TRAFFIC VOLUMES

Existing plus project volumes include existing volumes plus the traffic projected to be generated by the proposed project at the study intersections, roadway segments, and ramp meters.

Exhibit 9A shows *existing plus project* AM and PM peak hour volumes at the study intersections and ADT volumes at the study roadway segments. **Exhibit 9B** shows *existing plus project* Mid-day peak hour volumes at the study intersections.

5.3 EXISTING PLUS PROJECT INTERSECTION LEVEL OF SERVICE ANALYSIS

Existing plus project conditions AM, Mid-day, and PM peak hour intersection analysis is shown in **Table 13**. Calculations are based on the existing geometrics at the study area intersections as shown in **Exhibit 3** and the roadway improvements described in section 5.1. HCM analysis sheets are provided in **Appendix F**.

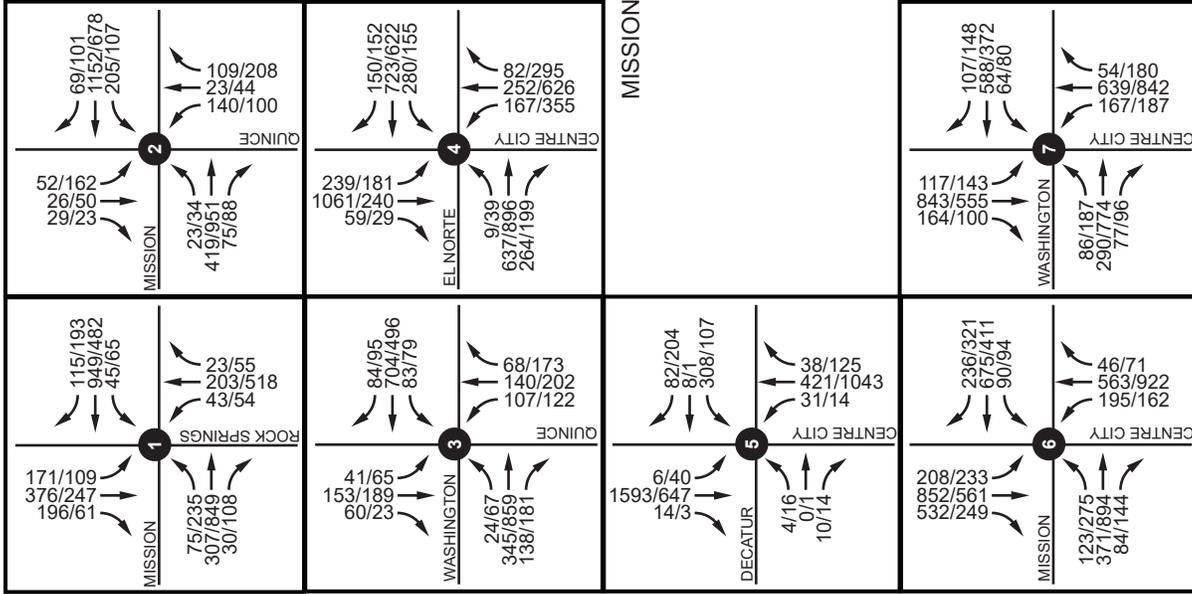


Exhibit 9A: Existing Plus Project AM/PM Peak Hour Volumes

ONP-16-002 Centre City Shopping Center TIA

Not to Scale

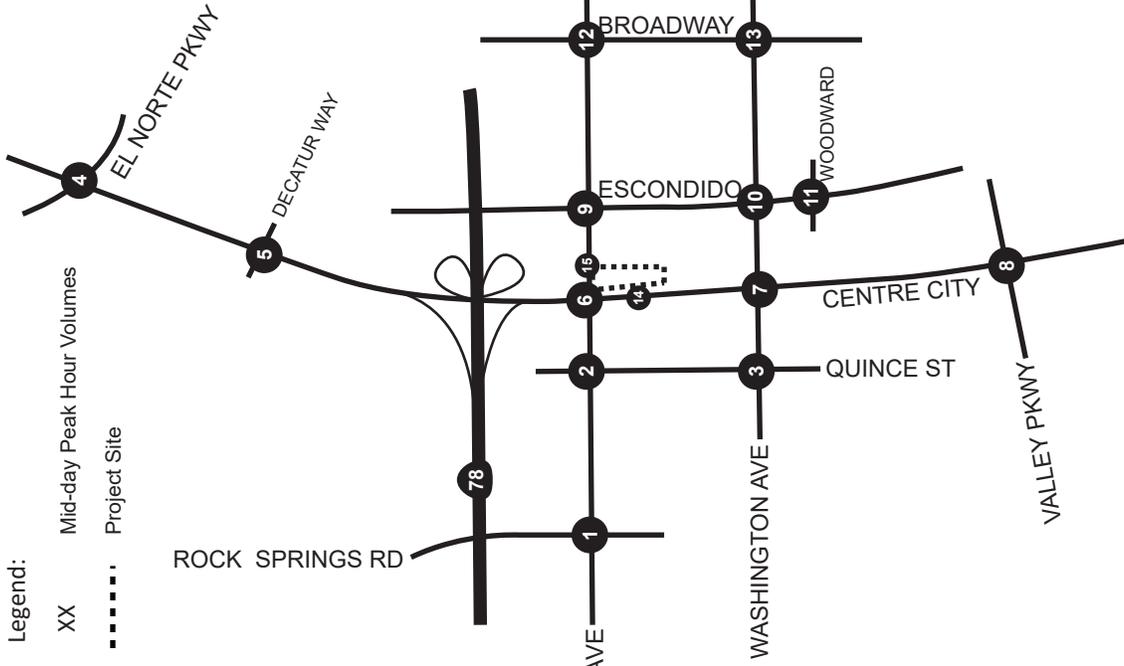
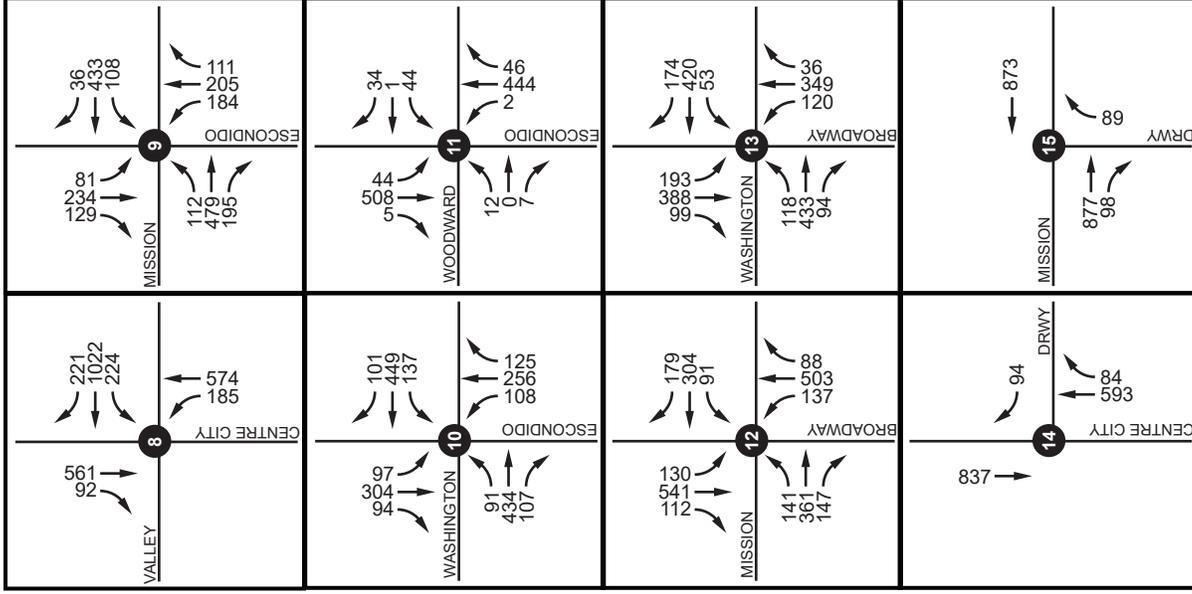
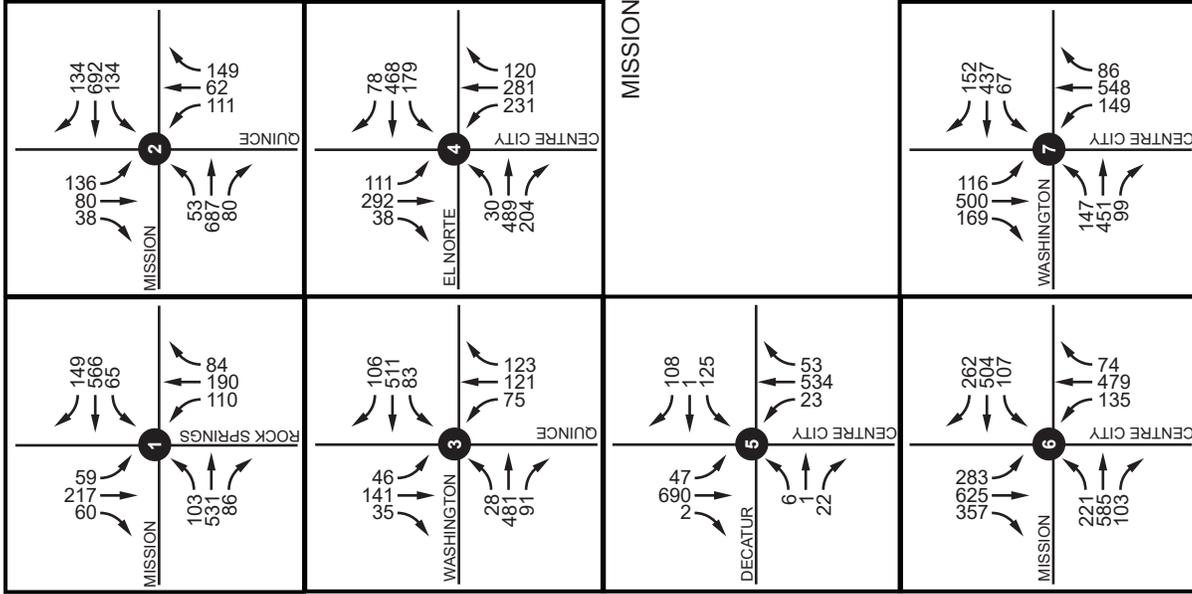


Exhibit 9B: Existing Plus Project Mid-day Peak Hour Volumes

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

Table 13
Intersection Analysis – Existing Plus Project Conditions

| Intersection | | Peak Hour | Existing | | Existing Plus Project | | | |
|--------------|---------------------------------|-----------|----------|-----|-----------------------|-----|-------------------|---------|
| | | | Delay | LOS | Delay | LOS | Change | Impact? |
| 1 | Rock Springs Rd/Mission Ave | AM | 25.1 | C | 25.2 | C | 0.1 | No |
| | | MD | 22.5 | C | 22.6 | C | 0.1 | |
| | | PM | 32.1 | C | 32.3 | C | 0.2 | |
| 2 | Quince St/Mission Ave | AM | 26.5 | C | 26.9 | C | 0.4 | No |
| | | MD | 35.7 | D | 36.0 | D | 0.3 | |
| | | PM | 45.1 | D | 42.8 | D | -2.3 | |
| 3 | Quince St/Washington Ave | AM | 14.5 | B | 14.5 | B | 0.0 | No |
| | | MD | 15.8 | B | 15.7 | B | -0.1 | |
| | | PM | 24.7 | C | 25.0 | C | 0.3 | |
| 4 | Centre City Pkwy/El Norte Pkwy | AM | 55.0 | E | 55.2 | E | 0.2 | No |
| | | MD | 45.7 | D | 45.9 | D | 0.2 | |
| | | PM | 56.5 | E | 57.2 | E | 0.7 | |
| 5 | Centre City Pkwy/Decatur | AM | 23.0 | C | 23.3 | C | 0.3 | No |
| | | MD | 23.1 | C | 23.3 | C | 0.2 | |
| | | PM | 32.1 | C | 32.4 | C | 0.3 | |
| 6 | Centre City Pkwy/Mission Ave | AM | 47.0 | D | 47.3 | D | 0.3 ¹ | No |
| | | MD | 41.9 | D | 42.1 | D | 0.2 ¹ | |
| | | PM | 57.3 | E | 53.3 | D | -4.0 ¹ | |
| 7 | Centre City Pkwy/Washington Ave | AM | 38.1 | D | 39.6 | D | 1.5 | No |
| | | MD | 39.3 | D | 40.4 | D | 1.1 | |
| | | PM | 45.5 | D | 46.0 | D | 0.5 | |
| 8 | Centre City Pkwy/Valley Pkwy | AM | 32.3 | C | 32.2 | C | -0.1 | No |
| | | MD | 25.5 | C | 25.4 | C | -0.1 | |
| | | PM | 31.2 | C | 31.2 | C | 0.0 | |
| 9 | Escondido Blvd/Mission Ave | AM | 40.2 | D | 40.6 | D | 0.4 | No |
| | | MD | 45.5 | D | 46.8 | D | 1.3 | |
| | | PM | 43.2 | D | 43.7 | D | 0.5 | |
| 10 | Escondido Blvd/Washington Ave | AM | 40.4 | D | 41.6 | D | 1.2 | No |
| | | MD | 42.5 | D | 42.9 | D | 0.4 | |
| | | PM | 37.9 | D | 39.1 | D | 1.2 | |
| 11 | Escondido Blvd/Woodward Ave | AM | 11.6 | B | 11.7 | B | 0.1 | No |
| | | MD | 7.4 | A | 7.7 | A | 0.3 | |
| | | PM | 12.3 | B | 12.5 | B | 0.2 | |
| 12 | Broadway/Mission Ave | AM | 35.0 | D | 36.1 | D | 1.1 | No |
| | | MD | 31.2 | C | 31.3 | C | 0.1 | |
| | | PM | 47.8 | D | 48.1 | D | 0.3 | |
| 13 | Broadway/Washington Ave | AM | 32.1 | C | 32.7 | C | 0.6 | No |
| | | MD | 30.4 | C | 31.7 | C | 1.3 | |
| | | PM | 35.3 | D | 35.7 | D | 0.4 | |
| 14 | Centre City Pkwy/Project Drwy | AM | | | 12.0 | B | 12.0 | No |
| | | MD | N/A | N/A | 11.3 | B | 11.3 | |
| | | PM | | | 15.6 | C | 15.6 | |
| 15 | Project Drwy/Mission Ave | AM | | | 11.6 | B | 11.6 | No |
| | | MD | N/A | N/A | 14.1 | B | 14.1 | |
| | | PM | | | 17.9 | C | 17.9 | |

Note: ¹ = With proposed improvements to intersection discussed in Section 4.1 (additional northbound through lane)

As shown in **Table 13**, the intersections are projected to continue to operate at an acceptable LOS (LOS D or better) during the AM, Mid-day and PM peak hours for existing plus project conditions with the exception of the Centre City Parkway/El Norte Parkway intersection which is projected to operate at LOS E during the AM and PM peak hours. When analyzing intersections based on HCM 2010 methodology, which calculates average delay, it is possible for the addition of project trips to improve the overall average delay at an intersection; this happens when the proposed project adds trips to a movement that experiences lower delay than the intersection as a whole, and/or when the proposed project adds trips to an underutilized phase.

Based on the published City of Escondido/SANTEC thresholds of significance, the addition of project generated trips is not projected to have a significant direct impact at any of the study intersections since it does not increase the average delay experienced at any intersections operating at LOS D or worse by greater than 2.0 seconds.

5.4 EXISTING PLUS PROJECT ROADWAY SEGMENT LEVEL OF SERVICE ANALYSIS

Table 14 summarizes *existing plus project* conditions roadway segment analysis based on the LOS E capacities contained in the City of Escondido traffic impact analysis guidelines.

As shown in **Table 14**, the study roadway segments are projected to operate at an acceptable LOS (LOS D or better) for *existing plus project* conditions.

**Table 14
Roadway Segment Analysis – Existing Plus Project Conditions**

| Roadway Segment | Functional Class | LOS E Capacity | Existing | | Existing Plus Project | | | |
|---------------------------------------|------------------|----------------|----------|------------|-----------------------|------------|--------------|------------|
| | | | ADT | V/C LOS | ADT | V/C LOS | Change In VC | Impact? |
| Mission – Rock Springs to Quince | 4 – C, NP | 34,200 | 22,209 | 0.649 C | 22,959 | 0.671 C | 0.022 | No |
| Mission – Quince to Centre City | 4 – C, NP | 34,200 | 25,949 | 0.759 D | 26,819 | 0.784 D | 0.025 | Yes |
| Mission – Centre City to Escondido | 4 – C, NP | 34,200 | 23,416 | 0.685 C | 25,186 | 0.736 C | 0.052 | No |
| Mission – Escondido to Broadway | 4 – C, NP | 34,200 | 18,101 | 0.529 B | 18,911 | 0.553 B | 0.024 | No |
| Centre City – El Norte to Decatur | 4 – M, NP | 37,000 | 22,624 | 0.611 C | 23,204 | 0.627 C | 0.016 | No |
| Centre City – Decatur to SR-78 | 4 – M, NP | 37,000 | 25,756 | 0.696 C | 26,396 | 0.713 C | 0.017 | No |
| Centre City – SR-78 to Mission | 5 – M, NP | 43,500* | 32,113 | 0.868 D | 33,333 | 0.766 D | -0.102 | No |
| Centre City – Mission to Washington | 4 – SM, NP | 37,000 | 22,266 | 0.602 C | 24,206 | 0.654 C | 0.052 | No |
| Centre City – Washington to Valley | 4 – SM, NP | 37,000 | 22,985 | 0.621 C | 23,455 | 0.634 C | 0.012 | No |
| Escondido – Mission to Washington | 4 – C, NP | 34,200 | 14,812 | 0.433 B | 16,582 | 0.485 B | 0.052 | No |
| Escondido – Washington to Valley | 4 – C, NP | 34,200 | 14,278 | 0.417 B | 14,978 | 0.438 B | 0.020 | No |
| Washington – Quince to Centre City | 4 – C, NP | 34,200 | 18,166 | 0.531 B | 18,916 | 0.553 C | 0.022 | No |
| Washington – Centre City to Escondido | 4 – C, NP | 34,200 | 18,471 | 0.540 B | 19,191 | 0.561 C | 0.021 | No |
| Washington – Escondido to Broadway | 4 – C, NP | 34,200 | 18,795 | 0.550 C | 19,545 | 0.571 C | 0.022 | No |
| Washington – east of Broadway | 4 – C, NP | 34,200 | 19,400 | 0.567 C | 19,750 | 0.577 C | 0.010 | No |

Note: 4-M, NP: 4 Lane Major No Parking, 5-M, NP: 5 Lane Major No Parking, 4-SM, NP: 4 Lane Super Major No Parking, 4 – C, NP: 4 Lane Collector No Parking

* Construction of third northbound through lane at the CCP/Mission intersection completes the improvement of northbound CCP between Mission and the SR-78 ramps from a 4-lane major to a 5-lane major.

Based on the City’s thresholds of significance the addition of project generated trips is projected to have a significant impact at the following roadway segment:

- Mission Avenue between Quince and Centre City (project-generated trips increase the V/C ratio of the segment by 2.5% and the segment is projected to operate at LOS D.)

However, as discussed in Section 2.3.3 (Roadway Segment Capacity Analysis), roadway capacities tend to be “rule of thumb” estimated for planning purposes and are affected by factors such as intersection spacing, configuration and control, access control, roadway grade, design geometrics, sight distance and vehicle mix. Typically when ADT-based roadway segment analysis indicates a deficiency, a review of peak hour operation of the intersections on either end of the segment is undertaken. The more detailed peak hour intersection operation analysis takes into account the factors that affect roadway capacity; unless the peak hour intersection analysis indicates the need for additional through lanes, roadway segment widening is not recommended on the basis of ADT analysis alone.

The Escondido General Plan Update Traffic Impact Analysis (Linscott, Law & Greenspan, Engineers December 5, 2011) Significance Criteria Section (Section 4.0, page 13) states "Where LOS E/F street segment operations are calculated, a secondary analysis of the adjacent intersections is conducted to determine the peak hour operations at either end of the segment. The peak hour intersection analysis is a more complicated and robust calculation as compared to the simplistic volume/capacity analysis required for street segments. If the adjacent intersections demonstrate acceptable LOS D or better operations, then it is determined that the street segment impact is in fact not significant, despite the poor VIC calculations, since intersection operations are considered more indicative of actual roadway system operations than street segment analysis."

In the case of Mission Avenue, the Centre City Parkway/Mission Avenue and Quince Street/Mission Avenue intersections are projected to operate at LOS D. Similar to the methodology used in the City's General Plan traffic impact analysis described above; this typically indicates that the roadway segment would function at acceptable operations. To fully address the potential roadway segment impact the approach delay for the signalized intersections on either side of the roadway segment are documented. For purposes of this analysis, the approach delay on both ends of the roadway segment should operate at LOS D to have the roadway segment impact be considered less than significant.

Table 15 summarizes the approach delay on Mission Avenue at the Mission/Quince, Mission/Centre City Parkway and Mission/Escondido intersections as well as the approach delay on Centre City Parkway at the Mission/Centre City Parkway intersection.

Table 15
Approach Delay on Ends of Potentially Impacted Roadway Segments
Existing Plus Project Conditions

| Intersection/Approach | AM Peak Hour (Delay – LOS) | Mid-Day Peak Hour (Delay – LOS) | PM Peak Hour (Delay – LOS) |
|------------------------------------|-------------------------------|------------------------------------|-------------------------------|
| Quince Street/Mission Avenue | | | |
| Eastbound Mission Avenue | 40.0 – D | 43.6 – D | 45.4 – D |
| Westbound Mission Avenue | 15.6 – B | 14.2 – B | 32.5 – C |
| Centre City Parkway/Mission Avenue | | | |
| Northbound Centre City Parkway | 20.2 – C | 34.0 – C | 27.7 – C |
| Southbound Centre City Parkway | 61.4 – E | 51.1 – D | 61.7 – E |
| Eastbound Mission Avenue | 28.3 – C | 23.5 – C | 62.7 – E |
| Westbound Mission Avenue | 57.4 – E | 54.7 – D | 63.8 – E |
| Escondido Boulevard/Mission Avenue | | | |
| Eastbound Mission Avenue | 36.5 – D | 56.7 – E | 39.5 – D |
| Westbound Mission Avenue | 38.2 – D | 37.3 – D | 34.3 – C |
| Centre City Parkway/Washington Ave | | | |
| Northbound Centre City Parkway | 51.5 – D | 41.7 – D | 50.0 – D |
| Southbound Centre City Parkway | 10.7 – B | 8.3 – A | 15.1 – B |
| Overall Intersection | 39.6 – D | 40.4 – D | 46.0 – D |

Note: Approach delay shown in seconds.

As shown in the table, approach delays in the eastbound, westbound, and southbound direction of the Centre City Parkway/Mission Avenue intersection operate at LOS E during at least one period. Approach delays in the eastbound direction of the Escondido Boulevard/Mission Avenue intersection operate at LOS E during the mid-day peak hour. Recommended improvements to address the project’s impacts are discussed in Section 5.6.

5.5 EXISTING PLUS PROJECT RAMP METER ANALYSIS

Table 16 summarizes the *existing plus project* delays and queues for the study ramp meters, based on the potential most restrictive meter rates provided by Caltrans.

**Table 16
Ramp Meter Analysis – Existing Plus Project Conditions**

| Least Restrictive Meter Rate | | | | | | |
|-----------------------------------|----------|------------------------|---------------------------|------------------------------|----------------|-----------------|
| Location | | Demand (Veh/Hr/Ln) | Meter Rate (Veh/Hr/Ln) | Excess Demand (Veh/Hr/Ln) | Delay (min) | Queue (feet) |
| Centre City Parkway/SR-78 WB Ramp | AM (HOV) | 124 | 570 | 0 | 0 | 0 |
| | AM (SOV) | 462 | 570 | 0 | 0.0 | 0 |
| | PM | Meter is not turned on | | | | |
| Most Restrictive Meter Rate | | | | | | |
| Location | | Demand (Veh/Hr/Ln) | Meter Rate (Veh/Hr/Ln) | Excess Demand (Veh/Hr/Ln) | Delay (min) | Queue (feet) |
| Centre City Parkway/SR-78 WB Ramp | AM (HOV) | 124 | 352 | 0 | 0 | 0 |
| | AM (SOV) | 462 | 352 | 110 | 18.8 | 2750 |
| | PM | Meter is not turned on | | | | |
| Observed Meter Rate | | | | | | |
| Location | | Demand (Veh/Hr/Ln) | Meter Rate (Veh/Hr/Ln) | Excess Demand (Veh/Hr/Ln) | Delay (min) | Queue (feet) |
| Centre City Parkway/SR-78 WB Ramp | AM (HOV) | 124 | 436 | 0 | 0 | 0 |
| | AM (SOV) | 462 | 436 | 26 | 3.6 | 650 |
| | PM | Meter is not turned on | | | | |

Delay = (Excess Demand Per Lane - Meter Rate) / Meter Rate Per Lane * 60 minutes/hour

Queue per lane = Excess Demand *25 feet/vehicle

Based on SANTEC thresholds of significance the addition of project generated trips is not projected to have a significant impact at the study ramp meter for *existing plus project conditions*.

5.6 EXISTING PLUS PROJECT RECOMMENDED IMPROVEMENTS

The following describes improvements that are recommended in the study area. The segment of Mission Avenue between Quince Street and Centre City Parkway was shown to have a roadway segment impact per City of Escondido significance criteria and approach delays at adjacent intersections were not shown to operate at LOS D or better during all peak periods.

Recommended Improvement: A second westbound left-turn lane would improve operations at the intersection. As such, the project should build its project frontage in the ultimate location and construct improvements including the median and striping modifications required for the

second westbound left-turn lane. Further, new signal timing plans will be required as part of improvement to adjust for the change in capacity. The project applicant fund new signal timings at the intersections of Centre City Parkway/Mission Avenue, Mission Avenue/Quince Street, and Mission Avenue/Escondido Boulevard.

The following changes would occur under the existing plus project plus mitigation scenario:

- Centre City Parkway/Mission Avenue intersection
 - Addition of second westbound left-turn (project applicant)
 - Signal timing modifications (project applicant)

- Mission Avenue/Quince Street intersection
 - Signal timing modifications (project applicant)

- Mission Avenue/Escondido Boulevard intersection
 - Signal timing modifications (project applicant)

Existing plus project plus mitigation AM, Mid-Day, and PM peak hour intersection analysis results for the intersections of Mission Avenue at Quince Street, Centre City Parkway, and Escondido Avenue are shown in **Table 17**. HCM analysis sheets are provided in Appendix G.

Table 17
Existing Plus Project Plus Mitigation Intersection LOS

| Intersection/Approach | Existing Plus Project | | | Existing Plus Project Plus Mitigation | | |
|------------------------------------|-----------------------|----------|----------|---------------------------------------|----------|----------|
| | AM | Mid-Day | PM | AM | Mid-Day | PM |
| Quince Street/Mission Avenue | | | | | | |
| Eastbound Mission Avenue | 40.0 – D | 43.6 – D | 45.4 – D | 40.2 – D | 43.6 – D | 45.4 – D |
| Westbound Mission Avenue | 15.6 – B | 14.2 – B | 32.5 – C | 15.7 – B | 14.2 – B | 11.7 – B |
| Overall Intersection | 26.9 – C | 36.0 – D | 42.8 – D | 26.9 – C | 35.1 – D | 35.9 – D |
| Centre City Parkway/Mission Avenue | | | | | | |
| Northbound Centre City Parkway | 20.2 – C | 34.0 – C | 27.7 – C | 47.2 – D | 48.8 – D | 54.7 – D |
| Southbound Centre City Parkway | 61.4 – E | 51.1 – D | 61.7 – E | 36.0 – D | 33.7 – C | 30.4 – C |
| Eastbound Mission Avenue | 28.3 – C | 23.5 – C | 62.7 – E | 50.6 – D | 35.2 – D | 46.0 – D |
| Westbound Mission Avenue | 57.4 – E | 54.7 – D | 63.8 – E | 30.5 – C | 28.4 – C | 45.5 – D |
| Overall Intersection | 47.3 – D | 42.1 – D | 53.3 – D | 39.0 – D | 35.6 – D | 44.5 – D |
| Escondido Boulevard/Mission Avenue | | | | | | |
| Eastbound Mission Avenue | 36.5 – D | 56.7 – E | 39.5 – D | 26.8 – C | 51.1 – D | 39.5 – D |
| Westbound Mission Avenue | 38.2 – D | 37.3 – D | 34.3 – C | 38.2 – D | 37.3 – D | 34.3 – C |
| Overall Intersection | 40.6 – D | 46.8 – D | 43.7 – D | 38.3 – D | 44.9 – D | 43.7 – D |
| Centre City Parkway/Washington Ave | | | | | | |
| Northbound Centre City Parkway | 51.5 – D | 41.7 – D | 50.0 – D | 51.5 – D | 41.7 – D | 50.0 – D |
| Southbound Centre City Parkway | 10.7 – B | 8.3 – A | 15.1 – B | 23.2 – C | 19.2 – B | 46.4 – D |
| Overall Intersection | 39.6 – D | 40.4 – D | 46.0 – D | 44.0 – D | 43.4 – D | 52.8 – D |

Note: Approach delay shown in seconds.

Approach delays are also provided to demonstrate that, with the addition of the recommended improvements, all approach delays to roadway segments identified as an impact would operate at LOS D or better for all peak periods.

- The northbound and southbound approaches at the Centre City Parkway/Mission Avenue intersection operate at LOS D or better for each peak. Therefore, the impact to the roadway segment of Centre City Parkway between Mission Avenue and SR-78 Ramps would be less than significant.
- The eastbound and westbound approaches at the Quince Street/Mission Avenue and Centre City Parkway/Mission Avenue intersections operate at LOS D or better for each peak. Therefore, the impact to the roadway segment of Mission Avenue between Quince Street and Centre City Parkway would be less than significant.

6.0 Existing Plus Cumulative Conditions

Existing plus cumulative conditions were analyzed to provide a baseline for determining if the addition of proposed project trips would result in any significant traffic impacts for project opening year (2018) conditions.

6.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for the existing conditions scenario are consistent with those previously shown in **Exhibit 3**. *Existing plus cumulative* conditions analysis assumes the same signal timing as in existing conditions.

6.2 EXISTING PLUS CUMULATIVE TRAFFIC VOLUMES

Existing plus cumulative traffic volumes include background traffic plus cumulative project traffic volumes. Since the proposed project is expected to be built and generating trips in 2018, *existing plus cumulative* volumes include an ambient growth rate of 1% per year for two years, applied to existing volumes plus cumulative project trips.

As discussed previously TJW worked with City staff to determine a list of appropriate projects to include in the existing plus cumulative scenarios. It was determined that there are six potential projects in the study area that could potentially be implemented in the near term and are appropriate to include in the cumulative scenario. The cumulative projects were previously discussed in *Section 4.6 Cumulative Projects Traffic*.

Existing plus cumulative Volumes = (Existing (2016) Counts * 1.01²) + Cumulative Projects Traffic

The addition of both an ambient growth rate to account for potential unforeseen increases in traffic in the study area and cumulative projects traffic volumes represents a conservative projection of future traffic volumes.

Exhibit 10A shows *existing plus cumulative* AM and PM peak hour volumes at the study intersections and ADT volumes at the study roadway segments. **Exhibit 10B** shows *existing plus cumulative* Mid-day peak hour volumes at the study intersection.

6.3 EXISTING PLUS CUMULATIVE INTERSECTION LEVEL OF SERVICE ANALYSIS

Existing plus cumulative conditions AM, Mid-day and PM peak hour intersection analysis is shown in **Table 18**. HCM analysis sheets are provided in **Appendix H**.

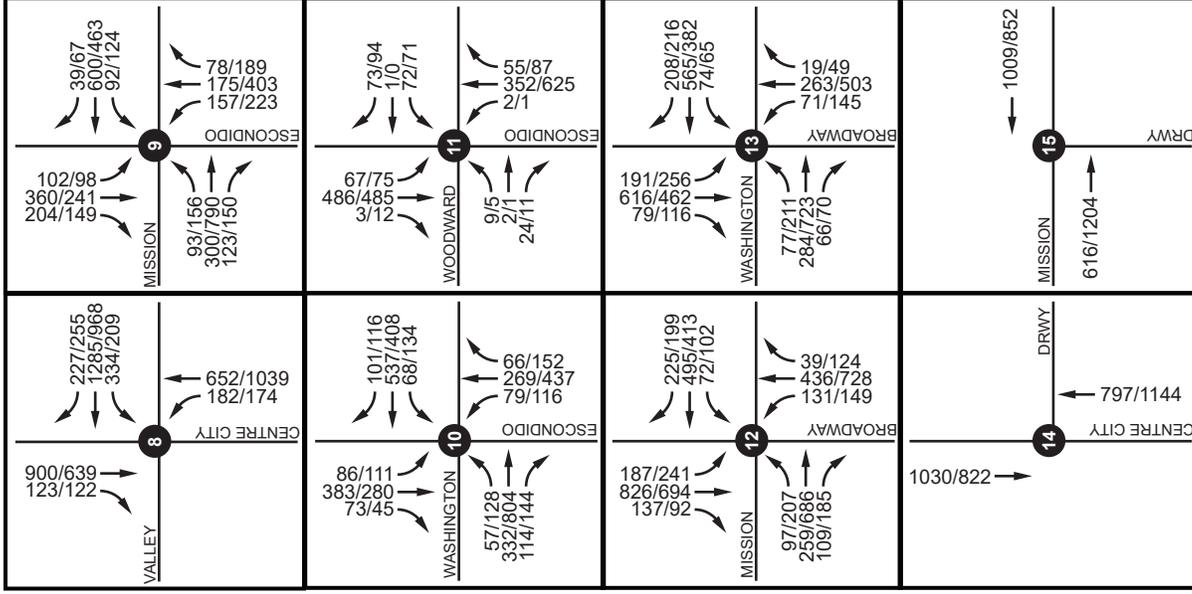
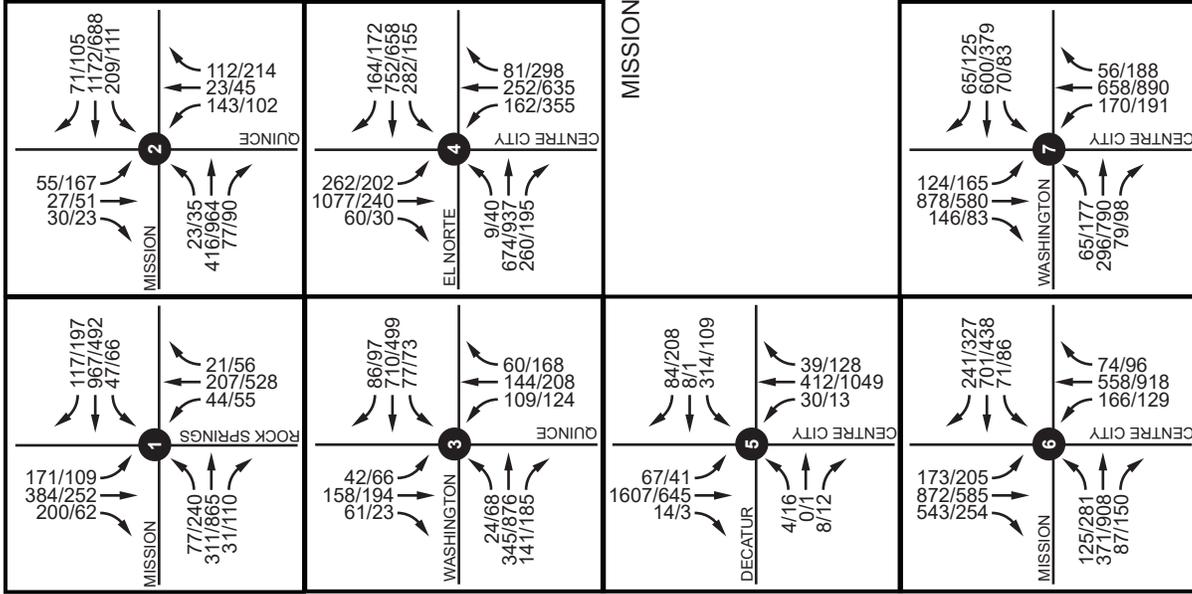


Exhibit 10A: Existing Plus Cumulative AM/PM Peak Hour Volumes

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

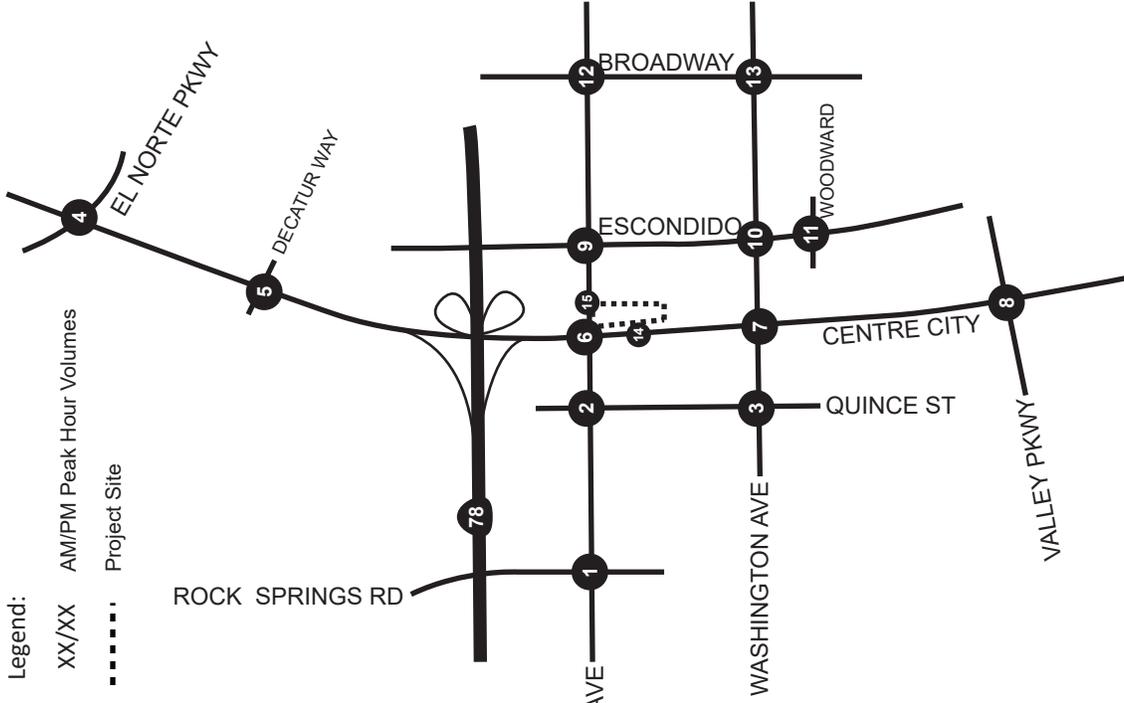
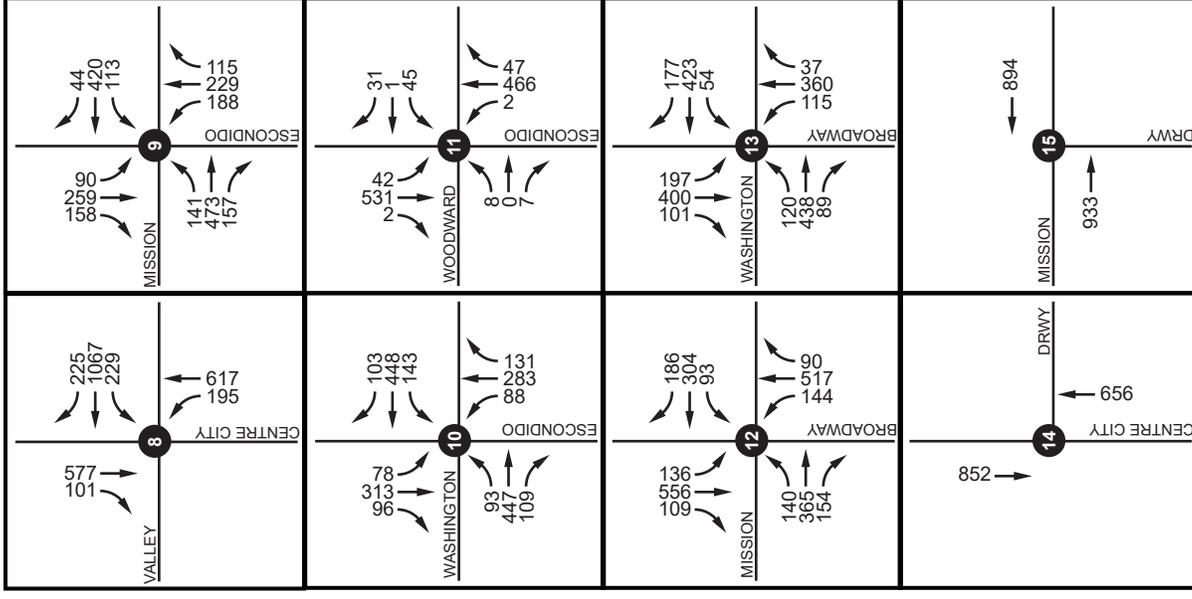
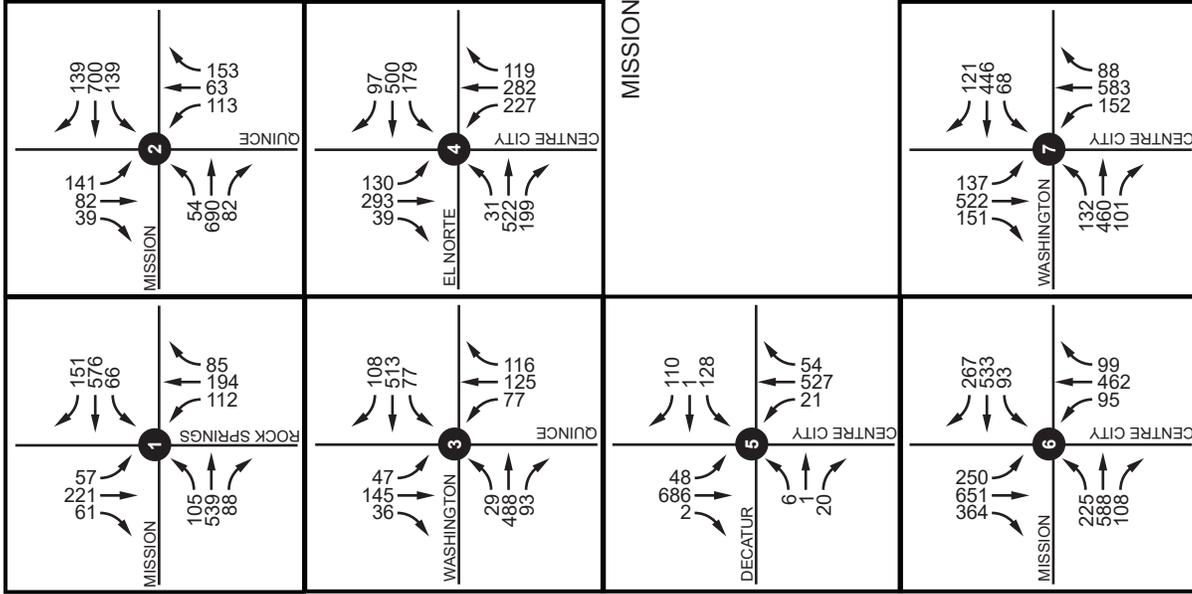


Exhibit 10B: Existing Plus Cumulative Mid-day Peak Hour Volumes

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

Table 18
Intersection Analysis – Existing Plus Cumulative Conditions

| Intersection | | Control Type | Peak Hour | Existing | |
|--------------|---------------------------------|---------------------|-----------|----------|-----|
| | | | | Delay | LOS |
| 1 | Rock Springs Rd/Mission Ave | Signal | AM | 25.5 | C |
| | | | MD | 22.7 | C |
| | | | PM | 32.6 | C |
| 2 | Quince St/Mission Ave | Signal | AM | 27.4 | C |
| | | | MD | 36.2 | D |
| | | | PM | 43.7 | D |
| 3 | Quince St/Washington Ave | Signal | AM | 14.5 | B |
| | | | MD | 15.7 | B |
| | | | PM | 25.1 | C |
| 4 | Centre City Pkwy/El Norte Pkwy | Signal | AM | 56.6 | E |
| | | | MD | 46.7 | D |
| | | | PM | 58.3 | E |
| 5 | Centre City Pkwy/Decatur | Signal | AM | 23.6 | C |
| | | | MD | 23.4 | C |
| | | | PM | 32.3 | C |
| 6 | Centre City Pkwy/Mission Ave | Signal | AM | 49.0 | D |
| | | | MD | 42.8 | D |
| | | | PM | 57.8 | E |
| 7 | Centre City Pkwy/Washington Ave | Signal | AM | 38.4 | D |
| | | | MD | 39.7 | D |
| | | | PM | 46.5 | D |
| 8 | Centre City Pkwy/Valley Pkwy | Signal | AM | 32.3 | C |
| | | | MD | 25.3 | C |
| | | | PM | 31.1 | C |
| 9 | Escondido Blvd/Mission Ave | Signal | AM | 40.9 | D |
| | | | MD | 46.4 | D |
| | | | PM | 45.8 | D |
| 10 | Escondido Blvd/Washington Ave | Signal | AM | 40.7 | D |
| | | | MD | 42.9 | D |
| | | | PM | 38.8 | D |
| 11 | Escondido Blvd/Woodward Ave | Signal | AM | 11.3 | B |
| | | | MD | 7.3 | A |
| | | | PM | 12.1 | B |
| 12 | Broadway/Mission Ave | Signal | AM | 37.4 | D |
| | | | MD | 31.6 | C |
| | | | PM | 50.2 | D |
| 13 | Broadway/Washington Ave | Signal | AM | 33.4 | C |
| | | | MD | 30.8 | C |
| | | | PM | 35.9 | D |
| 14 | Centre City Pkwy/Project Drwy | OWSC (with project) | AM | N/A | N/A |
| | | | MD | | |
| | | | PM | | |
| 15 | Project Drwy/Mission Ave | OWSC (with project) | AM | N/A | N/A |
| | | | MD | | |
| | | | PM | | |

Note: OWSC = One-way Stop-Controlled

As shown in **Table 18**, the intersections are projected to operate at an acceptable LOS (LOS D or better) during the AM, Mid-day and PM peak hours for existing plus cumulative conditions with the exception of the following two locations:

- Centre City Parkway/El Norte Parkway (LOS E AM and PM); and
- Centre City Parkway/Mission Avenue (LOS E PM).

6.4 EXISTING PLUS CUMULATIVE ROADWAY SEGMENT LEVEL OF SERVICE ANALYSIS

Table 19 summarizes existing plus cumulative conditions roadway segment analysis based on capacities contained in the City of Escondido traffic impact analysis guidelines.

**Table 19
Roadway Segment Analysis –Existing Plus Cumulative Conditions**

| Roadway Segment | Functional Class | LOS E Capacity | Existing Plus Cumulative | | |
|---------------------------------------|------------------|----------------|--------------------------|------------|-----|
| | | | ADT | V/C | LOS |
| Mission – Rock Springs to Quince | 4 – C, NP | 34,200 | 22,915 | 0.670 C | C |
| Mission – Quince to Centre City | 4 – C, NP | 34,200 | 26,891 | 0.786 C | D |
| Mission – Centre City to Escondido | 4 – C, NP | 34,200 | 24,637 | 0.720 C | C |
| Mission – Escondido to Broadway | 4 – C, NP | 34,200 | 18,675 | 0.546 B | B |
| Centre City – El Norte to Decatur | 4 – M, NP | 37,000 | 23,179 | 0.626 C | C |
| Centre City – Decatur to SR-78 | 4 – M, NP | 37,000 | 26,374 | 0.713 C | C |
| Centre City – SR-78 to Mission | 4 – M, NP | 37,000 | 33,018 | 0.892 D | D |
| Centre City – Mission to Washington | 4 – SM, NP | 37,000 | 23,654 | 0.639 C | C |
| Centre City – Washington to Valley | 4 – SM, NP | 37,000 | 23,697 | 0.640 C | C |
| Escondido – Mission to Washington | 4 – C, NP | 34,200 | 15,640 | 0.457 B | B |
| Escondido – Washington to Valley | 4 – C, NP | 34,200 | 15,095 | 0.441 B | B |
| Washington – Quince to Centre City | 4 – C, NP | 34,200 | 18,661 | 0.546 C | C |
| Washington – Centre City to Escondido | 4 – C, NP | 34,200 | 19,152 | 0.560 C | C |
| Washington – Escondido to Broadway | 4 – C, NP | 34,200 | 19,323 | 0.565 C | C |
| Washington – east of Broadway | 4 – C, NP | 34,200 | 19,890 | 0.582 C | C |

Note: 4-M, NP: 4 Lane Major No Parking, 5-M, NP: 5 Lane Major No Parking, 4-SM, NP: 4 Lane Super Major No Parking, 4 – C, NP: 4 Lane Collector No Parking

As shown in **Table 19**, the study roadway segments are projected to operate at an acceptable LOS (LOS D or better) for *existing plus cumulative* conditions.

6.5 EXISTING PLUS CUMULATIVE RAMP METER ANALYSIS

Table 20 summarizes *existing plus cumulative* delays and queues for the study ramp meter, based on the potential most restrictive meter rates provide by Caltrans.

**Table 20
Ramp Meter Analysis – Existing Plus Cumulative Conditions**

| Least Restrictive Meter Rate | | | | | | |
|-----------------------------------|----------|------------------------|---------------------------|------------------------------|----------------|-----------------|
| Location | | Demand (Veh/Hr/Ln) | Meter Rate (Veh/Hr/Ln) | Excess Demand (Veh/Hr/Ln) | Delay (min) | Queue (feet) |
| Centre City Parkway/SR-78 WB Ramp | AM (HOV) | 126 | 570 | 0 | 0 | 0 |
| | AM (SOV) | 490 | 570 | 0 | 0.0 | 0 |
| | PM | Meter is not turned on | | | | |
| Most Restrictive Meter Rate | | | | | | |
| Location | | Demand (Veh/Hr/Ln) | Meter Rate (Veh/Hr/Ln) | Excess Demand (Veh/Hr/Ln) | Delay (min) | Queue (feet) |
| Centre City Parkway/SR-78 WB Ramp | AM (HOV) | 126 | 352 | 0 | 0 | 0 |
| | AM (SOV) | 490 | 352 | 138 | 23.5 | 3450 |
| | PM | Meter is not turned on | | | | |
| Observed Meter Rate | | | | | | |
| Location | | Demand (Veh/Hr/Ln) | Meter Rate (Veh/Hr/Ln) | Excess Demand (Veh/Hr/Ln) | Delay (min) | Queue (feet) |
| Centre City Parkway/SR-78 WB Ramp | AM (HOV) | 126 | 436 | 0 | 0 | 0 |
| | AM (SOV) | 490 | 436 | 54 | 7.4 | 1350 |
| | PM | Meter is not turned on | | | | |

Delay = (Excess Demand Per Lane - Meter Rate) / Meter Rate Per Lane * 60 minutes/hour

Queue per lane = Excess Demand *25 feet/vehicle

7.0 Existing Plus Cumulative Plus Project Conditions

Existing plus cumulative plus project conditions analysis is intended to identify the project-related impacts on the existing circulation system in the year the project is expected to be completed. The proposed project is expected to be built and generating trips in 2018.

7.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for the *existing plus cumulative plus project* scenario are consistent with those previously shown in **Exhibit 3**, with the exception of project driveways and other facilities assumed to be constructed by the proposed project to provide site access.

The proposed project features the following improvements to northbound Centre City Parkway and the Centre City Parkway/Mission Avenue intersection along the project frontage:

- Creation of a third northbound through lane on Centre City Parkway along the project frontage and through the Centre City Parkway/Mission Avenue intersection.
- Creation of a northbound right-turn pocket at the project's driveway on Centre City Parkway to facilitate turns into the project site without hindering northbound through traffic on Centre City Parkway.

7.2 EXISTING PLUS CUMULATIVE PLUS PROJECT TRAFFIC VOLUMES

Existing plus cumulative plus project traffic volumes include *existing plus cumulative* traffic volumes plus the traffic projected to be generated by the proposed project at the study intersections, roadway segments, and ramp meters.

Exhibit 11A shows *existing plus cumulative plus project* AM and PM peak hour volumes at the study intersections and ADT volumes at the study roadway segments. **Exhibit 11B** shows *existing plus cumulative plus project* Mid-day peak hour volumes at the study intersections.

7.3 EXISTING PLUS CUMULATIVE PLUS PROJECT INTERSECTION LEVEL OF SERVICE ANALYSIS

Existing plus cumulative plus project conditions AM, Mid-day and PM peak hour intersection analysis is shown in **Table 21**. Calculations are based on the existing geometrics at the study area intersections as shown in **Exhibit 3** and the roadway improvements described in section 7.1. HCM analysis sheets are provided in **Appendix I**.

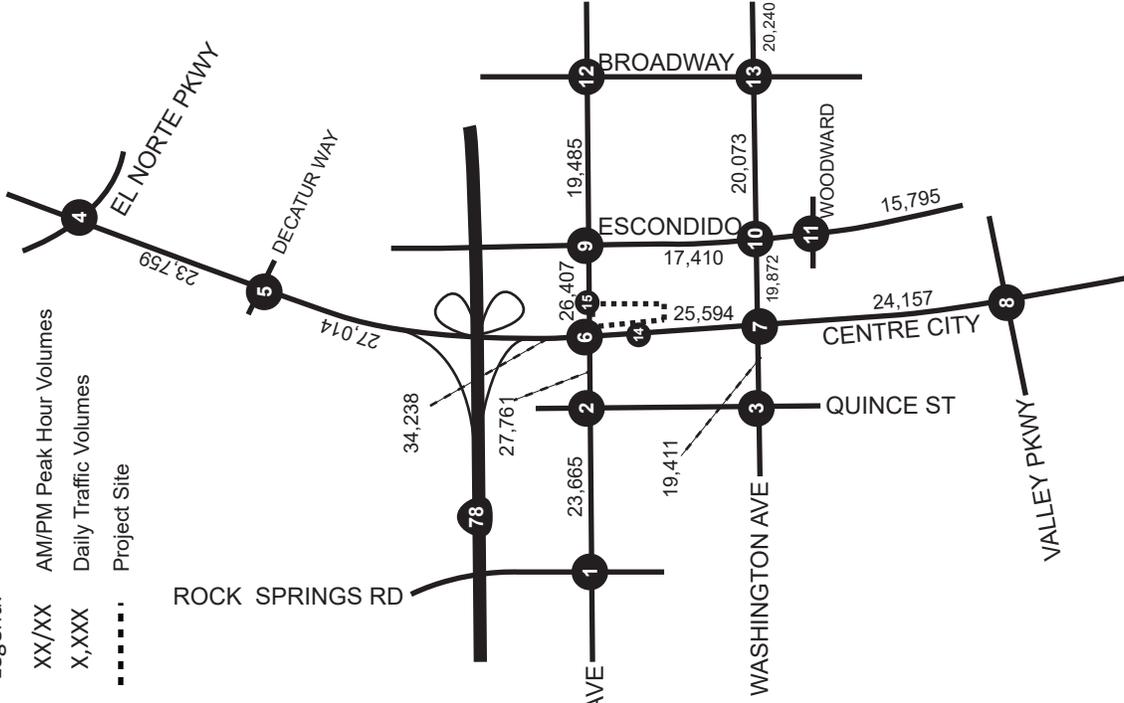
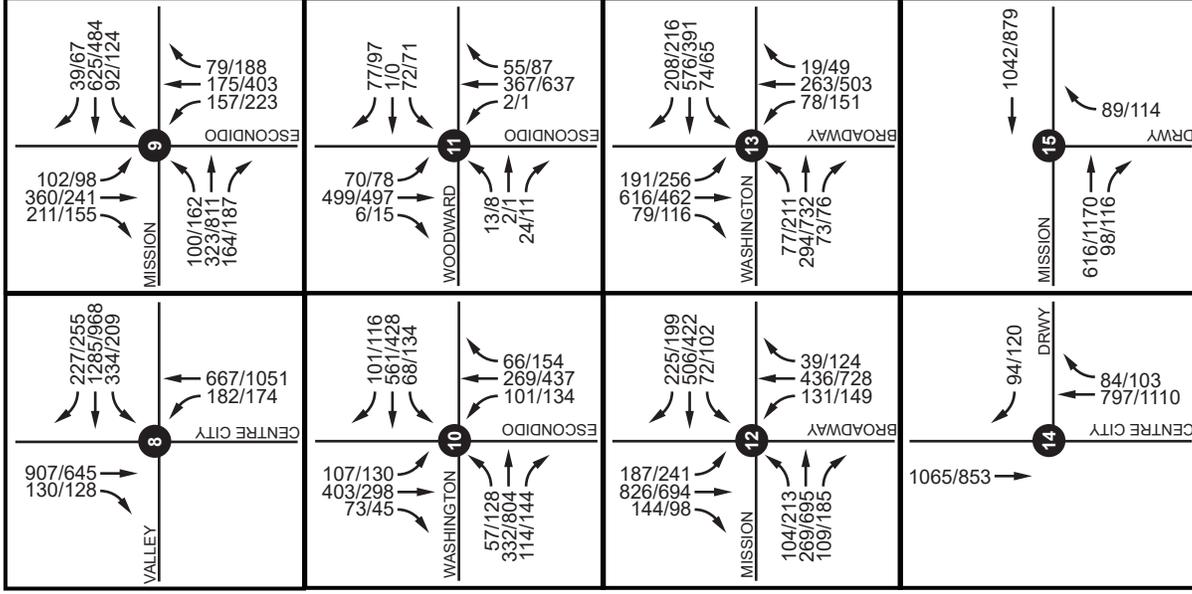
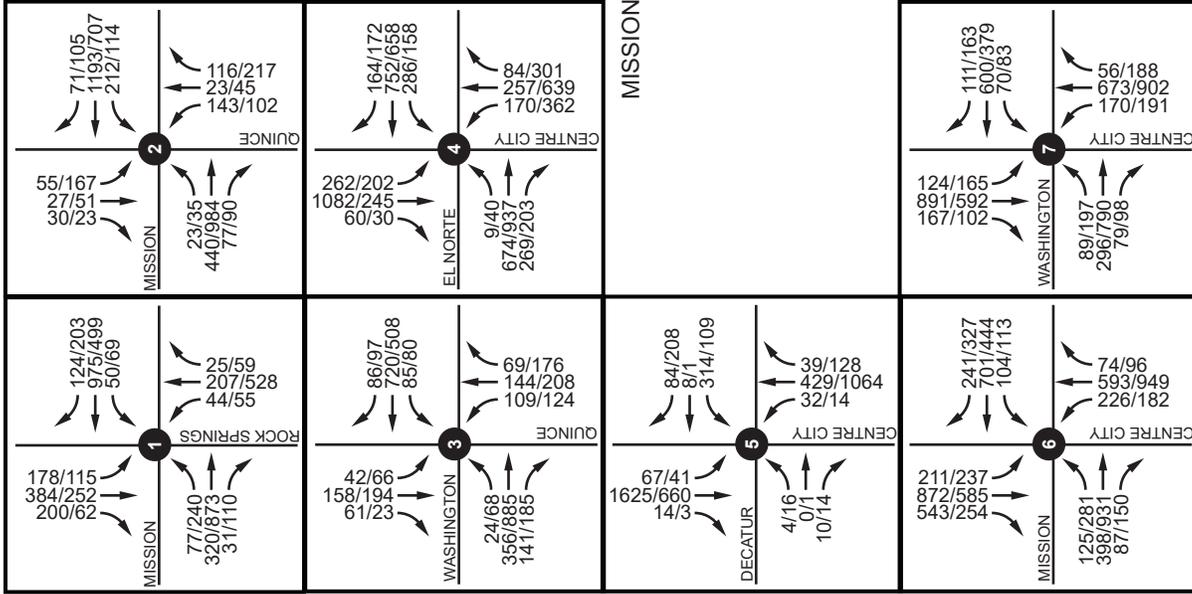
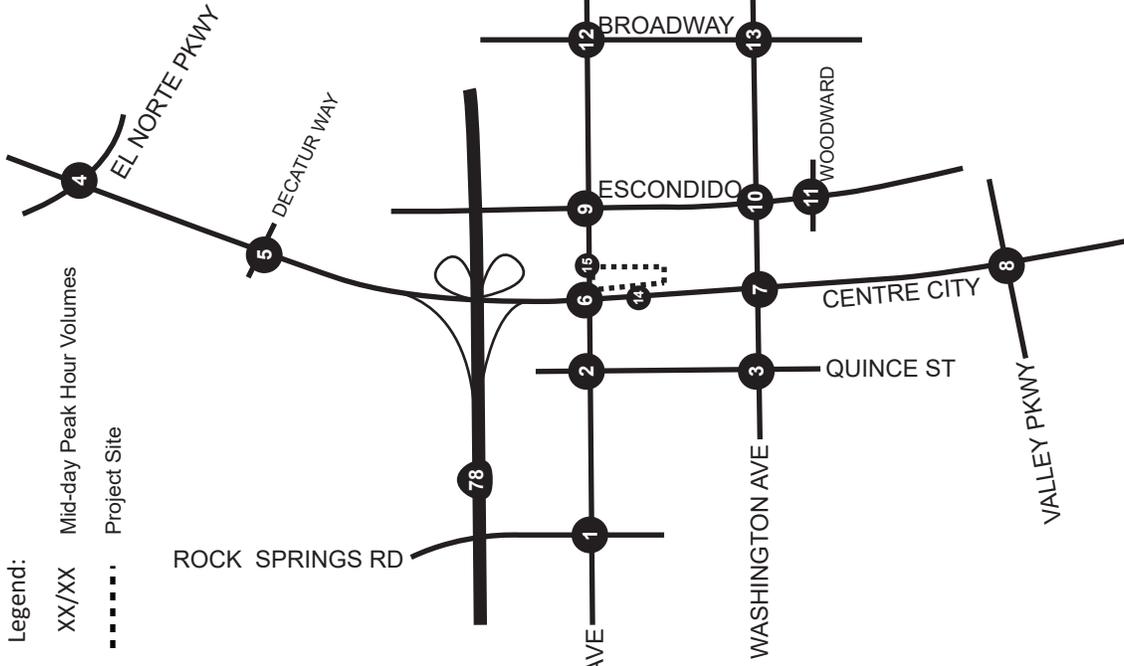
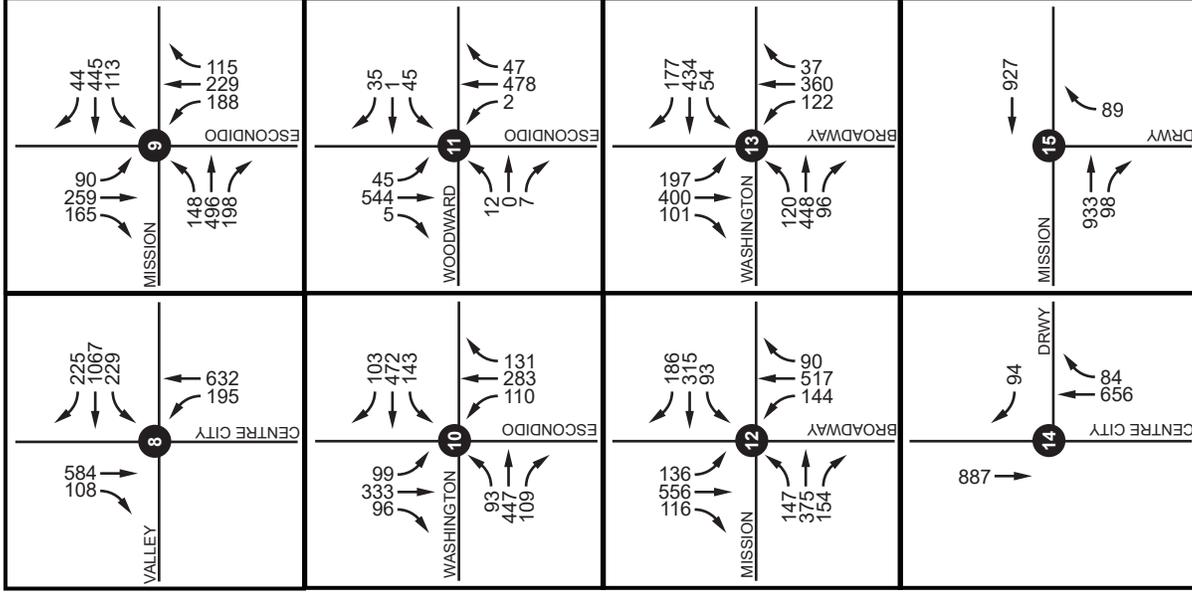
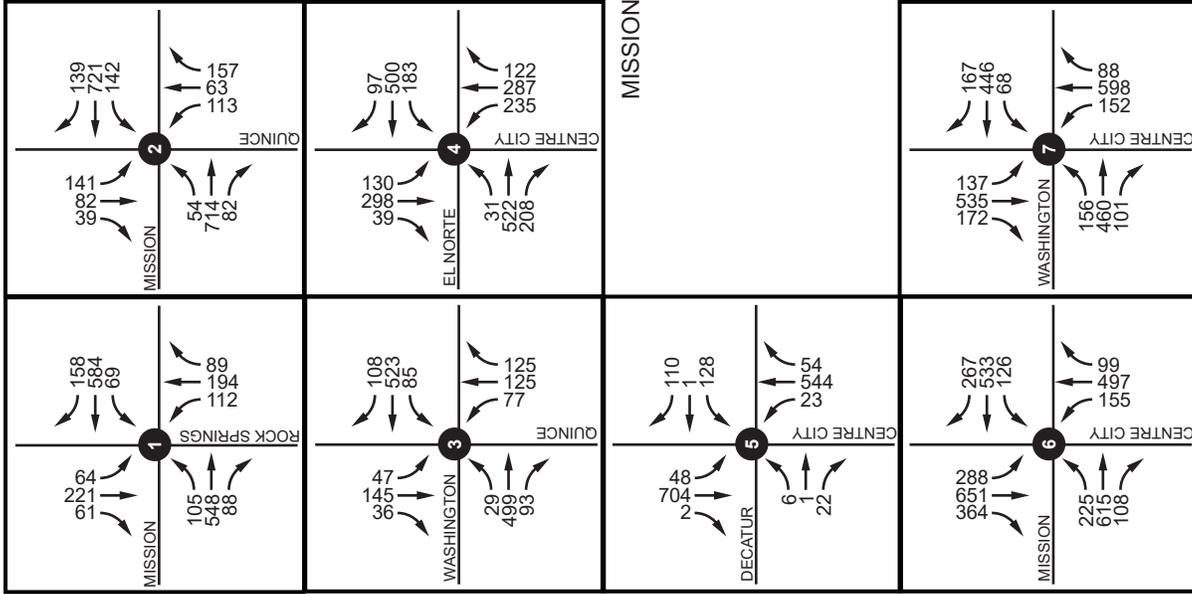


Exhibit 11A: Existing Plus Cumulative Plus Project AM/PM Peak Hour Volumes

ONP-16-002 Centre City Shopping Center TIA

Not to Scale



Legend:
 XX/XX Mid-day Peak Hour Volumes
 - - - - - Project Site



Exhibit 11B: Existing Plus Cumulative Plus Project Mid-day Peak Hour Volumes

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

Table 21
Intersection Analysis – Existing Plus Cumulative Plus Project Conditions

| Intersection | | Peak Hour | Existing Plus Cumulative | | Existing Plus Cumulative Plus Project | | | |
|--------------|---------------------------------|-----------|--------------------------|-----|---------------------------------------|-----|-------------------|---------|
| | | | Delay | LOS | Delay | LOS | Change | Impact? |
| 1 | Rock Springs Rd/Mission Ave | AM | 25.5 | C | 25.7 | C | 0.2 | No |
| | | MD | 22.7 | C | 22.8 | C | 0.1 | |
| | | PM | 32.6 | C | 32.8 | C | 0.2 | |
| 2 | Quince St/Mission Ave | AM | 27.4 | C | 27.8 | C | 0.4 | No |
| | | MD | 36.2 | D | 36.7 | D | 0.5 | |
| | | PM | 43.7 | D | 44.1 | D | 0.4 | |
| 3 | Quince St/Washington Ave | AM | 14.5 | B | 14.5 | B | 0.0 | No |
| | | MD | 15.7 | B | 15.6 | B | -0.1 | |
| | | PM | 25.1 | C | 25.3 | C | 0.2 | |
| 4 | Centre City Pkwy/El Norte Pkwy | AM | 56.6 | E | 56.9 | E | 0.3 | No |
| | | MD | 46.7 | D | 47.0 | D | 0.3 | |
| | | PM | 58.3 | E | 58.8 | E | 0.5 | |
| 5 | Centre City Pkwy/Decatur | AM | 23.6 | C | 23.9 | C | 0.3 | No |
| | | MD | 23.4 | C | 23.6 | C | 0.2 | |
| | | PM | 32.3 | C | 32.7 | C | 0.4 | |
| 6 | Centre City Pkwy/Mission Ave | AM | 49.0 | D | 50.4 | D | 1.4 ¹ | No |
| | | MD | 42.8 | D | 43.8 | D | 1.0 ¹ | |
| | | PM | 57.8 | E | 54.0 | D | -3.8 ¹ | |
| 7 | Centre City Pkwy/Washington Ave | AM | 38.4 | D | 40.1 | D | 1.7 | No |
| | | MD | 39.7 | D | 41.0 | D | 1.3 | |
| | | PM | 46.5 | D | 47.2 | D | 0.7 | |
| 8 | Centre City Pkwy/Valley Pkwy | AM | 32.3 | C | 32.2 | C | -0.1 | No |
| | | MD | 25.3 | C | 25.2 | C | -0.1 | |
| | | PM | 31.1 | C | 31.1 | C | 0.0 | |
| 9 | Escondido Blvd/Mission Ave | AM | 40.9 | D | 41.4 | D | 0.5 | No |
| | | MD | 46.4 | D | 47.8 | D | 1.4 | |
| | | PM | 45.8 | D | 46.3 | D | 0.5 | |
| 10 | Escondido Blvd/Washington Ave | AM | 40.7 | D | 41.9 | D | 1.2 | No |
| | | MD | 42.9 | D | 43.2 | D | 0.3 | |
| | | PM | 38.8 | D | 39.9 | D | 1.1 | |
| 11 | Escondido Blvd/Woodward Ave | AM | 11.3 | B | 11.5 | B | 0.2 | No |
| | | MD | 7.3 | A | 7.5 | A | 0.2 | |
| | | PM | 12.1 | B | 12.2 | B | 0.1 | |
| 12 | Broadway/Mission Ave | AM | 37.4 | D | 38.5 | D | 0.9 | No |
| | | MD | 31.6 | C | 31.9 | C | 0.3 | |
| | | PM | 50.2 | D | 50.5 | D | 0.3 | |
| 13 | Broadway/Washington Ave | AM | 33.4 | C | 34.0 | C | 0.6 | No |
| | | MD | 30.8 | C | 32.1 | C | 1.3 | |
| | | PM | 35.9 | D | 36.4 | D | 0.5 | |
| 14 | Centre City Pkwy/Project Drwy | AM | | | 12.7 | B | 12.7 | No |
| | | MD | N/A | N/A | 11.7 | B | 11.7 | |
| | | PM | | | 16.5 | C | 16.5 | |
| 15 | Project Drwy/Mission Ave | AM | | | 12.0 | B | 12.0 | No |
| | | MD | N/A | N/A | 14.6 | B | 14.6 | |
| | | PM | | | 18.5 | C | 18.5 | |

Note: ¹ = With proposed improvements to intersection discussed in Section 4.1 (additional northbound through lane)

As shown in **Table 21**, the intersections are projected to continue to operate at an acceptable LOS (LOS D or better) during the AM, Mid-day and PM peak hours for *existing plus cumulative plus project* conditions with the exception of the Centre City Parkway/El Norte Parkway intersection which is projected to operate at LOS E during the AM and PM peak hours. The improvements the proposed project plans on constructing at the Centre City Parkway/Mission Avenue intersection improves the intersection from LOS E for cumulative without project conditions to LOS D with the proposed project.

When analyzing intersections based on HCM 2010 methodology, which calculates average delay, it is possible for the addition of project trips to improve the overall average delay at an intersection; this happens when the proposed project adds trips to a movement that experiences lower delay than the intersection as a whole, and/or when the proposed project adds trips to an underutilized phase.

Based on the published City of Escondido thresholds of significance, the addition of project generated trips is not projected to have a significant direct impact at any of the study intersections since it does not increase the average delay experienced at any intersections operating at LOS D or worse by greater than 2.0 seconds.

7.4 EXISTING PLUS CUMULATIVE PLUS PROJECT ROADWAY SEGMENT LEVEL OF SERVICE ANALYSIS

Table 22 summarizes *existing plus cumulative plus project* conditions roadway segment analysis based on the LOS E capacities contained in the City of Escondido traffic impact analysis guidelines.

**Table 22
Roadway Segment Analysis – Existing Plus Cumulative Plus Project Conditions**

| Roadway Segment | Functional Class | LOS E Capacity | Existing Plus Cumulative | | Existing Plus Cumulative Plus Project | | | |
|---------------------------------------|------------------|----------------|--------------------------|------------|---------------------------------------|------------|--------------|------------|
| | | | ADT | V/C LOS | ADT | V/C LOS | Change In VC | Impact? |
| Mission – Rock Springs to Quince | 4 – C, NP | 34,200 | 22,915 | 0.670 C | 23,665 | 0.692 C | 0.022 | No |
| Mission – Quince to Centre City | 4 – C, NP | 34,200 | 26,891 | 0.786 D | 27,761 | 0.812 D | 0.026 | Yes |
| Mission – Centre City to Escondido | 4 – C, NP | 34,200 | 24,637 | 0.720 C | 26,407 | 0.772 D | 0.052 | Yes |
| Mission – Escondido to Broadway | 4 – C, NP | 34,200 | 18,675 | 0.546 B | 19,485 | 0.570 C | 0.024 | No |
| Centre City – El Norte to Decatur | 4 – M, NP | 37,000 | 23,179 | 0.626 C | 23,759 | 0.642 C | 0.016 | No |
| Centre City – Decatur to SR-78 | 4 – M, NP | 37,000 | 26,374 | 0.713 C | 27,014 | 0.730 C | 0.017 | No |
| Centre City – SR-78 to Mission | 5 – M, NP | 43,500* | 33,018 | 0.892 D | 34,238 | 0.787 D | -0.105 | No |
| Centre City – Mission to Washington | 4 – SM, NP | 37,000 | 23,654 | 0.639 C | 25,594 | 0.692 C | 0.053 | No |
| Centre City – Washington to Valley | 4 – SM, NP | 37,000 | 23,697 | 0.640 C | 24,157 | 0.653 C | 0.013 | No |
| Escondido – Mission to Washington | 4 – C, NP | 34,200 | 15,640 | 0.457 B | 17,410 | 0.509 B | 0.052 | No |
| Escondido – Washington to Valley | 4 – C, NP | 34,200 | 15,095 | 0.441 B | 15,795 | 0.462 B | 0.021 | No |
| Washington – Quince to Centre City | 4 – C, NP | 34,200 | 18,661 | 0.546 C | 19,411 | 0.568 C | 0.022 | No |
| Washington – Centre City to Escondido | 4 – C, NP | 34,200 | 19,152 | 0.560 C | 19,872 | 0.581 C | 0.021 | No |
| Washington – Escondido to Broadway | 4 – C, NP | 34,200 | 19,323 | 0.565 C | 20,073 | 0.587 C | 0.022 | No |
| Washington – east of Broadway | 4 – C, NP | 34,200 | 19,890 | 0.582 C | 20,240 | 0.592 C | 0.010 | No |

Note: 4-M, NP: 4 Lane Major No Parking, 5-M, NP: 5 Lane Major No Parking, 4-SM, NP: 4 Lane Super Major No Parking, 4 – C, NP: 4 Lane Collector No Parking

* Construction of third northbound through lane at the CCP/Mission intersection completes the improvement of northbound CCP between Mission and the SR-78 ramps from a 4-lane major to a 5-lane major.

As shown in **Table 22**, the study roadway segments are projected to operate at an acceptable LOS (LOS D or better) for *existing plus cumulative plus project* conditions.

Based on the City’s thresholds of significance the addition of project generated trips is projected to have a significant impact at the following roadway segments:

- Mission Avenue between Quince and Centre City (project-generated trips increase the V/C ratio of the segment by 2.6% and the segment is projected to operate at LOS D.)
- Mission Avenue between Centre City and Escondido (project-generated trips increase the V/C ratio of the segment by 5.2% and the segment is projected to operate at LOS D.)

However, as discussed in Section 2.3.3 (Roadway Segment Capacity Analysis), roadway capacities tend to be “rule of thumb” estimated for planning purposes and are affected by factors such as intersection spacing, configuration and control, access control, roadway grade, design geometrics, sight distance and vehicle mix. Typically when ADT-based roadway segment analysis indicates a

deficiency, a review of peak hour operation of the intersections on either end of the segment is undertaken. The more detailed peak hour intersection operation analysis takes into account the factors that affect roadway capacity; unless the peak hour intersection analysis indicates the need for additional through lanes, roadway segment widening is not recommended on the basis of ADT analysis alone.

The Escondido General Plan Update Traffic Impact Analysis (Linscott, Law & Greenspan, Engineers December 5, 2011) Significance Criteria Section (Section 4.0, page 13) states "Where LOS E/F street segment operations are calculated, a secondary analysis of the adjacent intersections is conducted to determine the peak hour operations at either end of the segment. The peak hour intersection analysis is a more complicated and robust calculation as compared to the simplistic volume/capacity analysis required for street segments. If the adjacent intersections demonstrate acceptable LOS D or better operations, then it is determined that the street segment impact is in fact not significant, despite the poor VIC calculations, since intersection operations are considered more indicative of actual roadway system operations than street segment analysis."

In the case of Mission Avenue between Quince Street and Centre City Parkway and between Centre City Parkway and Escondido Avenue, the Mission Avenue intersections with Quince Street, Centre City Parkway, and Escondido Avenue all operate at LOS D. Similar to the methodology used in the City's General Plan traffic impact analysis described above, this typically indicates that the roadway segment would function at acceptable operations. To fully address the potential roadway segment impact, the approach delay for the signalized intersections on either side of the roadway segment has been documented. For purposes of this analysis, the approach delay on both ends of the roadway segment should operate at LOS D to have the roadway segment impact be considered less than significant.

Table 23 summarizes the approach delay on Mission Avenue at the Mission/Quince, Mission/Centre City Parkway and Mission/Escondido intersections as well as the approach delay on Centre City Parkway at the Mission/Centre City Parkway intersection.

Table 23
Approach Delay on Ends of Potentially Impacted Roadway Segments
Existing Plus Cumulative Plus Project Conditions

| Intersection/Approach | AM Peak Hour (Delay – LOS) | Mid-Day Peak Hour (Delay – LOS) | PM Peak Hour (Delay – LOS) |
|--|--|--|--|
| Quince Street/Mission Avenue Eastbound Mission Avenue Westbound Mission Avenue Overall Intersection | 40.6 – D 16.8 – B | 45.0 – D 14.7 – B | 46.9 – D 33.0 – C |
| Centre City Parkway/Mission Avenue Northbound Centre City Parkway Southbound Centre City Parkway Eastbound Mission Avenue Westbound Mission Avenue Overall Intersection | 29.7 – C 64.5 – E 28.2 – C 59.2 – E | 37.8 – D 52.4 – D 24.2 – C 56.5 – E | 29.1 – C 62.5 – E 62.5 – E 65.0 – E |
| Escondido Boulevard/Mission Avenue Eastbound Mission Avenue Westbound Mission Avenue Overall Intersection | 36.5 – D 38.2 – D | 56.7 – E 37.3 – D | 43.6 – D 36.8 – D |
| Centre City Parkway/Washington Ave Northbound Centre City Parkway Southbound Centre City Parkway Overall Intersection | 52.3 – D 11.7 – B 40.1 – D | 42.5 – D 10.0 – B 41.0 – D | 52.7 – D 16.4 – B 47.2 – D |

Note: Approach delay shown in seconds.

As shown in the table, approach delays in the eastbound, westbound, and southbound direction of the Centre City Parkway/Mission Avenue intersection operate at LOS E during at least one period. Approach delays in the eastbound direction of the Escondido Boulevard/Mission Avenue intersection operate at LOS E during the mid-day peak hour. Recommended improvements to address the project’s impacts are discussed in Section 7.6.

7.5 EXISTING PLUS CUMULATIVE PLUS PROJECT RAMP METER ANALYSIS

Table 24 summarizes the *existing plus cumulative plus project* delays and queues for the study ramp meter, based on the potential most restrictive meter rates provide by Caltrans.

Table 24
Ramp Meter Analysis – Existing Plus Cumulative Plus Project Conditions

| Least Restrictive Meter Rate | | | | | | |
|-----------------------------------|----------|------------------------|---------------------------|------------------------------|----------------|-----------------|
| Location | | Demand (Veh/Hr/Ln) | Meter Rate (Veh/Hr/Ln) | Excess Demand (Veh/Hr/Ln) | Delay (min) | Queue (feet) |
| Centre City Parkway/SR-78 WB Ramp | AM (HOV) | 130 | 570 | 0 | 0 | 0 |
| | AM (SOV) | 503 | 570 | 0 | 0.0 | 0 |
| | PM | Meter is not turned on | | | | |
| Most Restrictive Meter Rate | | | | | | |
| Location | | Demand (Veh/Hr/Ln) | Meter Rate (Veh/Hr/Ln) | Excess Demand (Veh/Hr/Ln) | Delay (min) | Queue (feet) |
| Centre City Parkway/SR-78 WB Ramp | AM (HOV) | 130 | 352 | 0 | 0 | 0 |
| | AM (SOV) | 503 | 352 | 151 | 25.7 | 3775 |
| | PM | Meter is not turned on | | | | |
| Observed Meter Rate | | | | | | |
| Location | | Demand (Veh/Hr/Ln) | Meter Rate (Veh/Hr/Ln) | Excess Demand (Veh/Hr/Ln) | Delay (min) | Queue (feet) |
| Centre City Parkway/SR-78 WB Ramp | AM (HOV) | 130 | 436 | 0 | 0 | 0 |
| | AM (SOV) | 503 | 436 | 67 | 9.2 | 1675 |
| | PM | Meter is not turned on | | | | |

Delay = (Excess Demand Per Lane - Meter Rate) / Meter Rate Per Lane * 60 minutes/hour

Queue per lane = Excess Demand *25 feet/vehicle

Based on the SANTEC thresholds of significance the addition of project generated trips is projected to not have a significant direct impact at any of the study ramp meters for *existing plus cumulative plus project conditions*.

7.6 EXISTING PLUS CUMULATIVE PLUS PROJECT RECOMMENDED IMPROVEMENTS

Recommended Improvement: The City of Escondido has a planned Capital Improvement Project to add a second eastbound left-turn lane at the intersection of Centre City Parkway/Mission Avenue. The project is widening Mission Avenue along its project frontage to allow the eastbound through lanes to align across the intersection after the CIP project is completed. As such, the project should build its project frontage in the ultimate location and construct improvements including the median and striping modifications required for the second westbound left-turn lane. Further, new signal timing plans will be required as part of improvement to adjust for the change in capacity. The project applicant should pay its fair share towards new signal timings at the intersections of Centre City Parkway/Mission Avenue, Mission Avenue/Quince Street, and Mission Avenue/Escondido Boulevard.

The following changes would occur under the existing plus cumulative plus project plus mitigation scenario:

- Centre City Parkway/Mission Avenue intersection
 - Addition of second eastbound left-turn (project applicant contribution to City CIP)
 - Signal timing modifications (project applicant contribution to City CIP)

- Mission Avenue/Quince Street intersection
 - Signal timing modifications (project applicant contribution to City CIP)
- Mission Avenue/Escondido Boulevard intersection
 - Signal timing modifications (project applicant contribution to City CIP)

Existing plus cumulative plus project plus mitigation AM, Mid-Day, and PM peak hour intersection analysis results for the intersections of Mission Avenue at Quince Street, Centre City Parkway, and Escondido Avenue are shown in **Table 25**. HCM analysis sheets are provided in **Appendix J**.

Table 25
Existing Plus Cumulative Plus Project Plus Mitigation Intersection LOS

| Intersection/Approach | Existing Plus Cumulative Plus Project | | | Existing Plus Cumulative Plus Project Plus Mitigation | | |
|------------------------------------|---------------------------------------|----------|----------|---|----------|----------|
| | AM | Mid-Day | PM | AM | Mid-Day | PM |
| Quince Street/Mission Avenue | | | | | | |
| Eastbound Mission Avenue | 40.6 – D | 45.0 – D | 46.9 – D | 40.4 – D | 43.3 – D | 47.2 – D |
| Westbound Mission Avenue | 16.8 – B | 14.7 – B | 33.0 – C | 15.0 – B | 14.1 – B | 13.2 – B |
| Overall Intersection | 27.8 – C | 36.7 – D | 44.1 – D | 26.8 – C | 35.8 – D | 37.1 – D |
| Centre City Parkway/Mission Avenue | | | | | | |
| Northbound Centre City Parkway | 29.7 – C | 37.8 – D | 29.1 – C | 48.7 – D | 48.4 – D | 43.0 – D |
| Southbound Centre City Parkway | 64.5 – E | 52.4 – D | 62.5 – E | 36.2 – D | 29.6 – C | 55.2 – D |
| Eastbound Mission Avenue | 28.2 – C | 24.2 – C | 62.5 – E | 43.7 – D | 33.4 – C | 37.7 – D |
| Westbound Mission Avenue | 59.2 – E | 56.5 – E | 65.0 – E | 30.2 – C | 27.7 – C | 32.3 – D |
| Overall Intersection | 50.4 – D | 42.1 – D | 54.0 – D | 38.5 – D | 33.7 – C | 42.0 – D |
| Escondido Boulevard/Mission Avenue | | | | | | |
| Eastbound Mission Avenue | 37.6 – D | 58.1 – E | 43.6 – D | 13.3 – C | 42.1 – D | 42.2 – D |
| Westbound Mission Avenue | 38.8 – D | 37.8 – D | 36.8 – D | 42.3 – D | 37.8 – D | 37.1 – C |
| Overall Intersection | 41.4 – D | 47.8 – D | 46.3 – D | 38.7 – D | 42.4 – D | 46.0 – D |
| Centre City Parkway/Washington Ave | | | | | | |
| Northbound Centre City Parkway | 52.3 – D | 42.5 – D | 52.7 – D | 52.3 – D | 45.5 – D | 52.7 – D |
| Southbound Centre City Parkway | 11.7 – B | 10.0 – B | 16.4 – B | 45.1 – D | 26.6 – C | 16.4 – B |
| Overall Intersection | 40.1 – D | 41.0 – D | 47.2 – D | 51.9 – D | 45.5 – D | 47.2 – D |

Note: Approach delay shown in seconds.

Approach delays are also provided to demonstrate that, with the addition of the recommended improvements, all approach delays to roadway segments identified as an impact would operate at LOS D or better for all peak periods.

- The northbound and southbound approaches at the Centre City Parkway/Mission Avenue intersection operate at LOS D or better for each peak. Therefore, the impact to the roadway segment of Centre City Parkway between Mission Avenue and SR-78 Ramps would be less than significant.
- The eastbound and westbound approaches at the Quince Street/Mission Avenue and Centre City Parkway/Mission Avenue intersections operate at LOS D or better for each

peak. Therefore, the impact to the roadway segment of Mission Avenue between Quince Street and Centre City Parkway would be less than significant.

- The eastbound and westbound approaches at the Centre City Parkway/Mission Avenue and Escondido Avenue/Mission Avenue intersections operate at LOS D or better for each peak. Therefore, the impact to the roadway segment of Mission Avenue between Centre City Parkway and Escondido Avenue would be less than significant.

8.0 Pedestrian and Bicycle Volumes – CCP/Mission

In addition to vehicular traffic volumes, peak period pedestrian and bicycle volumes were collected at the Centre City Parkway/Mission Avenue intersection for the AM, Mid-day and PM peak periods. **Exhibit 12** shows the peak period pedestrian/bicycle crossing at the intersection.

The Mid-day and PM peak periods had higher pedestrian activity than the AM peak period, with the PM peak period being the busiest for pedestrian activity. Crossing of Centre City Parkway by pedestrians/bicyclists on Mission Avenue made up approximately 80% of the crossings, as the lack of sidewalks on Centre City Parkway discourages pedestrian activity from the north and south.

While the intersection level of service analysis did not take a trip generation reduction for non-motorized trips, it is likely that the fast food and quick serve restaurants proposed as part of the project will generate additional pedestrian activity at the intersection, as residents and employees from nearby businesses and dwelling units walk or bicycle to the site for a meal.

The proposed project should consider enhancement to the southeast corner of the intersection that would improve the quality of pedestrian and bicycle facilities. In particular, the existing pork chop separating the northbound free right turn lane from the rest of the northbound travel lanes on Centre City Parkway is a design that can cause confusion between pedestrians and motorists.

8.1 RECOMMENDED PEDESTRIAN IMPROVEMENTS

TJW recommends that as part of the proposed project, the following improvements be implemented:

- Striping of a crosswalk across the northbound right-turn lane, clearly delineating the pedestrian path of travel.
- Installation of signs on northbound Centre City Parkway indicating that vehicles should yield to pedestrians crossing the northbound free-right turn lane. The appropriate signs should be based on the latest Manual on Uniform Traffic Control Devices as amended by the state of California (CA MUTCD) and in consultation with City staff.
- Striping of crosswalks on all legs of the intersection
- Installation of countdown pedestrian timers at the intersection.

Legend:

XX/XX/XX AM/Mid-day/ PM Peak Period Crossings

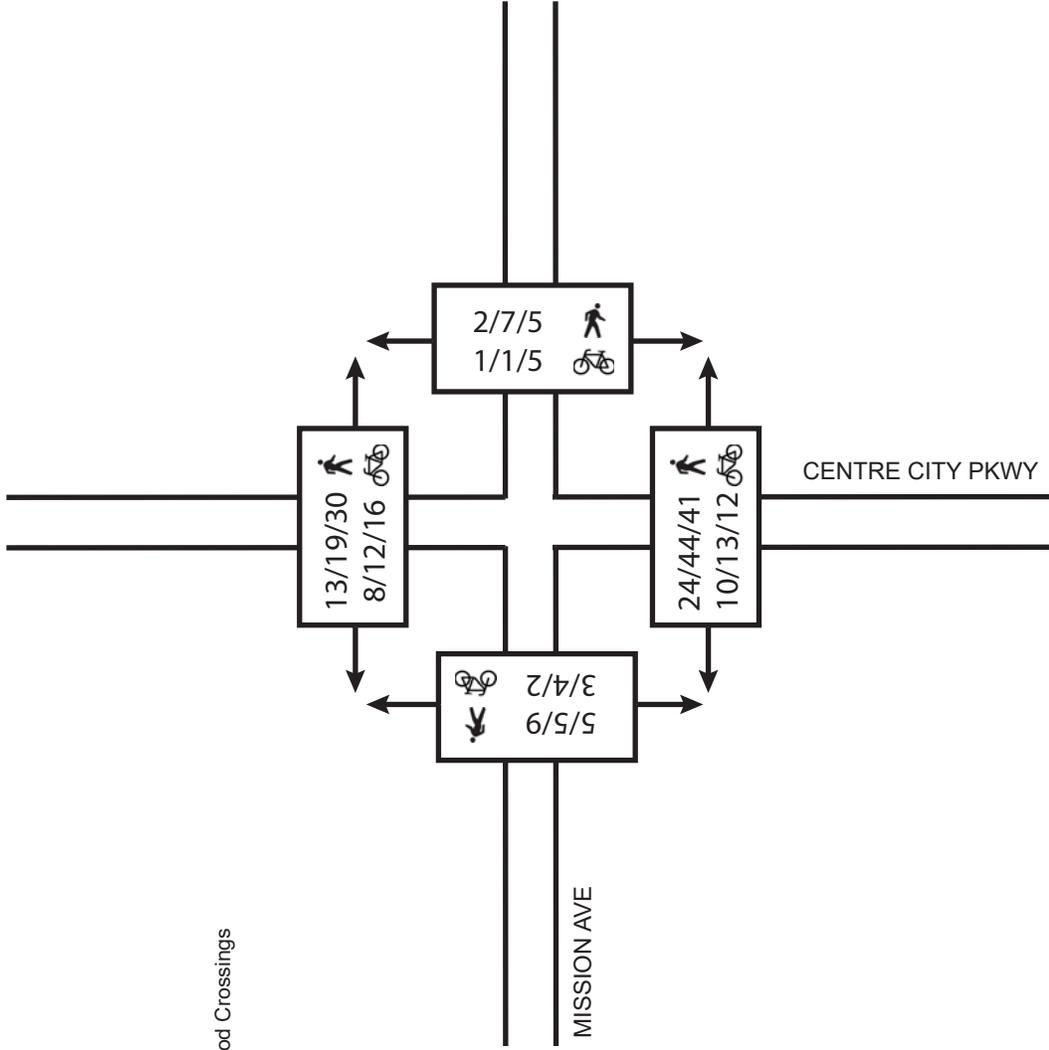


Exhibit 12:

Existing AM/Mid-day/PM Peak Period Bicycle and Pedestrian Volumes

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

9.0 Project Site Access Review

This section summarizes proposed site access and on-site circulation.

The proposed Centre City Shopping Center project has site access on Centre City Parkway and Mission Avenue. Both driveways will be right-turn in/right-turn out only and should be designed in accordance with City of Escondido specifications and standards for driveway design.

Both project driveways are planned to have one inbound lane and one outbound lane. The project proposes to construct a deceleration lane for vehicles turning right into the project driveway on Centre City Parkway. The project driveway on Mission Avenue is not planned to have a right-turn in pocket; eastbound Mission Avenue is planned to have a bicycle lane and buffer adjacent to the number two through lane.

The project driveways were analyzed for all with project scenarios in the intersection level of service analysis and are projected to operate acceptably.

Sight Distance

An important issue to consider in the design and construction of development is the safety and efficiency of vehicles entering and exiting the site. Based on the City of Escondido Design Standards, sight distance analysis is required at unsignalized driveways. Both of the project's proposed driveways will be one-way stop-controlled with free movement on the major streets (Centre City Parkway and Mission Avenue). The driveways should be designed to provide adequate sight distance to ensure satisfactory operation of the driveway intersections.

Sight distance at each project access point should be reviewed with respect to standard Caltrans and City sight distance standards at the time of final grading, landscaping and street improvement plans.

10.0 Queue Analysis

Queue analysis has been prepared for the left-turn pockets at the following intersections at the request of City staff for existing and near-term scenarios assuming implementation of the mitigation measures identified in the previous intersection and roadway segment analysis:

- Centre City Parkway/El Norte Parkway
- Centre City Parkway/Mission Avenue
- Centre City Parkway/Washington Avenue

Table 26 summarizes the projected 95th percentile left-turn queue lengths based on existing plus cumulative and existing plus cumulative plus project traffic volumes assuming implementation of recommended mitigation measures discussed in *Section 7.6*. Queue output sheets are contained in **Appendix K**.

Table 26
Queue Analysis - Existing Plus Cumulative Plus Project Conditions

| Intersection/Movement | Existing Pocket Length (ft) | AM Peak Hour | | Mid-Day Peak Hour | | PM Peak Hour | |
|---------------------------------|-----------------------------|-----------------|---------------------------|-------------------|---------------------------|-----------------|---------------------------|
| | | Without Project | With Project & Mitigation | Without Project | With Project & Mitigation | Without Project | With Project & Mitigation |
| Centre City Pkwy/El Norte Pkwy | | | | | | | |
| Eastbound Left-Turn | 150 | 16 | 16 | 34 | 34 | 44 | 44 |
| Westbound Left-Turn | 100 | 256 | 260 | 136 | 139 | 143 | 148 |
| Northbound Left-Turn | 250 | 138 | 144 | 166 | 172 | 324 | 331 |
| Southbound Left-Turn | 225 | 209 | 209 | 104 | 104 | 161 | 161 |
| Centre City Pkwy/Mission Ave | | | | | | | |
| Eastbound Left-Turn | 250 | 177 | 81 | 223 | 112 | 287 | 167 |
| Westbound Left-Turn | 125 | 97 | 72 | 137 | 82 | 115 | 78 |
| Northbound Left-Turn | 150 | 96 | 151 | 65 | 95 | 80 | 119 |
| Southbound Left-Turn | 200 | 108 | 127 | 146 | 157 | 150 | 143 |
| Centre City Pkwy/Washington Ave | | | | | | | |
| Eastbound Left-Turn | 250 | 104 | 157 | 186 | 235 | 269 | 316 |
| Westbound Left-Turn | 165 | 100 | 97 | 105 | 101 | 106 | 104 |
| Northbound Left-Turn | 350 | 110 | 110 | 93 | 93 | 132 | 132 |
| Southbound Left-Turn | 325 | 62 | 85 | 63 | 64 | 94 | 113 |

Note: 95th percentile queue lengths shown in feet

The previously identified mitigation measures at the Centre City Parkway/Mission Avenue intersection alleviates potential left-turn queue spillback on the eastbound and westbound Mission Avenue approaches.

As shown in the queuing analysis, the northbound left-turn queues at Centre City Parkway/Mission Avenue could potentially exceed the existing storage length during the AM peak period, even after implementation of the recommended mitigation measures.

As the project adds traffic to this movement and the queue occurs at the intersection directly adjacent to the project site, it is recommended that the project be responsible for extending the northbound left-turn pocket at the Centre City Parkway/Mission Avenue intersection.

- The project applicant should be responsible for extending the northbound left-turn pocket by 25 feet.

The southbound left-turn movement does not show queues extending beyond the current available length. However, the project adds approximately 40 trips to this movement and the roadway segment of Centre City Parkway between Mission Avenue and SR-78 was a potential impact based on the increase in volume-to-capacity. Improvements at this location are being recommended to provide additional operational improvements to the roadway segment and intersection providing access between the freeway and the project site.

- The project applicant should be responsible for extending the southbound left-turn pocket by 40 feet.

Providing turn pockets that contain queues created by the adjacent signal improves intersection and roadway operations by allowing sufficient storage space for left-turn vehicles to wait and not interfere with through vehicle flow.

Appendices

APPENDIX A

SANDAG SELECT ZONE MODEL RUN

SANDAG Series 11 2035 Highway Network Select Zone Assignment

ESCONDIDO Area

Model Run: 11/18/15
SERIES 11 2035 Revenue Constrained
2035 - Revenue Constrained

Forecasted Volumes:

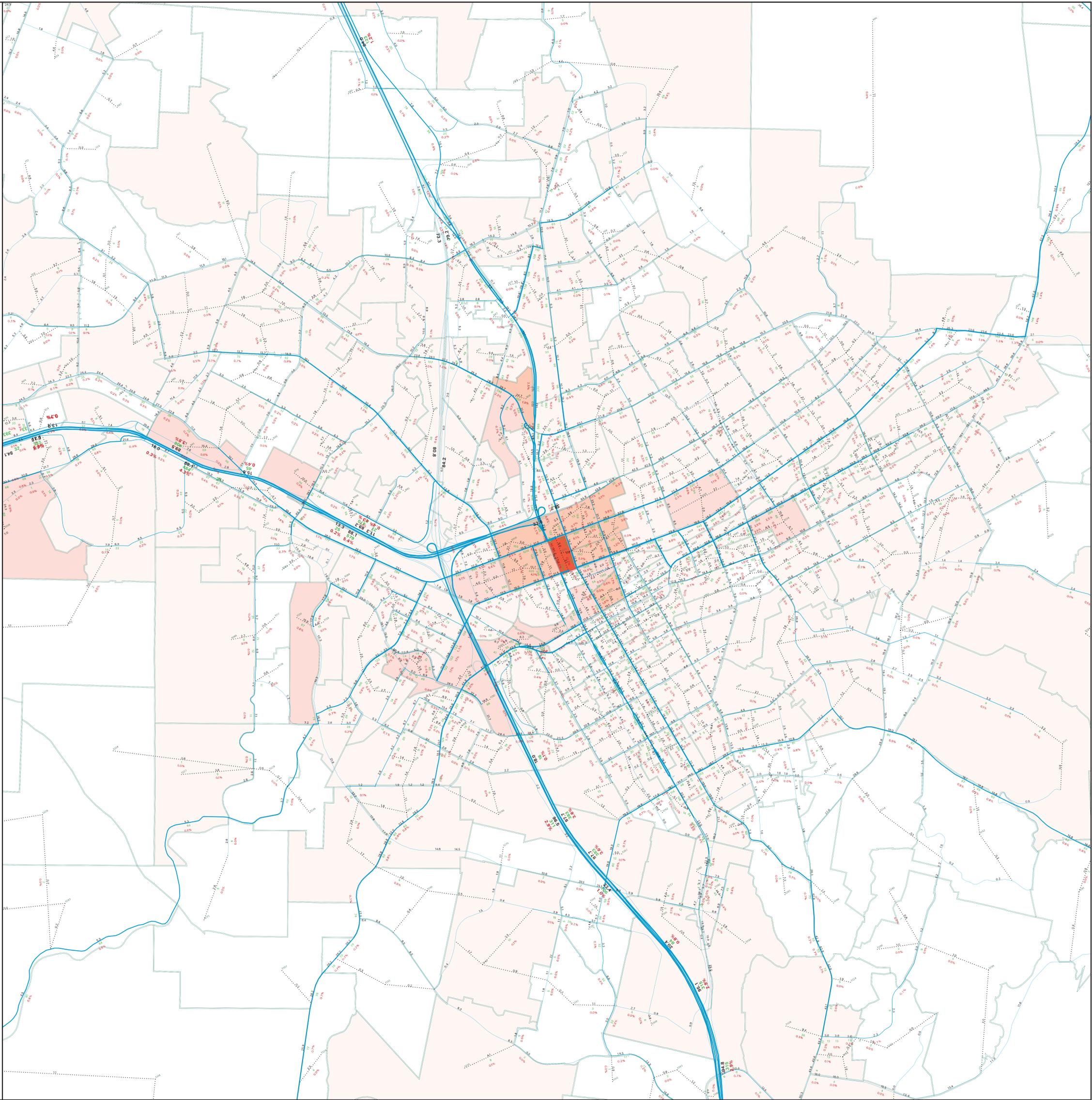
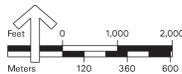
- # Unadjusted Volume (in Thousands)
- # Select Link Volume
- # Select Link Percentage
- # Traffic Analysis Zone

Link Distributions:

- 100%
- 50.1% -> 99.9%
- 25.1% -> 50.0%
- 10.1% -> 25.0%
- 5.1% -> 10.0%
- 0.1% -> 5.0%
- 0%

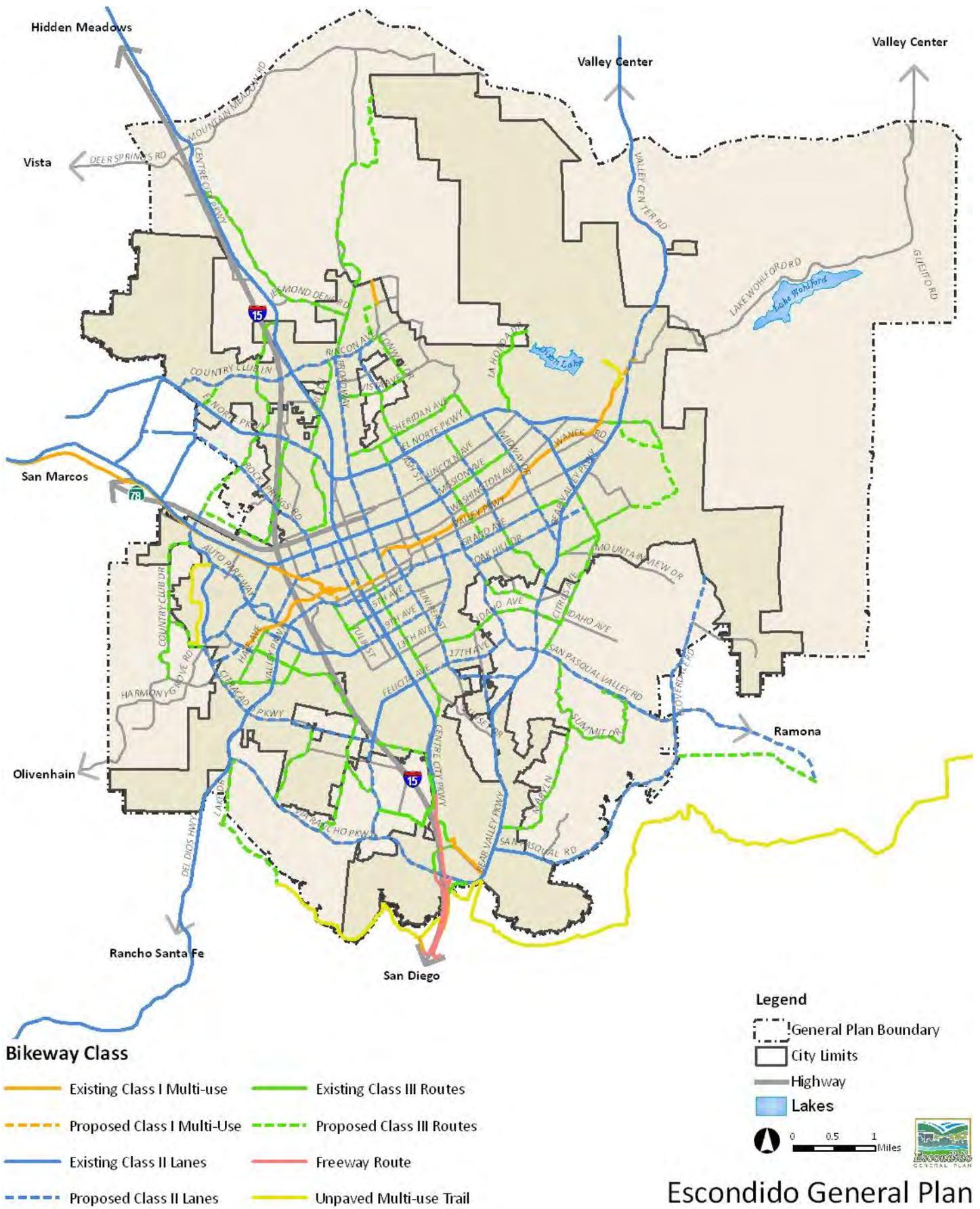
Zonal Distributions:

- 100%
- 25.1% -> 99.9%
- 10.1% -> 25.0%
- 1.1% -> 10.0%
- 0.6% -> 1.0%
- 0.1% -> 0.5%
- Zero Trips (0.0%)



APPENDIX B

City of Escondido General Plan Circulation Element Roadway and Bikeway Maps

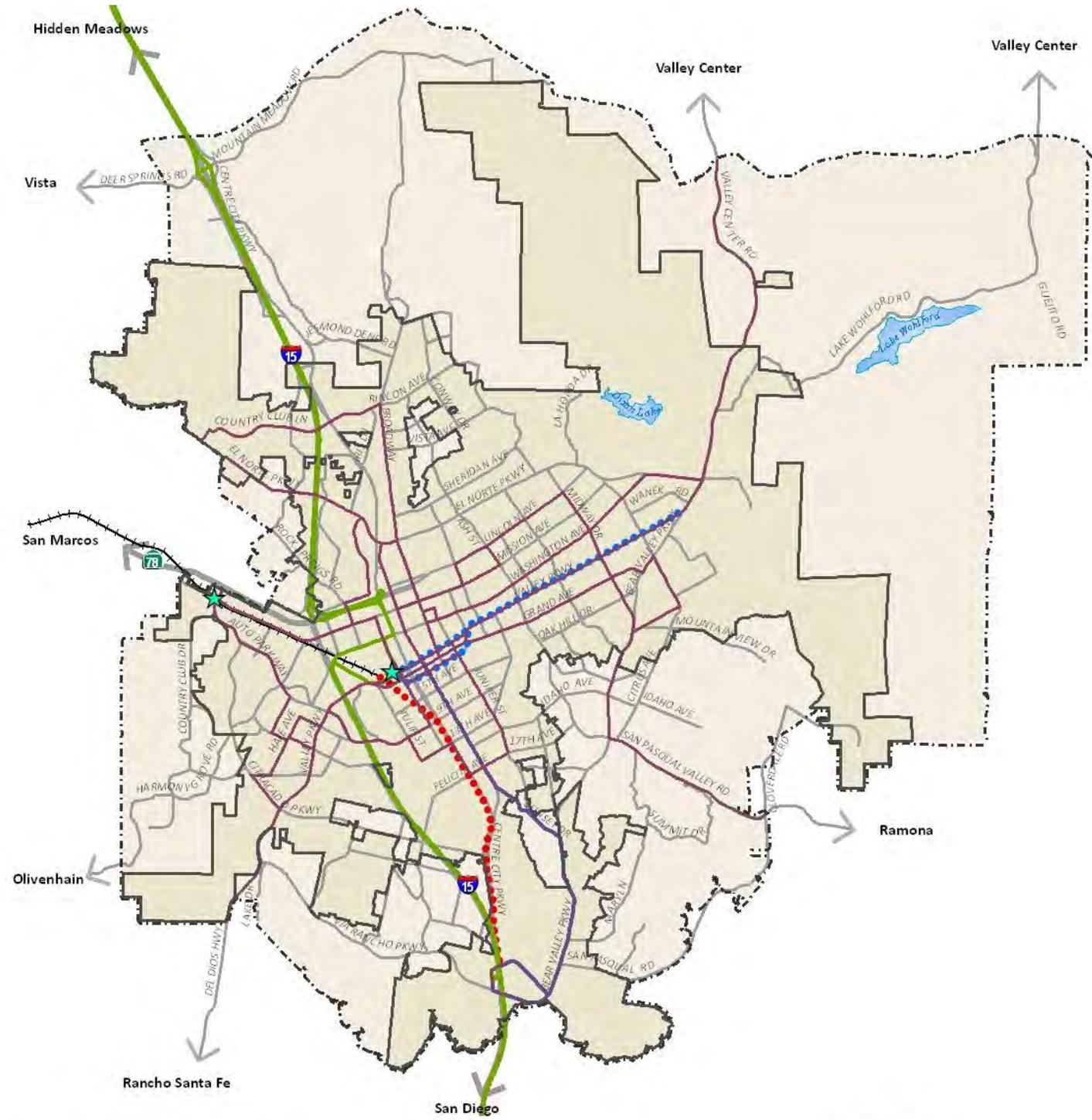


Source: City of Escondido

Escondido General Plan

Existing and Planned Bikeways

Figure III-3



North County Transit District Bus/Rail Routes*

- ++++ Existing SPRINTER Rail Line
- Projected NCTD Rail Line
- Local Bus
- Existing NCTD Rapid Bus
- Projected Future NCTD Rapid Bus
- BRT (Bus Rapid Transit) Routes
- ★ Transit Station

*Note: Additional NCTD bus transit servicing the community is not depicted. Projected NCTD rail service from the existing transit center to Westfield Shoppingtown requires additional evaluation and approval.

Source: City Of Escondido

Legend

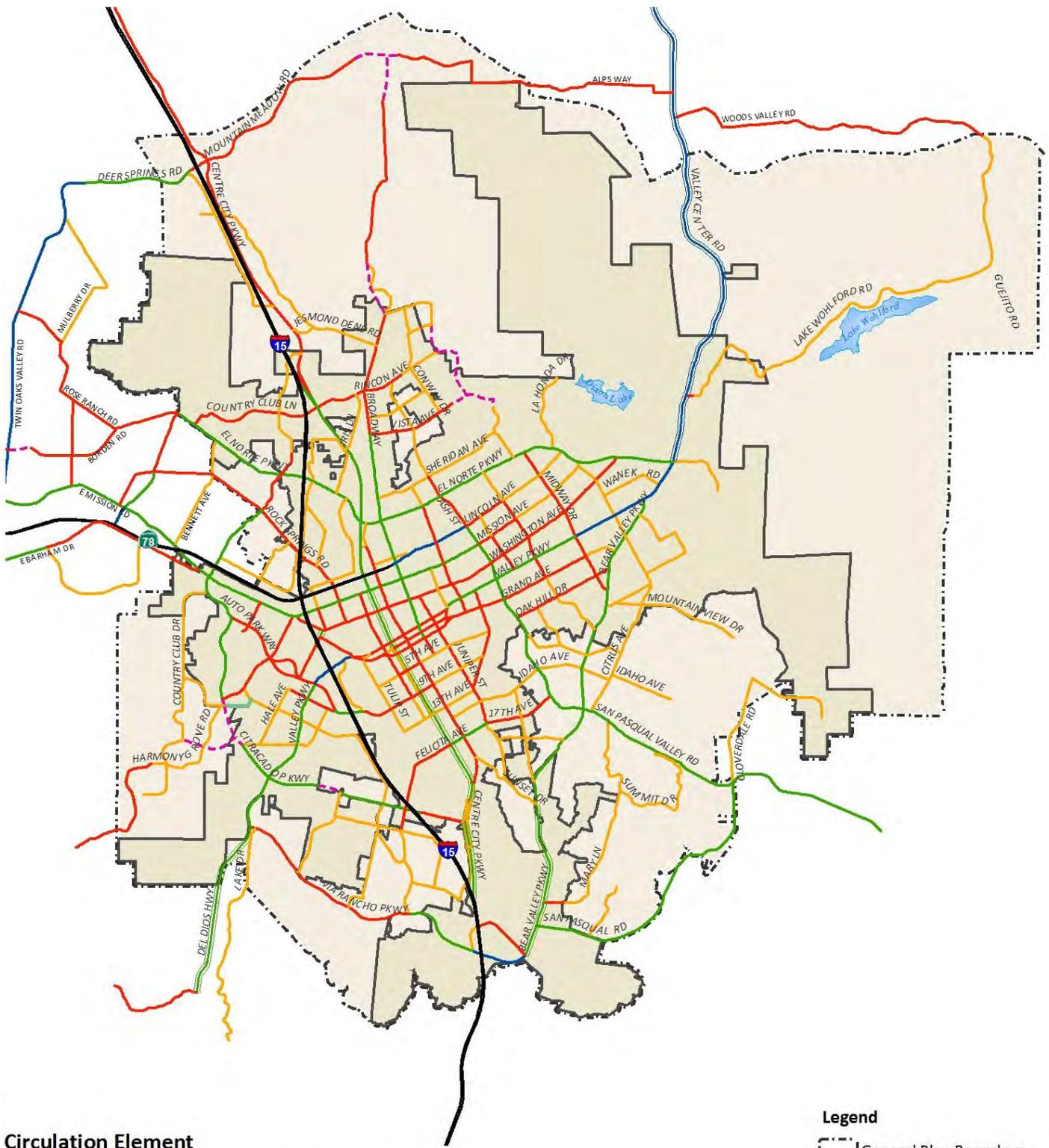
- General Plan Boundary
- City Limits
- Highway
- Lakes

0 0.5 1 Miles

Escondido General Plan

Existing & Proposed Transit Routes

Figure III-4



Circulation Element

- Freeway
- Super Prime Arterial
- Prime Arterial
- Super Major Road
- Major Road
- Collector
- Local Collector
- Future Alignment

Legend

- General Plan Boundary
- City Limits
- Lakes
- 0 0.5 1 Miles



Escondido General Plan

Circulation Diagram
Figure III-6

Escondido’s roadways are defined using a hierarchical classification system. Each type of roadway is described by size, function, and capacity. The street network establishes types of roadways, ranging from high capacity state and interstate highways, to two-lane undivided roadways. Some roadway types will have a standard rural cross-section for use in selected areas. Additional rights-of-way, greater than the standard widths, may be required at certain locations to accommodate specific circumstances. The standard roadway classifications are illustrated in Figure III-7, summarized in Figure III-8, and described in the paragraphs that follow.

ROADWAY PROFILES

Figure III-7
(Part 1)

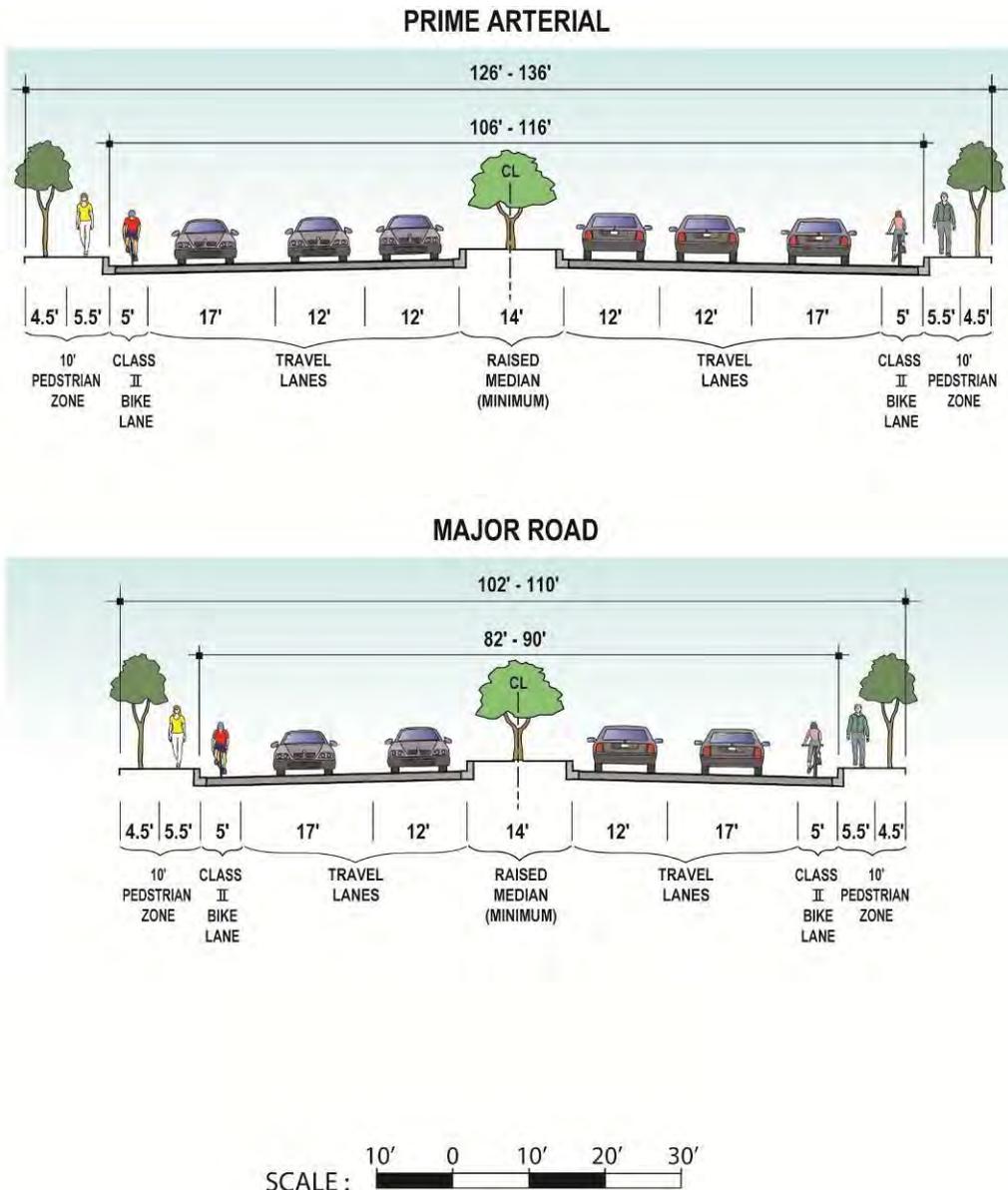


Figure III-8

GENERAL PLAN

ROADWAY CLASSIFICATIONS

(Summary Descriptions)

Prime Arterial:

High design standards, six to eight travel lanes, raised / landscaped medians, no parking, and very limited access. Provides regional, intra-city and sub-regional travel service.
 8 lanes: 116' – 136' right of way
 6 lanes: 106' – 126' right of way

Major Road:

Four to six travel lanes, controlled access, no parking, and raised / landscaped medians for added safety and efficiency in providing protected left turns at selected locations. Provides intra-city, and sub-regional service.
 6 lanes: 90' – 110' right-of-way
 4 lanes: 82' – 102' right-of-way

Collector Street:

Four travel lanes, controlled access, and no parking or restricted to areas where turn pockets or continuous turn lanes are provided. Provides intra-city travel.
 4 lanes, no parking: 84' right-of-way
 2 lanes, parking: 64' right-of-way

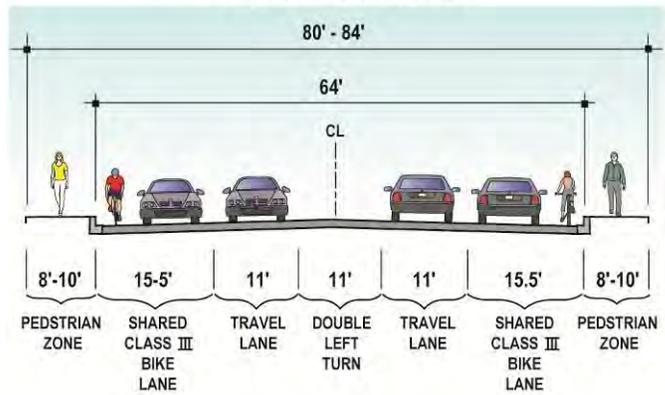
Local Collectors:

Two travel lanes with parking, except where parking is removed to provide turn lanes. Provides access between neighborhoods and to the Collector Street system.
 2 lanes, no parking: 42' right-of-way
 2 lanes, parking: 66' right-of-way

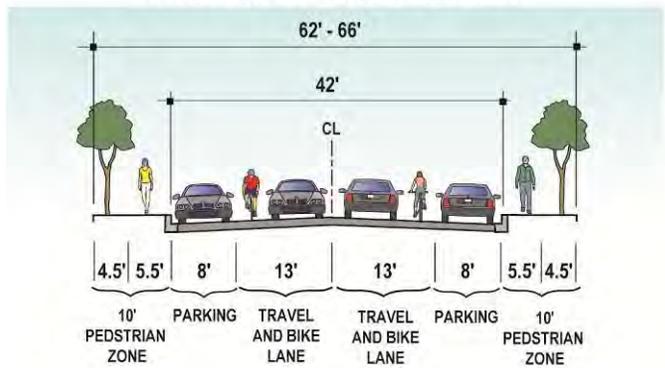
Note: Street classifications identify right-of-way widths. Lane, median and pedestrian zone dimensions and improvements may vary based on bicycle improvements, location and traffic conditions.

Figure III-7
(Part 2)

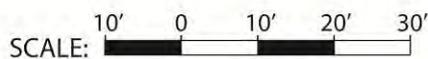
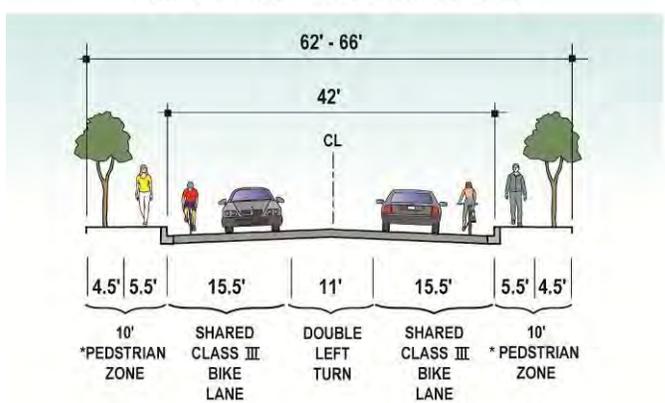
COLLECTOR STREET



LOCAL COLLECTOR
(PARKING, NO LEFT TURN LANE PROVIDED)



LOCAL COLLECTOR
(NO PARKING LEFT TURN LANE PROVIDED)



Escondido's asphalt patching program repairs local streets and fills potholes

a. Freeways

Interstate 15 and State Highway 78 design standards are dictated by Caltrans District 11. Interchange improvements are identified in the Circulation Plan and require coordination and approval by Caltrans. Interchange on-ramps along Interstate 15 and State Highway 78 within Escondido are subject to peak period ramp metering. The city supports the concurrent implementation of high occupancy vehicle (HOV) bypass lanes at the ramps (where possible) to promote ride sharing and transit use.

b. Prime Arterials

Prime Arterials are six-lane thoroughfares with raised landscaped medians. In some circumstances, eight lanes may be required. Access to Prime Arterials may vary depending on where the facility is located within the community, but is typically limited to adjacent commercial properties at signal-controlled intersections. Traffic carrying capacities of 70,000 vehicles per day can be achieved depending on the degree of access control, peak period traffic loadings, and lane configurations at the major intersections

Curbside parking is prohibited and generally, one-quarter mile intersection spacing is considered as a distance minimum. Where overriding circumstances will not allow the desired intersection spacing to be met, left turn restrictions should be considered at all unsignalized intersections. Design features such as curb radii and acceleration/deceleration lanes to accommodate higher speeds may be incorporated where appropriate for the intersection design. Prime Arterials roadways in Escondido include West Valley Parkway between Tulip Street and Ninth Avenue, Via Rancho Parkway south of Westfield Shoppingtown, and East Valley Parkway, east of Midway Drive.

c. Major Roads

Major Roads are four lane roadways with painted or raised landscaped medians. Minimum spacing for intersections along Major Roads should be one-eighth mile. Left turn restrictions will generally be placed at minor unsignalized driveways. Bike lanes are incorporated into Major Road design standards, however, as a primary traffic carrier, curbside parking may not be appropriate along most of the more heavily traveled Major Road street segments within the community. Traffic carrying capacities of 50,000 vehicles per day can be achieved depending on the degree of access control and peak period loadings. Major Roads in Escondido's circulation system include Centre City Parkway, El Norte Parkway, and Broadway between Washington and Vista Avenues.



*Interstate 15 and Highway 78
Freeway Classification*



*Valley Center Road
Prime Arterial Classification*



*Auto Park Way
Major Road Classification*

d. Collector Streets

Collector Streets are four-lane roadways without medians (undivided) with minimum intersection spacing approximately one-sixteenth mile (330 feet). Direct access from private residential properties is not prohibited, but should be avoided where possible. Collector Street design standards accommodate bicycle lanes with no curbside parking upon build out of the city. However, many Collector Streets in the community currently include curbside parking with no bicycle lanes provided. This requires cyclists to share a travel lane with vehicles. In some locations, Collector Streets may include a limited median, or be striped to provide a left-turn pocket. Traffic carrying capacities of approximately 34,200 vehicles per day can be achieved depending on the degree of access allowed and peak period traffic loadings. Collector Streets in Escondido include Washington Avenue, Grand Avenue, Country Club Lane, and Escondido Boulevard.



Grand Avenue
Collector Street Classification

e. Local Collector

Local Collector streets often provide access between neighborhoods and connection to larger streets in the circulation system. Local Collectors are two-lane roadways that may include painted medians for left turn movements depending on location within the community. Direct access from individual residential properties is permitted. The desirable intersection spacing for Local Collectors is approximately 330 feet. Minimum intersection/access spacing on all Local Collector roadways should be 200 feet. Local Collectors provide for curbside parking and bicycle lanes. Parking should be restricted near intersection approaches where separate right-turn lanes are provided. Traffic carrying capacities of 15,000 vehicles per day can be achieved depending on the degree of access control and peak period traffic loadings. Local Collector streets in Escondido include Sheridan Avenue, Tulip Street and Seven Oakes Road.



Tulip Street
Local Collector Classification

f. Local Streets

Local Streets are two-lane roadways without medians and not shown on the Circulation Plan but do provide a vital service by connecting subdivision and neighborhoods to the city's street system. Centerline striping is typically not provided, and curbside parking is allowed. Traffic carrying capacity is physically similar to a Local Collector, however the qualitative limit of acceptable traffic volumes in a residential environment is substantially lower (less than 10,000 vehicles per day).



APPENDIX C

EXISTING TRAFFIC COUNTS AND RAMP METER INFORMATION

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Thu, Dec 8, 16

LOCATION: Escondido
NORTH & SOUTH: Rock Springs
EAST & WEST: Mission

PROJECT #: SC1152
LOCATION #: 1
CONTROL: SIGNAL

| | | | | | | | |
|--------|----|----|----|-------|-------|-------------|------------|
| NOTES: | AM | PM | MD | OTHER | OTHER | ▲ N ▼ | ◀ W E ▶ |
|--------|----|----|----|-------|-------|-------------|------------|

| LANES: | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|--------------|----|----|--------------|----|----|-----------|----|----|-----------|----|----|-------|
| | Rock Springs | | | Rock Springs | | | Mission | | | Mission | | | |
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 2 | 0 | 1 | 1 | 1 | 1 | 2 | 0 | 1 | 2 | 0 | |

| | | | | | | | | | | | | | | |
|----------------|------------|-----|-------|-------|-----|-----|-------|-----|-------|-------|-----|-------|-------|-------|
| AM | 7:00 AM | 7 | 39 | 4 | 33 | 56 | 45 | 10 | 56 | 6 | 6 | 213 | 18 | 493 |
| | 7:15 AM | 15 | 35 | 3 | 33 | 92 | 52 | 15 | 64 | 7 | 7 | 228 | 21 | 572 |
| | 7:30 AM | 9 | 54 | 4 | 34 | 87 | 42 | 14 | 70 | 7 | 8 | 262 | 29 | 620 |
| | 7:45 AM | 13 | 55 | 11 | 42 | 87 | 55 | 20 | 83 | 8 | 13 | 251 | 28 | 666 |
| | 8:00 AM | 6 | 59 | 1 | 55 | 110 | 47 | 26 | 81 | 8 | 14 | 200 | 30 | 637 |
| | 8:15 AM | 8 | 51 | 8 | 24 | 72 | 37 | 9 | 81 | 7 | 27 | 198 | 26 | 548 |
| | 8:30 AM | 11 | 47 | 4 | 30 | 54 | 18 | 13 | 80 | 15 | 9 | 157 | 26 | 464 |
| | 8:45 AM | 14 | 28 | 11 | 24 | 56 | 28 | 16 | 95 | 15 | 20 | 146 | 29 | 482 |
| | VOLUMES | 83 | 368 | 46 | 275 | 614 | 324 | 123 | 610 | 73 | 104 | 1,655 | 207 | 4,482 |
| | APPROACH % | 17% | 74% | 9% | 23% | 51% | 27% | 15% | 76% | 9% | 5% | 84% | 11% | |
| APP/DEPART | 497 | / | 698 | 1,213 | / | 791 | 806 | / | 931 | 1,966 | / | 2,062 | 0 | |
| BEGIN PEAK HR | 7:15 AM | | | | | | | | | | | | | |
| VOLUMES | 43 | 203 | 19 | 164 | 376 | 196 | 75 | 298 | 30 | 42 | 941 | 108 | 2,495 | |
| APPROACH % | 16% | 77% | 7% | 22% | 51% | 27% | 19% | 74% | 7% | 4% | 86% | 10% | | |
| PEAK HR FACTOR | 0.839 | | | 0.868 | | | 0.876 | | | 0.912 | | | 0.937 | |
| APP/DEPART | 265 | / | 386 | 736 | / | 448 | 403 | / | 481 | 1,091 | / | 1,180 | 0 | |
| MIDDAY | 11:00 AM | 8 | 50 | 8 | 31 | 31 | 20 | 18 | 130 | 21 | 16 | 128 | 31 | 492 |
| | 11:15 AM | 12 | 43 | 13 | 33 | 40 | 14 | 13 | 147 | 24 | 15 | 121 | 22 | 497 |
| | 11:30 AM | 15 | 45 | 16 | 26 | 44 | 25 | 31 | 143 | 16 | 14 | 136 | 34 | 545 |
| | 11:45 AM | 9 | 45 | 21 | 21 | 43 | 19 | 27 | 144 | 14 | 23 | 120 | 31 | 517 |
| | 12:00 PM | 13 | 56 | 14 | 27 | 41 | 16 | 38 | 136 | 30 | 15 | 125 | 35 | 546 |
| | 12:15 PM | 15 | 47 | 17 | 29 | 46 | 18 | 27 | 127 | 15 | 20 | 134 | 41 | 536 |
| | 12:30 PM | 14 | 54 | 14 | 36 | 51 | 22 | 20 | 150 | 24 | 14 | 134 | 36 | 569 |
| | 12:45 PM | 10 | 60 | 15 | 18 | 52 | 24 | 18 | 109 | 17 | 13 | 165 | 30 | 531 |
| | VOLUMES | 96 | 400 | 118 | 221 | 348 | 158 | 192 | 1,086 | 161 | 130 | 1,063 | 260 | 4,233 |
| | APPROACH % | 16% | 65% | 19% | 30% | 48% | 22% | 13% | 75% | 11% | 9% | 73% | 18% | |
| APP/DEPART | 614 | / | 852 | 727 | / | 638 | 1,439 | / | 1,426 | 1,453 | / | 1,317 | 0 | |
| BEGIN PEAK HR | 12:00 PM | | | | | | | | | | | | | |
| VOLUMES | 52 | 217 | 60 | 110 | 190 | 80 | 103 | 522 | 86 | 62 | 558 | 142 | 2,182 | |
| APPROACH % | 16% | 66% | 18% | 29% | 50% | 21% | 14% | 73% | 12% | 8% | 73% | 19% | | |
| PEAK HR FACTOR | 0.968 | | | 0.872 | | | 0.871 | | | 0.916 | | | 0.959 | |
| APP/DEPART | 329 | / | 462 | 380 | / | 337 | 711 | / | 693 | 762 | / | 690 | 0 | |
| PM | 4:00 PM | 20 | 129 | 10 | 33 | 68 | 13 | 53 | 203 | 29 | 17 | 119 | 40 | 734 |
| | 4:15 PM | 8 | 134 | 17 | 18 | 62 | 19 | 59 | 220 | 25 | 20 | 122 | 53 | 757 |
| | 4:30 PM | 12 | 138 | 10 | 24 | 58 | 20 | 68 | 200 | 32 | 15 | 112 | 47 | 736 |
| | 4:45 PM | 14 | 117 | 15 | 28 | 59 | 9 | 55 | 218 | 22 | 10 | 122 | 47 | 716 |
| | 5:00 PM | 19 | 154 | 12 | 24 | 79 | 13 | 64 | 171 | 17 | 12 | 92 | 50 | 707 |
| | 5:15 PM | 9 | 131 | 15 | 25 | 52 | 15 | 81 | 221 | 14 | 24 | 117 | 61 | 765 |
| | 5:30 PM | 11 | 132 | 18 | 29 | 58 | 11 | 57 | 185 | 7 | 14 | 105 | 45 | 672 |
| | 5:45 PM | 6 | 138 | 11 | 17 | 69 | 15 | 44 | 145 | 15 | 11 | 98 | 40 | 609 |
| | VOLUMES | 99 | 1,073 | 108 | 198 | 505 | 115 | 481 | 1,563 | 161 | 123 | 887 | 383 | 5,696 |
| | APPROACH % | 8% | 84% | 8% | 24% | 62% | 14% | 22% | 71% | 7% | 9% | 64% | 27% | |
| APP/DEPART | 1,280 | / | 1,937 | 818 | / | 789 | 2,205 | / | 1,869 | 1,393 | / | 1,101 | 0 | |
| BEGIN PEAK HR | 4:00 PM | | | | | | | | | | | | | |
| VOLUMES | 54 | 518 | 52 | 103 | 247 | 61 | 235 | 841 | 108 | 62 | 475 | 187 | 2,943 | |
| APPROACH % | 9% | 83% | 8% | 25% | 60% | 15% | 20% | 71% | 9% | 9% | 66% | 26% | | |
| PEAK HR FACTOR | 0.975 | | | 0.901 | | | 0.974 | | | 0.928 | | | 0.972 | |
| APP/DEPART | 624 | / | 940 | 411 | / | 417 | 1,184 | / | 996 | 724 | / | 590 | 0 | |

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Thu, Dec 8, 16

LOCATION: Escondido
NORTH & SOUTH: Quince
EAST & WEST: Mission

PROJECT #: SC1152
LOCATION #: 2
CONTROL: SIGNAL

| | | | | |
|--------|-------|-----|---|-----|
| NOTES: | AM | | ▲ | |
| | PM | | N | |
| | MD | ◀ W | | E ▶ |
| | OTHER | | S | |
| | OTHER | | ▼ | |

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|---------|---------|------------|---------|---------|-----------|---------|---------|-----------|---------|---------|-------|
| | Quince | | | Quince | | | Mission | | | Mission | | | |
| LANES: | NL 1 | NT 2 | NR 0 | SL 1 | ST 1 | SR 0 | EL 1 | ET 2 | ER 0 | WL 1 | WT 2 | WR 0 | |

| | | | | | | | | | | | | | | |
|----------------|------------|-----|-----|-------|-----|-----|-------|-----|-------|-------|-------|-------|-------|-------|
| AM | 7:00 AM | 24 | 1 | 24 | 7 | 1 | 4 | 1 | 76 | 14 | 38 | 235 | 9 | 434 |
| | 7:15 AM | 44 | 4 | 31 | 11 | 4 | 8 | 1 | 71 | 13 | 38 | 241 | 13 | 479 |
| | 7:30 AM | 41 | 9 | 27 | 9 | 6 | 8 | 3 | 86 | 15 | 53 | 301 | 15 | 573 |
| | 7:45 AM | 39 | 6 | 28 | 13 | 8 | 1 | 6 | 108 | 18 | 46 | 291 | 17 | 581 |
| | 8:00 AM | 33 | 3 | 23 | 13 | 3 | 8 | 7 | 107 | 23 | 61 | 277 | 17 | 575 |
| | 8:15 AM | 27 | 5 | 27 | 17 | 9 | 12 | 7 | 94 | 19 | 42 | 262 | 20 | 541 |
| | 8:30 AM | 20 | 9 | 36 | 21 | 5 | 8 | 3 | 96 | 16 | 45 | 196 | 25 | 480 |
| | 8:45 AM | 30 | 6 | 25 | 19 | 6 | 4 | 4 | 109 | 17 | 45 | 199 | 18 | 482 |
| | VOLUMES | 258 | 43 | 221 | 110 | 42 | 53 | 32 | 747 | 135 | 368 | 2,002 | 134 | 4,145 |
| | APPROACH % | 49% | 8% | 42% | 54% | 20% | 26% | 4% | 82% | 15% | 15% | 80% | 5% | |
| APP/DEPART | 522 | / | 205 | 205 | / | 545 | 914 | / | 1,078 | 2,504 | / | 2,317 | 0 | |
| BEGIN PEAK HR | 7:30 AM | | | | | | | | | | | | | |
| VOLUMES | 140 | 23 | 105 | 52 | 26 | 29 | 23 | 395 | 75 | 202 | 1,131 | 69 | 2,270 | |
| APPROACH % | 52% | 9% | 39% | 49% | 24% | 27% | 5% | 80% | 15% | 14% | 81% | 5% | | |
| PEAK HR FACTOR | 0.870 | | | 0.704 | | | 0.900 | | | 0.950 | | | 0.977 | |
| APP/DEPART | 268 | / | 114 | 107 | / | 303 | 493 | / | 552 | 1,402 | / | 1,301 | 0 | |
| MIDDAY | 11:00 AM | 19 | 10 | 30 | 38 | 6 | 7 | 9 | 145 | 13 | 37 | 161 | 23 | 498 |
| | 11:15 AM | 22 | 11 | 38 | 32 | 15 | 4 | 4 | 134 | 19 | 39 | 153 | 35 | 506 |
| | 11:30 AM | 19 | 3 | 30 | 32 | 10 | 6 | 11 | 147 | 23 | 35 | 198 | 34 | 548 |
| | 11:45 AM | 21 | 11 | 30 | 34 | 17 | 7 | 8 | 144 | 15 | 31 | 170 | 30 | 518 |
| | 12:00 PM | 15 | 15 | 37 | 34 | 18 | 7 | 11 | 173 | 23 | 42 | 138 | 35 | 548 |
| | 12:15 PM | 36 | 19 | 37 | 36 | 17 | 9 | 17 | 158 | 23 | 25 | 181 | 42 | 600 |
| | 12:30 PM | 28 | 11 | 38 | 28 | 18 | 7 | 15 | 175 | 17 | 34 | 182 | 27 | 580 |
| | 12:45 PM | 32 | 17 | 33 | 38 | 27 | 15 | 10 | 157 | 17 | 30 | 170 | 30 | 576 |
| | VOLUMES | 192 | 97 | 273 | 272 | 128 | 62 | 85 | 1,233 | 150 | 273 | 1,353 | 256 | 4,374 |
| | APPROACH % | 34% | 17% | 49% | 59% | 28% | 13% | 6% | 84% | 10% | 15% | 72% | 14% | |
| APP/DEPART | 562 | / | 430 | 462 | / | 550 | 1,468 | / | 1,779 | 1,882 | / | 1,615 | 0 | |
| BEGIN PEAK HR | 12:00 PM | | | | | | | | | | | | | |
| VOLUMES | 111 | 62 | 145 | 136 | 80 | 38 | 53 | 663 | 80 | 131 | 671 | 134 | 2,304 | |
| APPROACH % | 35% | 19% | 46% | 54% | 31% | 15% | 7% | 83% | 10% | 14% | 72% | 14% | | |
| PEAK HR FACTOR | 0.864 | | | 0.794 | | | 0.961 | | | 0.944 | | | 0.960 | |
| APP/DEPART | 318 | / | 245 | 254 | / | 290 | 796 | / | 945 | 936 | / | 824 | 0 | |
| PM | 4:00 PM | 24 | 8 | 61 | 41 | 18 | 3 | 6 | 259 | 25 | 26 | 159 | 21 | 651 |
| | 4:15 PM | 32 | 13 | 39 | 34 | 8 | 7 | 2 | 225 | 25 | 29 | 170 | 19 | 603 |
| | 4:30 PM | 33 | 9 | 60 | 38 | 14 | 5 | 10 | 250 | 15 | 27 | 159 | 27 | 647 |
| | 4:45 PM | 19 | 12 | 47 | 36 | 13 | 6 | 10 | 191 | 19 | 23 | 177 | 22 | 575 |
| | 5:00 PM | 21 | 12 | 40 | 49 | 7 | 7 | 5 | 246 | 29 | 29 | 163 | 25 | 633 |
| | 5:15 PM | 27 | 11 | 58 | 39 | 16 | 5 | 9 | 244 | 25 | 25 | 160 | 27 | 646 |
| | 5:30 PM | 25 | 13 | 63 | 35 | 13 | 9 | 5 | 224 | 12 | 25 | 148 | 22 | 594 |
| | 5:45 PM | 23 | 15 | 33 | 35 | 8 | 3 | 9 | 182 | 13 | 26 | 141 | 26 | 514 |
| | VOLUMES | 204 | 93 | 401 | 307 | 97 | 45 | 56 | 1,821 | 163 | 210 | 1,277 | 189 | 4,863 |
| | APPROACH % | 29% | 13% | 57% | 68% | 22% | 10% | 3% | 89% | 8% | 13% | 76% | 11% | |
| APP/DEPART | 698 | / | 333 | 449 | / | 470 | 2,040 | / | 2,529 | 1,676 | / | 1,531 | 0 | |
| BEGIN PEAK HR | 4:30 PM | | | | | | | | | | | | | |
| VOLUMES | 100 | 44 | 205 | 162 | 50 | 23 | 34 | 931 | 88 | 104 | 659 | 101 | 2,501 | |
| APPROACH % | 29% | 13% | 59% | 69% | 21% | 10% | 3% | 88% | 8% | 12% | 76% | 12% | | |
| PEAK HR FACTOR | 0.855 | | | 0.933 | | | 0.940 | | | 0.973 | | | 0.966 | |
| APP/DEPART | 349 | / | 176 | 235 | / | 242 | 1,053 | / | 1,298 | 864 | / | 785 | 0 | |

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Thu, Dec 8, 16

LOCATION: Escondido
NORTH & SOUTH: Quince
EAST & WEST: Washington

PROJECT #: SC1152
LOCATION #: 3
CONTROL: SIGNAL

| | | | | |
|--------|-------|-----|---|-----|
| NOTES: | AM | | ▲ | |
| | PM | | N | |
| | MD | ◀ W | | E ▶ |
| | OTHER | | S | |
| | OTHER | | ▼ | |

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|---------|---------|------------|---------|---------|------------|---------|---------|------------|---------|---------|-------|
| | Quince | | | Quince | | | Washington | | | Washington | | | |
| LANES: | NL 1 | NT 2 | NR 0 | SL 1 | ST 2 | SR 0 | EL 1 | ET 2 | ER 0 | WL 1 | WT 2 | WR 0 | |

| | | | | | | | | | | | | | | |
|----------------|------------|-----|-----|-------|-----|-----|-------|-----|-------|-------|-----|-------|-------|-------|
| AM | 7:00 AM | 21 | 25 | 15 | 8 | 27 | 14 | 5 | 55 | 26 | 13 | 170 | 18 | 397 |
| | 7:15 AM | 27 | 29 | 5 | 5 | 27 | 11 | 5 | 73 | 31 | 24 | 159 | 24 | 420 |
| | 7:30 AM | 30 | 37 | 16 | 8 | 40 | 16 | 4 | 63 | 35 | 12 | 170 | 18 | 449 |
| | 7:45 AM | 27 | 36 | 17 | 8 | 42 | 12 | 9 | 89 | 38 | 25 | 217 | 26 | 546 |
| | 8:00 AM | 27 | 39 | 17 | 6 | 43 | 15 | 6 | 89 | 38 | 24 | 160 | 22 | 486 |
| | 8:15 AM | 23 | 28 | 9 | 19 | 28 | 17 | 5 | 93 | 27 | 14 | 147 | 18 | 428 |
| | 8:30 AM | 18 | 40 | 15 | 12 | 22 | 10 | 5 | 77 | 18 | 16 | 116 | 9 | 358 |
| | 8:45 AM | 13 | 27 | 21 | 12 | 32 | 10 | 5 | 72 | 23 | 16 | 122 | 19 | 372 |
| | VOLUMES | 186 | 261 | 115 | 78 | 261 | 105 | 44 | 611 | 236 | 144 | 1,261 | 154 | 3,456 |
| | APPROACH % | 33% | 46% | 20% | 18% | 59% | 24% | 5% | 69% | 26% | 9% | 81% | 10% | |
| APP/DEPART | 562 | / | 459 | 444 | / | 641 | 891 | / | 804 | 1,559 | / | 1,552 | 0 | |
| BEGIN PEAK HR | 7:30 AM | | | | | | | | | | | | | |
| VOLUMES | 107 | 140 | 59 | 41 | 153 | 60 | 24 | 334 | 138 | 75 | 694 | 84 | 1,909 | |
| APPROACH % | 35% | 46% | 19% | 16% | 60% | 24% | 5% | 67% | 28% | 9% | 81% | 10% | | |
| PEAK HR FACTOR | 0.922 | | | 0.992 | | | 0.912 | | | 0.796 | | | 0.874 | |
| APP/DEPART | 306 | / | 248 | 254 | / | 366 | 496 | / | 434 | 853 | / | 861 | 0 | |
| MIDDAY | 11:00 AM | 16 | 30 | 25 | 14 | 31 | 10 | 7 | 87 | 17 | 22 | 99 | 18 | 376 |
| | 11:15 AM | 18 | 29 | 20 | 15 | 32 | 4 | 4 | 104 | 19 | 22 | 119 | 26 | 412 |
| | 11:30 AM | 14 | 29 | 20 | 8 | 45 | 8 | 12 | 112 | 20 | 24 | 116 | 28 | 436 |
| | 11:45 AM | 19 | 30 | 25 | 14 | 22 | 10 | 11 | 110 | 25 | 22 | 123 | 21 | 432 |
| | 12:00 PM | 17 | 29 | 33 | 12 | 37 | 7 | 9 | 110 | 27 | 18 | 103 | 25 | 427 |
| | 12:15 PM | 12 | 26 | 23 | 3 | 31 | 6 | 4 | 116 | 18 | 23 | 155 | 30 | 447 |
| | 12:30 PM | 14 | 40 | 31 | 15 | 38 | 12 | 6 | 130 | 17 | 18 | 113 | 24 | 458 |
| | 12:45 PM | 32 | 26 | 27 | 16 | 35 | 10 | 9 | 114 | 29 | 16 | 130 | 27 | 471 |
| | VOLUMES | 142 | 239 | 204 | 97 | 271 | 67 | 62 | 883 | 172 | 165 | 958 | 199 | 3,459 |
| | APPROACH % | 24% | 41% | 35% | 22% | 62% | 15% | 6% | 79% | 15% | 12% | 72% | 15% | |
| APP/DEPART | 585 | / | 500 | 435 | / | 607 | 1,117 | / | 1,185 | 1,322 | / | 1,167 | 0 | |
| BEGIN PEAK HR | 12:00 PM | | | | | | | | | | | | | |
| VOLUMES | 75 | 121 | 114 | 46 | 141 | 35 | 28 | 470 | 91 | 75 | 501 | 106 | 1,803 | |
| APPROACH % | 24% | 39% | 37% | 21% | 64% | 16% | 5% | 80% | 15% | 11% | 73% | 16% | | |
| PEAK HR FACTOR | 0.912 | | | 0.854 | | | 0.962 | | | 0.820 | | | 0.957 | |
| APP/DEPART | 310 | / | 255 | 222 | / | 306 | 589 | / | 631 | 682 | / | 611 | 0 | |
| PM | 4:00 PM | 23 | 57 | 34 | 22 | 46 | 8 | 23 | 192 | 46 | 21 | 125 | 11 | 608 |
| | 4:15 PM | 23 | 32 | 29 | 15 | 40 | 6 | 17 | 214 | 38 | 18 | 128 | 24 | 584 |
| | 4:30 PM | 28 | 59 | 46 | 15 | 37 | 3 | 16 | 198 | 40 | 21 | 117 | 26 | 606 |
| | 4:45 PM | 28 | 38 | 38 | 14 | 38 | 4 | 15 | 193 | 45 | 20 | 113 | 20 | 566 |
| | 5:00 PM | 28 | 40 | 36 | 15 | 46 | 9 | 14 | 196 | 39 | 6 | 107 | 13 | 549 |
| | 5:15 PM | 38 | 65 | 45 | 21 | 68 | 7 | 22 | 263 | 57 | 25 | 150 | 36 | 797 |
| | 5:30 PM | 22 | 42 | 38 | 16 | 27 | 6 | 13 | 165 | 32 | 11 | 116 | 23 | 511 |
| | 5:45 PM | 13 | 39 | 26 | 8 | 28 | 4 | 7 | 140 | 29 | 13 | 107 | 21 | 435 |
| | VOLUMES | 203 | 372 | 292 | 126 | 330 | 47 | 127 | 1,561 | 326 | 135 | 963 | 174 | 4,656 |
| | APPROACH % | 23% | 43% | 34% | 25% | 66% | 9% | 6% | 78% | 16% | 11% | 76% | 14% | |
| APP/DEPART | 867 | / | 673 | 503 | / | 790 | 2,014 | / | 1,980 | 1,272 | / | 1,213 | 0 | |
| BEGIN PEAK HR | 4:30 PM | | | | | | | | | | | | | |
| VOLUMES | 122 | 202 | 165 | 65 | 189 | 23 | 67 | 850 | 181 | 72 | 487 | 95 | 2,518 | |
| APPROACH % | 25% | 41% | 34% | 23% | 68% | 8% | 6% | 77% | 16% | 11% | 74% | 15% | | |
| PEAK HR FACTOR | 0.826 | | | 0.721 | | | 0.803 | | | 0.775 | | | 0.790 | |
| APP/DEPART | 489 | / | 364 | 277 | / | 442 | 1,098 | / | 1,080 | 654 | / | 632 | 0 | |

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Thu, Dec 8, 16

LOCATION: Escondido
NORTH & SOUTH: Centre City
EAST & WEST: El Norte

PROJECT #: SC1152
LOCATION #: 4
CONTROL: SIGNAL

| | | | | |
|--------|-------|-----|---|-----|
| NOTES: | AM | | ▲ | |
| | PM | | N | |
| | MD | ◀ W | | E ▶ |
| | OTHER | | S | |
| | OTHER | | ▼ | |

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|-------------|---------|---------|-------------|---------|---------|-----------|---------|---------|-----------|---------|---------|-------|
| | Centre City | | | Centre City | | | El Norte | | | El Norte | | | |
| LANES: | NL 2 | NT 2 | NR 1 | SL 2 | ST 2 | SR 1 | EL 2 | ET 2 | ER 1 | WL 2 | WT 2 | WR 0 | |

| | | | | | | | | | | | | | | |
|----------------|------------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-----|-------|-------|-------|
| AM | 7:00 AM | 35 | 38 | 26 | 52 | 186 | 5 | 4 | 115 | 67 | 73 | 157 | 24 | 782 |
| | 7:15 AM | 29 | 59 | 13 | 61 | 199 | 14 | 4 | 173 | 67 | 68 | 179 | 45 | 911 |
| | 7:30 AM | 49 | 74 | 19 | 62 | 310 | 17 | 1 | 151 | 72 | 64 | 197 | 39 | 1,055 |
| | 7:45 AM | 41 | 50 | 28 | 59 | 266 | 18 | 2 | 186 | 59 | 78 | 182 | 38 | 1,007 |
| | 8:00 AM | 40 | 64 | 19 | 57 | 281 | 10 | 2 | 127 | 57 | 66 | 165 | 28 | 916 |
| | 8:15 AM | 49 | 41 | 24 | 45 | 139 | 15 | 3 | 130 | 52 | 61 | 181 | 31 | 771 |
| | 8:30 AM | 34 | 52 | 29 | 33 | 132 | 13 | 4 | 103 | 54 | 65 | 115 | 25 | 659 |
| | 8:45 AM | 47 | 49 | 21 | 20 | 106 | 5 | 3 | 104 | 65 | 64 | 128 | 19 | 631 |
| | VOLUMES | 324 | 427 | 179 | 389 | 1,619 | 97 | 23 | 1,089 | 493 | 539 | 1,304 | 249 | 6,732 |
| | APPROACH % | 35% | 46% | 19% | 18% | 77% | 5% | 1% | 68% | 31% | 26% | 62% | 12% | |
| APP/DEPART | 930 | / | 697 | 2,105 | / | 2,651 | 1,605 | / | 1,652 | 2,092 | / | 1,732 | 0 | |
| BEGIN PEAK HR | 7:15 AM | | | | | | | | | | | | | |
| VOLUMES | 159 | 247 | 79 | 239 | 1,056 | 59 | 9 | 637 | 255 | 276 | 723 | 150 | 3,889 | |
| APPROACH % | 33% | 51% | 16% | 18% | 78% | 4% | 1% | 71% | 28% | 24% | 63% | 13% | | |
| PEAK HR FACTOR | 0.854 | | | 0.870 | | | 0.912 | | | 0.958 | | | 0.922 | |
| APP/DEPART | 485 | / | 405 | 1,354 | / | 1,586 | 901 | / | 953 | 1,149 | / | 945 | 0 | |
| MIDDAY | 11:00 AM | 61 | 61 | 25 | 24 | 97 | 8 | 6 | 110 | 41 | 32 | 91 | 17 | 573 |
| | 11:15 AM | 49 | 48 | 46 | 35 | 75 | 11 | 8 | 91 | 36 | 28 | 105 | 22 | 554 |
| | 11:30 AM | 47 | 56 | 32 | 28 | 79 | 8 | 7 | 133 | 49 | 41 | 119 | 20 | 619 |
| | 11:45 AM | 73 | 77 | 31 | 25 | 80 | 10 | 7 | 123 | 45 | 42 | 123 | 15 | 651 |
| | 12:00 PM | 44 | 67 | 22 | 28 | 61 | 12 | 6 | 101 | 50 | 50 | 102 | 24 | 567 |
| | 12:15 PM | 59 | 76 | 32 | 30 | 67 | 8 | 10 | 132 | 51 | 42 | 124 | 19 | 650 |
| | 12:30 PM | 63 | 82 | 45 | 25 | 82 | 12 | 5 | 96 | 57 | 35 | 85 | 21 | 608 |
| | 12:45 PM | 51 | 79 | 35 | 23 | 89 | 10 | 8 | 116 | 50 | 39 | 101 | 18 | 619 |
| | VOLUMES | 447 | 546 | 268 | 218 | 630 | 79 | 57 | 902 | 379 | 309 | 850 | 156 | 4,841 |
| | APPROACH % | 35% | 43% | 21% | 24% | 68% | 9% | 4% | 67% | 28% | 23% | 65% | 12% | |
| APP/DEPART | 1,261 | / | 747 | 927 | / | 1,317 | 1,338 | / | 1,385 | 1,315 | / | 1,392 | 0 | |
| BEGIN PEAK HR | 11:30 AM | | | | | | | | | | | | | |
| VOLUMES | 223 | 276 | 117 | 111 | 287 | 38 | 30 | 489 | 195 | 175 | 468 | 78 | 2,487 | |
| APPROACH % | 36% | 45% | 19% | 25% | 66% | 9% | 4% | 68% | 27% | 24% | 65% | 11% | | |
| PEAK HR FACTOR | 0.851 | | | 0.948 | | | 0.925 | | | 0.974 | | | 0.955 | |
| APP/DEPART | 616 | / | 382 | 436 | / | 657 | 714 | / | 714 | 721 | / | 734 | 0 | |
| PM | 4:00 PM | 82 | 130 | 58 | 39 | 64 | 8 | 6 | 189 | 49 | 41 | 139 | 37 | 842 |
| | 4:15 PM | 79 | 130 | 77 | 26 | 52 | 12 | 12 | 207 | 58 | 30 | 134 | 43 | 860 |
| | 4:30 PM | 78 | 114 | 75 | 58 | 86 | 11 | 4 | 198 | 33 | 46 | 146 | 37 | 886 |
| | 4:45 PM | 101 | 162 | 67 | 43 | 60 | 10 | 16 | 246 | 49 | 26 | 138 | 26 | 944 |
| | 5:00 PM | 75 | 137 | 77 | 46 | 62 | 9 | 8 | 208 | 57 | 37 | 158 | 43 | 917 |
| | 5:15 PM | 94 | 194 | 76 | 47 | 74 | 6 | 6 | 202 | 45 | 41 | 143 | 39 | 967 |
| | 5:30 PM | 78 | 129 | 72 | 45 | 39 | 4 | 9 | 240 | 40 | 48 | 183 | 44 | 931 |
| | 5:45 PM | 93 | 136 | 60 | 57 | 55 | 8 | 6 | 204 | 33 | 43 | 146 | 32 | 873 |
| | VOLUMES | 680 | 1,132 | 562 | 361 | 492 | 68 | 67 | 1,694 | 364 | 312 | 1,187 | 301 | 7,220 |
| | APPROACH % | 29% | 48% | 24% | 39% | 53% | 7% | 3% | 80% | 17% | 17% | 66% | 17% | |
| APP/DEPART | 2,374 | / | 1,504 | 921 | / | 1,162 | 2,125 | / | 2,613 | 1,800 | / | 1,941 | 0 | |
| BEGIN PEAK HR | 4:45 PM | | | | | | | | | | | | | |
| VOLUMES | 348 | 622 | 292 | 181 | 235 | 29 | 39 | 896 | 191 | 152 | 622 | 152 | 3,759 | |
| APPROACH % | 28% | 49% | 23% | 41% | 53% | 7% | 3% | 80% | 17% | 16% | 67% | 16% | | |
| PEAK HR FACTOR | 0.867 | | | 0.876 | | | 0.905 | | | 0.842 | | | 0.972 | |
| APP/DEPART | 1,262 | / | 814 | 445 | / | 573 | 1,126 | / | 1,367 | 926 | / | 1,005 | 0 | |

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Thu, Dec 8, 16

LOCATION: Escondido
NORTH & SOUTH: Centre City
EAST & WEST: Decatur

PROJECT #: SC1152
LOCATION #: 5
CONTROL: SIGNAL

| | | | | |
|--------|-------|-----|---|-----|
| NOTES: | AM | | ▲ | |
| | PM | | N | |
| | MD | ◀ W | | E ▶ |
| | OTHER | | S | |
| | OTHER | | ▼ | |

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|-------------|---------|---------|-------------|---------|---------|-----------|-----------|-----------|-----------|---------|---------|-------|
| | Centre City | | | Centre City | | | Decatur | | | Decatur | | | |
| LANES: | NL 1 | NT 2 | NR 1 | SL 1 | ST 2 | SR 1 | EL 1 | ET 0.5 | ER 0.5 | WL 1 | WT 1 | WR 0 | |

| | | | | | | | | | | | | | | |
|----------------|------------|-------|-------|-------|-------|-------|-------|-----|-----|-------|-----|-----|-------|-------|
| AM | 7:00 AM | 6 | 79 | 6 | 12 | 318 | 3 | 1 | 1 | 8 | 100 | 1 | 18 | 553 |
| | 7:15 AM | 6 | 106 | 10 | 12 | 368 | 4 | 1 | 0 | 3 | 76 | 2 | 21 | 609 |
| | 7:30 AM | 8 | 94 | 7 | 24 | 408 | 5 | 2 | 0 | 1 | 78 | 2 | 23 | 652 |
| | 7:45 AM | 6 | 117 | 9 | 16 | 443 | 1 | 0 | 0 | 1 | 67 | 2 | 19 | 681 |
| | 8:00 AM | 9 | 87 | 12 | 14 | 356 | 4 | 1 | 0 | 3 | 87 | 2 | 19 | 594 |
| | 8:15 AM | 5 | 100 | 14 | 20 | 289 | 0 | 0 | 0 | 5 | 55 | 1 | 17 | 506 |
| | 8:30 AM | 7 | 96 | 10 | 8 | 246 | 2 | 1 | 1 | 5 | 55 | 1 | 25 | 457 |
| | 8:45 AM | 4 | 101 | 10 | 6 | 245 | 3 | 0 | 0 | 2 | 34 | 0 | 15 | 420 |
| | VOLUMES | 51 | 780 | 78 | 112 | 2,673 | 22 | 6 | 2 | 28 | 552 | 11 | 157 | 4,472 |
| | APPROACH % | 6% | 86% | 9% | 4% | 95% | 1% | 17% | 6% | 78% | 77% | 2% | 22% | |
| APP/DEPART | 909 | / | 947 | 2,807 | / | 3,270 | 36 | / | 188 | 720 | / | 67 | 0 | |
| BEGIN PEAK HR | 7:15 AM | | | | | | | | | | | | | |
| VOLUMES | 29 | 404 | 38 | 66 | 1,575 | 14 | 4 | 0 | 8 | 308 | 8 | 82 | 2,536 | |
| APPROACH % | 6% | 86% | 8% | 4% | 95% | 1% | 33% | 0% | 67% | 77% | 2% | 21% | | |
| PEAK HR FACTOR | 0.892 | | | 0.899 | | | 0.750 | | | 0.921 | | | 0.931 | |
| APP/DEPART | 471 | / | 493 | 1,655 | / | 1,898 | 12 | / | 101 | 398 | / | 44 | 0 | |
| MIDDAY | 11:00 AM | 5 | 112 | 11 | 11 | 169 | 2 | 1 | 0 | 4 | 19 | 1 | 19 | 354 |
| | 11:15 AM | 4 | 100 | 7 | 6 | 193 | 2 | 0 | 1 | 7 | 32 | 0 | 15 | 367 |
| | 11:30 AM | 7 | 125 | 17 | 14 | 217 | 0 | 3 | 0 | 6 | 27 | 0 | 30 | 446 |
| | 11:45 AM | 4 | 131 | 15 | 9 | 129 | 0 | 0 | 0 | 7 | 37 | 0 | 22 | 354 |
| | 12:00 PM | 5 | 121 | 9 | 10 | 169 | 1 | 0 | 0 | 5 | 18 | 0 | 25 | 363 |
| | 12:15 PM | 5 | 140 | 12 | 14 | 157 | 1 | 3 | 1 | 2 | 43 | 1 | 31 | 410 |
| | 12:30 PM | 4 | 145 | 11 | 11 | 158 | 1 | 3 | 0 | 7 | 27 | 1 | 27 | 395 |
| | 12:45 PM | 10 | 133 | 14 | 12 | 158 | 2 | 1 | 1 | 3 | 27 | 1 | 26 | 388 |
| | VOLUMES | 44 | 1,007 | 96 | 87 | 1,350 | 9 | 11 | 3 | 41 | 230 | 4 | 195 | 3,077 |
| | APPROACH % | 4% | 88% | 8% | 6% | 93% | 1% | 20% | 5% | 75% | 54% | 1% | 45% | |
| APP/DEPART | 1,147 | / | 1,234 | 1,446 | / | 1,634 | 55 | / | 165 | 429 | / | 44 | 0 | |
| BEGIN PEAK HR | 11:30 AM | | | | | | | | | | | | | |
| VOLUMES | 21 | 517 | 53 | 47 | 672 | 2 | 6 | 1 | 20 | 125 | 1 | 108 | 1,573 | |
| APPROACH % | 4% | 87% | 9% | 7% | 93% | 0% | 22% | 4% | 74% | 53% | 0% | 46% | | |
| PEAK HR FACTOR | 0.941 | | | 0.780 | | | 0.750 | | | 0.780 | | | 0.882 | |
| APP/DEPART | 591 | / | 639 | 721 | / | 825 | 27 | / | 93 | 234 | / | 16 | 0 | |
| PM | 4:00 PM | 0 | 234 | 28 | 5 | 159 | 0 | 6 | 0 | 8 | 26 | 2 | 35 | 503 |
| | 4:15 PM | 1 | 245 | 47 | 3 | 170 | 1 | 3 | 2 | 4 | 20 | 2 | 45 | 543 |
| | 4:30 PM | 2 | 245 | 31 | 9 | 157 | 0 | 3 | 0 | 2 | 28 | 1 | 41 | 519 |
| | 4:45 PM | 5 | 246 | 33 | 12 | 145 | 3 | 3 | 0 | 5 | 29 | 0 | 58 | 539 |
| | 5:00 PM | 2 | 245 | 29 | 11 | 166 | 0 | 4 | 1 | 2 | 25 | 0 | 63 | 548 |
| | 5:15 PM | 4 | 292 | 32 | 8 | 164 | 0 | 6 | 0 | 3 | 25 | 0 | 42 | 576 |
| | 5:30 PM | 2 | 260 | 24 | 12 | 127 | 0 | 0 | 1 | 7 | 40 | 0 | 45 | 518 |
| | 5:45 PM | 3 | 245 | 27 | 9 | 143 | 0 | 1 | 0 | 5 | 21 | 0 | 37 | 491 |
| | VOLUMES | 19 | 2,012 | 251 | 69 | 1,231 | 4 | 26 | 4 | 36 | 214 | 5 | 366 | 4,237 |
| | APPROACH % | 1% | 88% | 11% | 5% | 94% | 0% | 39% | 6% | 55% | 37% | 1% | 63% | |
| APP/DEPART | 2,282 | / | 2,417 | 1,304 | / | 1,493 | 66 | / | 311 | 585 | / | 16 | 0 | |
| BEGIN PEAK HR | 4:30 PM | | | | | | | | | | | | | |
| VOLUMES | 13 | 1,028 | 125 | 40 | 632 | 3 | 16 | 1 | 12 | 107 | 1 | 204 | 2,182 | |
| APPROACH % | 1% | 88% | 11% | 6% | 94% | 0% | 55% | 3% | 41% | 34% | 0% | 65% | | |
| PEAK HR FACTOR | 0.889 | | | 0.953 | | | 0.806 | | | 0.886 | | | 0.947 | |
| APP/DEPART | 1,166 | / | 1,258 | 675 | / | 757 | 29 | / | 156 | 312 | / | 11 | 0 | |

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Tue, Dec 13, 16

LOCATION:
NORTH & SOUTH:
EAST & WEST:

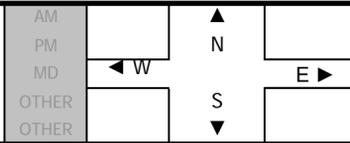
Escondido
Centre City
Mission

PROJECT #:
LOCATION #:
CONTROL:

SC1152
6
SIGNAL

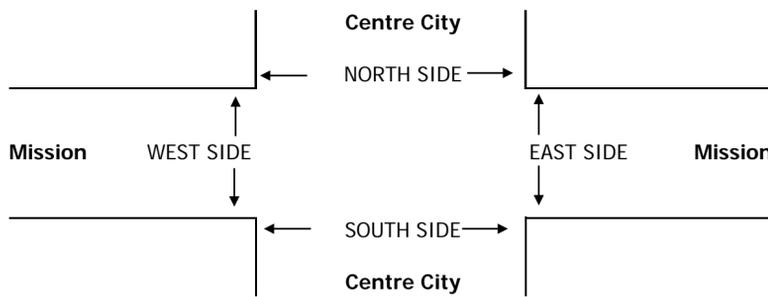
NOTES:

AM WB queue, PM EB queue



Add U-Turns to Left Turns

| | NORTHBOUND Centre City | | | SOUTHBOUND Centre City | | | EASTBOUND Mission | | | WESTBOUND Mission | | | TOTAL | U-TURNS | | | | | |
|----------------|---------------------------|-----|-------|---------------------------|-----|-------|----------------------|-----|-------|----------------------|-----|-------|-------|---------|----|----|----|-----|----|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | | NB | SB | EB | WB | TTL | |
| LANES: | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | | | | | | | |
| AM | 7:00 AM | 34 | 141 | 4 | 18 | 219 | 93 | 20 | 46 | 25 | 15 | 150 | 58 | 823 | 1 | 0 | 0 | 1 | 2 |
| | 7:15 AM | 30 | 133 | 9 | 26 | 178 | 120 | 23 | 51 | 18 | 13 | 179 | 64 | 844 | 0 | 0 | 0 | 0 | 0 |
| | 7:30 AM | 40 | 147 | 6 | 40 | 239 | 116 | 24 | 90 | 19 | 19 | 169 | 74 | 983 | 2 | 0 | 0 | 2 | 4 |
| | 7:45 AM | 32 | 133 | 17 | 35 | 240 | 144 | 29 | 77 | 15 | 9 | 172 | 45 | 948 | 1 | 0 | 0 | 0 | 1 |
| | 8:00 AM | 30 | 142 | 14 | 37 | 200 | 134 | 29 | 74 | 28 | 11 | 180 | 57 | 936 | 0 | 2 | 0 | 1 | 3 |
| | 8:15 AM | 30 | 106 | 9 | 58 | 173 | 138 | 41 | 103 | 22 | 18 | 154 | 60 | 912 | 0 | 0 | 0 | 1 | 1 |
| | 8:30 AM | 26 | 139 | 15 | 49 | 184 | 132 | 30 | 92 | 19 | 13 | 111 | 56 | 866 | 0 | 0 | 0 | 1 | 1 |
| | 8:45 AM | 27 | 106 | 12 | 44 | 183 | 103 | 31 | 121 | 28 | 7 | 147 | 49 | 858 | 0 | 1 | 0 | 0 | 1 |
| | VOLUMES | 249 | 1,047 | 86 | 307 | 1,616 | 980 | 227 | 654 | 174 | 105 | 1,262 | 463 | 7,170 | 4 | 3 | 0 | 6 | 13 |
| | APPROACH % | 18% | 76% | 6% | 11% | 56% | 34% | 22% | 62% | 16% | 6% | 69% | 25% | | | | | | |
| APP/DEPART | 1,382 | / | 1,740 | 2,903 | / | 1,893 | 1,055 | / | 1,050 | 1,830 | / | 2,487 | 0 | | | | | | |
| BEGIN PEAK HR | 7:30 AM | | | | | | | | | | | | | | | | | | |
| VOLUMES | 132 | 528 | 46 | 170 | 852 | 532 | 123 | 344 | 84 | 57 | 675 | 236 | 3,779 | | | | | | |
| APPROACH % | 19% | 75% | 7% | 11% | 55% | 34% | 22% | 62% | 15% | 6% | 70% | 24% | | | | | | | |
| PEAK HR FACTOR | 0.915 | | | 0.927 | | | 0.830 | | | 0.924 | | | 0.961 | | | | | | |
| APP/DEPART | 706 | / | 889 | 1,554 | / | 992 | 551 | / | 562 | 968 | / | 1,336 | 0 | | | | | | |
| MIDDAY | 11:00 AM | 19 | 113 | 11 | 55 | 143 | 87 | 52 | 132 | 30 | 20 | 138 | 49 | 849 | 0 | 0 | 0 | 0 | 0 |
| | 11:15 AM | 18 | 105 | 20 | 57 | 159 | 74 | 65 | 151 | 24 | 22 | 126 | 52 | 873 | 1 | 1 | 0 | 2 | 4 |
| | 11:30 AM | 14 | 119 | 24 | 55 | 155 | 109 | 50 | 132 | 26 | 17 | 117 | 81 | 899 | 0 | 0 | 0 | 2 | 2 |
| | 11:45 AM | 25 | 111 | 8 | 66 | 163 | 96 | 56 | 141 | 26 | 22 | 126 | 66 | 906 | 0 | 1 | 0 | 0 | 1 |
| | 12:00 PM | 18 | 109 | 22 | 67 | 148 | 78 | 50 | 134 | 27 | 13 | 135 | 63 | 864 | 0 | 0 | 0 | 1 | 1 |
| | 12:15 PM | 22 | 118 | 11 | 56 | 127 | 67 | 70 | 151 | 30 | 17 | 126 | 76 | 871 | 1 | 0 | 0 | 1 | 2 |
| | 12:30 PM | 20 | 146 | 21 | 49 | 124 | 92 | 54 | 143 | 22 | 16 | 110 | 61 | 858 | 3 | 2 | 0 | 2 | 7 |
| | 12:45 PM | 26 | 149 | 12 | 39 | 150 | 90 | 57 | 138 | 25 | 13 | 121 | 63 | 883 | 0 | 0 | 0 | 1 | 1 |
| | VOLUMES | 162 | 970 | 129 | 444 | 1,169 | 693 | 454 | 1,122 | 210 | 140 | 999 | 511 | 7,003 | 5 | 4 | 0 | 9 | 18 |
| | APPROACH % | 13% | 77% | 10% | 19% | 51% | 30% | 25% | 63% | 12% | 8% | 61% | 31% | | | | | | |
| APP/DEPART | 1,261 | / | 1,939 | 2,306 | / | 1,515 | 1,786 | / | 1,700 | 1,650 | / | 1,849 | 0 | | | | | | |
| BEGIN PEAK HR | 11:15 AM | | | | | | | | | | | | | | | | | | |
| VOLUMES | 75 | 444 | 74 | 245 | 625 | 357 | 221 | 558 | 103 | 74 | 504 | 262 | 3,542 | | | | | | |
| APPROACH % | 13% | 75% | 12% | 20% | 51% | 29% | 25% | 63% | 12% | 9% | 60% | 31% | | | | | | | |
| PEAK HR FACTOR | 0.944 | | | 0.944 | | | 0.919 | | | 0.977 | | | 0.977 | | | | | | |
| APP/DEPART | 593 | / | 929 | 1,227 | / | 798 | 882 | / | 880 | 840 | / | 935 | 0 | | | | | | |
| PM | 4:00 PM | 25 | 196 | 22 | 52 | 149 | 57 | 86 | 179 | 41 | 16 | 111 | 62 | 996 | 1 | 2 | 0 | 2 | 5 |
| | 4:15 PM | 19 | 185 | 20 | 56 | 154 | 78 | 65 | 218 | 46 | 11 | 134 | 58 | 1,044 | 0 | 2 | 0 | 1 | 3 |
| | 4:30 PM | 34 | 218 | 18 | 52 | 127 | 72 | 63 | 237 | 37 | 19 | 106 | 81 | 1,064 | 1 | 1 | 0 | 0 | 2 |
| | 4:45 PM | 36 | 259 | 18 | 52 | 152 | 62 | 52 | 190 | 41 | 15 | 88 | 85 | 1,050 | 3 | 0 | 0 | 0 | 3 |
| | 5:00 PM | 17 | 181 | 15 | 43 | 144 | 53 | 74 | 225 | 28 | 18 | 117 | 73 | 988 | 0 | 1 | 0 | 2 | 3 |
| | 5:15 PM | 22 | 233 | 20 | 54 | 138 | 62 | 86 | 219 | 38 | 15 | 100 | 82 | 1,069 | 0 | 1 | 0 | 2 | 3 |
| | 5:30 PM | 27 | 208 | 21 | 70 | 135 | 61 | 55 | 172 | 33 | 13 | 94 | 74 | 963 | 1 | 0 | 0 | 2 | 3 |
| | 5:45 PM | 22 | 150 | 22 | 51 | 122 | 59 | 67 | 189 | 45 | 11 | 107 | 79 | 924 | 0 | 1 | 0 | 0 | 1 |
| | VOLUMES | 202 | 1,630 | 156 | 430 | 1,121 | 504 | 548 | 1,629 | 309 | 118 | 857 | 594 | 8,098 | 6 | 8 | 0 | 9 | 23 |
| | APPROACH % | 10% | 82% | 8% | 21% | 55% | 25% | 22% | 66% | 12% | 8% | 55% | 38% | | | | | | |
| APP/DEPART | 1,988 | / | 2,780 | 2,055 | / | 1,545 | 2,486 | / | 2,216 | 1,569 | / | 1,557 | 0 | | | | | | |
| BEGIN PEAK HR | 4:30 PM | | | | | | | | | | | | | | | | | | |
| VOLUMES | 109 | 891 | 71 | 201 | 561 | 249 | 275 | 871 | 144 | 67 | 411 | 321 | 4,171 | | | | | | |
| APPROACH % | 10% | 83% | 7% | 20% | 55% | 25% | 21% | 68% | 11% | 8% | 51% | 40% | | | | | | | |
| PEAK HR FACTOR | 0.855 | | | 0.950 | | | 0.940 | | | 0.960 | | | 0.975 | | | | | | |
| APP/DEPART | 1,071 | / | 1,490 | 1,011 | / | 772 | 1,290 | / | 1,144 | 799 | / | 765 | 0 | | | | | | |



| | AM | MIDDAY | PM |
|----------|----|--------|----|
| 7:00 AM | | | |
| 7:15 AM | | | |
| 7:30 AM | | | |
| 7:45 AM | | | |
| 8:00 AM | | | |
| 8:15 AM | | | |
| 8:30 AM | | | |
| 8:45 AM | | | |
| TOTAL | | | |
| 11:00 AM | | | |
| 11:15 AM | | | |
| 11:30 AM | | | |
| 11:45 AM | | | |
| 12:00 PM | | | |
| 12:15 PM | | | |
| 12:30 PM | | | |
| 12:45 PM | | | |
| TOTAL | | | |
| 4:00 PM | | | |
| 4:15 PM | | | |
| 4:30 PM | | | |
| 4:45 PM | | | |
| 5:00 PM | | | |
| 5:15 PM | | | |
| 5:30 PM | | | |
| 5:45 PM | | | |
| TOTAL | | | |

| PEDESTRIAN + BIKE CROSSINGS | | | | |
|-----------------------------|--------|--------|--------|-------|
| N SIDE | S SIDE | E SIDE | W SIDE | TOTAL |
| 3 | 3 | 0 | 0 | 6 |
| 0 | 5 | 0 | 2 | 7 |
| 2 | 1 | 2 | 0 | 5 |
| 2 | 4 | 1 | 2 | 9 |
| 0 | 2 | 0 | 1 | 3 |
| 6 | 3 | 0 | 1 | 10 |
| 5 | 9 | 0 | 0 | 14 |
| 3 | 7 | 0 | 2 | 12 |
| 21 | 34 | 3 | 8 | 66 |
| 4 | 1 | 1 | 2 | 8 |
| 7 | 9 | 0 | 1 | 17 |
| 6 | 4 | 3 | 0 | 13 |
| 3 | 12 | 1 | 2 | 18 |
| 3 | 5 | 0 | 0 | 8 |
| 1 | 13 | 1 | 0 | 15 |
| 4 | 6 | 0 | 4 | 14 |
| 3 | 7 | 2 | 0 | 12 |
| 31 | 57 | 8 | 9 | 105 |
| 3 | 4 | 1 | 0 | 8 |
| 7 | 3 | 1 | 0 | 11 |
| 7 | 7 | 0 | 0 | 14 |
| 7 | 10 | 0 | 2 | 19 |
| 8 | 6 | 0 | 2 | 16 |
| 5 | 8 | 4 | 3 | 20 |
| 3 | 9 | 3 | 2 | 17 |
| 6 | 6 | 1 | 2 | 15 |
| 46 | 53 | 10 | 11 | 120 |

| PEDESTRIAN CROSSINGS | | | | |
|----------------------|--------|--------|--------|-------|
| N SIDE | S SIDE | E SIDE | W SIDE | TOTAL |
| 3 | 1 | 0 | 0 | 4 |
| 0 | 4 | 0 | 2 | 6 |
| 0 | 1 | 2 | 0 | 3 |
| 1 | 3 | 0 | 1 | 5 |
| 0 | 1 | 0 | 1 | 2 |
| 2 | 3 | 0 | 0 | 5 |
| 4 | 6 | 0 | 0 | 10 |
| 3 | 5 | 0 | 1 | 9 |
| 13 | 24 | 2 | 5 | 44 |
| 1 | 1 | 1 | 0 | 3 |
| 7 | 5 | 0 | 0 | 12 |
| 4 | 3 | 2 | 0 | 9 |
| 2 | 11 | 1 | 2 | 16 |
| 2 | 5 | 0 | 0 | 7 |
| 0 | 9 | 1 | 0 | 10 |
| 2 | 5 | 0 | 3 | 10 |
| 1 | 5 | 2 | 0 | 8 |
| 19 | 44 | 7 | 5 | 75 |
| 0 | 4 | 0 | 0 | 4 |
| 6 | 3 | 1 | 0 | 10 |
| 7 | 4 | 0 | 0 | 11 |
| 2 | 9 | 0 | 1 | 12 |
| 6 | 5 | 0 | 2 | 13 |
| 4 | 6 | 3 | 3 | 16 |
| 1 | 5 | 1 | 1 | 8 |
| 4 | 5 | 0 | 2 | 11 |
| 30 | 41 | 5 | 9 | 85 |

| BICYCLE CROSSINGS | | | | |
|-------------------|----|----|----|-------|
| NS | SS | ES | WS | TOTAL |
| 0 | 2 | 0 | 0 | 2 |
| 0 | 1 | 0 | 0 | 1 |
| 2 | 0 | 0 | 0 | 2 |
| 1 | 1 | 1 | 1 | 4 |
| 0 | 1 | 0 | 0 | 1 |
| 4 | 0 | 0 | 1 | 5 |
| 1 | 3 | 0 | 0 | 4 |
| 0 | 2 | 0 | 1 | 3 |
| 8 | 10 | 1 | 3 | 22 |
| 3 | 0 | 0 | 2 | 5 |
| 0 | 4 | 0 | 1 | 5 |
| 2 | 1 | 1 | 0 | 4 |
| 1 | 1 | 0 | 0 | 2 |
| 1 | 0 | 0 | 0 | 1 |
| 1 | 4 | 0 | 0 | 5 |
| 2 | 1 | 0 | 1 | 4 |
| 2 | 2 | 0 | 0 | 4 |
| 12 | 13 | 1 | 4 | 30 |
| 3 | 0 | 1 | 0 | 4 |
| 1 | 0 | 0 | 0 | 1 |
| 0 | 3 | 0 | 0 | 3 |
| 5 | 1 | 0 | 1 | 7 |
| 2 | 1 | 0 | 0 | 3 |
| 1 | 2 | 1 | 0 | 4 |
| 2 | 4 | 2 | 1 | 9 |
| 2 | 1 | 1 | 0 | 4 |
| 16 | 12 | 5 | 2 | 35 |

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Thu, Dec 8, 16

LOCATION: Escondido
NORTH & SOUTH: Centre City
EAST & WEST: Washington

PROJECT #: SC1152
LOCATION #: 7
CONTROL: SIGNAL

| | | |
|---|----------------------------------|--|
| <p>NOTES:</p> <p style="color: blue; text-align: center;">PM EB queue</p> | AM PM MD OTHER OTHER | |
|---|----------------------------------|--|

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|-------------|----|----|-------------|----|----|------------|----|----|------------|----|----|-------|
| | Centre City | | | Centre City | | | Washington | | | Washington | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 0 | 1 | 2 | 0 | |

| | | | | | | | | | | | | | | |
|----------------|------------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-------|
| AM | 7:00 AM | 39 | 143 | 5 | 18 | 145 | 35 | 10 | 50 | 15 | 16 | 137 | 15 | 628 |
| | 7:15 AM | 32 | 146 | 10 | 30 | 186 | 35 | 17 | 69 | 25 | 22 | 139 | 18 | 729 |
| | 7:30 AM | 46 | 158 | 9 | 32 | 198 | 31 | 8 | 66 | 15 | 14 | 138 | 15 | 730 |
| | 7:45 AM | 53 | 157 | 18 | 29 | 241 | 39 | 19 | 64 | 18 | 13 | 161 | 16 | 828 |
| | 8:00 AM | 36 | 163 | 17 | 26 | 205 | 38 | 18 | 91 | 19 | 15 | 150 | 12 | 790 |
| | 8:15 AM | 38 | 146 | 9 | 37 | 164 | 30 | 11 | 98 | 25 | 11 | 139 | 20 | 728 |
| | 8:30 AM | 28 | 151 | 12 | 22 | 137 | 22 | 19 | 70 | 18 | 13 | 80 | 20 | 592 |
| | 8:45 AM | 23 | 120 | 11 | 25 | 177 | 34 | 16 | 67 | 20 | 15 | 122 | 19 | 649 |
| | VOLUMES | 295 | 1,184 | 91 | 219 | 1,453 | 264 | 118 | 575 | 155 | 119 | 1,066 | 135 | 5,674 |
| | APPROACH % | 19% | 75% | 6% | 11% | 75% | 14% | 14% | 68% | 18% | 9% | 81% | 10% | |
| APP/DEPART | 1,570 | / | 1,430 | 1,936 | / | 1,734 | 848 | / | 884 | 1,320 | / | 1,626 | 0 | |
| BEGIN PEAK HR | 7:15 AM | | | | | | | | | | | | | |
| VOLUMES | 167 | 624 | 54 | 117 | 830 | 143 | 62 | 290 | 77 | 64 | 588 | 61 | 3,077 | |
| APPROACH % | 20% | 74% | 6% | 11% | 76% | 13% | 14% | 68% | 18% | 9% | 82% | 9% | | |
| PEAK HR FACTOR | 0.927 | | | 0.882 | | | 0.838 | | | 0.938 | | | 0.929 | |
| APP/DEPART | 845 | / | 744 | 1,090 | / | 973 | 429 | / | 461 | 713 | / | 899 | 0 | |
| MIDDAY | 11:00 AM | 32 | 117 | 20 | 37 | 129 | 35 | 23 | 84 | 22 | 19 | 94 | 21 | 633 |
| | 11:15 AM | 32 | 120 | 22 | 25 | 134 | 49 | 23 | 97 | 21 | 17 | 77 | 31 | 648 |
| | 11:30 AM | 35 | 116 | 21 | 37 | 126 | 29 | 39 | 113 | 26 | 22 | 82 | 16 | 662 |
| | 11:45 AM | 42 | 128 | 18 | 30 | 135 | 29 | 23 | 120 | 23 | 20 | 94 | 22 | 684 |
| | 12:00 PM | 25 | 132 | 27 | 27 | 125 | 33 | 29 | 122 | 20 | 15 | 104 | 23 | 682 |
| | 12:15 PM | 34 | 136 | 17 | 36 | 115 | 45 | 33 | 102 | 21 | 20 | 114 | 33 | 706 |
| | 12:30 PM | 39 | 126 | 20 | 25 | 123 | 32 | 26 | 117 | 30 | 17 | 128 | 27 | 710 |
| | 12:45 PM | 51 | 139 | 22 | 28 | 124 | 38 | 35 | 110 | 28 | 15 | 91 | 23 | 704 |
| | VOLUMES | 290 | 1,014 | 167 | 245 | 1,011 | 290 | 231 | 865 | 191 | 145 | 784 | 196 | 5,429 |
| | APPROACH % | 20% | 69% | 11% | 16% | 65% | 19% | 18% | 67% | 15% | 13% | 70% | 17% | |
| APP/DEPART | 1,471 | / | 1,421 | 1,546 | / | 1,362 | 1,287 | / | 1,269 | 1,125 | / | 1,377 | 0 | |
| BEGIN PEAK HR | 12:00 PM | | | | | | | | | | | | | |
| VOLUMES | 149 | 533 | 86 | 116 | 487 | 148 | 123 | 451 | 99 | 67 | 437 | 106 | 2,802 | |
| APPROACH % | 19% | 69% | 11% | 15% | 65% | 20% | 18% | 67% | 15% | 11% | 72% | 17% | | |
| PEAK HR FACTOR | 0.906 | | | 0.958 | | | 0.973 | | | 0.887 | | | 0.987 | |
| APP/DEPART | 768 | / | 754 | 751 | / | 661 | 673 | / | 649 | 610 | / | 738 | 0 | |
| PM | 4:00 PM | 38 | 161 | 30 | 23 | 140 | 40 | 40 | 210 | 37 | 26 | 98 | 30 | 873 |
| | 4:15 PM | 42 | 199 | 46 | 41 | 156 | 25 | 36 | 171 | 37 | 17 | 84 | 23 | 877 |
| | 4:30 PM | 42 | 192 | 49 | 36 | 138 | 21 | 54 | 199 | 32 | 19 | 98 | 29 | 909 |
| | 4:45 PM | 45 | 198 | 41 | 51 | 143 | 10 | 39 | 199 | 24 | 18 | 102 | 32 | 902 |
| | 5:00 PM | 37 | 184 | 41 | 23 | 108 | 22 | 39 | 195 | 27 | 23 | 73 | 32 | 804 |
| | 5:15 PM | 63 | 256 | 49 | 33 | 154 | 28 | 35 | 181 | 13 | 20 | 99 | 17 | 948 |
| | 5:30 PM | 42 | 226 | 42 | 29 | 158 | 10 | 37 | 178 | 13 | 20 | 78 | 25 | 858 |
| | 5:45 PM | 41 | 147 | 35 | 28 | 130 | 13 | 41 | 155 | 22 | 19 | 112 | 28 | 771 |
| | VOLUMES | 350 | 1,563 | 333 | 264 | 1,127 | 169 | 321 | 1,488 | 205 | 162 | 744 | 216 | 6,942 |
| | APPROACH % | 16% | 70% | 15% | 17% | 72% | 11% | 16% | 74% | 10% | 14% | 66% | 19% | |
| APP/DEPART | 2,246 | / | 2,091 | 1,560 | / | 1,523 | 2,014 | / | 2,077 | 1,122 | / | 1,251 | 0 | |
| BEGIN PEAK HR | 4:30 PM | | | | | | | | | | | | | |
| VOLUMES | 187 | 830 | 180 | 143 | 543 | 81 | 167 | 774 | 96 | 80 | 372 | 110 | 3,563 | |
| APPROACH % | 16% | 69% | 15% | 19% | 71% | 11% | 16% | 75% | 9% | 14% | 66% | 20% | | |
| PEAK HR FACTOR | 0.813 | | | 0.892 | | | 0.910 | | | 0.924 | | | 0.940 | |
| APP/DEPART | 1,197 | / | 1,099 | 767 | / | 734 | 1,037 | / | 1,093 | 562 | / | 637 | 0 | |

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Thu, Dec 8, 16

LOCATION: Escondido
NORTH & SOUTH: Centre City
EAST & WEST: Valley

PROJECT #: SC1152
LOCATION #: 8
CONTROL: SIGNAL

| | | | |
|--------|----------------------------------|------------|------------|
| NOTES: | AM PM MD OTHER OTHER | ◀ W E ▶ | ▲ N S ▼ |
|--------|----------------------------------|------------|------------|

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|-------------|----|----|-------------|----|----|-----------|----|----|-----------|----|----|-------|
| | Centre City | | | Centre City | | | Valley | | | Valley | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 2 | 2 | X | X | 2 | 0 | X | X | X | 1 | 3 | 1 | |

| | | | | | | | | | | | | | | |
|----------------|------------|-----|-------|-------|-----|-------|-------|----|----|-------|-------|-------|-------|-------|
| AM | 7:00 AM | 27 | 146 | 0 | 0 | 165 | 23 | 0 | 0 | 0 | 72 | 204 | 49 | 686 |
| | 7:15 AM | 28 | 143 | 0 | 0 | 210 | 20 | 0 | 0 | 0 | 96 | 274 | 54 | 825 |
| | 7:30 AM | 45 | 141 | 0 | 0 | 210 | 25 | 0 | 0 | 0 | 75 | 288 | 64 | 848 |
| | 7:45 AM | 54 | 175 | 0 | 0 | 226 | 21 | 0 | 0 | 0 | 86 | 334 | 48 | 944 |
| | 8:00 AM | 41 | 159 | 0 | 0 | 223 | 33 | 0 | 0 | 0 | 70 | 332 | 67 | 925 |
| | 8:15 AM | 35 | 132 | 0 | 0 | 194 | 27 | 0 | 0 | 0 | 69 | 267 | 40 | 764 |
| | 8:30 AM | 38 | 150 | 0 | 0 | 149 | 17 | 0 | 0 | 0 | 54 | 189 | 44 | 641 |
| | 8:45 AM | 31 | 138 | 0 | 0 | 168 | 31 | 0 | 0 | 0 | 44 | 211 | 34 | 657 |
| | VOLUMES | 299 | 1,184 | 0 | 0 | 1,545 | 197 | 0 | 0 | 0 | 566 | 2,099 | 400 | 6,290 |
| | APPROACH % | 20% | 80% | 0% | 0% | 89% | 11% | 0% | 0% | 0% | 18% | 68% | 13% | |
| APP/DEPART | 1,483 | / | 1,584 | 1,742 | / | 2,111 | 0 | / | 0 | 3,065 | / | 2,595 | 0 | |
| BEGIN PEAK HR | 7:15 AM | | | | | | | | | | | | | |
| VOLUMES | 168 | 618 | 0 | 0 | 869 | 99 | 0 | 0 | 0 | 327 | 1,228 | 233 | 3,542 | |
| APPROACH % | 21% | 79% | 0% | 0% | 90% | 10% | 0% | 0% | 0% | 18% | 69% | 13% | | |
| PEAK HR FACTOR | 0.858 | | | 0.945 | | | 0.000 | | | 0.953 | | | 0.938 | |
| APP/DEPART | 786 | / | 851 | 968 | / | 1,196 | 0 | / | 0 | 1,788 | / | 1,495 | 0 | |
| MIDDAY | 11:00 AM | 35 | 134 | 0 | 0 | 147 | 25 | 0 | 0 | 0 | 60 | 240 | 38 | 679 |
| | 11:15 AM | 47 | 120 | 0 | 0 | 140 | 28 | 0 | 0 | 0 | 59 | 226 | 46 | 666 |
| | 11:30 AM | 47 | 128 | 0 | 0 | 132 | 22 | 0 | 0 | 0 | 33 | 247 | 38 | 647 |
| | 11:45 AM | 45 | 123 | 0 | 0 | 152 | 32 | 0 | 0 | 0 | 56 | 244 | 49 | 701 |
| | 12:00 PM | 38 | 139 | 0 | 0 | 124 | 20 | 0 | 0 | 0 | 58 | 233 | 59 | 671 |
| | 12:15 PM | 45 | 134 | 0 | 0 | 139 | 17 | 0 | 0 | 0 | 65 | 270 | 64 | 734 |
| | 12:30 PM | 39 | 139 | 0 | 0 | 160 | 28 | 0 | 0 | 0 | 50 | 249 | 46 | 711 |
| | 12:45 PM | 63 | 147 | 0 | 0 | 131 | 20 | 0 | 0 | 0 | 51 | 270 | 52 | 734 |
| | VOLUMES | 359 | 1,064 | 0 | 0 | 1,125 | 192 | 0 | 0 | 0 | 432 | 1,979 | 392 | 5,543 |
| | APPROACH % | 25% | 75% | 0% | 0% | 85% | 15% | 0% | 0% | 0% | 15% | 71% | 14% | |
| APP/DEPART | 1,423 | / | 1,456 | 1,317 | / | 1,559 | 0 | / | 0 | 2,803 | / | 2,528 | 0 | |
| BEGIN PEAK HR | 12:00 PM | | | | | | | | | | | | | |
| VOLUMES | 185 | 559 | 0 | 0 | 554 | 85 | 0 | 0 | 0 | 224 | 1,022 | 221 | 2,850 | |
| APPROACH % | 25% | 75% | 0% | 0% | 87% | 13% | 0% | 0% | 0% | 15% | 70% | 15% | | |
| PEAK HR FACTOR | 0.886 | | | 0.850 | | | 0.000 | | | 0.919 | | | 0.971 | |
| APP/DEPART | 744 | / | 780 | 639 | / | 778 | 0 | / | 0 | 1,467 | / | 1,292 | 0 | |
| PM | 4:00 PM | 33 | 214 | 0 | 0 | 194 | 31 | 0 | 0 | 0 | 45 | 220 | 47 | 784 |
| | 4:15 PM | 35 | 208 | 0 | 0 | 179 | 28 | 0 | 0 | 0 | 57 | 240 | 51 | 798 |
| | 4:30 PM | 40 | 233 | 0 | 0 | 165 | 21 | 0 | 0 | 0 | 50 | 230 | 67 | 806 |
| | 4:45 PM | 44 | 223 | 0 | 0 | 159 | 29 | 0 | 0 | 0 | 49 | 243 | 51 | 798 |
| | 5:00 PM | 35 | 265 | 0 | 0 | 129 | 26 | 0 | 0 | 0 | 49 | 235 | 67 | 806 |
| | 5:15 PM | 46 | 251 | 0 | 0 | 162 | 30 | 0 | 0 | 0 | 57 | 217 | 65 | 828 |
| | 5:30 PM | 37 | 224 | 0 | 0 | 150 | 18 | 0 | 0 | 0 | 58 | 232 | 58 | 777 |
| | 5:45 PM | 37 | 195 | 0 | 0 | 162 | 24 | 0 | 0 | 0 | 50 | 205 | 33 | 706 |
| | VOLUMES | 307 | 1,813 | 0 | 0 | 1,300 | 207 | 0 | 0 | 0 | 415 | 1,822 | 439 | 6,303 |
| | APPROACH % | 14% | 86% | 0% | 0% | 86% | 14% | 0% | 0% | 0% | 16% | 68% | 16% | |
| APP/DEPART | 2,120 | / | 2,252 | 1,507 | / | 1,715 | 0 | / | 0 | 2,676 | / | 2,336 | 0 | |
| BEGIN PEAK HR | 4:30 PM | | | | | | | | | | | | | |
| VOLUMES | 165 | 972 | 0 | 0 | 615 | 106 | 0 | 0 | 0 | 205 | 925 | 250 | 3,238 | |
| APPROACH % | 15% | 85% | 0% | 0% | 85% | 15% | 0% | 0% | 0% | 15% | 67% | 18% | | |
| PEAK HR FACTOR | 0.948 | | | 0.939 | | | 0.000 | | | 0.983 | | | 0.978 | |
| APP/DEPART | 1,137 | / | 1,222 | 721 | / | 820 | 0 | / | 0 | 1,380 | / | 1,196 | 0 | |

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Thu, Dec 8, 16

LOCATION: Escondido
NORTH & SOUTH: Escondido
EAST & WEST: Mission

PROJECT #: SC1152
LOCATION #: 9
CONTROL: SIGNAL

| | | | | | | | | | | | | | |
|---|----|----|----|-------|-------|---|---|---|---|---|---|---|---|
| <p>NOTES:</p> <p style="text-align: center; color: blue;">MD WB queue</p> | AM | PM | MD | OTHER | OTHER | ▲ | N | ▶ | E | ▼ | S | ◀ | W |
|---|----|----|----|-------|-------|---|---|---|---|---|---|---|---|

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|----|----|------------|----|----|-----------|----|----|-----------|----|----|-------|
| | Escondido | | | Escondido | | | Mission | | | Mission | | | |
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | |

| | | | | | | | | | | | | | | |
|----------------|------------|-----|-------|-------|-----|-----|-------|-----|-------|-------|-----|-------|-------|-------|
| AM | 7:00 AM | 28 | 26 | 10 | 10 | 59 | 38 | 9 | 54 | 15 | 16 | 155 | 4 | 424 |
| | 7:15 AM | 35 | 18 | 11 | 20 | 64 | 40 | 9 | 64 | 16 | 17 | 206 | 10 | 510 |
| | 7:30 AM | 43 | 31 | 13 | 22 | 84 | 40 | 6 | 43 | 28 | 20 | 177 | 9 | 516 |
| | 7:45 AM | 31 | 31 | 15 | 26 | 117 | 60 | 16 | 86 | 39 | 31 | 142 | 10 | 604 |
| | 8:00 AM | 44 | 44 | 26 | 27 | 74 | 43 | 11 | 66 | 23 | 19 | 118 | 5 | 500 |
| | 8:15 AM | 36 | 45 | 21 | 21 | 66 | 36 | 20 | 93 | 31 | 18 | 146 | 7 | 540 |
| | 8:30 AM | 47 | 52 | 25 | 13 | 54 | 24 | 10 | 79 | 29 | 12 | 104 | 3 | 452 |
| | 8:45 AM | 28 | 38 | 13 | 7 | 40 | 21 | 16 | 79 | 23 | 18 | 126 | 7 | 416 |
| | VOLUMES | 292 | 285 | 134 | 146 | 558 | 302 | 97 | 564 | 204 | 151 | 1,174 | 55 | 3,962 |
| | APPROACH % | 41% | 40% | 19% | 15% | 55% | 30% | 11% | 65% | 24% | 11% | 85% | 4% | |
| APP/DEPART | 711 | / | 437 | 1,006 | / | 913 | 865 | / | 844 | 1,380 | / | 1,768 | 0 | |
| BEGIN PEAK HR | 7:30 AM | | | | | | | | | | | | | |
| VOLUMES | 154 | 151 | 75 | 96 | 341 | 179 | 53 | 288 | 121 | 88 | 583 | 31 | 2,160 | |
| APPROACH % | 41% | 40% | 20% | 16% | 55% | 29% | 11% | 62% | 26% | 13% | 83% | 4% | | |
| PEAK HR FACTOR | 0.833 | | | 0.759 | | | 0.802 | | | 0.852 | | | 0.894 | |
| APP/DEPART | 380 | / | 235 | 616 | / | 550 | 462 | / | 459 | 702 | / | 916 | 0 | |
| MIDDAY | 11:00 AM | 37 | 45 | 25 | 16 | 57 | 26 | 22 | 87 | 38 | 17 | 94 | 8 | 472 |
| | 11:15 AM | 37 | 42 | 18 | 16 | 57 | 27 | 18 | 112 | 32 | 22 | 100 | 10 | 491 |
| | 11:30 AM | 48 | 54 | 31 | 15 | 62 | 34 | 24 | 94 | 42 | 24 | 105 | 11 | 544 |
| | 11:45 AM | 46 | 64 | 23 | 16 | 57 | 43 | 31 | 132 | 32 | 28 | 93 | 9 | 574 |
| | 12:00 PM | 53 | 50 | 27 | 13 | 64 | 29 | 22 | 93 | 38 | 27 | 114 | 10 | 540 |
| | 12:15 PM | 46 | 50 | 23 | 15 | 55 | 24 | 25 | 131 | 39 | 27 | 99 | 6 | 540 |
| | 12:30 PM | 48 | 51 | 31 | 18 | 62 | 25 | 33 | 108 | 23 | 24 | 81 | 9 | 513 |
| | 12:45 PM | 37 | 54 | 30 | 35 | 53 | 44 | 25 | 124 | 54 | 30 | 114 | 11 | 611 |
| | VOLUMES | 352 | 410 | 208 | 144 | 467 | 252 | 200 | 881 | 298 | 199 | 800 | 74 | 4,285 |
| | APPROACH % | 36% | 42% | 21% | 17% | 54% | 29% | 15% | 64% | 22% | 19% | 75% | 7% | |
| APP/DEPART | 970 | / | 684 | 863 | / | 964 | 1,379 | / | 1,233 | 1,073 | / | 1,404 | 0 | |
| BEGIN PEAK HR | 12:00 PM | | | | | | | | | | | | | |
| VOLUMES | 184 | 205 | 111 | 81 | 234 | 122 | 105 | 456 | 154 | 108 | 408 | 36 | 2,204 | |
| APPROACH % | 37% | 41% | 22% | 19% | 54% | 28% | 15% | 64% | 22% | 20% | 74% | 7% | | |
| PEAK HR FACTOR | 0.962 | | | 0.828 | | | 0.881 | | | 0.890 | | | 0.902 | |
| APP/DEPART | 500 | / | 346 | 437 | / | 496 | 715 | / | 648 | 552 | / | 714 | 0 | |
| PM | 4:00 PM | 47 | 84 | 37 | 22 | 52 | 27 | 28 | 188 | 53 | 31 | 106 | 13 | 688 |
| | 4:15 PM | 50 | 73 | 48 | 29 | 34 | 23 | 41 | 208 | 48 | 27 | 103 | 11 | 695 |
| | 4:30 PM | 41 | 90 | 41 | 16 | 58 | 21 | 43 | 160 | 39 | 31 | 94 | 9 | 643 |
| | 4:45 PM | 48 | 98 | 32 | 22 | 54 | 29 | 27 | 161 | 37 | 20 | 118 | 16 | 662 |
| | 5:00 PM | 48 | 98 | 47 | 25 | 49 | 27 | 32 | 202 | 36 | 30 | 114 | 22 | 730 |
| | 5:15 PM | 62 | 86 | 53 | 20 | 61 | 22 | 37 | 204 | 39 | 36 | 106 | 10 | 736 |
| | 5:30 PM | 61 | 93 | 50 | 22 | 53 | 35 | 24 | 200 | 35 | 33 | 112 | 11 | 729 |
| | 5:45 PM | 56 | 72 | 48 | 18 | 45 | 9 | 41 | 163 | 43 | 18 | 118 | 16 | 647 |
| | VOLUMES | 413 | 694 | 356 | 174 | 406 | 193 | 273 | 1,486 | 330 | 226 | 871 | 108 | 5,530 |
| | APPROACH % | 28% | 47% | 24% | 23% | 53% | 25% | 13% | 71% | 16% | 19% | 72% | 9% | |
| APP/DEPART | 1,463 | / | 1,075 | 773 | / | 962 | 2,089 | / | 2,016 | 1,205 | / | 1,477 | 0 | |
| BEGIN PEAK HR | 4:45 PM | | | | | | | | | | | | | |
| VOLUMES | 219 | 375 | 182 | 89 | 217 | 113 | 120 | 767 | 147 | 119 | 450 | 59 | 2,857 | |
| APPROACH % | 28% | 48% | 23% | 21% | 52% | 27% | 12% | 74% | 14% | 19% | 72% | 9% | | |
| PEAK HR FACTOR | 0.951 | | | 0.952 | | | 0.923 | | | 0.946 | | | 0.970 | |
| APP/DEPART | 776 | / | 554 | 419 | / | 483 | 1,034 | / | 1,038 | 628 | / | 782 | 0 | |

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Thu, Dec 8, 16

LOCATION: Escondido
NORTH & SOUTH: Escondido
EAST & WEST: Washington

PROJECT #: SC1152
LOCATION #: 10
CONTROL: SIGNAL

| | | | | |
|--------|-------|-----|---|-----|
| NOTES: | AM | | ▲ | |
| | PM | | N | |
| | MD | ◀ W | | E ▶ |
| | OTHER | | S | |
| | OTHER | | ▼ | |

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|---------|---------|------------|---------|---------|------------|---------|---------|------------|---------|---------|-------|
| | Escondido | | | Escondido | | | Washington | | | Washington | | | |
| LANES: | NL 1 | NT 2 | NR 0 | SL 1 | ST 2 | SR 0 | EL 1 | ET 2 | ER 0 | WL 1 | WT 2 | WR 0 | |

| | | | | | | | | | | | | | | |
|----------------|------------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-------|
| AM | 7:00 AM | 11 | 30 | 5 | 18 | 54 | 14 | 8 | 51 | 20 | 8 | 137 | 22 | 378 |
| | 7:15 AM | 14 | 38 | 2 | 11 | 52 | 18 | 11 | 69 | 23 | 5 | 137 | 23 | 403 |
| | 7:30 AM | 16 | 46 | 8 | 13 | 72 | 16 | 10 | 77 | 18 | 15 | 125 | 32 | 448 |
| | 7:45 AM | 19 | 79 | 14 | 31 | 129 | 20 | 20 | 81 | 26 | 18 | 154 | 32 | 623 |
| | 8:00 AM | 18 | 50 | 19 | 16 | 83 | 19 | 15 | 81 | 32 | 18 | 138 | 16 | 505 |
| | 8:15 AM | 24 | 66 | 22 | 24 | 78 | 17 | 11 | 85 | 36 | 14 | 102 | 19 | 498 |
| | 8:30 AM | 14 | 57 | 18 | 12 | 50 | 9 | 9 | 81 | 16 | 10 | 106 | 22 | 404 |
| | 8:45 AM | 21 | 54 | 15 | 9 | 50 | 17 | 13 | 75 | 25 | 19 | 96 | 15 | 409 |
| | VOLUMES | 137 | 420 | 103 | 134 | 568 | 130 | 97 | 600 | 196 | 107 | 995 | 181 | 3,668 |
| | APPROACH % | 21% | 64% | 16% | 16% | 68% | 16% | 11% | 67% | 22% | 8% | 78% | 14% | |
| APP/DEPART | 660 | / | 698 | 832 | / | 871 | 893 | / | 837 | 1,283 | / | 1,262 | 0 | |
| BEGIN PEAK HR | 7:30 AM | | | | | | | | | | | | | |
| VOLUMES | 77 | 241 | 63 | 84 | 362 | 72 | 56 | 324 | 112 | 65 | 519 | 99 | 2,074 | |
| APPROACH % | 20% | 63% | 17% | 16% | 70% | 14% | 11% | 66% | 23% | 10% | 76% | 14% | | |
| PEAK HR FACTOR | 0.850 | | | 0.719 | | | 0.932 | | | 0.837 | | | 0.832 | |
| APP/DEPART | 381 | / | 396 | 518 | / | 539 | 492 | / | 471 | 683 | / | 668 | 0 | |
| MIDDAY | 11:00 AM | 13 | 59 | 31 | 19 | 52 | 18 | 13 | 102 | 28 | 20 | 100 | 21 | 476 |
| | 11:15 AM | 22 | 65 | 37 | 19 | 75 | 18 | 13 | 104 | 30 | 22 | 103 | 11 | 519 |
| | 11:30 AM | 21 | 56 | 35 | 24 | 65 | 12 | 26 | 106 | 31 | 26 | 79 | 19 | 500 |
| | 11:45 AM | 16 | 75 | 33 | 21 | 71 | 15 | 17 | 105 | 20 | 30 | 98 | 23 | 524 |
| | 12:00 PM | 27 | 53 | 36 | 16 | 67 | 20 | 20 | 123 | 24 | 35 | 101 | 20 | 542 |
| | 12:15 PM | 21 | 76 | 30 | 18 | 70 | 25 | 22 | 95 | 23 | 35 | 109 | 30 | 554 |
| | 12:30 PM | 20 | 53 | 25 | 20 | 64 | 20 | 22 | 123 | 31 | 34 | 121 | 26 | 559 |
| | 12:45 PM | 18 | 74 | 34 | 22 | 83 | 29 | 27 | 93 | 29 | 33 | 94 | 25 | 561 |
| | VOLUMES | 158 | 511 | 261 | 159 | 547 | 157 | 160 | 851 | 216 | 235 | 805 | 175 | 4,235 |
| | APPROACH % | 17% | 55% | 28% | 18% | 63% | 18% | 13% | 69% | 18% | 19% | 66% | 14% | |
| APP/DEPART | 930 | / | 846 | 863 | / | 998 | 1,227 | / | 1,271 | 1,215 | / | 1,120 | 0 | |
| BEGIN PEAK HR | 12:00 PM | | | | | | | | | | | | | |
| VOLUMES | 86 | 256 | 125 | 76 | 284 | 94 | 91 | 434 | 107 | 137 | 425 | 101 | 2,216 | |
| APPROACH % | 18% | 55% | 27% | 17% | 63% | 21% | 14% | 69% | 17% | 21% | 64% | 15% | | |
| PEAK HR FACTOR | 0.919 | | | 0.847 | | | 0.898 | | | 0.916 | | | 0.988 | |
| APP/DEPART | 467 | / | 448 | 454 | / | 528 | 632 | / | 635 | 663 | / | 605 | 0 | |
| PM | 4:00 PM | 22 | 88 | 28 | 40 | 72 | 22 | 31 | 165 | 16 | 31 | 110 | 30 | 655 |
| | 4:15 PM | 23 | 91 | 31 | 35 | 83 | 21 | 33 | 205 | 34 | 29 | 80 | 25 | 690 |
| | 4:30 PM | 25 | 88 | 31 | 29 | 57 | 11 | 41 | 198 | 55 | 18 | 101 | 17 | 671 |
| | 4:45 PM | 30 | 93 | 43 | 19 | 77 | 16 | 22 | 201 | 28 | 41 | 111 | 35 | 716 |
| | 5:00 PM | 30 | 122 | 43 | 31 | 65 | 7 | 31 | 182 | 22 | 24 | 83 | 31 | 671 |
| | 5:15 PM | 29 | 104 | 29 | 30 | 53 | 10 | 31 | 203 | 36 | 45 | 91 | 31 | 692 |
| | 5:30 PM | 23 | 112 | 34 | 34 | 67 | 13 | 37 | 180 | 25 | 20 | 105 | 20 | 670 |
| | 5:45 PM | 21 | 96 | 31 | 35 | 62 | 12 | 32 | 137 | 17 | 32 | 89 | 24 | 588 |
| | VOLUMES | 203 | 794 | 270 | 253 | 536 | 112 | 258 | 1,471 | 233 | 240 | 770 | 213 | 5,353 |
| | APPROACH % | 16% | 63% | 21% | 28% | 59% | 12% | 13% | 75% | 12% | 20% | 63% | 17% | |
| APP/DEPART | 1,267 | / | 1,266 | 901 | / | 1,009 | 1,962 | / | 1,993 | 1,223 | / | 1,085 | 0 | |
| BEGIN PEAK HR | 4:30 PM | | | | | | | | | | | | | |
| VOLUMES | 114 | 407 | 146 | 109 | 252 | 44 | 125 | 784 | 141 | 128 | 386 | 114 | 2,750 | |
| APPROACH % | 17% | 61% | 22% | 27% | 62% | 11% | 12% | 75% | 13% | 20% | 61% | 18% | | |
| PEAK HR FACTOR | 0.855 | | | 0.904 | | | 0.893 | | | 0.840 | | | 0.960 | |
| APP/DEPART | 667 | / | 647 | 405 | / | 521 | 1,050 | / | 1,038 | 628 | / | 544 | 0 | |

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Thu, Dec 8, 16

LOCATION: Escondido
NORTH & SOUTH: Escondido
EAST & WEST: Woodward

PROJECT #: SC1152
LOCATION #: 11
CONTROL: SIGNAL

| | | | | |
|--------|----------------------------------|-----|------------|-----|
| NOTES: | AM PM MD OTHER OTHER | ◀ W | ▲ N S ▼ | E ▶ |
|--------|----------------------------------|-----|------------|-----|

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|---------|---------|------------|---------|---------|-----------|---------|---------|-----------|---------|---------|-------|
| | Escondido | | | Escondido | | | Woodward | | | Woodward | | | |
| LANES: | NL 0 | NT 2 | NR 0 | SL 1 | ST 2 | SR 0 | EL 0 | ET 1 | ER 0 | WL 1 | WT 0 | WR 1 | |

| | | | | | | | | | | | | | | |
|----------------|------------|-----|-------|-------|-----|-------|-------|-----|-----|-------|-----|-----|-------|-------|
| AM | 7:00 AM | 0 | 43 | 3 | 4 | 89 | 1 | 6 | 1 | 4 | 1 | 0 | 2 | 154 |
| | 7:15 AM | 0 | 43 | 4 | 4 | 72 | 0 | 1 | 1 | 5 | 5 | 0 | 7 | 142 |
| | 7:30 AM | 1 | 59 | 6 | 6 | 98 | 2 | 6 | 0 | 4 | 2 | 1 | 7 | 192 |
| | 7:45 AM | 1 | 90 | 9 | 13 | 158 | 1 | 1 | 0 | 10 | 11 | 0 | 12 | 306 |
| | 8:00 AM | 0 | 74 | 13 | 23 | 115 | 0 | 1 | 0 | 5 | 22 | 0 | 22 | 275 |
| | 8:15 AM | 1 | 76 | 19 | 21 | 116 | 2 | 3 | 1 | 3 | 25 | 0 | 30 | 297 |
| | 8:30 AM | 0 | 81 | 13 | 9 | 72 | 0 | 4 | 1 | 6 | 13 | 1 | 8 | 208 |
| | 8:45 AM | 0 | 75 | 7 | 9 | 81 | 1 | 4 | 1 | 1 | 8 | 0 | 6 | 193 |
| | VOLUMES | 3 | 541 | 74 | 89 | 801 | 7 | 26 | 5 | 38 | 87 | 2 | 94 | 1,767 |
| | APPROACH % | 0% | 88% | 12% | 10% | 89% | 1% | 38% | 7% | 55% | 48% | 1% | 51% | |
| APP/DEPART | 618 | / | 661 | 897 | / | 926 | 69 | / | 168 | 183 | / | 12 | 0 | |
| BEGIN PEAK HR | 7:45 AM | | | | | | | | | | | | | |
| VOLUMES | 2 | 321 | 54 | 66 | 461 | 3 | 9 | 2 | 24 | 71 | 1 | 72 | 1,086 | |
| APPROACH % | 1% | 85% | 14% | 12% | 87% | 1% | 26% | 6% | 69% | 49% | 1% | 50% | | |
| PEAK HR FACTOR | 0.943 | | | 0.770 | | | 0.795 | | | 0.655 | | | 0.887 | |
| APP/DEPART | 377 | / | 402 | 530 | / | 556 | 35 | / | 122 | 144 | / | 6 | 0 | |
| MIDDAY | 11:00 AM | 0 | 100 | 8 | 9 | 96 | 1 | 1 | 0 | 4 | 10 | 0 | 9 | 238 |
| | 11:15 AM | 0 | 110 | 24 | 5 | 116 | 1 | 0 | 0 | 1 | 5 | 0 | 1 | 263 |
| | 11:30 AM | 0 | 111 | 8 | 10 | 123 | 0 | 1 | 0 | 1 | 8 | 0 | 5 | 267 |
| | 11:45 AM | 0 | 103 | 7 | 11 | 107 | 2 | 1 | 0 | 1 | 7 | 0 | 8 | 247 |
| | 12:00 PM | 0 | 115 | 8 | 6 | 121 | 2 | 2 | 0 | 0 | 13 | 0 | 10 | 277 |
| | 12:15 PM | 0 | 110 | 8 | 15 | 124 | 0 | 2 | 0 | 3 | 12 | 0 | 7 | 281 |
| | 12:30 PM | 2 | 90 | 15 | 11 | 125 | 0 | 3 | 0 | 2 | 10 | 1 | 8 | 267 |
| | 12:45 PM | 0 | 117 | 15 | 9 | 125 | 0 | 1 | 0 | 2 | 9 | 0 | 5 | 283 |
| | VOLUMES | 2 | 856 | 93 | 76 | 937 | 6 | 11 | 0 | 14 | 74 | 1 | 53 | 2,123 |
| | APPROACH % | 0% | 90% | 10% | 7% | 92% | 1% | 44% | 0% | 56% | 58% | 1% | 41% | |
| APP/DEPART | 951 | / | 920 | 1,019 | / | 1,025 | 25 | / | 169 | 128 | / | 9 | 0 | |
| BEGIN PEAK HR | 12:00 PM | | | | | | | | | | | | | |
| VOLUMES | 2 | 432 | 46 | 41 | 495 | 2 | 8 | 0 | 7 | 44 | 1 | 30 | 1,108 | |
| APPROACH % | 0% | 90% | 10% | 8% | 92% | 0% | 53% | 0% | 47% | 59% | 1% | 40% | | |
| PEAK HR FACTOR | 0.909 | | | 0.968 | | | 0.750 | | | 0.815 | | | 0.979 | |
| APP/DEPART | 480 | / | 470 | 538 | / | 546 | 15 | / | 87 | 75 | / | 5 | 0 | |
| PM | 4:00 PM | 0 | 139 | 17 | 11 | 118 | 3 | 0 | 0 | 0 | 8 | 0 | 15 | 311 |
| | 4:15 PM | 0 | 126 | 16 | 23 | 121 | 1 | 1 | 0 | 1 | 7 | 0 | 13 | 309 |
| | 4:30 PM | 1 | 151 | 17 | 25 | 111 | 2 | 0 | 0 | 3 | 17 | 0 | 14 | 341 |
| | 4:45 PM | 0 | 112 | 26 | 18 | 125 | 5 | 2 | 0 | 3 | 21 | 0 | 34 | 346 |
| | 5:00 PM | 0 | 179 | 17 | 15 | 91 | 4 | 2 | 0 | 4 | 21 | 0 | 26 | 359 |
| | 5:15 PM | 0 | 146 | 25 | 16 | 123 | 1 | 1 | 1 | 1 | 11 | 0 | 18 | 343 |
| | 5:30 PM | 0 | 157 | 19 | 16 | 85 | 1 | 0 | 1 | 1 | 19 | 1 | 25 | 325 |
| | 5:45 PM | 0 | 123 | 17 | 12 | 95 | 2 | 2 | 0 | 1 | 14 | 0 | 12 | 278 |
| | VOLUMES | 1 | 1,133 | 154 | 136 | 869 | 19 | 8 | 2 | 14 | 118 | 1 | 157 | 2,612 |
| | APPROACH % | 0% | 88% | 12% | 13% | 85% | 2% | 33% | 8% | 58% | 43% | 0% | 57% | |
| APP/DEPART | 1,288 | / | 1,298 | 1,024 | / | 1,001 | 24 | / | 292 | 276 | / | 21 | 0 | |
| BEGIN PEAK HR | 4:30 PM | | | | | | | | | | | | | |
| VOLUMES | 1 | 588 | 85 | 74 | 450 | 12 | 5 | 1 | 11 | 70 | 0 | 92 | 1,389 | |
| APPROACH % | 0% | 87% | 13% | 14% | 84% | 2% | 29% | 6% | 65% | 43% | 0% | 57% | | |
| PEAK HR FACTOR | 0.860 | | | 0.905 | | | 0.708 | | | 0.736 | | | 0.967 | |
| APP/DEPART | 674 | / | 685 | 536 | / | 531 | 17 | / | 160 | 162 | / | 13 | 0 | |

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Thu, Dec 8, 16

LOCATION: Escondido
NORTH & SOUTH: Broadway
EAST & WEST: Mission

PROJECT #: SC1152
LOCATION #: 12
CONTROL: SIGNAL

| | | | | |
|--------|-------|-----|---|-----|
| NOTES: | AM | | ▲ | |
| | PM | | N | |
| | MD | ◀ W | | E ▶ |
| | OTHER | | S | |
| | OTHER | | ▼ | |

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|---------|---------|------------|---------|---------|-----------|---------|---------|-----------|---------|---------|-------|
| | Broadway | | | Broadway | | | Mission | | | Mission | | | |
| LANES: | NL 1 | NT 2 | NR 0 | SL 1 | ST 2 | SR 0 | EL 1 | ET 2 | ER 0 | WL 1 | WT 2 | WR 0 | |

| | | | | | | | | | | | | | | |
|----------------|------------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-------|
| AM | 7:00 AM | 27 | 114 | 12 | 35 | 157 | 25 | 14 | 41 | 14 | 13 | 145 | 80 | 677 |
| | 7:15 AM | 33 | 114 | 6 | 49 | 188 | 25 | 16 | 54 | 25 | 19 | 157 | 55 | 741 |
| | 7:30 AM | 36 | 115 | 8 | 46 | 187 | 30 | 21 | 38 | 22 | 21 | 149 | 53 | 726 |
| | 7:45 AM | 35 | 102 | 8 | 45 | 223 | 33 | 22 | 70 | 29 | 14 | 113 | 63 | 757 |
| | 8:00 AM | 21 | 94 | 12 | 50 | 178 | 45 | 25 | 61 | 30 | 24 | 109 | 44 | 693 |
| | 8:15 AM | 32 | 112 | 10 | 40 | 220 | 25 | 23 | 81 | 23 | 12 | 108 | 57 | 743 |
| | 8:30 AM | 21 | 94 | 12 | 40 | 184 | 27 | 27 | 67 | 19 | 14 | 89 | 46 | 640 |
| | 8:45 AM | 31 | 96 | 12 | 34 | 161 | 26 | 22 | 64 | 20 | 13 | 92 | 43 | 614 |
| | VOLUMES | 236 | 841 | 80 | 339 | 1,498 | 236 | 170 | 476 | 182 | 130 | 962 | 441 | 5,591 |
| | APPROACH % | 20% | 73% | 7% | 16% | 72% | 11% | 21% | 57% | 22% | 8% | 63% | 29% | |
| APP/DEPART | 1,157 | / | 1,452 | 2,073 | / | 1,810 | 828 | / | 895 | 1,533 | / | 1,434 | 0 | |
| BEGIN PEAK HR | 7:30 AM | | | | | | | | | | | | | |
| VOLUMES | 124 | 423 | 38 | 181 | 808 | 133 | 91 | 250 | 104 | 71 | 479 | 217 | 2,919 | |
| APPROACH % | 21% | 72% | 6% | 16% | 72% | 12% | 20% | 56% | 23% | 9% | 62% | 28% | | |
| PEAK HR FACTOR | 0.920 | | | 0.932 | | | 0.876 | | | 0.860 | | | 0.964 | |
| APP/DEPART | 585 | / | 731 | 1,122 | / | 983 | 445 | / | 469 | 767 | / | 736 | 0 | |
| MIDDAY | 11:00 AM | 41 | 150 | 17 | 38 | 148 | 29 | 28 | 76 | 28 | 17 | 78 | 39 | 689 |
| | 11:15 AM | 30 | 105 | 12 | 36 | 152 | 27 | 30 | 78 | 30 | 27 | 76 | 37 | 640 |
| | 11:30 AM | 36 | 124 | 25 | 29 | 137 | 33 | 31 | 94 | 31 | 25 | 78 | 45 | 688 |
| | 11:45 AM | 31 | 122 | 10 | 43 | 144 | 31 | 30 | 68 | 44 | 21 | 77 | 35 | 656 |
| | 12:00 PM | 31 | 131 | 22 | 38 | 137 | 30 | 28 | 95 | 32 | 29 | 73 | 43 | 689 |
| | 12:15 PM | 35 | 115 | 17 | 35 | 142 | 24 | 38 | 76 | 35 | 27 | 76 | 42 | 662 |
| | 12:30 PM | 33 | 141 | 30 | 26 | 122 | 22 | 36 | 92 | 35 | 18 | 74 | 39 | 668 |
| | 12:45 PM | 38 | 116 | 19 | 31 | 140 | 29 | 32 | 88 | 45 | 17 | 70 | 55 | 680 |
| | VOLUMES | 275 | 1,004 | 152 | 276 | 1,122 | 225 | 253 | 667 | 280 | 181 | 602 | 335 | 5,372 |
| | APPROACH % | 19% | 70% | 11% | 17% | 69% | 14% | 21% | 56% | 23% | 16% | 54% | 30% | |
| APP/DEPART | 1,431 | / | 1,592 | 1,623 | / | 1,583 | 1,200 | / | 1,095 | 1,118 | / | 1,102 | 0 | |
| BEGIN PEAK HR | 12:00 PM | | | | | | | | | | | | | |
| VOLUMES | 137 | 503 | 88 | 130 | 541 | 105 | 134 | 351 | 147 | 91 | 293 | 179 | 2,699 | |
| APPROACH % | 19% | 69% | 12% | 17% | 70% | 14% | 21% | 56% | 23% | 16% | 52% | 32% | | |
| PEAK HR FACTOR | 0.892 | | | 0.946 | | | 0.958 | | | 0.971 | | | 0.979 | |
| APP/DEPART | 728 | / | 816 | 776 | / | 779 | 632 | / | 569 | 563 | / | 535 | 0 | |
| PM | 4:00 PM | 34 | 152 | 22 | 59 | 178 | 26 | 42 | 170 | 50 | 21 | 99 | 54 | 907 |
| | 4:15 PM | 31 | 159 | 17 | 55 | 149 | 23 | 55 | 164 | 52 | 17 | 83 | 56 | 861 |
| | 4:30 PM | 27 | 179 | 30 | 58 | 199 | 21 | 43 | 147 | 45 | 24 | 81 | 44 | 898 |
| | 4:45 PM | 31 | 163 | 28 | 64 | 172 | 23 | 40 | 143 | 41 | 20 | 101 | 45 | 871 |
| | 5:00 PM | 32 | 180 | 31 | 59 | 162 | 19 | 54 | 182 | 54 | 22 | 106 | 56 | 957 |
| | 5:15 PM | 41 | 213 | 39 | 59 | 195 | 16 | 58 | 163 | 36 | 27 | 84 | 41 | 972 |
| | 5:30 PM | 38 | 154 | 24 | 51 | 147 | 30 | 48 | 178 | 46 | 31 | 109 | 50 | 906 |
| | 5:45 PM | 28 | 168 | 30 | 59 | 160 | 27 | 45 | 149 | 37 | 23 | 74 | 44 | 844 |
| | VOLUMES | 262 | 1,368 | 221 | 464 | 1,362 | 185 | 385 | 1,296 | 361 | 185 | 737 | 390 | 7,216 |
| | APPROACH % | 14% | 74% | 12% | 23% | 68% | 9% | 19% | 63% | 18% | 14% | 56% | 30% | |
| APP/DEPART | 1,851 | / | 2,143 | 2,011 | / | 1,908 | 2,042 | / | 1,981 | 1,312 | / | 1,184 | 0 | |
| BEGIN PEAK HR | 4:45 PM | | | | | | | | | | | | | |
| VOLUMES | 142 | 710 | 122 | 233 | 676 | 88 | 200 | 666 | 177 | 100 | 400 | 192 | 3,706 | |
| APPROACH % | 15% | 73% | 13% | 23% | 68% | 9% | 19% | 64% | 17% | 14% | 58% | 28% | | |
| PEAK HR FACTOR | 0.831 | | | 0.923 | | | 0.899 | | | 0.911 | | | 0.953 | |
| APP/DEPART | 974 | / | 1,102 | 997 | / | 953 | 1,043 | / | 1,021 | 692 | / | 630 | 0 | |

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Thu, Dec 8, 16

LOCATION: Escondido
NORTH & SOUTH: Broadway
EAST & WEST: Washington

PROJECT #: SC1152
LOCATION #: 13
CONTROL: SIGNAL

| | | | | | | | |
|--------|----|----|----|-------|-------|-------------|------------|
| NOTES: | AM | PM | MD | OTHER | OTHER | ▲ N ▼ | ◀ W E ▶ |
|--------|----|----|----|-------|-------|-------------|------------|

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | TOTAL |
|--------|------------|---------|---------|------------|---------|---------|------------|---------|---------|------------|---------|---------|-------|
| | Broadway | | | Broadway | | | Washington | | | Washington | | | |
| LANES: | NL 1 | NT 2 | NR 0 | SL 1 | ST 2 | SR 0 | EL 1 | ET 2 | ER 0 | WL 1 | WT 2 | WR 0 | |

| | | | | | | | | | | | | | | |
|----------------|------------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-------|
| AM | 7:00 AM | 10 | 56 | 1 | 41 | 104 | 16 | 15 | 40 | 8 | 11 | 154 | 56 | 512 |
| | 7:15 AM | 16 | 72 | 1 | 42 | 153 | 22 | 11 | 54 | 23 | 13 | 141 | 49 | 597 |
| | 7:30 AM | 15 | 69 | 2 | 56 | 121 | 13 | 10 | 58 | 10 | 14 | 155 | 56 | 579 |
| | 7:45 AM | 15 | 49 | 4 | 50 | 173 | 21 | 20 | 84 | 16 | 17 | 146 | 48 | 643 |
| | 8:00 AM | 17 | 59 | 4 | 46 | 137 | 22 | 19 | 71 | 13 | 26 | 138 | 48 | 600 |
| | 8:15 AM | 23 | 77 | 9 | 35 | 171 | 21 | 26 | 62 | 26 | 16 | 107 | 52 | 625 |
| | 8:30 AM | 14 | 76 | 4 | 41 | 131 | 9 | 19 | 62 | 25 | 14 | 100 | 30 | 525 |
| | 8:45 AM | 19 | 66 | 3 | 50 | 107 | 11 | 21 | 57 | 15 | 11 | 101 | 45 | 506 |
| | VOLUMES | 129 | 524 | 28 | 361 | 1,097 | 135 | 141 | 488 | 136 | 122 | 1,042 | 384 | 4,587 |
| | APPROACH % | 19% | 77% | 4% | 23% | 69% | 8% | 18% | 64% | 18% | 8% | 67% | 25% | |
| APP/DEPART | 681 | / | 1,049 | 1,593 | / | 1,355 | 765 | / | 877 | 1,548 | / | 1,306 | 0 | |
| BEGIN PEAK HR | 7:30 AM | | | | | | | | | | | | | |
| VOLUMES | 70 | 254 | 19 | 187 | 602 | 77 | 75 | 275 | 65 | 73 | 546 | 204 | 2,447 | |
| APPROACH % | 20% | 74% | 6% | 22% | 70% | 9% | 18% | 66% | 16% | 9% | 66% | 25% | | |
| PEAK HR FACTOR | 0.787 | | | 0.887 | | | 0.865 | | | 0.914 | | | 0.951 | |
| APP/DEPART | 343 | / | 533 | 866 | / | 740 | 415 | / | 481 | 823 | / | 693 | 0 | |
| MIDDAY | 11:00 AM | 24 | 102 | 10 | 49 | 93 | 30 | 38 | 72 | 20 | 17 | 92 | 44 | 591 |
| | 11:15 AM | 19 | 75 | 4 | 48 | 103 | 32 | 27 | 95 | 13 | 19 | 100 | 46 | 581 |
| | 11:30 AM | 24 | 77 | 8 | 48 | 91 | 27 | 36 | 100 | 23 | 11 | 98 | 43 | 586 |
| | 11:45 AM | 35 | 81 | 4 | 49 | 117 | 26 | 27 | 105 | 16 | 19 | 90 | 44 | 613 |
| | 12:00 PM | 23 | 84 | 2 | 49 | 91 | 25 | 20 | 103 | 14 | 15 | 92 | 39 | 557 |
| | 12:15 PM | 31 | 80 | 8 | 46 | 107 | 27 | 33 | 111 | 22 | 16 | 113 | 42 | 636 |
| | 12:30 PM | 30 | 100 | 9 | 42 | 95 | 25 | 39 | 108 | 19 | 7 | 98 | 45 | 617 |
| | 12:45 PM | 29 | 85 | 17 | 56 | 95 | 22 | 26 | 101 | 32 | 15 | 108 | 48 | 634 |
| | VOLUMES | 215 | 684 | 62 | 387 | 792 | 214 | 246 | 795 | 159 | 119 | 791 | 351 | 4,815 |
| | APPROACH % | 22% | 71% | 6% | 28% | 57% | 15% | 21% | 66% | 13% | 9% | 63% | 28% | |
| APP/DEPART | 961 | / | 1,280 | 1,393 | / | 1,070 | 1,200 | / | 1,244 | 1,261 | / | 1,221 | 0 | |
| BEGIN PEAK HR | 12:00 PM | | | | | | | | | | | | | |
| VOLUMES | 113 | 349 | 36 | 193 | 388 | 99 | 118 | 423 | 87 | 53 | 411 | 174 | 2,444 | |
| APPROACH % | 23% | 70% | 7% | 28% | 57% | 15% | 19% | 67% | 14% | 8% | 64% | 27% | | |
| PEAK HR FACTOR | 0.896 | | | 0.944 | | | 0.946 | | | 0.933 | | | 0.961 | |
| APP/DEPART | 498 | / | 640 | 680 | / | 528 | 628 | / | 652 | 638 | / | 624 | 0 | |
| PM | 4:00 PM | 28 | 102 | 11 | 63 | 121 | 21 | 49 | 166 | 14 | 15 | 110 | 48 | 748 |
| | 4:15 PM | 21 | 98 | 13 | 57 | 98 | 23 | 46 | 191 | 26 | 15 | 91 | 29 | 708 |
| | 4:30 PM | 37 | 101 | 12 | 67 | 106 | 28 | 52 | 190 | 14 | 23 | 91 | 50 | 771 |
| | 4:45 PM | 32 | 124 | 13 | 70 | 121 | 33 | 60 | 159 | 20 | 17 | 97 | 54 | 800 |
| | 5:00 PM | 40 | 141 | 12 | 40 | 80 | 26 | 45 | 175 | 18 | 12 | 93 | 54 | 736 |
| | 5:15 PM | 33 | 123 | 11 | 74 | 142 | 27 | 50 | 179 | 17 | 12 | 90 | 54 | 812 |
| | 5:30 PM | 15 | 106 | 17 | 71 | 102 | 29 | 35 | 183 | 15 | 21 | 109 | 57 | 760 |
| | 5:45 PM | 28 | 76 | 9 | 65 | 81 | 13 | 41 | 151 | 20 | 18 | 112 | 43 | 657 |
| | VOLUMES | 234 | 871 | 98 | 507 | 851 | 200 | 378 | 1,394 | 144 | 133 | 793 | 389 | 5,992 |
| | APPROACH % | 19% | 72% | 8% | 33% | 55% | 13% | 20% | 73% | 8% | 10% | 60% | 30% | |
| APP/DEPART | 1,203 | / | 1,638 | 1,558 | / | 1,128 | 1,916 | / | 1,999 | 1,315 | / | 1,227 | 0 | |
| BEGIN PEAK HR | 4:30 PM | | | | | | | | | | | | | |
| VOLUMES | 142 | 489 | 48 | 251 | 449 | 114 | 207 | 703 | 69 | 64 | 371 | 212 | 3,119 | |
| APPROACH % | 21% | 72% | 7% | 31% | 55% | 14% | 21% | 72% | 7% | 10% | 57% | 33% | | |
| PEAK HR FACTOR | 0.880 | | | 0.837 | | | 0.956 | | | 0.963 | | | 0.960 | |
| APP/DEPART | 679 | / | 908 | 814 | / | 582 | 979 | / | 1,002 | 647 | / | 627 | 0 | |

ADT1 Mission between Rock Springs and Quince.

Prepared by: Field Data Services of Arizona

Prepared by AimTD LLC tel. 714 253 7888

| AM Period | NB | SB | EB | WB | PM Period | NB | SB | EB | WB | | | | | | | | |
|-----------|----|----|-----|-----|-----------|------|------|-------|-----|---|---|---|-----|------|-----|-----|------|
| 0:30 | 0 | 0 | 11 | 15 | 12:00 | 0 | 0 | 207 | 160 | | | | | | | | |
| 0:15 | 0 | 0 | 6 | 10 | 12:15 | 0 | 0 | 198 | 227 | | | | | | | | |
| 0:30 | 0 | 0 | 8 | 11 | 12:30 | 0 | 0 | 207 | 218 | | | | | | | | |
| 0:45 | 0 | 0 | 4 | 29 | 6 | 42 | 71 | 12:45 | 0 | 0 | 0 | 0 | 184 | 796 | 219 | 824 | 1620 |
| 1:00 | 0 | 0 | 10 | 9 | 13:00 | 0 | 0 | 168 | 239 | | | | | | | | |
| 1:15 | 0 | 0 | 5 | 8 | 13:15 | 0 | 0 | 199 | 188 | | | | | | | | |
| 1:30 | 0 | 0 | 7 | 6 | 13:30 | 0 | 0 | 165 | 214 | | | | | | | | |
| 1:45 | 0 | 0 | 5 | 27 | 9 | 32 | 59 | 13:45 | 0 | 0 | 0 | 0 | 154 | 686 | 176 | 817 | 1503 |
| 2:00 | 0 | 0 | 4 | 4 | 14:00 | 0 | 0 | 190 | 215 | | | | | | | | |
| 2:15 | 0 | 0 | 5 | 9 | 14:15 | 0 | 0 | 170 | 215 | | | | | | | | |
| 2:30 | 0 | 0 | 0 | 6 | 14:30 | 0 | 0 | 230 | 223 | | | | | | | | |
| 2:45 | 0 | 0 | 4 | 13 | 1 | 20 | 33 | 14:45 | 0 | 0 | 0 | 0 | 215 | 805 | 212 | 865 | 1670 |
| 3:00 | 0 | 0 | 4 | 2 | 15:00 | 0 | 0 | 229 | 201 | | | | | | | | |
| 3:15 | 0 | 0 | 2 | 3 | 15:15 | 0 | 0 | 215 | 200 | | | | | | | | |
| 3:30 | 0 | 0 | 3 | 7 | 15:30 | 0 | 0 | 222 | 189 | | | | | | | | |
| 3:45 | 0 | 0 | 6 | 15 | 6 | 18 | 33 | 15:45 | 0 | 0 | 0 | 0 | 234 | 900 | 217 | 807 | 1707 |
| 4:00 | 0 | 0 | 4 | 7 | 16:00 | 0 | 0 | 290 | 188 | | | | | | | | |
| 4:15 | 0 | 0 | 5 | 17 | 16:15 | 0 | 0 | 252 | 209 | | | | | | | | |
| 4:30 | 0 | 0 | 9 | 28 | 16:30 | 0 | 0 | 275 | 197 | | | | | | | | |
| 4:45 | 0 | 0 | 14 | 32 | 39 | 91 | 123 | 16:45 | 0 | 0 | 0 | 0 | 220 | 1037 | 204 | 798 | 1835 |
| 5:00 | 0 | 0 | 16 | 45 | 17:00 | 0 | 0 | 280 | 191 | | | | | | | | |
| 5:15 | 0 | 0 | 17 | 74 | 17:15 | 0 | 0 | 278 | 193 | | | | | | | | |
| 5:30 | 0 | 0 | 32 | 89 | 17:30 | 0 | 0 | 241 | 182 | | | | | | | | |
| 5:45 | 0 | 0 | 34 | 99 | 171 | 379 | 478 | 17:45 | 0 | 0 | 0 | 0 | 204 | 1003 | 167 | 733 | 1736 |
| 6:00 | 0 | 0 | 47 | 143 | 18:00 | 0 | 0 | 183 | 170 | | | | | | | | |
| 6:15 | 0 | 0 | 66 | 170 | 18:15 | 0 | 0 | 155 | 122 | | | | | | | | |
| 6:30 | 0 | 0 | 67 | 219 | 18:30 | 0 | 0 | 145 | 127 | | | | | | | | |
| 6:45 | 0 | 0 | 67 | 247 | 308 | 840 | 1087 | 18:45 | 0 | 0 | 0 | 0 | 108 | 591 | 93 | 512 | 1103 |
| 7:00 | 0 | 0 | 91 | 263 | 19:00 | 0 | 0 | 87 | 100 | | | | | | | | |
| 7:15 | 0 | 0 | 85 | 294 | 19:15 | 0 | 0 | 77 | 80 | | | | | | | | |
| 7:30 | 0 | 0 | 104 | 350 | 19:30 | 0 | 0 | 71 | 113 | | | | | | | | |
| 7:45 | 0 | 0 | 132 | 412 | 332 | 1239 | 1651 | 19:45 | 0 | 0 | 0 | 0 | 78 | 313 | 58 | 351 | 664 |
| 8:00 | 0 | 0 | 137 | 318 | 20:00 | 0 | 0 | 70 | 63 | | | | | | | | |
| 8:15 | 0 | 0 | 120 | 301 | 20:15 | 0 | 0 | 56 | 60 | | | | | | | | |
| 8:30 | 0 | 0 | 115 | 225 | 20:30 | 0 | 0 | 55 | 61 | | | | | | | | |
| 8:45 | 0 | 0 | 130 | 502 | 234 | 1078 | 1580 | 20:45 | 0 | 0 | 0 | 0 | 56 | 237 | 46 | 230 | 467 |
| 9:00 | 0 | 0 | 129 | 196 | 21:00 | 0 | 0 | 56 | 55 | | | | | | | | |
| 9:15 | 0 | 0 | 131 | 174 | 21:15 | 0 | 0 | 35 | 45 | | | | | | | | |
| 9:30 | 0 | 0 | 147 | 189 | 21:30 | 0 | 0 | 39 | 38 | | | | | | | | |
| 9:45 | 0 | 0 | 146 | 553 | 190 | 749 | 1302 | 21:45 | 0 | 0 | 0 | 0 | 37 | 167 | 33 | 171 | 338 |
| 10:00 | 0 | 0 | 138 | 192 | 22:00 | 0 | 0 | 30 | 34 | | | | | | | | |
| 10:15 | 0 | 0 | 162 | 175 | 22:15 | 0 | 0 | 25 | 35 | | | | | | | | |
| 10:30 | 0 | 0 | 145 | 192 | 22:30 | 0 | 0 | 32 | 24 | | | | | | | | |
| 10:45 | 0 | 0 | 158 | 603 | 160 | 719 | 1322 | 22:45 | 0 | 0 | 0 | 0 | 21 | 108 | 20 | 113 | 221 |
| 11:00 | 0 | 0 | 167 | 187 | 23:00 | 0 | 0 | 23 | 24 | | | | | | | | |
| 11:15 | 0 | 0 | 154 | 179 | 23:15 | 0 | 0 | 13 | 24 | | | | | | | | |
| 11:30 | 0 | 0 | 180 | 226 | 23:30 | 0 | 0 | 17 | 14 | | | | | | | | |
| 11:45 | 0 | 0 | 167 | 668 | 199 | 791 | 1459 | 23:45 | 0 | 0 | 0 | 0 | 12 | 65 | 20 | 82 | 147 |

Total Vol. 3200 5998 **9198** 6708 6303 **13011**

| Daily Totals | | | | |
|--------------|----|------|-------|--------------|
| NB | SB | EB | WB | Combined |
| | | 9908 | 12301 | 22209 |

AM

PM

| Split % | AM | | | PM | | | | |
|------------------|-------|-------|--------------|-------|-------------|--------------|-------|--------------|
| | 34.8% | 65.2% | 41.4% | 51.6% | 48.4% | 58.6% | | |
| Peak Hour | 0:30 | 0:30 | 11:45 | 7:30 | 7:30 | 16:30 | 12:15 | 15:45 |
| Volume | | | 779 | 1301 | 1794 | 1053 | 903 | 1862 |
| P.H.F. | | | 0.94 | 0.93 | 0.97 | 0.94 | 0.94 | 0.97 |

ADT2 Mission between Quince and Centre City.

Prepared by: Field Data Services of Arizona

Prepared by AimTD LLC tel. 714 253 7888

| AM Period | NB | SB | EB | WB | PM Period | NB | SB | EB | WB | | | |
|-----------|----|----|-----|-----|-----------|----|----|-----|------|-----|-----|------|
| 0:30 | 0 | 0 | 15 | 14 | 12:00 | 0 | 0 | 213 | 241 | | | |
| 0:15 | 0 | 0 | 14 | 14 | 12:15 | 0 | 0 | 253 | 224 | | | |
| 0:30 | 0 | 0 | 8 | 16 | 12:30 | 0 | 0 | 221 | 229 | | | |
| 0:45 | 0 | 0 | 17 | 54 | 12:45 | 0 | 0 | 222 | 909 | 247 | 941 | 1850 |
| 1:00 | 0 | 0 | 17 | 11 | 13:00 | 0 | 0 | 217 | 245 | | | |
| 1:15 | 0 | 0 | 10 | 10 | 13:15 | 0 | 0 | 236 | 218 | | | |
| 1:30 | 0 | 0 | 8 | 10 | 13:30 | 0 | 0 | 226 | 235 | | | |
| 1:45 | 0 | 0 | 10 | 45 | 13:45 | 0 | 0 | 224 | 903 | 218 | 916 | 1819 |
| 2:00 | 0 | 0 | 6 | 11 | 14:00 | 0 | 0 | 250 | 187 | | | |
| 2:15 | 0 | 0 | 10 | 7 | 14:15 | 0 | 0 | 249 | 202 | | | |
| 2:30 | 0 | 0 | 8 | 5 | 14:30 | 0 | 0 | 220 | 208 | | | |
| 2:45 | 0 | 0 | 4 | 28 | 14:45 | 0 | 0 | 265 | 984 | 224 | 821 | 1805 |
| 3:00 | 0 | 0 | 13 | 5 | 15:00 | 0 | 0 | 227 | 200 | | | |
| 3:15 | 0 | 0 | 6 | 9 | 15:15 | 0 | 0 | 283 | 197 | | | |
| 3:30 | 0 | 0 | 6 | 14 | 15:30 | 0 | 0 | 252 | 224 | | | |
| 3:45 | 0 | 0 | 6 | 31 | 15:45 | 0 | 0 | 309 | 1071 | 220 | 841 | 1912 |
| 4:00 | 0 | 0 | 12 | 16 | 16:00 | 0 | 0 | 306 | 192 | | | |
| 4:15 | 0 | 0 | 12 | 12 | 16:15 | 0 | 0 | 329 | 231 | | | |
| 4:30 | 0 | 0 | 13 | 40 | 16:30 | 0 | 0 | 337 | 211 | | | |
| 4:45 | 0 | 0 | 19 | 56 | 16:45 | 0 | 0 | 283 | 1255 | 183 | 817 | 2072 |
| 5:00 | 0 | 0 | 9 | 44 | 17:00 | 0 | 0 | 327 | 187 | | | |
| 5:15 | 0 | 0 | 20 | 68 | 17:15 | 0 | 0 | 343 | 184 | | | |
| 5:30 | 0 | 0 | 48 | 124 | 17:30 | 0 | 0 | 260 | 181 | | | |
| 5:45 | 0 | 0 | 35 | 112 | 17:45 | 0 | 0 | 301 | 1231 | 188 | 740 | 1971 |
| 6:00 | 0 | 0 | 46 | 168 | 18:00 | 0 | 0 | 226 | 181 | | | |
| 6:15 | 0 | 0 | 60 | 217 | 18:15 | 0 | 0 | 193 | 141 | | | |
| 6:30 | 0 | 0 | 69 | 210 | 18:30 | 0 | 0 | 174 | 133 | | | |
| 6:45 | 0 | 0 | 95 | 270 | 18:45 | 0 | 0 | 135 | 728 | 129 | 584 | 1312 |
| 7:00 | 0 | 0 | 91 | 276 | 19:00 | 0 | 0 | 120 | 97 | | | |
| 7:15 | 0 | 0 | 92 | 329 | 19:15 | 0 | 0 | 116 | 91 | | | |
| 7:30 | 0 | 0 | 133 | 323 | 19:30 | 0 | 0 | 129 | 109 | | | |
| 7:45 | 0 | 0 | 121 | 437 | 19:45 | 0 | 0 | 82 | 447 | 91 | 388 | 835 |
| 8:00 | 0 | 0 | 131 | 344 | 20:00 | 0 | 0 | 108 | 88 | | | |
| 8:15 | 0 | 0 | 166 | 322 | 20:15 | 0 | 0 | 86 | 79 | | | |
| 8:30 | 0 | 0 | 141 | 269 | 20:30 | 0 | 0 | 66 | 71 | | | |
| 8:45 | 0 | 0 | 180 | 618 | 20:45 | 0 | 0 | 63 | 323 | 79 | 317 | 640 |
| 9:00 | 0 | 0 | 136 | 217 | 21:00 | 0 | 0 | 73 | 93 | | | |
| 9:15 | 0 | 0 | 186 | 204 | 21:15 | 0 | 0 | 57 | 73 | | | |
| 9:30 | 0 | 0 | 137 | 202 | 21:30 | 0 | 0 | 69 | 62 | | | |
| 9:45 | 0 | 0 | 183 | 642 | 21:45 | 0 | 0 | 30 | 229 | 50 | 278 | 507 |
| 10:00 | 0 | 0 | 162 | 185 | 22:00 | 0 | 0 | 52 | 49 | | | |
| 10:15 | 0 | 0 | 208 | 242 | 22:15 | 0 | 0 | 53 | 39 | | | |
| 10:30 | 0 | 0 | 182 | 191 | 22:30 | 0 | 0 | 33 | 23 | | | |
| 10:45 | 0 | 0 | 195 | 747 | 22:45 | 0 | 0 | 34 | 172 | 31 | 142 | 314 |
| 11:00 | 0 | 0 | 216 | 254 | 23:00 | 0 | 0 | 41 | 18 | | | |
| 11:15 | 0 | 0 | 242 | 227 | 23:15 | 0 | 0 | 34 | 24 | | | |
| 11:30 | 0 | 0 | 210 | 250 | 23:30 | 0 | 0 | 22 | 25 | | | |
| 11:45 | 0 | 0 | 225 | 893 | 23:45 | 0 | 0 | 23 | 120 | 15 | 82 | 202 |

Total Vol. 3933 6777 **10710** 8372 6867 **15239**

Daily Totals

| NB | Front | SB | EB | Side | WB | Combined |
|----|-------|----|-------|------|-------|--------------|
| | | | 12305 | | 13644 | 25949 |

AM

PM

| Split % | AM | | | PM | | |
|------------------|-------|-------|------------------------|-------|-------|--------------|
| | 36.7% | 63.3% | 41.3% | 54.9% | 45.1% | 58.7% |
| Peak Hour | 0:30 | 0:30 | 11:45 7:15 7:30 | 16:30 | 12:15 | 15:45 |
| Volume | | | 912 1343 1887 | 1290 | 945 | 2135 |
| P.H.F. | | | 0.90 0.97 0.97 | 0.94 | 0.96 | 0.95 |

| AM Period | NB | SB | EB | WB | PM Period | NB | SB | EB | WB | | | |
|-----------|----|----|-----|-----|-----------|----|----|-----|------|-----|-----|------|
| 0:30 | 0 | 0 | 16 | 13 | 12:00 | 0 | 0 | 229 | 216 | | | |
| 0:15 | 0 | 0 | 11 | 16 | 12:15 | 0 | 0 | 224 | 224 | | | |
| 0:30 | 0 | 0 | 10 | 10 | 12:30 | 0 | 0 | 218 | 192 | | | |
| 0:45 | 0 | 0 | 12 | 49 | 12:45 | 0 | 0 | 195 | 866 | 202 | 834 | 1700 |
| 1:00 | 0 | 0 | 15 | 6 | 13:00 | 0 | 0 | 201 | 225 | | | |
| 1:15 | 0 | 0 | 6 | 8 | 13:15 | 0 | 0 | 221 | 207 | | | |
| 1:30 | 0 | 0 | 11 | 7 | 13:30 | 0 | 0 | 209 | 185 | | | |
| 1:45 | 0 | 0 | 11 | 43 | 13:45 | 0 | 0 | 194 | 825 | 177 | 794 | 1619 |
| 2:00 | 0 | 0 | 6 | 7 | 14:00 | 0 | 0 | 210 | 157 | | | |
| 2:15 | 0 | 0 | 7 | 6 | 14:15 | 0 | 0 | 225 | 174 | | | |
| 2:30 | 0 | 0 | 5 | 3 | 14:30 | 0 | 0 | 203 | 165 | | | |
| 2:45 | 0 | 0 | 4 | 22 | 14:45 | 0 | 0 | 253 | 891 | 179 | 675 | 1566 |
| 3:00 | 0 | 0 | 12 | 3 | 15:00 | 0 | 0 | 211 | 183 | | | |
| 3:15 | 0 | 0 | 8 | 5 | 15:15 | 0 | 0 | 271 | 209 | | | |
| 3:30 | 0 | 0 | 4 | 7 | 15:30 | 0 | 0 | 242 | 198 | | | |
| 3:45 | 0 | 0 | 3 | 27 | 15:45 | 0 | 0 | 277 | 1001 | 204 | 794 | 1795 |
| 4:00 | 0 | 0 | 11 | 11 | 16:00 | 0 | 0 | 253 | 189 | | | |
| 4:15 | 0 | 0 | 7 | 6 | 16:15 | 0 | 0 | 293 | 203 | | | |
| 4:30 | 0 | 0 | 12 | 24 | 16:30 | 0 | 0 | 306 | 206 | | | |
| 4:45 | 0 | 0 | 13 | 43 | 16:45 | 0 | 0 | 260 | 1112 | 188 | 786 | 1898 |
| 5:00 | 0 | 0 | 10 | 30 | 17:00 | 0 | 0 | 284 | 208 | | | |
| 5:15 | 0 | 0 | 14 | 52 | 17:15 | 0 | 0 | 294 | 197 | | | |
| 5:30 | 0 | 0 | 42 | 84 | 17:30 | 0 | 0 | 265 | 181 | | | |
| 5:45 | 0 | 0 | 29 | 95 | 17:45 | 0 | 0 | 261 | 1104 | 197 | 783 | 1887 |
| 6:00 | 0 | 0 | 47 | 176 | 18:00 | 0 | 0 | 211 | 176 | | | |
| 6:15 | 0 | 0 | 45 | 215 | 18:15 | 0 | 0 | 190 | 147 | | | |
| 6:30 | 0 | 0 | 60 | 232 | 18:30 | 0 | 0 | 181 | 124 | | | |
| 6:45 | 0 | 0 | 84 | 236 | 18:45 | 0 | 0 | 118 | 700 | 121 | 568 | 1268 |
| 7:00 | 0 | 0 | 69 | 223 | 19:00 | 0 | 0 | 118 | 111 | | | |
| 7:15 | 0 | 0 | 86 | 256 | 19:15 | 0 | 0 | 126 | 97 | | | |
| 7:30 | 0 | 0 | 138 | 262 | 19:30 | 0 | 0 | 120 | 110 | | | |
| 7:45 | 0 | 0 | 129 | 422 | 19:45 | 0 | 0 | 95 | 459 | 82 | 400 | 859 |
| 8:00 | 0 | 0 | 124 | 248 | 20:00 | 0 | 0 | 104 | 103 | | | |
| 8:15 | 0 | 0 | 171 | 232 | 20:15 | 0 | 0 | 70 | 75 | | | |
| 8:30 | 0 | 0 | 157 | 180 | 20:30 | 0 | 0 | 74 | 69 | | | |
| 8:45 | 0 | 0 | 176 | 628 | 20:45 | 0 | 0 | 68 | 316 | 71 | 318 | 634 |
| 9:00 | 0 | 0 | 147 | 171 | 21:00 | 0 | 0 | 62 | 83 | | | |
| 9:15 | 0 | 0 | 164 | 164 | 21:15 | 0 | 0 | 56 | 79 | | | |
| 9:30 | 0 | 0 | 137 | 171 | 21:30 | 0 | 0 | 67 | 58 | | | |
| 9:45 | 0 | 0 | 164 | 612 | 21:45 | 0 | 0 | 40 | 225 | 50 | 270 | 495 |
| 10:00 | 0 | 0 | 152 | 138 | 22:00 | 0 | 0 | 50 | 46 | | | |
| 10:15 | 0 | 0 | 212 | 192 | 22:15 | 0 | 0 | 46 | 32 | | | |
| 10:30 | 0 | 0 | 177 | 165 | 22:30 | 0 | 0 | 32 | 22 | | | |
| 10:45 | 0 | 0 | 190 | 731 | 22:45 | 0 | 0 | 38 | 166 | 29 | 129 | 295 |
| 11:00 | 0 | 0 | 203 | 212 | 23:00 | 0 | 0 | 27 | 15 | | | |
| 11:15 | 0 | 0 | 234 | 205 | 23:15 | 0 | 0 | 31 | 24 | | | |
| 11:30 | 0 | 0 | 218 | 220 | 23:30 | 0 | 0 | 20 | 22 | | | |
| 11:45 | 0 | 0 | 219 | 874 | 23:45 | 0 | 0 | 22 | 100 | 15 | 76 | 176 |

Total Vol. 3782 5442 **9224** 7765 6427 **14192**

| Daily Totals | | | | | | |
|--------------|-------|----|-------|------|-------|--------------|
| NB | Front | SB | EB | Side | WB | Combined |
| | | | 11547 | | 11869 | 23416 |

AM

PM

| Split % | AM | | | PM | | |
|------------------|-------|-------|-------------------------|-------|-------|--------------|
| | 41.0% | 59.0% | 39.4% | 54.7% | 45.3% | 60.6% |
| Peak Hour | 0:30 | 0:30 | 11:15 6:45 11:30 | 16:30 | 12:15 | 16:15 |
| Volume | | | 900 1035 1769 | 1144 | 843 | 1948 |
| P.H.F. | | | 0.96 0.88 0.99 | 0.93 | 0.94 | 0.95 |

| AM Period | NB | SB | EB | WB | PM Period | NB | SB | EB | WB | | | | | | | | |
|-----------|----|----|-----|-----|-----------|-----|------|-------|-----|---|---|---|-----|------|-----|-----|------|
| 0:30 | 0 | 0 | 16 | 13 | 12:00 | 0 | 0 | 131 | 148 | | | | | | | | |
| 0:15 | 0 | 0 | 14 | 2 | 12:15 | 0 | 0 | 173 | 132 | | | | | | | | |
| 0:30 | 0 | 0 | 11 | 7 | 12:30 | 0 | 0 | 155 | 114 | | | | | | | | |
| 0:45 | 0 | 0 | 9 | 50 | 3 | 25 | 75 | 12:45 | 0 | 0 | 0 | 0 | 181 | 640 | 149 | 543 | 1183 |
| 1:00 | 0 | 0 | 12 | 4 | 13:00 | 0 | 0 | 165 | 105 | | | | | | | | |
| 1:15 | 0 | 0 | 11 | 5 | 13:15 | 0 | 0 | 172 | 119 | | | | | | | | |
| 1:30 | 0 | 0 | 7 | 7 | 13:30 | 0 | 0 | 163 | 114 | | | | | | | | |
| 1:45 | 0 | 0 | 5 | 35 | 7 | 23 | 58 | 13:45 | 0 | 0 | 0 | 0 | 175 | 675 | 147 | 485 | 1160 |
| 2:00 | 0 | 0 | 10 | 7 | 14:00 | 0 | 0 | 178 | 106 | | | | | | | | |
| 2:15 | 0 | 0 | 5 | 4 | 14:15 | 0 | 0 | 170 | 156 | | | | | | | | |
| 2:30 | 0 | 0 | 3 | 7 | 14:30 | 0 | 0 | 164 | 140 | | | | | | | | |
| 2:45 | 0 | 0 | 2 | 20 | 1 | 19 | 39 | 14:45 | 0 | 0 | 0 | 0 | 208 | 720 | 135 | 537 | 1257 |
| 3:00 | 0 | 0 | 10 | 3 | 15:00 | 0 | 0 | 178 | 143 | | | | | | | | |
| 3:15 | 0 | 0 | 4 | 2 | 15:15 | 0 | 0 | 212 | 162 | | | | | | | | |
| 3:30 | 0 | 0 | 4 | 6 | 15:30 | 0 | 0 | 205 | 139 | | | | | | | | |
| 3:45 | 0 | 0 | 9 | 27 | 7 | 18 | 45 | 15:45 | 0 | 0 | 0 | 0 | 227 | 822 | 156 | 600 | 1422 |
| 4:00 | 0 | 0 | 9 | 6 | 16:00 | 0 | 0 | 247 | 150 | | | | | | | | |
| 4:15 | 0 | 0 | 6 | 12 | 16:15 | 0 | 0 | 285 | 141 | | | | | | | | |
| 4:30 | 0 | 0 | 6 | 19 | 16:30 | 0 | 0 | 217 | 134 | | | | | | | | |
| 4:45 | 0 | 0 | 9 | 30 | 32 | 69 | 99 | 16:45 | 0 | 0 | 0 | 0 | 215 | 964 | 154 | 579 | 1543 |
| 5:00 | 0 | 0 | 10 | 24 | 17:00 | 0 | 0 | 274 | 166 | | | | | | | | |
| 5:15 | 0 | 0 | 15 | 52 | 17:15 | 0 | 0 | 277 | 152 | | | | | | | | |
| 5:30 | 0 | 0 | 23 | 59 | 17:30 | 0 | 0 | 272 | 156 | | | | | | | | |
| 5:45 | 0 | 0 | 30 | 78 | 117 | 252 | 330 | 17:45 | 0 | 0 | 0 | 0 | 229 | 1052 | 152 | 626 | 1678 |
| 6:00 | 0 | 0 | 31 | 123 | 18:00 | 0 | 0 | 191 | 130 | | | | | | | | |
| 6:15 | 0 | 0 | 62 | 174 | 18:15 | 0 | 0 | 176 | 95 | | | | | | | | |
| 6:30 | 0 | 0 | 70 | 188 | 18:30 | 0 | 0 | 159 | 114 | | | | | | | | |
| 6:45 | 0 | 0 | 72 | 235 | 218 | 703 | 938 | 18:45 | 0 | 0 | 0 | 0 | 131 | 657 | 88 | 427 | 1084 |
| 7:00 | 0 | 0 | 74 | 175 | 19:00 | 0 | 0 | 115 | 82 | | | | | | | | |
| 7:15 | 0 | 0 | 95 | 233 | 19:15 | 0 | 0 | 99 | 90 | | | | | | | | |
| 7:30 | 0 | 0 | 78 | 206 | 19:30 | 0 | 0 | 108 | 82 | | | | | | | | |
| 7:45 | 0 | 0 | 127 | 374 | 183 | 797 | 1171 | 19:45 | 0 | 0 | 0 | 0 | 73 | 395 | 47 | 301 | 696 |
| 8:00 | 0 | 0 | 119 | 142 | 20:00 | 0 | 0 | 102 | 52 | | | | | | | | |
| 8:15 | 0 | 0 | 135 | 171 | 20:15 | 0 | 0 | 75 | 69 | | | | | | | | |
| 8:30 | 0 | 0 | 117 | 119 | 20:30 | 0 | 0 | 70 | 54 | | | | | | | | |
| 8:45 | 0 | 0 | 99 | 470 | 151 | 583 | 1053 | 20:45 | 0 | 0 | 0 | 0 | 82 | 329 | 56 | 231 | 560 |
| 9:00 | 0 | 0 | 111 | 98 | 21:00 | 0 | 0 | 82 | 54 | | | | | | | | |
| 9:15 | 0 | 0 | 91 | 123 | 21:15 | 0 | 0 | 61 | 42 | | | | | | | | |
| 9:30 | 0 | 0 | 117 | 108 | 21:30 | 0 | 0 | 64 | 33 | | | | | | | | |
| 9:45 | 0 | 0 | 117 | 436 | 115 | 444 | 880 | 21:45 | 0 | 0 | 0 | 0 | 52 | 259 | 36 | 165 | 424 |
| 10:00 | 0 | 0 | 109 | 109 | 22:00 | 0 | 0 | 49 | 28 | | | | | | | | |
| 10:15 | 0 | 0 | 120 | 119 | 22:15 | 0 | 0 | 43 | 30 | | | | | | | | |
| 10:30 | 0 | 0 | 111 | 111 | 22:30 | 0 | 0 | 36 | 18 | | | | | | | | |
| 10:45 | 0 | 0 | 126 | 466 | 114 | 453 | 919 | 22:45 | 0 | 0 | 0 | 0 | 32 | 160 | 19 | 95 | 255 |
| 11:00 | 0 | 0 | 126 | 117 | 23:00 | 0 | 0 | 36 | 22 | | | | | | | | |
| 11:15 | 0 | 0 | 141 | 129 | 23:15 | 0 | 0 | 18 | 13 | | | | | | | | |
| 11:30 | 0 | 0 | 133 | 135 | 23:30 | 0 | 0 | 22 | 12 | | | | | | | | |
| 11:45 | 0 | 0 | 167 | 567 | 128 | 509 | 1076 | 23:45 | 0 | 0 | 0 | 0 | 14 | 90 | 19 | 66 | 156 |

Total Vol. 2788 3895 **6683** 6763 4655 **11418**

| Daily Totals | | | | |
|--------------|----|------|------|--------------|
| NB | SB | EB | WB | Combined |
| | | 9551 | 8550 | 18101 |

AM

PM

| Split % | AM | | | PM | | |
|------------------|-------|-------|------------------------|-------|-------|--------------|
| | 41.7% | 58.3% | 36.9% | 59.2% | 40.8% | 63.1% |
| Peak Hour | 0:30 | 0:30 | 11:45 6:45 7:15 | 17:00 | 16:45 | 17:00 |
| Volume | | | 626 832 1183 | 1052 | 628 | 1678 |
| P.H.F. | | | 0.90 0.89 0.90 | 0.95 | 0.95 | 0.95 |

ADT5 Centre City between Decatur and SR-78.

Prepared by: Field Data Services of Arizona

Prepared by AimTD LLC tel. 714 253 7888

| AM Period | NB | SB | EB | WB | PM Period | NB | SB | EB | WB | | | | | |
|-----------|-----|-----|-----|------|-----------|-----|------|-----|-----|---|---|---|---|------|
| 0:30 | 16 | 16 | 0 | 0 | 12:00 | 134 | 190 | 0 | 0 | | | | | |
| 0:15 | 16 | 12 | 0 | 0 | 12:15 | 163 | 202 | 0 | 0 | | | | | |
| 0:30 | 11 | 9 | 0 | 0 | 12:30 | 156 | 191 | 0 | 0 | | | | | |
| 0:45 | 12 | 55 | 12 | 49 | 12:45 | 158 | 611 | 191 | 774 | 0 | 0 | 0 | 0 | 1385 |
| 1:00 | 12 | 10 | 0 | 0 | 13:00 | 171 | 178 | 0 | 0 | | | | | |
| 1:15 | 8 | 10 | 0 | 0 | 13:15 | 182 | 189 | 0 | 0 | | | | | |
| 1:30 | 10 | 9 | 0 | 0 | 13:30 | 201 | 244 | 0 | 0 | | | | | |
| 1:45 | 9 | 39 | 7 | 36 | 13:45 | 163 | 717 | 199 | 810 | 0 | 0 | 0 | 0 | 1527 |
| 2:00 | 6 | 11 | 0 | 0 | 14:00 | 154 | 247 | 0 | 0 | | | | | |
| 2:15 | 5 | 9 | 0 | 0 | 14:15 | 191 | 231 | 0 | 0 | | | | | |
| 2:30 | 6 | 9 | 0 | 0 | 14:30 | 199 | 219 | 0 | 0 | | | | | |
| 2:45 | 7 | 24 | 7 | 36 | 14:45 | 227 | 771 | 188 | 885 | 0 | 0 | 0 | 0 | 1656 |
| 3:00 | 7 | 8 | 0 | 0 | 15:00 | 215 | 226 | 0 | 0 | | | | | |
| 3:15 | 8 | 21 | 0 | 0 | 15:15 | 255 | 204 | 0 | 0 | | | | | |
| 3:30 | 6 | 15 | 0 | 0 | 15:30 | 249 | 186 | 0 | 0 | | | | | |
| 3:45 | 6 | 27 | 20 | 64 | 15:45 | 275 | 994 | 208 | 824 | 0 | 0 | 0 | 0 | 1818 |
| 4:00 | 6 | 26 | 0 | 0 | 16:00 | 266 | 193 | 0 | 0 | | | | | |
| 4:15 | 4 | 35 | 0 | 0 | 16:15 | 297 | 195 | 0 | 0 | | | | | |
| 4:30 | 14 | 46 | 0 | 0 | 16:30 | 282 | 188 | 0 | 0 | | | | | |
| 4:45 | 12 | 36 | 65 | 172 | 16:45 | 288 | 1133 | 182 | 758 | 0 | 0 | 0 | 0 | 1891 |
| 5:00 | 16 | 90 | 0 | 0 | 17:00 | 280 | 194 | 0 | 0 | | | | | |
| 5:15 | 17 | 166 | 0 | 0 | 17:15 | 332 | 193 | 0 | 0 | | | | | |
| 5:30 | 36 | 213 | 0 | 0 | 17:30 | 290 | 176 | 0 | 0 | | | | | |
| 5:45 | 43 | 112 | 224 | 693 | 17:45 | 279 | 1181 | 172 | 735 | 0 | 0 | 0 | 0 | 1916 |
| 6:00 | 50 | 278 | 0 | 0 | 18:00 | 238 | 150 | 0 | 0 | | | | | |
| 6:15 | 50 | 329 | 0 | 0 | 18:15 | 264 | 153 | 0 | 0 | | | | | |
| 6:30 | 68 | 367 | 0 | 0 | 18:30 | 207 | 113 | 0 | 0 | | | | | |
| 6:45 | 68 | 236 | 379 | 1353 | 18:45 | 167 | 876 | 135 | 551 | 0 | 0 | 0 | 0 | 1427 |
| 7:00 | 91 | 429 | 0 | 0 | 19:00 | 163 | 112 | 0 | 0 | | | | | |
| 7:15 | 122 | 448 | 0 | 0 | 19:15 | 169 | 103 | 0 | 0 | | | | | |
| 7:30 | 109 | 490 | 0 | 0 | 19:30 | 162 | 114 | 0 | 0 | | | | | |
| 7:45 | 132 | 454 | 513 | 1880 | 19:45 | 133 | 627 | 89 | 418 | 0 | 0 | 0 | 0 | 1045 |
| 8:00 | 108 | 447 | 0 | 0 | 20:00 | 129 | 74 | 0 | 0 | | | | | |
| 8:15 | 119 | 350 | 0 | 0 | 20:15 | 111 | 70 | 0 | 0 | | | | | |
| 8:30 | 113 | 310 | 0 | 0 | 20:30 | 117 | 62 | 0 | 0 | | | | | |
| 8:45 | 115 | 455 | 283 | 1390 | 20:45 | 97 | 454 | 73 | 279 | 0 | 0 | 0 | 0 | 733 |
| 9:00 | 113 | 225 | 0 | 0 | 21:00 | 111 | 64 | 0 | 0 | | | | | |
| 9:15 | 112 | 269 | 0 | 0 | 21:15 | 93 | 60 | 0 | 0 | | | | | |
| 9:30 | 112 | 229 | 0 | 0 | 21:30 | 87 | 51 | 0 | 0 | | | | | |
| 9:45 | 109 | 446 | 219 | 942 | 21:45 | 77 | 368 | 47 | 222 | 0 | 0 | 0 | 0 | 590 |
| 10:00 | 121 | 200 | 0 | 0 | 22:00 | 69 | 40 | 0 | 0 | | | | | |
| 10:15 | 131 | 217 | 0 | 0 | 22:15 | 58 | 37 | 0 | 0 | | | | | |
| 10:30 | 112 | 191 | 0 | 0 | 22:30 | 50 | 37 | 0 | 0 | | | | | |
| 10:45 | 109 | 473 | 208 | 816 | 22:45 | 39 | 216 | 34 | 148 | 0 | 0 | 0 | 0 | 364 |
| 11:00 | 130 | 192 | 0 | 0 | 23:00 | 52 | 31 | 0 | 0 | | | | | |
| 11:15 | 111 | 233 | 0 | 0 | 23:15 | 26 | 30 | 0 | 0 | | | | | |
| 11:30 | 152 | 255 | 0 | 0 | 23:30 | 28 | 19 | 0 | 0 | | | | | |
| 11:45 | 152 | 545 | 175 | 855 | 23:45 | 21 | 127 | 9 | 89 | 0 | 0 | 0 | 0 | 216 |

Total Vol. 2902 8286 **11188** 8075 6493 **14568**

| | | | | | Daily Totals | | | | |
|--|--|--|--|--|--------------|-------|----|----|----------|
| | | | | | NB | SB | EB | WB | Combined |
| | | | | | 10977 | 14779 | | | 25756 |

| AM | | | | | PM | | | | | |
|-----------|-------|-------|--------------|------|-------------|-------|--------------|--------------|--|--|
| Split % | 25.9% | 74.1% | 43.4% | | 55.4% | 44.6% | 56.6% | | | |
| Peak Hour | 11:45 | 7:15 | 0:30 | 0:30 | 7:15 | 16:45 | 13:30 | 16:30 | | |
| Volume | 605 | 1898 | 2369 | | 1190 | 921 | 1939 | | | |
| P.H.F. | 0.93 | 0.92 | 0.92 | | 0.93 | 0.93 | 0.92 | | | |

ADT8 Centre City south of Washington.

Prepared by: Field Data Services of Arizona

Prepared by AimTD LLC tel. 714 253 7888

| AM Period | NB | SB | EB | WB | PM Period | NB | SB | EB | WB | | | | | |
|-----------|-----|-----|-----|-----|-----------|-----|------|-----|-----|---|---|---|---|------|
| 0:30 | 10 | 13 | 0 | 0 | 12:00 | 185 | 166 | 0 | 0 | | | | | |
| 0:15 | 14 | 10 | 0 | 0 | 12:15 | 188 | 161 | 0 | 0 | | | | | |
| 0:30 | 15 | 10 | 0 | 0 | 12:30 | 186 | 177 | 0 | 0 | | | | | |
| 0:45 | 14 | 53 | 6 | 39 | 12:45 | 213 | 772 | 178 | 682 | 0 | 0 | 0 | 0 | 1454 |
| 1:00 | 10 | 2 | 0 | 0 | 13:00 | 229 | 171 | 0 | 0 | | | | | |
| 1:15 | 13 | 7 | 0 | 0 | 13:15 | 180 | 182 | 0 | 0 | | | | | |
| 1:30 | 7 | 15 | 0 | 0 | 13:30 | 195 | 179 | 0 | 0 | | | | | |
| 1:45 | 12 | 42 | 6 | 30 | 13:45 | 204 | 808 | 194 | 726 | 0 | 0 | 0 | 0 | 1534 |
| 2:00 | 13 | 6 | 0 | 0 | 14:00 | 204 | 180 | 0 | 0 | | | | | |
| 2:15 | 6 | 3 | 0 | 0 | 14:15 | 187 | 183 | 0 | 0 | | | | | |
| 2:30 | 6 | 9 | 0 | 0 | 14:30 | 217 | 210 | 0 | 0 | | | | | |
| 2:45 | 5 | 30 | 2 | 20 | 14:45 | 197 | 805 | 191 | 764 | 0 | 0 | 0 | 0 | 1569 |
| 3:00 | 6 | 4 | 0 | 0 | 15:00 | 252 | 154 | 0 | 0 | | | | | |
| 3:15 | 5 | 8 | 0 | 0 | 15:15 | 233 | 187 | 0 | 0 | | | | | |
| 3:30 | 10 | 10 | 0 | 0 | 15:30 | 252 | 189 | 0 | 0 | | | | | |
| 3:45 | 5 | 26 | 6 | 28 | 15:45 | 277 | 1014 | 175 | 705 | 0 | 0 | 0 | 0 | 1719 |
| 4:00 | 10 | 8 | 0 | 0 | 16:00 | 229 | 209 | 0 | 0 | | | | | |
| 4:15 | 4 | 14 | 0 | 0 | 16:15 | 287 | 215 | 0 | 0 | | | | | |
| 4:30 | 7 | 9 | 0 | 0 | 16:30 | 283 | 192 | 0 | 0 | | | | | |
| 4:45 | 15 | 36 | 12 | 43 | 16:45 | 284 | 1083 | 190 | 806 | 0 | 0 | 0 | 0 | 1889 |
| 5:00 | 11 | 28 | 0 | 0 | 17:00 | 262 | 164 | 0 | 0 | | | | | |
| 5:15 | 28 | 37 | 0 | 0 | 17:15 | 368 | 196 | 0 | 0 | | | | | |
| 5:30 | 35 | 38 | 0 | 0 | 17:30 | 310 | 197 | 0 | 0 | | | | | |
| 5:45 | 48 | 122 | 63 | 166 | 17:45 | 223 | 1163 | 176 | 733 | 0 | 0 | 0 | 0 | 1896 |
| 6:00 | 72 | 91 | 0 | 0 | 18:00 | 253 | 159 | 0 | 0 | | | | | |
| 6:15 | 87 | 105 | 0 | 0 | 18:15 | 222 | 177 | 0 | 0 | | | | | |
| 6:30 | 131 | 138 | 0 | 0 | 18:30 | 175 | 142 | 0 | 0 | | | | | |
| 6:45 | 152 | 442 | 168 | 502 | 18:45 | 134 | 784 | 127 | 605 | 0 | 0 | 0 | 0 | 1389 |
| 7:00 | 187 | 178 | 0 | 0 | 19:00 | 159 | 145 | 0 | 0 | | | | | |
| 7:15 | 188 | 235 | 0 | 0 | 19:15 | 130 | 105 | 0 | 0 | | | | | |
| 7:30 | 213 | 229 | 0 | 0 | 19:30 | 132 | 110 | 0 | 0 | | | | | |
| 7:45 | 228 | 816 | 275 | 917 | 19:45 | 125 | 546 | 119 | 479 | 0 | 0 | 0 | 0 | 1025 |
| 8:00 | 216 | 242 | 0 | 0 | 20:00 | 118 | 99 | 0 | 0 | | | | | |
| 8:15 | 193 | 204 | 0 | 0 | 20:15 | 114 | 68 | 0 | 0 | | | | | |
| 8:30 | 191 | 172 | 0 | 0 | 20:30 | 89 | 57 | 0 | 0 | | | | | |
| 8:45 | 154 | 754 | 215 | 833 | 20:45 | 94 | 415 | 67 | 291 | 0 | 0 | 0 | 0 | 706 |
| 9:00 | 127 | 126 | 0 | 0 | 21:00 | 104 | 77 | 0 | 0 | | | | | |
| 9:15 | 172 | 159 | 0 | 0 | 21:15 | 82 | 63 | 0 | 0 | | | | | |
| 9:30 | 127 | 130 | 0 | 0 | 21:30 | 80 | 63 | 0 | 0 | | | | | |
| 9:45 | 165 | 591 | 188 | 603 | 21:45 | 64 | 330 | 42 | 245 | 0 | 0 | 0 | 0 | 575 |
| 10:00 | 166 | 140 | 0 | 0 | 22:00 | 57 | 39 | 0 | 0 | | | | | |
| 10:15 | 136 | 155 | 0 | 0 | 22:15 | 35 | 31 | 0 | 0 | | | | | |
| 10:30 | 149 | 177 | 0 | 0 | 22:30 | 23 | 28 | 0 | 0 | | | | | |
| 10:45 | 157 | 608 | 169 | 641 | 22:45 | 29 | 144 | 31 | 129 | 0 | 0 | 0 | 0 | 273 |
| 11:00 | 168 | 176 | 0 | 0 | 23:00 | 30 | 34 | 0 | 0 | | | | | |
| 11:15 | 174 | 178 | 0 | 0 | 23:15 | 33 | 23 | 0 | 0 | | | | | |
| 11:30 | 168 | 182 | 0 | 0 | 23:30 | 23 | 25 | 0 | 0 | | | | | |
| 11:45 | 188 | 698 | 181 | 717 | 23:45 | 21 | 107 | 10 | 92 | 0 | 0 | 0 | 0 | 199 |

Total Vol. 4218 4539 **8757** 7971 6257 **14228**

Daily Totals

| NB | SB | EB | WB | Combined |
|-------|-------|----|----|--------------|
| 12189 | 10796 | | | 22985 |

AM

PM

| Split % | 48.2% | 51.8% | 38.1% | | | 56.0% | 44.0% | 61.9% | | |
|------------------|-------|-------|--------------|------|-------------|-------|-------|--------------|--|--|
| Peak Hour | 7:30 | 7:15 | 0:30 | 0:30 | 7:15 | 16:45 | 16:00 | 16:45 | | |
| Volume | 850 | 981 | 1826 | | | 1224 | 806 | 1971 | | |
| P.H.F. | 0.93 | 0.89 | 0.91 | | | 0.87 | 0.94 | 0.87 | | |

ADT10 Washington west of Escondido.

Prepared by: Field Data Services of Arizona

Prepared by AimTD LLC tel. 714 253 7888

| AM Period | NB | SB | EB | WB | PM Period | NB | SB | EB | WB | | | |
|-----------|----|----|-----|-----|-----------|----|----|-----|------|-----|-----|------|
| 0:30 | 0 | 0 | 3 | 9 | 12:00 | 0 | 0 | 167 | 148 | | | |
| 0:15 | 0 | 0 | 2 | 5 | 12:15 | 0 | 0 | 140 | 155 | | | |
| 0:30 | 0 | 0 | 4 | 2 | 12:30 | 0 | 0 | 176 | 161 | | | |
| 0:45 | 0 | 0 | 11 | 20 | 12:45 | 0 | 0 | 149 | 632 | 141 | 605 | 1237 |
| 1:00 | 0 | 0 | 5 | 13 | 13:00 | 0 | 0 | 199 | 139 | | | |
| 1:15 | 0 | 0 | 7 | 9 | 13:15 | 0 | 0 | 155 | 150 | | | |
| 1:30 | 0 | 0 | 10 | 4 | 13:30 | 0 | 0 | 183 | 125 | | | |
| 1:45 | 0 | 0 | 6 | 28 | 13:45 | 0 | 0 | 145 | 682 | 160 | 574 | 1256 |
| 2:00 | 0 | 0 | 7 | 4 | 14:00 | 0 | 0 | 181 | 126 | | | |
| 2:15 | 0 | 0 | 7 | 4 | 14:15 | 0 | 0 | 156 | 149 | | | |
| 2:30 | 0 | 0 | 8 | 4 | 14:30 | 0 | 0 | 215 | 133 | | | |
| 2:45 | 0 | 0 | 4 | 26 | 14:45 | 0 | 0 | 214 | 766 | 125 | 533 | 1299 |
| 3:00 | 0 | 0 | 2 | 3 | 15:00 | 0 | 0 | 211 | 149 | | | |
| 3:15 | 0 | 0 | 2 | 7 | 15:15 | 0 | 0 | 222 | 165 | | | |
| 3:30 | 0 | 0 | 8 | 12 | 15:30 | 0 | 0 | 222 | 166 | | | |
| 3:45 | 0 | 0 | 11 | 23 | 15:45 | 0 | 0 | 261 | 916 | 120 | 600 | 1516 |
| 4:00 | 0 | 0 | 7 | 11 | 16:00 | 0 | 0 | 209 | 154 | | | |
| 4:15 | 0 | 0 | 4 | 16 | 16:15 | 0 | 0 | 269 | 124 | | | |
| 4:30 | 0 | 0 | 8 | 16 | 16:30 | 0 | 0 | 291 | 137 | | | |
| 4:45 | 0 | 0 | 12 | 31 | 16:45 | 0 | 0 | 248 | 1017 | 157 | 572 | 1589 |
| 5:00 | 0 | 0 | 9 | 42 | 17:00 | 0 | 0 | 232 | 120 | | | |
| 5:15 | 0 | 0 | 13 | 55 | 17:15 | 0 | 0 | 267 | 130 | | | |
| 5:30 | 0 | 0 | 20 | 83 | 17:30 | 0 | 0 | 239 | 141 | | | |
| 5:45 | 0 | 0 | 37 | 79 | 17:45 | 0 | 0 | 176 | 914 | 122 | 513 | 1427 |
| 6:00 | 0 | 0 | 44 | 121 | 18:00 | 0 | 0 | 186 | 126 | | | |
| 6:15 | 0 | 0 | 41 | 147 | 18:15 | 0 | 0 | 196 | 133 | | | |
| 6:30 | 0 | 0 | 60 | 170 | 18:30 | 0 | 0 | 146 | 97 | | | |
| 6:45 | 0 | 0 | 54 | 199 | 18:45 | 0 | 0 | 106 | 634 | 117 | 473 | 1107 |
| 7:00 | 0 | 0 | 79 | 162 | 19:00 | 0 | 0 | 124 | 105 | | | |
| 7:15 | 0 | 0 | 103 | 169 | 19:15 | 0 | 0 | 84 | 83 | | | |
| 7:30 | 0 | 0 | 105 | 157 | 19:30 | 0 | 0 | 93 | 85 | | | |
| 7:45 | 0 | 0 | 127 | 414 | 19:45 | 0 | 0 | 82 | 383 | 76 | 349 | 732 |
| 8:00 | 0 | 0 | 128 | 175 | 20:00 | 0 | 0 | 98 | 62 | | | |
| 8:15 | 0 | 0 | 132 | 143 | 20:15 | 0 | 0 | 72 | 58 | | | |
| 8:30 | 0 | 0 | 106 | 129 | 20:30 | 0 | 0 | 71 | 59 | | | |
| 8:45 | 0 | 0 | 113 | 479 | 20:45 | 0 | 0 | 78 | 319 | 53 | 232 | 551 |
| 9:00 | 0 | 0 | 133 | 120 | 21:00 | 0 | 0 | 64 | 55 | | | |
| 9:15 | 0 | 0 | 120 | 101 | 21:15 | 0 | 0 | 51 | 50 | | | |
| 9:30 | 0 | 0 | 151 | 116 | 21:30 | 0 | 0 | 50 | 34 | | | |
| 9:45 | 0 | 0 | 121 | 525 | 21:45 | 0 | 0 | 28 | 193 | 41 | 180 | 373 |
| 10:00 | 0 | 0 | 108 | 117 | 22:00 | 0 | 0 | 56 | 33 | | | |
| 10:15 | 0 | 0 | 130 | 112 | 22:15 | 0 | 0 | 26 | 21 | | | |
| 10:30 | 0 | 0 | 138 | 116 | 22:30 | 0 | 0 | 25 | 21 | | | |
| 10:45 | 0 | 0 | 122 | 498 | 22:45 | 0 | 0 | 24 | 131 | 18 | 93 | 224 |
| 11:00 | 0 | 0 | 143 | 131 | 23:00 | 0 | 0 | 33 | 20 | | | |
| 11:15 | 0 | 0 | 147 | 143 | 23:15 | 0 | 0 | 18 | 21 | | | |
| 11:30 | 0 | 0 | 163 | 112 | 23:30 | 0 | 0 | 26 | 18 | | | |
| 11:45 | 0 | 0 | 142 | 595 | 23:45 | 0 | 0 | 12 | 89 | 9 | 68 | 157 |

Total Vol. 2917 3781 **6698** 6676 4792 **11468**

| Daily Totals | | | | |
|--------------|----|------|------|--------------|
| NB | SB | EB | WB | Combined |
| | | 9593 | 8573 | 18166 |

AM

PM

| Split % | AM | | | PM | | |
|------------------|-------|-------|--------------|-------|-------------|--------------|
| | 43.6% | 56.4% | 36.9% | 58.2% | 41.8% | 63.1% |
| Peak Hour | 0:30 | 0:30 | 11:45 | 6:30 | 11:45 | 16:00 |
| Volume | | | 625 | 696 | 1218 | 1040 |
| P.H.F. | | | 0.89 | 0.89 | 0.90 | 0.89 |

ADT11 Washington east of Escondido.

Prepared by: Field Data Services of Arizona

Prepared by AimTD LLC tel. 714 253 7888

| AM Period | NB | SB | EB | WB | PM Period | NB | SB | EB | WB | | | |
|-----------|----|----|-----|-----|-----------|----|----|-----|------|-----|-----|------|
| 0:30 | 0 | 0 | 4 | 8 | 12:00 | 0 | 0 | 175 | 156 | | | |
| 0:15 | 0 | 0 | 2 | 4 | 12:15 | 0 | 0 | 143 | 174 | | | |
| 0:30 | 0 | 0 | 4 | 2 | 12:30 | 0 | 0 | 168 | 181 | | | |
| 0:45 | 0 | 0 | 9 | 19 | 12:45 | 0 | 0 | 149 | 635 | 152 | 663 | 1298 |
| 1:00 | 0 | 0 | 7 | 11 | 13:00 | 0 | 0 | 188 | 158 | | | |
| 1:15 | 0 | 0 | 5 | 8 | 13:15 | 0 | 0 | 179 | 137 | | | |
| 1:30 | 0 | 0 | 10 | 5 | 13:30 | 0 | 0 | 172 | 151 | | | |
| 1:45 | 0 | 0 | 7 | 29 | 13:45 | 0 | 0 | 151 | 690 | 174 | 620 | 1310 |
| 2:00 | 0 | 0 | 7 | 5 | 14:00 | 0 | 0 | 191 | 135 | | | |
| 2:15 | 0 | 0 | 5 | 4 | 14:15 | 0 | 0 | 165 | 158 | | | |
| 2:30 | 0 | 0 | 6 | 3 | 14:30 | 0 | 0 | 209 | 157 | | | |
| 2:45 | 0 | 0 | 3 | 21 | 14:45 | 0 | 0 | 211 | 776 | 139 | 589 | 1365 |
| 3:00 | 0 | 0 | 2 | 3 | 15:00 | 0 | 0 | 202 | 165 | | | |
| 3:15 | 0 | 0 | 1 | 2 | 15:15 | 0 | 0 | 200 | 174 | | | |
| 3:30 | 0 | 0 | 6 | 10 | 15:30 | 0 | 0 | 207 | 188 | | | |
| 3:45 | 0 | 0 | 12 | 21 | 15:45 | 0 | 0 | 270 | 879 | 144 | 671 | 1550 |
| 4:00 | 0 | 0 | 7 | 14 | 16:00 | 0 | 0 | 230 | 171 | | | |
| 4:15 | 0 | 0 | 5 | 14 | 16:15 | 0 | 0 | 268 | 134 | | | |
| 4:30 | 0 | 0 | 6 | 15 | 16:30 | 0 | 0 | 255 | 136 | | | |
| 4:45 | 0 | 0 | 12 | 30 | 16:45 | 0 | 0 | 260 | 1013 | 187 | 628 | 1641 |
| 5:00 | 0 | 0 | 9 | 44 | 17:00 | 0 | 0 | 252 | 138 | | | |
| 5:15 | 0 | 0 | 7 | 51 | 17:15 | 0 | 0 | 259 | 167 | | | |
| 5:30 | 0 | 0 | 22 | 87 | 17:30 | 0 | 0 | 245 | 145 | | | |
| 5:45 | 0 | 0 | 28 | 66 | 17:45 | 0 | 0 | 193 | 949 | 145 | 595 | 1544 |
| 6:00 | 0 | 0 | 41 | 112 | 18:00 | 0 | 0 | 202 | 149 | | | |
| 6:15 | 0 | 0 | 43 | 142 | 18:15 | 0 | 0 | 208 | 134 | | | |
| 6:30 | 0 | 0 | 50 | 183 | 18:30 | 0 | 0 | 162 | 115 | | | |
| 6:45 | 0 | 0 | 50 | 184 | 18:45 | 0 | 0 | 132 | 704 | 123 | 521 | 1225 |
| 7:00 | 0 | 0 | 74 | 167 | 19:00 | 0 | 0 | 123 | 108 | | | |
| 7:15 | 0 | 0 | 82 | 165 | 19:15 | 0 | 0 | 92 | 89 | | | |
| 7:30 | 0 | 0 | 98 | 172 | 19:30 | 0 | 0 | 101 | 74 | | | |
| 7:45 | 0 | 0 | 126 | 380 | 19:45 | 0 | 0 | 75 | 391 | 77 | 348 | 739 |
| 8:00 | 0 | 0 | 116 | 172 | 20:00 | 0 | 0 | 91 | 76 | | | |
| 8:15 | 0 | 0 | 131 | 135 | 20:15 | 0 | 0 | 86 | 73 | | | |
| 8:30 | 0 | 0 | 111 | 138 | 20:30 | 0 | 0 | 72 | 67 | | | |
| 8:45 | 0 | 0 | 99 | 457 | 20:45 | 0 | 0 | 77 | 326 | 52 | 268 | 594 |
| 9:00 | 0 | 0 | 115 | 124 | 21:00 | 0 | 0 | 75 | 67 | | | |
| 9:15 | 0 | 0 | 104 | 101 | 21:15 | 0 | 0 | 63 | 52 | | | |
| 9:30 | 0 | 0 | 137 | 122 | 21:30 | 0 | 0 | 58 | 33 | | | |
| 9:45 | 0 | 0 | 130 | 486 | 21:45 | 0 | 0 | 38 | 234 | 38 | 190 | 424 |
| 10:00 | 0 | 0 | 103 | 127 | 22:00 | 0 | 0 | 49 | 34 | | | |
| 10:15 | 0 | 0 | 134 | 128 | 22:15 | 0 | 0 | 36 | 25 | | | |
| 10:30 | 0 | 0 | 124 | 141 | 22:30 | 0 | 0 | 28 | 17 | | | |
| 10:45 | 0 | 0 | 131 | 492 | 22:45 | 0 | 0 | 14 | 127 | 21 | 97 | 224 |
| 11:00 | 0 | 0 | 152 | 141 | 23:00 | 0 | 0 | 31 | 17 | | | |
| 11:15 | 0 | 0 | 160 | 136 | 23:15 | 0 | 0 | 21 | 21 | | | |
| 11:30 | 0 | 0 | 165 | 124 | 23:30 | 0 | 0 | 29 | 15 | | | |
| 11:45 | 0 | 0 | 159 | 636 | 23:45 | 0 | 0 | 13 | 94 | 12 | 65 | 159 |

Total Vol. 2821 3901 **6722** 6818 5255 **12073**

| Daily Totals | | | | |
|--------------|----|------|------|--------------|
| NB | SB | EB | WB | Combined |
| | | 9639 | 9156 | 18795 |

AM

PM

| Split % | AM | | | PM | | |
|------------------|-------|-------|-------------------------|-------|-------|--------------|
| | 42.0% | 58.0% | 35.8% | 56.5% | 43.5% | 64.2% |
| Peak Hour | 0:30 | 0:30 | 11:15 7:15 11:45 | 16:15 | 15:15 | 16:30 |
| Volume | | | 659 713 1307 | 1035 | 677 | 1654 |
| P.H.F. | | | 0.94 0.87 0.94 | 0.97 | 0.90 | 0.93 |

| Location (I.D.) | Route | Dir | Period | Cars per green | Sec./ Cycle | (per lane) Veh./hr | Total # lanes | HOV |
|---------------------------|-------|-----|-------------|----------------|-------------|--------------------|---------------|-----|
| NB Centre City Pkwy (240) | 78 | WB | 0530 - 0930 | 1 | 6.3 - 10.2 | 570 - 352 | 2 | Lt |

The meters normally operate in a traffic responsive mode.

There are 15 separate rates or steps between the slowest and the fastest discharge rate that depend on the mainlane volumes.

|

APPENDIX D

EXISTING CONDITIONS HCM ANALYSIS WORKSHEETS

SEC CCP/Mission TIA
1: Rock Springs Rd & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Conditions AM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  |  |
| Traffic Volume (veh/h) | 75 | 298 | 30 | 42 | 941 | 108 | 43 | 203 | 19 | 164 | 376 | 196 |
| Future Volume (veh/h) | 75 | 298 | 30 | 42 | 941 | 108 | 43 | 203 | 19 | 164 | 376 | 196 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 80 | 317 | 32 | 45 | 1001 | 115 | 46 | 216 | 20 | 174 | 400 | 209 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 102 | 1767 | 177 | 57 | 1659 | 191 | 153 | 963 | 88 | 350 | 547 | 465 |
| Arrive On Green | 0.06 | 0.54 | 0.54 | 0.03 | 0.52 | 0.52 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 |
| Sat Flow, veh/h | 1774 | 3249 | 326 | 1774 | 3200 | 367 | 809 | 3278 | 301 | 1140 | 1863 | 1583 |
| Grp Volume(v), veh/h | 80 | 172 | 177 | 45 | 553 | 563 | 46 | 116 | 120 | 174 | 400 | 209 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1805 | 1774 | 1770 | 1798 | 809 | 1770 | 1810 | 1140 | 1863 | 1583 |
| Q Serve(g_s), s | 4.4 | 4.9 | 5.0 | 2.5 | 21.9 | 21.9 | 5.4 | 4.9 | 5.0 | 13.6 | 19.3 | 10.7 |
| Cycle Q Clear(g_c), s | 4.4 | 4.9 | 5.0 | 2.5 | 21.9 | 21.9 | 24.7 | 4.9 | 5.0 | 18.7 | 19.3 | 10.7 |
| Prop In Lane | 1.00 | | 0.18 | 1.00 | | 0.20 | 1.00 | | 0.17 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 102 | 963 | 982 | 57 | 918 | 932 | 153 | 520 | 532 | 350 | 547 | 465 |
| V/C Ratio(X) | 0.78 | 0.18 | 0.18 | 0.79 | 0.60 | 0.60 | 0.30 | 0.22 | 0.23 | 0.50 | 0.73 | 0.45 |
| Avail Cap(c_a), veh/h | 177 | 963 | 982 | 106 | 918 | 932 | 188 | 595 | 608 | 398 | 626 | 532 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.81 | 0.81 | 0.81 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 46.5 | 11.5 | 11.5 | 48.0 | 16.9 | 16.9 | 42.9 | 26.7 | 26.7 | 33.8 | 31.8 | 28.7 |
| Incr Delay (d2), s/veh | 4.8 | 0.4 | 0.4 | 7.0 | 2.4 | 2.3 | 0.8 | 0.2 | 0.2 | 0.8 | 3.4 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.3 | 2.5 | 2.6 | 1.3 | 11.2 | 11.4 | 1.2 | 2.4 | 2.5 | 4.4 | 10.4 | 4.7 |
| LnGrp Delay(d),s/veh | 51.3 | 11.9 | 11.9 | 55.0 | 19.2 | 19.2 | 43.7 | 26.8 | 26.9 | 34.6 | 35.2 | 29.2 |
| LnGrp LOS | D | B | B | E | B | B | D | C | C | C | D | C |
| Approach Vol, veh/h | | 429 | | | 1161 | | | 282 | | | 783 | |
| Approach Delay, s/veh | | 19.3 | | | 20.6 | | | 29.6 | | | 33.5 | |
| Approach LOS | | B | | | C | | | 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 | 7.2 | 58.9 | | 33.9 | 9.8 | 56.3 | | 33.9 | | | | |
| Change Period (Y+Rc), s | 4.0 | 4.5 | | 4.5 | 4.0 | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | 6.0 | 47.4 | | 33.6 | 10.0 | 43.4 | | 33.6 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.5 | 7.0 | | 21.3 | 6.4 | 23.9 | | 26.7 | | | | |
| Green Ext Time (p_c), s | 0.0 | 22.5 | | 3.7 | 0.0 | 13.8 | | 2.6 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 25.1 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|--|---|---|--|---|--|---|---|---|--|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |   | |  |   | |  |  |  |  |   |  |
| Traffic Volume (veh/h) | 23 | 395 | 75 | 202 | 1131 | 69 | 140 | 23 | 105 | 52 | 26 | 29 |
| Future Volume (veh/h) | 23 | 395 | 75 | 202 | 1131 | 69 | 140 | 23 | 105 | 52 | 26 | 29 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 23 | 403 | 77 | 206 | 1154 | 70 | 143 | 23 | 107 | 53 | 27 | 30 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 466 | 822 | 156 | 694 | 1373 | 83 | 172 | 218 | 185 | 98 | 54 | 60 |
| Arrive On Green | 0.26 | 0.28 | 0.28 | 0.78 | 0.81 | 0.81 | 0.10 | 0.12 | 0.12 | 0.06 | 0.07 | 0.07 |
| Sat Flow, veh/h | 1774 | 2970 | 563 | 1774 | 3391 | 206 | 1774 | 1863 | 1583 | 1774 | 807 | 897 |
| Grp Volume(v), veh/h | 23 | 239 | 241 | 206 | 602 | 622 | 143 | 23 | 107 | 53 | 0 | 57 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1763 | 1774 | 1770 | 1826 | 1774 | 1863 | 1583 | 1774 | 0 | 1704 |
| Q Serve(g_s), s | 1.2 | 13.5 | 13.8 | 3.9 | 24.3 | 24.4 | 9.5 | 1.3 | 3.6 | 3.5 | 0.0 | 3.9 |
| Cycle Q Clear(g_c), s | 1.2 | 13.5 | 13.8 | 3.9 | 24.3 | 24.4 | 9.5 | 1.3 | 3.6 | 3.5 | 0.0 | 3.9 |
| Prop In Lane | 1.00 | | 0.32 | 1.00 | | 0.11 | 1.00 | | 1.00 | 1.00 | | 0.53 |
| Lane Grp Cap(c), veh/h | 466 | 490 | 488 | 694 | 717 | 740 | 172 | 218 | 185 | 98 | 0 | 114 |
| V/C Ratio(X) | 0.05 | 0.49 | 0.49 | 0.30 | 0.84 | 0.84 | 0.83 | 0.11 | 0.58 | 0.54 | 0.00 | 0.50 |
| Avail Cap(c_a), veh/h | 466 | 490 | 488 | 694 | 717 | 740 | 205 | 545 | 463 | 135 | 0 | 430 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.96 | 0.96 | 0.96 | 0.62 | 0.62 | 0.62 | 0.94 | 0.94 | 0.94 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.0 | 36.3 | 36.4 | 8.4 | 9.1 | 9.1 | 53.2 | 47.4 | 10.9 | 55.2 | 0.0 | 54.1 |
| Incr Delay (d2), s/veh | 0.1 | 3.3 | 3.4 | 0.2 | 7.4 | 7.2 | 20.7 | 0.2 | 3.2 | 5.5 | 0.0 | 4.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.6 | 7.1 | 7.2 | 1.9 | 12.5 | 12.9 | 5.6 | 0.7 | 1.7 | 1.9 | 0.0 | 1.9 |
| LnGrp Delay(d),s/veh | 33.1 | 39.6 | 39.8 | 8.6 | 16.4 | 16.3 | 73.9 | 47.6 | 14.1 | 60.7 | 0.0 | 58.2 |
| LnGrp LOS | C | D | D | A | B | B | E | D | B | E | | E |
| Approach Vol, veh/h | | 503 | | | 1430 | | | 273 | | | 110 | |
| Approach Delay, s/veh | | 39.4 | | | 15.2 | | | 48.3 | | | 59.4 | |
| Approach LOS | | D | | | B | | | D | | | E | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 51.5 | 38.6 | 16.8 | 13.1 | 36.1 | 54.0 | 10.7 | 19.1 | | | | |
| Change Period (Y+Rc), s | 4.6 | 5.4 | 5.1 | * 5.1 | 4.6 | * 5.4 | 4.1 | 5.1 | | | | |
| Max Green Setting (Gmax), s | 23.4 | 33.2 | 13.9 | * 30 | 8.5 | * 49 | 9.1 | 35.1 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.9 | 15.8 | 11.5 | 5.9 | 3.2 | 26.4 | 5.5 | 5.6 | | | | |
| Green Ext Time (p_c), s | 0.7 | 4.7 | 0.3 | 0.3 | 0.4 | 14.5 | 0.0 | 1.1 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 26.5 | | | | | | | | | |
| HCM 2010 LOS | | | C | | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
3: Quince St & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Conditions AM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 24 | 334 | 138 | 75 | 694 | 84 | 107 | 140 | 59 | 41 | 153 | 60 |
| Future Volume (veh/h) | 24 | 334 | 138 | 75 | 694 | 84 | 107 | 140 | 59 | 41 | 153 | 60 |
| 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 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 28 | 384 | 159 | 86 | 798 | 97 | 123 | 161 | 68 | 47 | 176 | 69 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 504 | 1760 | 719 | 631 | 2280 | 277 | 222 | 506 | 205 | 229 | 517 | 196 |
| Arrive On Green | 0.72 | 0.72 | 0.72 | 1.00 | 1.00 | 1.00 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 |
| Sat Flow, veh/h | 619 | 2453 | 1002 | 860 | 3178 | 386 | 1130 | 2459 | 997 | 1147 | 2514 | 951 |
| Grp Volume(v), veh/h | 28 | 276 | 267 | 86 | 444 | 451 | 123 | 114 | 115 | 47 | 122 | 123 |
| Grp Sat Flow(s),veh/h/ln | 619 | 1770 | 1686 | 860 | 1770 | 1795 | 1130 | 1770 | 1687 | 1147 | 1770 | 1695 |
| Q Serve(g_s), s | 1.6 | 6.3 | 6.4 | 1.0 | 0.0 | 0.0 | 12.5 | 6.6 | 7.0 | 4.4 | 7.1 | 7.5 |
| Cycle Q Clear(g_c), s | 1.6 | 6.3 | 6.4 | 7.4 | 0.0 | 0.0 | 20.0 | 6.6 | 7.0 | 11.3 | 7.1 | 7.5 |
| Prop In Lane | 1.00 | | 0.59 | 1.00 | | 0.22 | 1.00 | | 0.59 | 1.00 | | 0.56 |
| Lane Grp Cap(c), veh/h | 504 | 1270 | 1210 | 631 | 1270 | 1288 | 222 | 364 | 347 | 229 | 364 | 349 |
| V/C Ratio(X) | 0.06 | 0.22 | 0.22 | 0.14 | 0.35 | 0.35 | 0.55 | 0.31 | 0.33 | 0.20 | 0.33 | 0.35 |
| Avail Cap(c_a), veh/h | 504 | 1270 | 1210 | 631 | 1270 | 1288 | 399 | 640 | 610 | 408 | 640 | 613 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.78 | 0.78 | 0.78 | 1.00 | 1.00 | 1.00 | 0.74 | 0.74 | 0.74 |
| Uniform Delay (d), s/veh | 5.0 | 5.7 | 5.7 | 0.3 | 0.0 | 0.0 | 49.4 | 40.5 | 40.6 | 45.4 | 40.6 | 40.8 |
| Incr Delay (d2), s/veh | 0.2 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 1.6 | 0.4 | 0.4 | 0.2 | 0.3 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.3 | 3.1 | 3.1 | 0.3 | 0.2 | 0.2 | 4.0 | 3.2 | 3.3 | 1.4 | 3.5 | 3.5 |
| LnGrp Delay(d),s/veh | 5.2 | 6.1 | 6.1 | 0.6 | 0.6 | 0.6 | 51.0 | 40.8 | 41.0 | 45.7 | 40.9 | 41.1 |
| LnGrp LOS | A | A | A | A | A | A | D | D | D | D | D | D |
| Approach Vol, veh/h | | 571 | | | 981 | | | 352 | | | 292 | |
| Approach Delay, s/veh | | 6.0 | | | 0.6 | | | 44.4 | | | 41.8 | |
| Approach LOS | | A | | | A | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 90.7 | | 29.3 | | 90.7 | | 29.3 | | | | |
| Change Period (Y+Rc), s | | 4.6 | | 4.6 | | 4.6 | | 4.6 | | | | |
| Max Green Setting (Gmax), s | | 67.4 | | 43.4 | | 67.4 | | 43.4 | | | | |
| Max Q Clear Time (g_c+I1), s | | 8.4 | | 22.0 | | 9.4 | | 13.3 | | | | |
| Green Ext Time (p_c), s | | 10.8 | | 2.7 | | 10.7 | | 2.8 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 14.5 | | | | | | | | |
| HCM 2010 LOS | | | | B | | | | | | | | |

SEC CCP/Mission TIA
4: Centre City Pkwy & El Norte Pkwy

HCM 2010 Signalized Intersection Summary
Existing Conditions AM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 9 | 637 | 255 | 276 | 723 | 150 | 159 | 247 | 79 | 239 | 1056 | 59 |
| Future Volume (veh/h) | 9 | 637 | 255 | 276 | 723 | 150 | 159 | 247 | 79 | 239 | 1056 | 59 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 10 | 692 | 277 | 300 | 786 | 163 | 173 | 268 | 86 | 260 | 1148 | 64 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 77 | 988 | 442 | 339 | 1038 | 215 | 292 | 1367 | 612 | 303 | 1374 | 615 |
| Arrive On Green | 0.02 | 0.28 | 0.28 | 0.10 | 0.36 | 0.36 | 0.17 | 0.77 | 0.77 | 0.09 | 0.39 | 0.39 |
| Sat Flow, veh/h | 3442 | 3539 | 1583 | 3442 | 2920 | 606 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 10 | 692 | 277 | 300 | 476 | 473 | 173 | 268 | 86 | 260 | 1148 | 64 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1583 | 1721 | 1770 | 1756 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 0.5 | 28.9 | 25.2 | 14.2 | 39.2 | 39.2 | 7.7 | 3.3 | 2.3 | 12.3 | 48.5 | 4.3 |
| Cycle Q Clear(g_c), s | 0.5 | 28.9 | 25.2 | 14.2 | 39.2 | 39.2 | 7.7 | 3.3 | 2.3 | 12.3 | 48.5 | 4.3 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.34 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 77 | 988 | 442 | 339 | 629 | 624 | 292 | 1367 | 612 | 303 | 1374 | 615 |
| V/C Ratio(X) | 0.13 | 0.70 | 0.63 | 0.88 | 0.76 | 0.76 | 0.59 | 0.20 | 0.14 | 0.86 | 0.84 | 0.10 |
| Avail Cap(c_a), veh/h | 209 | 1094 | 489 | 353 | 629 | 624 | 292 | 1367 | 612 | 405 | 1374 | 615 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 79.1 | 53.3 | 51.9 | 73.4 | 46.9 | 46.9 | 65.9 | 11.9 | 11.8 | 74.2 | 45.7 | 32.2 |
| Incr Delay (d2), s/veh | 0.3 | 2.2 | 3.0 | 21.1 | 5.9 | 5.9 | 2.2 | 0.3 | 0.5 | 10.6 | 6.1 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.2 | 14.4 | 11.4 | 7.7 | 20.2 | 20.1 | 3.7 | 1.7 | 1.1 | 6.3 | 24.9 | 1.9 |
| LnGrp Delay(d),s/veh | 79.4 | 55.5 | 55.0 | 94.5 | 52.8 | 52.8 | 68.1 | 12.2 | 12.2 | 84.8 | 51.8 | 32.5 |
| LnGrp LOS | E | E | D | F | D | D | E | B | B | F | D | C |
| Approach Vol, veh/h | | 979 | | | 1249 | | | 527 | | | 1472 | |
| Approach Delay, s/veh | | 55.6 | | | 62.8 | | | 30.5 | | | 56.8 | |
| Approach LOS | | E | | | E | | | C | | | 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 | 20.6 | 70.6 | 21.4 | 52.4 | 20.3 | 71.0 | 8.8 | 65.0 | | | | |
| Change Period (Y+Rc), s | 6.1 | 6.9 | 5.1 | 6.3 | 6.3 | 6.9 | 5.1 | 6.3 | | | | |
| Max Green Setting (Gmax), s | 19.4 | 53.3 | 16.9 | 51.0 | 14.0 | 58.5 | 10.0 | 57.9 | | | | |
| Max Q Clear Time (g_c+I1), s | 14.3 | 5.3 | 16.2 | 30.9 | 9.7 | 50.5 | 2.5 | 41.2 | | | | |
| Green Ext Time (p_c), s | 0.2 | 18.7 | 0.1 | 15.2 | 0.1 | 6.0 | 0.0 | 13.7 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 55.0 | | | | | | | | | |
| HCM 2010 LOS | | | E | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 4 | 0 | 8 | 308 | 8 | 82 | 29 | 404 | 38 | 66 | 1575 | 14 |
| Future Volume (veh/h) | 4 | 0 | 8 | 308 | 8 | 82 | 29 | 404 | 38 | 66 | 1575 | 14 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 4 | 0 | 9 | 331 | 9 | 88 | 31 | 434 | 41 | 71 | 1694 | 15 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 1 | 1 | 2 | 1 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 129 | 0 | 114 | 351 | 29 | 288 | 115 | 1928 | 863 | 103 | 1855 | 830 |
| Arrive On Green | 0.07 | 0.00 | 0.07 | 0.20 | 0.20 | 0.20 | 0.06 | 0.54 | 0.54 | 0.12 | 1.00 | 1.00 |
| Sat Flow, veh/h | 1774 | 0 | 1583 | 1774 | 149 | 1457 | 1774 | 3539 | 1583 | 1774 | 3539 | 1583 |
| Grp Volume(v), veh/h | 4 | 0 | 9 | 331 | 0 | 97 | 31 | 434 | 41 | 71 | 1694 | 15 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 0 | 1583 | 1774 | 0 | 1606 | 1774 | 1770 | 1583 | 1774 | 1770 | 1583 |
| Q Serve(g_s), s | 0.3 | 0.0 | 0.9 | 30.4 | 0.0 | 8.5 | 2.7 | 10.5 | 2.0 | 6.3 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 0.3 | 0.0 | 0.9 | 30.4 | 0.0 | 8.5 | 2.7 | 10.5 | 2.0 | 6.3 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.91 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 129 | 0 | 114 | 351 | 0 | 317 | 115 | 1928 | 863 | 103 | 1855 | 830 |
| V/C Ratio(X) | 0.03 | 0.00 | 0.08 | 0.94 | 0.00 | 0.31 | 0.27 | 0.23 | 0.05 | 0.69 | 0.91 | 0.02 |
| Avail Cap(c_a), veh/h | 129 | 0 | 115 | 394 | 0 | 356 | 115 | 1928 | 863 | 141 | 1855 | 830 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.88 | 0.88 | 0.88 | 0.55 | 0.55 | 0.55 |
| Uniform Delay (d), s/veh | 71.1 | 0.0 | 71.4 | 65.2 | 0.0 | 56.5 | 73.4 | 19.5 | 17.6 | 71.4 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.1 | 0.0 | 0.2 | 29.0 | 0.0 | 0.4 | 0.4 | 0.2 | 0.1 | 1.8 | 5.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.2 | 0.0 | 0.4 | 17.7 | 0.0 | 3.8 | 1.4 | 5.2 | 0.9 | 3.1 | 1.3 | 0.0 |
| LnGrp Delay(d),s/veh | 71.2 | 0.0 | 71.6 | 94.2 | 0.0 | 56.9 | 73.8 | 19.7 | 17.6 | 73.3 | 5.0 | 0.0 |
| LnGrp LOS | E | | E | F | | E | E | B | B | E | A | A |
| Approach Vol, veh/h | | 13 | | | 428 | | | 506 | | | 1780 | |
| Approach Delay, s/veh | | 71.5 | | | 85.7 | | | 22.9 | | | 7.6 | |
| Approach LOS | | E | | | F | | | C | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 14.2 | 96.8 | 37.4 | 16.6 | 17.6 | 93.4 | 16.7 | 37.3 | | | | |
| Change Period (Y+Rc), s | 4.6 | 6.9 | * 4.7 | * 4.7 | 6.9 | * 6.9 | * 4.7 | * 4.7 | | | | |
| Max Green Setting (Gmax), s | 13.1 | 82.4 | * 37 | * 12 | 9.0 | * 87 | * 12 | * 37 | | | | |
| Max Q Clear Time (g_c+I1), s | 8.3 | 12.5 | 32.4 | 2.9 | 4.7 | 2.0 | 2.3 | 10.5 | | | | |
| Green Ext Time (p_c), s | 0.0 | 4.0 | 0.3 | 0.3 | 0.1 | 31.5 | 0.0 | 0.5 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 23.0 | | | | | | | | | |
| HCM 2010 LOS | | | C | | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 123 | 344 | 84 | 57 | 675 | 236 | 132 | 528 | 46 | 170 | 852 | 532 |
| Future Volume (veh/h) | 123 | 344 | 84 | 57 | 675 | 236 | 132 | 528 | 46 | 170 | 852 | 532 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 0.98 | 1.00 | | 0.98 | 1.00 | | 0.99 | 1.00 | | 0.98 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 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 | 1667 | 1863 | 1863 | 1667 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 128 | 358 | 88 | 59 | 703 | 246 | 138 | 550 | 48 | 177 | 888 | 554 |
| Adj No. of Lanes | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 161 | 985 | 432 | 102 | 880 | 385 | 484 | 1165 | 514 | 547 | 1171 | 516 |
| Arrive On Green | 0.18 | 0.56 | 0.56 | 0.02 | 0.08 | 0.08 | 0.21 | 0.44 | 0.44 | 0.16 | 0.33 | 0.33 |
| Sat Flow, veh/h | 1774 | 3539 | 1551 | 1587 | 3539 | 1547 | 3079 | 3539 | 1560 | 3442 | 3539 | 1559 |
| Grp Volume(v), veh/h | 128 | 358 | 88 | 59 | 703 | 246 | 138 | 550 | 48 | 177 | 888 | 554 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1551 | 1587 | 1770 | 1547 | 1540 | 1770 | 1560 | 1721 | 1770 | 1559 |
| Q Serve(g_s), s | 8.3 | 6.7 | 2.3 | 4.4 | 23.4 | 18.5 | 4.5 | 13.2 | 1.7 | 5.5 | 26.9 | 39.7 |
| Cycle Q Clear(g_c), s | 8.3 | 6.7 | 2.3 | 4.4 | 23.4 | 18.5 | 4.5 | 13.2 | 1.7 | 5.5 | 26.9 | 39.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 161 | 985 | 432 | 102 | 880 | 385 | 484 | 1165 | 514 | 547 | 1171 | 516 |
| V/C Ratio(X) | 0.79 | 0.36 | 0.20 | 0.58 | 0.80 | 0.64 | 0.29 | 0.47 | 0.09 | 0.32 | 0.76 | 1.07 |
| Avail Cap(c_a), veh/h | 200 | 1165 | 510 | 126 | 1047 | 458 | 484 | 1165 | 514 | 547 | 1171 | 516 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 1.33 | 1.33 | 1.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.96 | 0.96 | 0.96 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.50 | 0.50 | 0.50 |
| Uniform Delay (d), s/veh | 48.0 | 20.7 | 9.1 | 57.1 | 52.1 | 49.9 | 41.8 | 26.3 | 13.7 | 44.8 | 35.9 | 40.2 |
| Incr Delay (d2), s/veh | 12.5 | 0.2 | 0.2 | 1.9 | 3.5 | 1.8 | 0.1 | 1.4 | 0.4 | 0.1 | 2.4 | 50.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 4.6 | 3.3 | 1.0 | 2.0 | 11.9 | 8.1 | 1.9 | 6.6 | 0.8 | 2.6 | 13.5 | 24.3 |
| LnGrp Delay(d),s/veh | 60.5 | 20.9 | 9.2 | 59.0 | 55.6 | 51.7 | 41.9 | 27.7 | 14.1 | 44.8 | 38.2 | 90.3 |
| LnGrp LOS | E | C | A | E | E | D | D | C | B | D | D | F |
| Approach Vol, veh/h | | 574 | | | 1008 | | | 736 | | | 1619 | |
| Approach Delay, s/veh | | 27.9 | | | 54.9 | | | 29.5 | | | 56.8 | |
| Approach LOS | | C | | | D | | | C | | | 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 | 23.6 | 45.9 | 12.2 | 38.3 | 23.4 | 46.1 | 15.8 | 34.7 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.4 | 4.5 | 4.9 | 4.5 | 6.4 | 4.9 | * 4.9 | | | | |
| Max Green Setting (Gmax), s | 11.2 | 39.5 | 9.5 | 39.5 | 11.0 | 39.7 | 13.5 | * 36 | | | | |
| Max Q Clear Time (g_c+I1), s | 7.5 | 15.2 | 6.4 | 8.7 | 6.5 | 41.7 | 10.3 | 25.4 | | | | |
| Green Ext Time (p_c), s | 0.2 | 3.1 | 0.0 | 2.2 | 0.3 | 0.0 | 0.8 | 3.4 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 47.0 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |   | |  |   | |   |   |   |   |   |   |
| Traffic Volume (veh/h) | 62 | 290 | 77 | 64 | 588 | 61 | 167 | 624 | 54 | 117 | 830 | 143 |
| Future Volume (veh/h) | 62 | 290 | 77 | 64 | 588 | 61 | 167 | 624 | 54 | 117 | 830 | 143 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 67 | 312 | 83 | 69 | 632 | 66 | 180 | 671 | 58 | 126 | 892 | 154 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 119 | 394 | 103 | 275 | 743 | 78 | 343 | 1047 | 468 | 771 | 1546 | 692 |
| Arrive On Green | 0.02 | 0.05 | 0.05 | 0.05 | 0.08 | 0.08 | 0.03 | 0.10 | 0.10 | 0.45 | 0.87 | 0.87 |
| Sat Flow, veh/h | 1774 | 2777 | 727 | 1774 | 3235 | 337 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 67 | 197 | 198 | 69 | 345 | 353 | 180 | 671 | 58 | 126 | 892 | 154 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1734 | 1774 | 1770 | 1803 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 4.5 | 13.2 | 13.6 | 4.5 | 23.1 | 23.2 | 6.2 | 21.9 | 4.0 | 2.6 | 7.7 | 1.8 |
| Cycle Q Clear(g_c), s | 4.5 | 13.2 | 13.6 | 4.5 | 23.1 | 23.2 | 6.2 | 21.9 | 4.0 | 2.6 | 7.7 | 1.8 |
| Prop In Lane | 1.00 | | 0.42 | 1.00 | | 0.19 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 119 | 251 | 246 | 275 | 407 | 414 | 343 | 1047 | 468 | 771 | 1546 | 692 |
| V/C Ratio(X) | 0.56 | 0.79 | 0.81 | 0.25 | 0.85 | 0.85 | 0.52 | 0.64 | 0.12 | 0.16 | 0.58 | 0.22 |
| Avail Cap(c_a), veh/h | 140 | 612 | 600 | 275 | 627 | 639 | 359 | 1047 | 468 | 771 | 1546 | 692 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 0.99 | 0.99 | 0.99 | 0.77 | 0.77 | 0.77 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 56.9 | 55.4 | 55.6 | 50.2 | 53.4 | 53.4 | 55.2 | 48.0 | 39.9 | 26.4 | 4.8 | 4.4 |
| Incr Delay (d2), s/veh | 1.5 | 2.0 | 2.3 | 0.1 | 3.2 | 3.2 | 0.5 | 2.9 | 0.5 | 0.0 | 1.6 | 0.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.3 | 6.6 | 6.7 | 2.2 | 11.7 | 12.0 | 3.0 | 11.2 | 1.8 | 1.2 | 3.8 | 0.9 |
| LnGrp Delay(d),s/veh | 58.5 | 57.4 | 57.9 | 50.4 | 56.6 | 56.7 | 55.7 | 50.9 | 40.5 | 26.4 | 6.3 | 5.1 |
| LnGrp LOS | E | E | E | D | E | E | E | D | D | C | A | A |
| Approach Vol, veh/h | | 462 | | | 767 | | | 909 | | | 1172 | |
| Approach Delay, s/veh | | 57.8 | | | 56.1 | | | 51.2 | | | 8.3 | |
| Approach LOS | | E | | | E | | | D | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 33.4 | 42.0 | 23.1 | 21.5 | 16.5 | 58.9 | 12.5 | 32.1 | | | | |
| Change Period (Y+Rc), s | 6.5 | * 6.5 | 4.5 | 4.5 | 4.5 | 6.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 12.5 | * 36 | 10.5 | 41.5 | 12.5 | 35.5 | 9.5 | 42.5 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.6 | 23.9 | 6.5 | 15.6 | 8.2 | 9.7 | 6.5 | 25.2 | | | | |
| Green Ext Time (p_c), s | 1.4 | 2.5 | 1.2 | 1.4 | 0.1 | 4.9 | 0.0 | 2.4 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 38.1 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
8: Centre City Pkwy & Valley Pkwy

HCM 2010 Signalized Intersection Summary
Existing Conditions AM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | |  |  |  |  |  | | |  |  |
| Traffic Volume (veh/h) | 0 | 0 | 0 | 327 | 1228 | 223 | 168 | 618 | 0 | 0 | 869 | 99 |
| Future Volume (veh/h) | 0 | 0 | 0 | 327 | 1228 | 223 | 168 | 618 | 0 | 0 | 869 | 99 |
| Number | | | | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | | | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | | | | 1863 | 1863 | 1863 | 1863 | 1863 | 0 | 0 | 1863 | 1863 |
| Adj Flow Rate, veh/h | | | | 348 | 1306 | 237 | 179 | 657 | 0 | 0 | 924 | 105 |
| Adj No. of Lanes | | | | 1 | 3 | 1 | 2 | 2 | 0 | 0 | 2 | 1 |
| Peak Hour Factor | | | | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | | | | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 2 | 2 |
| Cap, veh/h | | | | 541 | 1705 | 483 | 527 | 2106 | 0 | 0 | 1360 | 608 |
| Arrive On Green | | | | 0.31 | 0.31 | 0.31 | 0.15 | 0.59 | 0.00 | 0.00 | 0.38 | 0.38 |
| Sat Flow, veh/h | | | | 1774 | 5588 | 1583 | 3442 | 3632 | 0 | 0 | 3632 | 1583 |
| Grp Volume(v), veh/h | | | | 348 | 1306 | 237 | 179 | 657 | 0 | 0 | 924 | 105 |
| Grp Sat Flow(s),veh/h/ln | | | | 1774 | 1863 | 1583 | 1721 | 1770 | 0 | 0 | 1770 | 1583 |
| Q Serve(g_s), s | | | | 20.4 | 25.4 | 14.7 | 5.6 | 11.1 | 0.0 | 0.0 | 26.1 | 5.2 |
| Cycle Q Clear(g_c), s | | | | 20.4 | 25.4 | 14.7 | 5.6 | 11.1 | 0.0 | 0.0 | 26.1 | 5.2 |
| Prop In Lane | | | | 1.00 | | 1.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | | | | 541 | 1705 | 483 | 527 | 2106 | 0 | 0 | 1360 | 608 |
| V/C Ratio(X) | | | | 0.64 | 0.77 | 0.49 | 0.34 | 0.31 | 0.00 | 0.00 | 0.68 | 0.17 |
| Avail Cap(c_a), veh/h | | | | 679 | 2138 | 606 | 527 | 2106 | 0 | 0 | 1360 | 608 |
| HCM Platoon Ratio | | | | 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 | 0.00 | 0.73 | 0.73 |
| Uniform Delay (d), s/veh | | | | 36.0 | 37.8 | 34.1 | 45.4 | 12.1 | 0.0 | 0.0 | 30.8 | 24.4 |
| Incr Delay (d2), s/veh | | | | 1.1 | 1.2 | 0.6 | 0.3 | 0.4 | 0.0 | 0.0 | 2.0 | 0.5 |
| Initial Q Delay(d3),s/veh | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | | | | 10.1 | 13.2 | 13.4 | 2.7 | 5.5 | 0.0 | 0.0 | 13.1 | 2.4 |
| LnGrp Delay(d),s/veh | | | | 37.1 | 39.0 | 34.7 | 45.7 | 12.5 | 0.0 | 0.0 | 32.8 | 24.8 |
| LnGrp LOS | | | | D | D | C | D | B | | | C | C |
| Approach Vol, veh/h | | | | | 1891 | | | 836 | | | 1029 | |
| Approach Delay, s/veh | | | | | 38.1 | | | 19.6 | | | 32.0 | |
| Approach LOS | | | | | D | | | B | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | 5 | 6 | | | | | | |
| Phs Duration (G+Y+Rc), s | | 78.3 | | 41.7 | 25.3 | 53.0 | | | | | | |
| Change Period (Y+Rc), s | | 6.9 | | 5.1 | 6.9 | * 6.9 | | | | | | |
| Max Green Setting (Gmax), s | | 62.1 | | 45.9 | 11.0 | * 46 | | | | | | |
| Max Q Clear Time (g_c+I1), s | | 13.1 | | 27.4 | 7.6 | 28.1 | | | | | | |
| Green Ext Time (p_c), s | | 4.5 | | 9.2 | 1.4 | 5.4 | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 32.3 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 53 | 288 | 121 | 88 | 583 | 31 | 154 | 151 | 75 | 96 | 341 | 179 |
| Future Volume (veh/h) | 53 | 288 | 121 | 88 | 583 | 31 | 154 | 151 | 75 | 96 | 341 | 179 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 60 | 324 | 136 | 99 | 655 | 35 | 173 | 170 | 84 | 108 | 383 | 201 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 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 | 254 | 695 | 286 | 313 | 1085 | 58 | 201 | 727 | 344 | 135 | 629 | 325 |
| Arrive On Green | 0.19 | 0.38 | 0.38 | 0.18 | 0.32 | 0.32 | 0.11 | 0.31 | 0.31 | 0.08 | 0.28 | 0.28 |
| Sat Flow, veh/h | 1774 | 2447 | 1007 | 1774 | 3418 | 182 | 1774 | 2334 | 1103 | 1774 | 2258 | 1168 |
| Grp Volume(v), veh/h | 60 | 233 | 227 | 99 | 339 | 351 | 173 | 127 | 127 | 108 | 299 | 285 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1685 | 1774 | 1770 | 1831 | 1774 | 1770 | 1668 | 1774 | 1770 | 1657 |
| Q Serve(g_s), s | 3.4 | 11.9 | 12.3 | 5.8 | 19.4 | 19.4 | 11.5 | 6.4 | 6.8 | 7.2 | 17.6 | 18.0 |
| Cycle Q Clear(g_c), s | 3.4 | 11.9 | 12.3 | 5.8 | 19.4 | 19.4 | 11.5 | 6.4 | 6.8 | 7.2 | 17.6 | 18.0 |
| Prop In Lane | 1.00 | | 0.60 | 1.00 | | 0.10 | 1.00 | | 0.66 | 1.00 | | 0.71 |
| Lane Grp Cap(c), veh/h | 254 | 503 | 479 | 313 | 562 | 581 | 201 | 552 | 520 | 135 | 493 | 461 |
| V/C Ratio(X) | 0.24 | 0.46 | 0.48 | 0.32 | 0.60 | 0.60 | 0.86 | 0.23 | 0.24 | 0.80 | 0.61 | 0.62 |
| Avail Cap(c_a), veh/h | 254 | 503 | 479 | 313 | 562 | 581 | 339 | 552 | 520 | 235 | 493 | 461 |
| HCM Platoon Ratio | 1.33 | 1.33 | 1.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.54 | 0.54 | 0.54 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 43.0 | 30.4 | 30.5 | 43.1 | 34.6 | 34.6 | 52.3 | 30.6 | 30.8 | 54.5 | 37.6 | 37.7 |
| Incr Delay (d2), s/veh | 0.2 | 3.0 | 3.4 | 0.1 | 2.6 | 2.5 | 4.9 | 0.9 | 1.1 | 4.1 | 5.5 | 6.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.7 | 6.2 | 6.1 | 2.9 | 9.9 | 10.3 | 5.9 | 3.2 | 3.3 | 3.7 | 9.4 | 9.0 |
| LnGrp Delay(d),s/veh | 43.2 | 33.5 | 33.9 | 43.2 | 37.2 | 37.1 | 57.1 | 31.6 | 31.8 | 58.7 | 43.1 | 43.8 |
| LnGrp LOS | D | C | C | D | D | D | E | C | C | E | D | D |
| Approach Vol, veh/h | | 520 | | | 789 | | | 427 | | | 692 | |
| Approach Delay, s/veh | | 34.8 | | | 37.9 | | | 42.0 | | | 45.8 | |
| Approach LOS | | C | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 25.3 | 39.0 | 17.7 | 38.0 | 21.3 | 43.0 | 13.7 | 42.0 | | | | |
| Change Period (Y+Rc), s | 4.1 | 4.9 | 4.1 | 4.6 | 4.1 | 4.9 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 14.9 | 34.1 | 22.9 | 30.4 | 10.9 | 38.1 | 15.9 | * 37 | | | | |
| Max Q Clear Time (g_c+I1), s | 7.8 | 14.3 | 13.5 | 20.0 | 5.4 | 21.4 | 9.2 | 8.8 | | | | |
| Green Ext Time (p_c), s | 0.1 | 1.7 | 0.2 | 1.9 | 0.1 | 2.4 | 0.2 | 0.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 40.2 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
10: Escondido Blvd & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Conditions AM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|--|---|---|--|---|---|--|---|---|--|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |   | |  |   | |  |   | |  |   | |
| Traffic Volume (veh/h) | 56 | 324 | 112 | 65 | 519 | 99 | 77 | 241 | 63 | 84 | 362 | 72 |
| Future Volume (veh/h) | 56 | 324 | 112 | 65 | 519 | 99 | 77 | 241 | 63 | 84 | 362 | 72 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 67 | 390 | 135 | 78 | 625 | 119 | 93 | 290 | 76 | 101 | 436 | 87 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 237 | 1026 | 351 | 109 | 950 | 181 | 118 | 868 | 224 | 125 | 874 | 173 |
| Arrive On Green | 0.04 | 0.13 | 0.13 | 0.06 | 0.32 | 0.32 | 0.07 | 0.31 | 0.31 | 0.07 | 0.30 | 0.30 |
| Sat Flow, veh/h | 1774 | 2590 | 886 | 1774 | 2969 | 564 | 1774 | 2787 | 718 | 1774 | 2946 | 584 |
| Grp Volume(v), veh/h | 67 | 265 | 260 | 78 | 372 | 372 | 93 | 182 | 184 | 101 | 261 | 262 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1706 | 1774 | 1770 | 1763 | 1774 | 1770 | 1736 | 1774 | 1770 | 1760 |
| Q Serve(g_s), s | 4.4 | 16.4 | 16.7 | 5.2 | 21.7 | 21.8 | 6.2 | 9.5 | 9.8 | 6.7 | 14.6 | 14.8 |
| Cycle Q Clear(g_c), s | 4.4 | 16.4 | 16.7 | 5.2 | 21.7 | 21.8 | 6.2 | 9.5 | 9.8 | 6.7 | 14.6 | 14.8 |
| Prop In Lane | 1.00 | | 0.52 | 1.00 | | 0.32 | 1.00 | | 0.41 | 1.00 | | 0.33 |
| Lane Grp Cap(c), veh/h | 237 | 701 | 676 | 109 | 566 | 564 | 118 | 551 | 541 | 125 | 525 | 522 |
| V/C Ratio(X) | 0.28 | 0.38 | 0.38 | 0.71 | 0.66 | 0.66 | 0.79 | 0.33 | 0.34 | 0.81 | 0.50 | 0.50 |
| Avail Cap(c_a), veh/h | 237 | 701 | 676 | 205 | 566 | 564 | 220 | 551 | 541 | 220 | 525 | 522 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.94 | 0.94 | 0.94 | 0.49 | 0.49 | 0.49 | 0.99 | 0.99 | 0.99 | 0.85 | 0.85 | 0.85 |
| Uniform Delay (d), s/veh | 51.8 | 38.6 | 38.8 | 55.3 | 35.1 | 35.2 | 55.2 | 31.7 | 31.8 | 54.9 | 34.8 | 34.9 |
| Incr Delay (d2), s/veh | 0.2 | 1.5 | 1.5 | 1.6 | 2.9 | 2.9 | 4.3 | 1.6 | 1.7 | 3.9 | 2.8 | 2.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.2 | 8.3 | 8.2 | 2.6 | 11.1 | 11.1 | 3.2 | 4.9 | 4.9 | 3.4 | 7.5 | 7.6 |
| LnGrp Delay(d),s/veh | 52.0 | 40.1 | 40.3 | 56.8 | 38.0 | 38.1 | 59.5 | 33.3 | 33.5 | 58.8 | 37.7 | 37.8 |
| LnGrp LOS | D | D | D | E | D | D | E | C | C | E | D | D |
| Approach Vol, veh/h | | 592 | | | 822 | | | 459 | | | 624 | |
| Approach Delay, s/veh | | 41.5 | | | 39.9 | | | 38.7 | | | 41.1 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 12.6 | 43.8 | 11.5 | 52.1 | 14.4 | 42.0 | 20.6 | 43.0 | | | | |
| Change Period (Y+Rc), s | 4.1 | 6.4 | 4.1 | 4.6 | 6.4 | * 6.4 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 14.9 | 35.6 | 13.9 | 36.4 | 14.9 | * 36 | 11.9 | * 38 | | | | |
| Max Q Clear Time (g_c+I1), s | 8.7 | 11.8 | 7.2 | 18.7 | 8.2 | 16.8 | 6.4 | 23.8 | | | | |
| Green Ext Time (p_c), s | 0.1 | 1.4 | 0.0 | 1.9 | 0.2 | 1.9 | 0.1 | 2.6 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 40.4 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | |  | |  | |  | |  |  |  |
| Traffic Volume (veh/h) | 9 | 2 | 24 | 71 | 1 | 72 | 2 | 321 | 54 | 66 | 461 | 3 |
| Future Volume (veh/h) | 9 | 2 | 24 | 71 | 1 | 72 | 2 | 321 | 54 | 66 | 461 | 3 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1900 | 1863 | 1900 | 1863 | 1900 | 1863 | 1900 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 10 | 2 | 27 | 80 | 1 | 81 | 2 | 361 | 61 | 74 | 518 | 3 |
| Adj No. of Lanes | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 1 | 2 | 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 | 71 | 19 | 84 | 200 | 0 | 122 | 44 | 2093 | 348 | 96 | 2905 | 17 |
| Arrive On Green | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.70 | 0.70 | 0.70 | 0.05 | 0.81 | 0.81 |
| Sat Flow, veh/h | 232 | 252 | 1089 | 1375 | 0 | 1583 | 2 | 2971 | 495 | 1774 | 3608 | 21 |
| Grp Volume(v), veh/h | 39 | 0 | 0 | 80 | 0 | 81 | 226 | 0 | 198 | 74 | 254 | 267 |
| Grp Sat Flow(s),veh/h/ln | 1573 | 0 | 0 | 1375 | 0 | 1583 | 1860 | 0 | 1608 | 1774 | 1770 | 1859 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 2.4 | 0.0 | 4.2 | 0.0 | 0.0 | 3.5 | 3.5 | 2.8 | 2.8 |
| Cycle Q Clear(g_c), s | 1.9 | 0.0 | 0.0 | 4.3 | 0.0 | 4.2 | 3.5 | 0.0 | 3.5 | 3.5 | 2.8 | 2.8 |
| Prop In Lane | 0.26 | | 0.69 | 1.00 | | 1.00 | 0.01 | | 0.31 | 1.00 | | 0.01 |
| Lane Grp Cap(c), veh/h | 175 | 0 | 0 | 200 | 0 | 122 | 1353 | 0 | 1132 | 96 | 1425 | 1497 |
| V/C Ratio(X) | 0.22 | 0.00 | 0.00 | 0.40 | 0.00 | 0.66 | 0.17 | 0.00 | 0.18 | 0.77 | 0.18 | 0.18 |
| Avail Cap(c_a), veh/h | 530 | 0 | 0 | 514 | 0 | 484 | 1353 | 0 | 1132 | 313 | 1425 | 1497 |
| 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 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.85 | 0.85 | 0.85 |
| Uniform Delay (d), s/veh | 37.1 | 0.0 | 0.0 | 38.0 | 0.0 | 38.1 | 4.2 | 0.0 | 4.2 | 39.7 | 1.9 | 1.9 |
| Incr Delay (d2), s/veh | 0.2 | 0.0 | 0.0 | 0.5 | 0.0 | 2.3 | 0.3 | 0.0 | 0.3 | 4.2 | 0.2 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.9 | 0.0 | 0.0 | 1.8 | 0.0 | 1.9 | 1.9 | 0.0 | 1.6 | 1.8 | 1.4 | 1.5 |
| LnGrp Delay(d),s/veh | 37.3 | 0.0 | 0.0 | 38.5 | 0.0 | 40.4 | 4.5 | 0.0 | 4.6 | 43.9 | 2.1 | 2.1 |
| LnGrp LOS | D | | | D | | D | A | | A | D | A | A |
| Approach Vol, veh/h | | 39 | | | 161 | | | 424 | | | 595 | |
| Approach Delay, s/veh | | 37.3 | | | 39.5 | | | 4.5 | | | 7.3 | |
| Approach LOS | | D | | | D | | | A | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 8.6 | 64.9 | | 11.6 | | 73.4 | | 11.6 | | | | |
| Change Period (Y+Rc), s | 4.0 | 5.0 | | * 5 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 15.0 | 30.0 | | * 27 | | 49.0 | | 26.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.5 | 5.5 | | 3.9 | | 4.8 | | 6.3 | | | | |
| Green Ext Time (p_c), s | 0.0 | 5.9 | | 0.4 | | 6.5 | | 0.4 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 11.6 | | | | | | | | |
| HCM 2010 LOS | | | | B | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
12: Broadway & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Conditions AM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 91 | 250 | 104 | 71 | 479 | 217 | 124 | 423 | 38 | 181 | 808 | 133 |
| Future Volume (veh/h) | 91 | 250 | 104 | 71 | 479 | 217 | 124 | 423 | 38 | 181 | 808 | 133 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 95 | 260 | 108 | 74 | 499 | 226 | 129 | 441 | 40 | 189 | 842 | 139 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 121 | 664 | 269 | 95 | 605 | 273 | 179 | 990 | 89 | 228 | 1001 | 165 |
| Arrive On Green | 0.07 | 0.27 | 0.27 | 0.05 | 0.25 | 0.25 | 0.10 | 0.30 | 0.30 | 0.13 | 0.33 | 0.33 |
| Sat Flow, veh/h | 1774 | 2461 | 996 | 1774 | 2374 | 1070 | 1774 | 3283 | 297 | 1774 | 3042 | 502 |
| Grp Volume(v), veh/h | 95 | 185 | 183 | 74 | 371 | 354 | 129 | 237 | 244 | 189 | 490 | 491 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1687 | 1774 | 1770 | 1674 | 1774 | 1770 | 1810 | 1774 | 1770 | 1774 |
| Q Serve(g_s), s | 3.8 | 6.2 | 6.5 | 3.0 | 14.4 | 14.6 | 5.1 | 7.9 | 7.9 | 7.6 | 18.7 | 18.7 |
| Cycle Q Clear(g_c), s | 3.8 | 6.2 | 6.5 | 3.0 | 14.4 | 14.6 | 5.1 | 7.9 | 7.9 | 7.6 | 18.7 | 18.7 |
| Prop In Lane | 1.00 | | 0.59 | 1.00 | | 0.64 | 1.00 | | 0.16 | 1.00 | | 0.28 |
| Lane Grp Cap(c), veh/h | 121 | 478 | 455 | 95 | 451 | 427 | 179 | 534 | 546 | 228 | 582 | 584 |
| V/C Ratio(X) | 0.78 | 0.39 | 0.40 | 0.78 | 0.82 | 0.83 | 0.72 | 0.44 | 0.45 | 0.83 | 0.84 | 0.84 |
| Avail Cap(c_a), veh/h | 134 | 485 | 462 | 134 | 485 | 459 | 182 | 534 | 546 | 231 | 582 | 584 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.4 | 21.7 | 21.8 | 34.1 | 25.6 | 25.7 | 31.8 | 20.5 | 20.6 | 31.0 | 22.7 | 22.7 |
| Incr Delay (d2), s/veh | 23.5 | 0.5 | 0.6 | 17.3 | 10.4 | 11.4 | 12.7 | 2.7 | 2.6 | 21.4 | 13.8 | 13.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.7 | 3.1 | 3.1 | 1.9 | 8.3 | 8.0 | 3.1 | 4.2 | 4.3 | 5.1 | 11.3 | 11.4 |
| LnGrp Delay(d),s/veh | 56.9 | 22.2 | 22.4 | 51.4 | 36.1 | 37.1 | 44.5 | 23.2 | 23.2 | 52.4 | 36.5 | 36.4 |
| LnGrp LOS | E | C | C | D | D | D | D | C | C | D | D | D |
| Approach Vol, veh/h | | 463 | | | 799 | | | 610 | | | 1170 | |
| Approach Delay, s/veh | | 29.4 | | | 37.9 | | | 27.7 | | | 39.0 | |
| Approach LOS | | C | | | D | | | C | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 13.9 | 26.5 | 8.4 | 24.2 | 11.9 | 28.5 | 9.5 | 23.1 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 9.5 | 22.0 | 5.5 | 20.0 | 7.5 | 24.0 | 5.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 9.6 | 9.9 | 5.0 | 8.5 | 7.1 | 20.7 | 5.8 | 16.6 | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.5 | 0.0 | 5.1 | 0.1 | 1.8 | 0.0 | 2.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 35.0 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 75 | 275 | 65 | 73 | 546 | 204 | 70 | 254 | 19 | 187 | 602 | 77 |
| Future Volume (veh/h) | 75 | 275 | 65 | 73 | 546 | 204 | 70 | 254 | 19 | 187 | 602 | 77 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 79 | 289 | 68 | 77 | 575 | 215 | 74 | 267 | 20 | 197 | 634 | 81 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 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 | 101 | 418 | 97 | 307 | 662 | 247 | 96 | 982 | 73 | 239 | 1183 | 151 |
| Arrive On Green | 0.06 | 0.15 | 0.15 | 0.17 | 0.26 | 0.26 | 0.05 | 0.29 | 0.29 | 0.13 | 0.37 | 0.37 |
| Sat Flow, veh/h | 1774 | 2854 | 661 | 1774 | 2524 | 942 | 1774 | 3340 | 249 | 1774 | 3158 | 403 |
| Grp Volume(v), veh/h | 79 | 177 | 180 | 77 | 403 | 387 | 74 | 141 | 146 | 197 | 355 | 360 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1746 | 1774 | 1770 | 1697 | 1774 | 1770 | 1819 | 1774 | 1770 | 1792 |
| Q Serve(g_s), s | 3.1 | 6.8 | 7.0 | 2.7 | 15.5 | 15.6 | 2.9 | 4.4 | 4.4 | 7.7 | 11.2 | 11.2 |
| Cycle Q Clear(g_c), s | 3.1 | 6.8 | 7.0 | 2.7 | 15.5 | 15.6 | 2.9 | 4.4 | 4.4 | 7.7 | 11.2 | 11.2 |
| Prop In Lane | 1.00 | | 0.38 | 1.00 | | 0.56 | 1.00 | | 0.14 | 1.00 | | 0.22 |
| Lane Grp Cap(c), veh/h | 101 | 259 | 256 | 307 | 464 | 445 | 96 | 520 | 535 | 239 | 663 | 671 |
| V/C Ratio(X) | 0.78 | 0.68 | 0.70 | 0.25 | 0.87 | 0.87 | 0.77 | 0.27 | 0.27 | 0.83 | 0.54 | 0.54 |
| Avail Cap(c_a), veh/h | 137 | 496 | 489 | 307 | 496 | 475 | 147 | 520 | 535 | 261 | 663 | 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 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.2 | 28.9 | 29.0 | 25.5 | 25.2 | 25.2 | 33.4 | 19.3 | 19.4 | 30.1 | 17.5 | 17.5 |
| Incr Delay (d2), s/veh | 18.2 | 3.2 | 3.5 | 0.4 | 14.4 | 15.2 | 12.8 | 1.3 | 1.3 | 17.9 | 3.1 | 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(50%),veh/ln | 2.0 | 3.5 | 3.6 | 1.3 | 9.4 | 9.1 | 1.8 | 2.3 | 2.4 | 5.0 | 6.0 | 6.1 |
| LnGrp Delay(d),s/veh | 51.4 | 32.1 | 32.5 | 26.0 | 39.6 | 40.4 | 46.2 | 20.6 | 20.6 | 48.0 | 20.5 | 20.5 |
| LnGrp LOS | D | C | C | C | D | D | D | C | C | D | C | C |
| Approach Vol, veh/h | | 436 | | | 867 | | | 361 | | | 912 | |
| Approach Delay, s/veh | | 35.8 | | | 38.7 | | | 25.9 | | | 26.5 | |
| Approach LOS | | D | | | D | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 14.1 | 25.5 | 16.8 | 15.0 | 8.3 | 31.3 | 8.6 | 23.2 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 10.5 | 21.0 | 5.5 | 20.0 | 5.9 | 25.6 | 5.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 9.7 | 6.4 | 4.7 | 9.0 | 4.9 | 13.2 | 5.1 | 17.6 | | | | |
| Green Ext Time (p_c), s | 0.1 | 1.3 | 0.0 | 1.5 | 0.0 | 4.0 | 0.0 | 1.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 32.1 | | | | | | | | | |
| HCM 2010 LOS | | | C | | | | | | | | | |

SEC CCP/Mission TIA
1: Rock Springs Rd & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Conditions Mid-Day Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  |  |
| Traffic Volume (veh/h) | 103 | 522 | 86 | 62 | 558 | 142 | 110 | 190 | 80 | 52 | 217 | 60 |
| Future Volume (veh/h) | 103 | 522 | 86 | 62 | 558 | 142 | 110 | 190 | 80 | 52 | 217 | 60 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 107 | 544 | 90 | 65 | 581 | 148 | 115 | 198 | 83 | 54 | 226 | 62 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 135 | 1751 | 289 | 84 | 1529 | 389 | 228 | 608 | 246 | 268 | 461 | 391 |
| Arrive On Green | 0.08 | 0.58 | 0.58 | 0.05 | 0.55 | 0.55 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Sat Flow, veh/h | 1774 | 3042 | 502 | 1774 | 2797 | 710 | 1087 | 2461 | 996 | 1094 | 1863 | 1583 |
| Grp Volume(v), veh/h | 107 | 316 | 318 | 65 | 367 | 362 | 115 | 140 | 141 | 54 | 226 | 62 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1774 | 1774 | 1770 | 1737 | 1087 | 1770 | 1687 | 1094 | 1863 | 1583 |
| Q Serve(g_s), s | 5.9 | 9.2 | 9.3 | 3.6 | 11.9 | 11.9 | 10.1 | 6.5 | 6.8 | 4.3 | 10.4 | 3.1 |
| Cycle Q Clear(g_c), s | 5.9 | 9.2 | 9.3 | 3.6 | 11.9 | 11.9 | 20.5 | 6.5 | 6.8 | 11.1 | 10.4 | 3.1 |
| Prop In Lane | 1.00 | | 0.28 | 1.00 | | 0.41 | 1.00 | | 0.59 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 135 | 1019 | 1021 | 84 | 968 | 950 | 228 | 437 | 417 | 268 | 461 | 391 |
| V/C Ratio(X) | 0.79 | 0.31 | 0.31 | 0.78 | 0.38 | 0.38 | 0.51 | 0.32 | 0.34 | 0.20 | 0.49 | 0.16 |
| Avail Cap(c_a), veh/h | 284 | 1019 | 1021 | 195 | 968 | 950 | 301 | 557 | 531 | 342 | 587 | 499 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.90 | 0.90 | 0.90 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 45.4 | 11.0 | 11.0 | 47.1 | 13.0 | 13.0 | 41.0 | 30.8 | 30.9 | 35.5 | 32.2 | 29.5 |
| Incr Delay (d2), s/veh | 4.0 | 0.8 | 0.8 | 5.1 | 1.0 | 1.0 | 1.3 | 0.3 | 0.4 | 0.3 | 0.6 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.1 | 4.7 | 4.7 | 1.9 | 6.1 | 6.0 | 3.1 | 3.2 | 3.2 | 1.3 | 5.4 | 1.4 |
| LnGrp Delay(d),s/veh | 49.4 | 11.8 | 11.8 | 52.2 | 14.0 | 14.0 | 42.3 | 31.1 | 31.3 | 35.7 | 32.8 | 29.6 |
| LnGrp LOS | D | B | B | D | B | B | D | C | C | D | C | C |
| Approach Vol, veh/h | | 741 | | | 794 | | | 396 | | | 342 | |
| Approach Delay, s/veh | | 17.2 | | | 17.1 | | | 34.4 | | | 32.7 | |
| Approach LOS | | B | | | B | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 8.7 | 62.1 | | 29.2 | 11.6 | 59.2 | | 29.2 | | | | |
| Change Period (Y+Rc), s | 4.0 | 4.5 | | 4.5 | 4.0 | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | 11.0 | 44.5 | | 31.5 | 16.0 | 39.5 | | 31.5 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.6 | 11.3 | | 13.1 | 7.9 | 13.9 | | 22.5 | | | | |
| Green Ext Time (p_c), s | 0.0 | 12.6 | | 2.9 | 0.1 | 11.3 | | 2.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 22.5 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  | |
| Traffic Volume (veh/h) | 53 | 663 | 80 | 131 | 671 | 134 | 111 | 62 | 145 | 136 | 80 | 38 |
| Future Volume (veh/h) | 53 | 663 | 80 | 131 | 671 | 134 | 111 | 62 | 145 | 136 | 80 | 38 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 55 | 691 | 83 | 136 | 699 | 140 | 116 | 65 | 151 | 142 | 83 | 40 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 425 | 992 | 119 | 553 | 1129 | 226 | 223 | 220 | 187 | 174 | 108 | 52 |
| Arrive On Green | 0.24 | 0.31 | 0.31 | 0.62 | 0.77 | 0.77 | 0.04 | 0.04 | 0.04 | 0.10 | 0.09 | 0.09 |
| Sat Flow, veh/h | 1774 | 3183 | 382 | 1774 | 2940 | 588 | 1774 | 1863 | 1583 | 1774 | 1189 | 573 |
| Grp Volume(v), veh/h | 55 | 384 | 390 | 136 | 421 | 418 | 116 | 65 | 151 | 142 | 0 | 123 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1795 | 1774 | 1770 | 1759 | 1774 | 1863 | 1583 | 1774 | 0 | 1762 |
| Q Serve(g_s), s | 2.9 | 22.9 | 22.9 | 4.1 | 12.6 | 12.6 | 7.7 | 4.1 | 11.4 | 9.4 | 0.0 | 8.2 |
| Cycle Q Clear(g_c), s | 2.9 | 22.9 | 22.9 | 4.1 | 12.6 | 12.6 | 7.7 | 4.1 | 11.4 | 9.4 | 0.0 | 8.2 |
| Prop In Lane | 1.00 | | 0.21 | 1.00 | | 0.33 | 1.00 | | 1.00 | 1.00 | | 0.33 |
| Lane Grp Cap(c), veh/h | 425 | 552 | 560 | 553 | 680 | 676 | 223 | 220 | 187 | 174 | 0 | 159 |
| V/C Ratio(X) | 0.13 | 0.70 | 0.70 | 0.25 | 0.62 | 0.62 | 0.52 | 0.30 | 0.81 | 0.81 | 0.00 | 0.77 |
| Avail Cap(c_a), veh/h | 425 | 552 | 560 | 553 | 680 | 676 | 232 | 433 | 368 | 265 | 0 | 442 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.97 | 0.97 | 0.97 | 0.83 | 0.83 | 0.83 | 0.88 | 0.88 | 0.88 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 35.8 | 36.3 | 36.3 | 16.3 | 10.0 | 10.0 | 53.9 | 52.8 | 56.3 | 53.0 | 0.0 | 53.4 |
| Incr Delay (d2), s/veh | 0.2 | 6.9 | 6.8 | 0.2 | 3.5 | 3.5 | 2.0 | 0.8 | 8.4 | 12.4 | 0.0 | 9.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.5 | 12.3 | 12.4 | 2.0 | 6.5 | 6.5 | 3.9 | 2.1 | 5.4 | 5.2 | 0.0 | 4.4 |
| LnGrp Delay(d),s/veh | 36.0 | 43.2 | 43.1 | 16.5 | 13.5 | 13.6 | 55.9 | 53.6 | 64.7 | 65.4 | 0.0 | 62.5 |
| LnGrp LOS | D | D | D | B | B | B | E | D | E | E | | E |
| Approach Vol, veh/h | | 829 | | | 975 | | | 332 | | | 265 | |
| Approach Delay, s/veh | | 42.7 | | | 14.0 | | | 59.5 | | | 64.1 | |
| Approach LOS | | D | | | B | | | E | | | E | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 42.0 | 42.8 | 19.2 | 16.0 | 33.3 | 51.5 | 15.9 | 19.3 | | | | |
| Change Period (Y+Rc), s | 4.6 | 5.4 | 4.1 | 5.1 | 4.6 | * 5.4 | 4.1 | 5.1 | | | | |
| Max Green Setting (Gmax), s | 17.6 | 37.4 | 15.7 | 30.1 | 9.4 | * 46 | 17.9 | 27.9 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.1 | 24.9 | 9.7 | 10.2 | 4.9 | 14.6 | 11.4 | 13.4 | | | | |
| Green Ext Time (p_c), s | 0.5 | 6.2 | 0.5 | 0.7 | 0.2 | 11.6 | 0.5 | 0.8 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 35.7 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
3: Quince St & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Conditions Mid-Day Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 28 | 470 | 91 | 75 | 501 | 106 | 75 | 121 | 114 | 46 | 141 | 35 |
| Future Volume (veh/h) | 28 | 470 | 91 | 75 | 501 | 106 | 75 | 121 | 114 | 46 | 141 | 35 |
| 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 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 29 | 490 | 95 | 78 | 522 | 110 | 78 | 126 | 119 | 48 | 147 | 36 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 674 | 2295 | 443 | 664 | 2258 | 474 | 180 | 266 | 231 | 148 | 420 | 100 |
| Arrive On Green | 0.78 | 0.78 | 0.78 | 1.00 | 1.00 | 1.00 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Sat Flow, veh/h | 792 | 2961 | 571 | 827 | 2913 | 611 | 1196 | 1798 | 1560 | 1130 | 2837 | 676 |
| Grp Volume(v), veh/h | 29 | 292 | 293 | 78 | 316 | 316 | 78 | 124 | 121 | 48 | 90 | 93 |
| Grp Sat Flow(s),veh/h/ln | 792 | 1770 | 1762 | 827 | 1770 | 1755 | 1196 | 1770 | 1588 | 1130 | 1770 | 1743 |
| Q Serve(g_s), s | 1.0 | 5.3 | 5.4 | 0.7 | 0.0 | 0.0 | 7.5 | 7.7 | 8.4 | 4.9 | 5.5 | 5.7 |
| Cycle Q Clear(g_c), s | 1.0 | 5.3 | 5.4 | 6.1 | 0.0 | 0.0 | 13.3 | 7.7 | 8.4 | 13.4 | 5.5 | 5.7 |
| Prop In Lane | 1.00 | | 0.32 | 1.00 | | 0.35 | 1.00 | | 0.98 | 1.00 | | 0.39 |
| Lane Grp Cap(c), veh/h | 674 | 1372 | 1366 | 664 | 1372 | 1360 | 180 | 262 | 235 | 148 | 262 | 258 |
| V/C Ratio(X) | 0.04 | 0.21 | 0.21 | 0.12 | 0.23 | 0.23 | 0.43 | 0.47 | 0.52 | 0.32 | 0.34 | 0.36 |
| Avail Cap(c_a), veh/h | 674 | 1372 | 1366 | 664 | 1372 | 1360 | 445 | 655 | 587 | 399 | 655 | 645 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.74 | 0.74 | 0.74 | 1.00 | 1.00 | 1.00 | 0.78 | 0.78 | 0.78 |
| Uniform Delay (d), s/veh | 3.1 | 3.6 | 3.6 | 0.2 | 0.0 | 0.0 | 52.0 | 46.8 | 47.1 | 53.3 | 45.9 | 46.0 |
| Incr Delay (d2), s/veh | 0.1 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 1.2 | 1.0 | 1.3 | 0.7 | 0.4 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.2 | 2.7 | 2.7 | 0.2 | 0.1 | 0.1 | 2.6 | 3.8 | 3.8 | 1.6 | 2.7 | 2.8 |
| LnGrp Delay(d),s/veh | 3.3 | 4.0 | 4.0 | 0.4 | 0.3 | 0.3 | 53.2 | 47.8 | 48.4 | 54.0 | 46.3 | 46.5 |
| LnGrp LOS | A | A | A | A | A | A | D | D | D | D | D | D |
| Approach Vol, veh/h | | 614 | | | 710 | | | 323 | | | 231 | |
| Approach Delay, s/veh | | 4.0 | | | 0.3 | | | 49.3 | | | 48.0 | |
| Approach LOS | | A | | | A | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 97.6 | | 22.4 | | 97.6 | | 22.4 | | | | |
| Change Period (Y+Rc), s | | 4.6 | | 4.6 | | 4.6 | | 4.6 | | | | |
| Max Green Setting (Gmax), s | | 66.4 | | 44.4 | | 66.4 | | 44.4 | | | | |
| Max Q Clear Time (g_c+I1), s | | 7.4 | | 15.3 | | 8.1 | | 15.4 | | | | |
| Green Ext Time (p_c), s | | 8.2 | | 2.4 | | 8.2 | | 2.4 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 15.8 | | | | | | | | |
| HCM 2010 LOS | | | | B | | | | | | | | |

SEC CCP/Mission TIA
4: Centre City Pkwy & El Norte Pkwy

HCM 2010 Signalized Intersection Summary
Existing Conditions Mid-Day Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 30 | 489 | 195 | 175 | 468 | 78 | 223 | 276 | 117 | 111 | 287 | 38 |
| Future Volume (veh/h) | 30 | 489 | 195 | 175 | 468 | 78 | 223 | 276 | 117 | 111 | 287 | 38 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 31 | 509 | 203 | 182 | 488 | 81 | 232 | 288 | 122 | 116 | 299 | 40 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 171 | 864 | 387 | 241 | 805 | 133 | 338 | 1503 | 672 | 310 | 1470 | 658 |
| Arrive On Green | 0.05 | 0.24 | 0.24 | 0.07 | 0.26 | 0.26 | 0.10 | 0.42 | 0.42 | 0.09 | 0.42 | 0.42 |
| Sat Flow, veh/h | 3442 | 3539 | 1583 | 3442 | 3041 | 502 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 31 | 509 | 203 | 182 | 283 | 286 | 232 | 288 | 122 | 116 | 299 | 40 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1583 | 1721 | 1770 | 1774 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 1.2 | 18.1 | 15.9 | 7.4 | 20.0 | 20.2 | 9.3 | 7.3 | 6.9 | 4.5 | 7.7 | 2.2 |
| Cycle Q Clear(g_c), s | 1.2 | 18.1 | 15.9 | 7.4 | 20.0 | 20.2 | 9.3 | 7.3 | 6.9 | 4.5 | 7.7 | 2.2 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.28 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 171 | 864 | 387 | 241 | 468 | 470 | 338 | 1503 | 672 | 310 | 1470 | 658 |
| V/C Ratio(X) | 0.18 | 0.59 | 0.52 | 0.76 | 0.60 | 0.61 | 0.69 | 0.19 | 0.18 | 0.37 | 0.20 | 0.06 |
| Avail Cap(c_a), veh/h | 241 | 1302 | 582 | 350 | 707 | 709 | 403 | 1503 | 672 | 313 | 1470 | 658 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 65.0 | 47.6 | 46.8 | 65.2 | 45.9 | 46.0 | 62.2 | 25.7 | 25.6 | 61.1 | 26.6 | 25.0 |
| Incr Delay (d2), s/veh | 0.4 | 1.1 | 1.9 | 2.7 | 2.1 | 2.2 | 2.5 | 0.3 | 0.6 | 0.3 | 0.3 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.6 | 9.0 | 7.1 | 3.6 | 10.0 | 10.1 | 4.6 | 3.6 | 3.1 | 2.2 | 3.8 | 1.0 |
| LnGrp Delay(d),s/veh | 65.4 | 48.7 | 48.6 | 67.8 | 48.1 | 48.2 | 64.8 | 26.0 | 26.2 | 61.4 | 27.0 | 25.2 |
| LnGrp LOS | E | D | D | E | D | D | E | C | C | E | C | C |
| Approach Vol, veh/h | | 743 | | | 751 | | | 642 | | | 455 | |
| Approach Delay, s/veh | | 49.4 | | | 52.9 | | | 40.0 | | | 35.6 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 19.0 | 67.5 | 15.1 | 41.2 | 20.3 | 66.2 | 12.2 | 44.1 | | | | |
| Change Period (Y+Rc), s | 6.1 | 6.9 | 5.1 | 6.3 | 6.3 | 6.9 | 5.1 | 6.3 | | | | |
| Max Green Setting (Gmax), s | 13.0 | 60.6 | 14.5 | 52.5 | 16.7 | 56.7 | 10.0 | 57.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.5 | 9.3 | 9.4 | 20.1 | 11.3 | 9.7 | 3.2 | 22.2 | | | | |
| Green Ext Time (p_c), s | 0.1 | 6.0 | 0.1 | 14.7 | 0.2 | 6.0 | 0.0 | 15.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 45.7 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 6 | 1 | 20 | 125 | 1 | 108 | 21 | 517 | 53 | 47 | 672 | 2 |
| Future Volume (veh/h) | 6 | 1 | 20 | 125 | 1 | 108 | 21 | 517 | 53 | 47 | 672 | 2 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 7 | 1 | 22 | 140 | 1 | 121 | 24 | 581 | 60 | 53 | 755 | 2 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 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 | 35 | 11 | 238 | 250 | 4 | 436 | 80 | 1162 | 520 | 160 | 1210 | 541 |
| Arrive On Green | 0.02 | 0.16 | 0.16 | 0.14 | 0.28 | 0.28 | 0.05 | 0.33 | 0.33 | 0.09 | 0.34 | 0.34 |
| Sat Flow, veh/h | 1774 | 69 | 1524 | 1774 | 13 | 1572 | 1774 | 3539 | 1583 | 1774 | 3539 | 1583 |
| Grp Volume(v), veh/h | 7 | 0 | 23 | 140 | 0 | 122 | 24 | 581 | 60 | 53 | 755 | 2 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 0 | 1594 | 1774 | 0 | 1585 | 1774 | 1770 | 1583 | 1774 | 1770 | 1583 |
| Q Serve(g_s), s | 0.3 | 0.0 | 0.9 | 5.4 | 0.0 | 4.4 | 1.0 | 9.7 | 1.9 | 2.1 | 13.1 | 0.0 |
| Cycle Q Clear(g_c), s | 0.3 | 0.0 | 0.9 | 5.4 | 0.0 | 4.4 | 1.0 | 9.7 | 1.9 | 2.1 | 13.1 | 0.0 |
| Prop In Lane | 1.00 | | 0.96 | 1.00 | | 0.99 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 35 | 0 | 249 | 250 | 0 | 440 | 80 | 1162 | 520 | 160 | 1210 | 541 |
| V/C Ratio(X) | 0.20 | 0.00 | 0.09 | 0.56 | 0.00 | 0.28 | 0.30 | 0.50 | 0.12 | 0.33 | 0.62 | 0.00 |
| Avail Cap(c_a), veh/h | 266 | 0 | 955 | 266 | 0 | 950 | 217 | 1162 | 520 | 242 | 1210 | 541 |
| 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 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 35.4 | 0.0 | 26.5 | 29.4 | 0.0 | 20.8 | 33.9 | 19.8 | 17.2 | 31.3 | 20.2 | 8.5 |
| Incr Delay (d2), s/veh | 1.0 | 0.0 | 0.1 | 1.2 | 0.0 | 0.3 | 0.8 | 1.5 | 0.5 | 0.4 | 2.4 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.1 | 0.0 | 0.4 | 2.7 | 0.0 | 2.0 | 0.5 | 4.9 | 0.9 | 1.0 | 6.8 | 0.0 |
| LnGrp Delay(d),s/veh | 36.4 | 0.0 | 26.7 | 30.6 | 0.0 | 21.0 | 34.7 | 21.4 | 17.7 | 31.8 | 22.7 | 8.5 |
| LnGrp LOS | D | | C | C | | C | C | C | B | C | C | A |
| Approach Vol, veh/h | | 30 | | | 262 | | | 665 | | | 810 | |
| Approach Delay, s/veh | | 28.9 | | | 26.1 | | | 21.5 | | | 23.2 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 11.2 | 31.0 | 15.1 | 16.2 | 10.2 | 32.0 | 6.2 | 25.1 | | | | |
| Change Period (Y+Rc), s | 4.6 | 6.9 | * 4.7 | * 4.7 | 6.9 | * 6.9 | * 4.7 | * 4.7 | | | | |
| Max Green Setting (Gmax), s | 10.0 | 24.1 | * 11 | * 44 | 9.0 | * 25 | * 11 | * 44 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.1 | 11.7 | 7.4 | 2.9 | 3.0 | 15.1 | 2.3 | 6.4 | | | | |
| Green Ext Time (p_c), s | 0.0 | 3.7 | 0.1 | 0.8 | 2.1 | 4.0 | 0.0 | 0.8 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 23.1 | | | | | | | | | |
| HCM 2010 LOS | | | C | | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 221 | 558 | 103 | 74 | 504 | 262 | 75 | 444 | 74 | 245 | 625 | 357 |
| Future Volume (veh/h) | 221 | 558 | 103 | 74 | 504 | 262 | 75 | 444 | 74 | 245 | 625 | 357 |
| 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 | | 0.97 | 1.00 | | 0.95 | 1.00 | | 0.98 | 1.00 | | 0.98 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 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 | 1667 | 1863 | 1863 | 1667 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 226 | 569 | 105 | 76 | 514 | 267 | 77 | 453 | 76 | 250 | 638 | 364 |
| Adj No. of Lanes | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 271 | 1196 | 520 | 110 | 888 | 379 | 505 | 876 | 385 | 607 | 920 | 405 |
| Arrive On Green | 0.31 | 0.68 | 0.68 | 0.02 | 0.08 | 0.08 | 0.16 | 0.25 | 0.25 | 0.18 | 0.26 | 0.26 |
| Sat Flow, veh/h | 1774 | 3539 | 1540 | 1587 | 3539 | 1512 | 3079 | 3539 | 1557 | 3442 | 3539 | 1559 |
| Grp Volume(v), veh/h | 226 | 569 | 105 | 76 | 514 | 267 | 77 | 453 | 76 | 250 | 638 | 364 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1540 | 1587 | 1770 | 1512 | 1540 | 1770 | 1557 | 1721 | 1770 | 1559 |
| Q Serve(g_s), s | 14.3 | 9.2 | 1.9 | 5.7 | 16.8 | 20.6 | 2.6 | 13.3 | 3.6 | 7.7 | 19.5 | 27.0 |
| Cycle Q Clear(g_c), s | 14.3 | 9.2 | 1.9 | 5.7 | 16.8 | 20.6 | 2.6 | 13.3 | 3.6 | 7.7 | 19.5 | 27.0 |
| 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 | 271 | 1196 | 520 | 110 | 888 | 379 | 505 | 876 | 385 | 607 | 920 | 405 |
| V/C Ratio(X) | 0.83 | 0.48 | 0.20 | 0.69 | 0.58 | 0.70 | 0.15 | 0.52 | 0.20 | 0.41 | 0.69 | 0.90 |
| Avail Cap(c_a), veh/h | 333 | 1351 | 588 | 155 | 1032 | 441 | 505 | 876 | 385 | 607 | 920 | 405 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.87 | 0.87 | 0.87 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.90 | 0.90 | 0.90 |
| Uniform Delay (d), s/veh | 40.3 | 14.4 | 5.4 | 57.4 | 48.9 | 50.7 | 43.0 | 39.0 | 22.2 | 43.9 | 40.1 | 42.9 |
| Incr Delay (d2), s/veh | 10.5 | 0.2 | 0.1 | 2.9 | 0.4 | 3.7 | 0.1 | 2.2 | 1.1 | 0.1 | 3.9 | 23.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 7.7 | 4.5 | 0.8 | 2.6 | 8.3 | 9.0 | 1.1 | 6.7 | 1.7 | 3.7 | 10.1 | 14.2 |
| LnGrp Delay(d),s/veh | 50.8 | 14.6 | 5.5 | 60.3 | 49.4 | 54.4 | 43.1 | 41.1 | 23.3 | 44.0 | 43.9 | 66.1 |
| LnGrp LOS | D | B | A | E | D | D | D | D | C | D | D | E |
| Approach Vol, veh/h | | 900 | | | 857 | | | 606 | | | 1252 | |
| Approach Delay, s/veh | | 22.6 | | | 51.9 | | | 39.1 | | | 50.4 | |
| Approach LOS | | C | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 25.7 | 36.1 | 12.8 | 45.4 | 24.2 | 37.6 | 23.2 | 35.0 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.4 | 4.5 | 4.9 | 4.5 | 6.4 | 4.9 | * 4.9 | | | | |
| Max Green Setting (Gmax), s | 12.5 | 29.7 | 11.7 | 45.8 | 11.0 | 31.2 | 22.5 | * 35 | | | | |
| Max Q Clear Time (g_c+I1), s | 9.7 | 15.3 | 7.7 | 11.2 | 4.6 | 29.0 | 16.3 | 22.6 | | | | |
| Green Ext Time (p_c), s | 0.2 | 2.2 | 0.0 | 3.8 | 0.4 | 1.1 | 2.1 | 2.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 41.9 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 123 | 451 | 99 | 67 | 437 | 106 | 149 | 533 | 86 | 116 | 487 | 148 |
| Future Volume (veh/h) | 123 | 451 | 99 | 67 | 437 | 106 | 149 | 533 | 86 | 116 | 487 | 148 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 124 | 456 | 100 | 68 | 441 | 107 | 151 | 538 | 87 | 117 | 492 | 149 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 151 | 553 | 120 | 148 | 536 | 129 | 342 | 959 | 429 | 933 | 1626 | 727 |
| Arrive On Green | 0.03 | 0.06 | 0.06 | 0.03 | 0.06 | 0.06 | 0.10 | 0.27 | 0.27 | 0.54 | 0.92 | 0.92 |
| Sat Flow, veh/h | 1774 | 2891 | 630 | 1774 | 2831 | 681 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 124 | 278 | 278 | 68 | 274 | 274 | 151 | 538 | 87 | 117 | 492 | 149 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1752 | 1774 | 1770 | 1742 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 8.3 | 18.6 | 18.8 | 4.5 | 18.4 | 18.6 | 5.0 | 15.7 | 5.1 | 2.0 | 1.9 | 1.1 |
| Cycle Q Clear(g_c), s | 8.3 | 18.6 | 18.8 | 4.5 | 18.4 | 18.6 | 5.0 | 15.7 | 5.1 | 2.0 | 1.9 | 1.1 |
| Prop In Lane | 1.00 | | 0.36 | 1.00 | | 0.39 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 151 | 338 | 335 | 148 | 335 | 330 | 342 | 959 | 429 | 933 | 1626 | 727 |
| V/C Ratio(X) | 0.82 | 0.82 | 0.83 | 0.46 | 0.82 | 0.83 | 0.44 | 0.56 | 0.20 | 0.13 | 0.30 | 0.20 |
| Avail Cap(c_a), veh/h | 200 | 668 | 661 | 151 | 619 | 610 | 344 | 959 | 429 | 933 | 1626 | 727 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 0.98 | 0.98 | 0.98 | 0.87 | 0.87 | 0.87 | 0.96 | 0.96 | 0.96 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 57.4 | 54.2 | 54.3 | 55.7 | 54.2 | 54.3 | 50.9 | 37.6 | 33.8 | 20.5 | 2.7 | 2.7 |
| Incr Delay (d2), s/veh | 13.9 | 1.9 | 2.0 | 0.7 | 1.7 | 1.8 | 0.3 | 2.3 | 1.0 | 0.0 | 0.5 | 0.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 4.7 | 9.3 | 9.3 | 2.3 | 9.2 | 9.2 | 2.4 | 8.0 | 2.4 | 0.9 | 0.9 | 0.5 |
| LnGrp Delay(d),s/veh | 71.3 | 56.1 | 56.3 | 56.4 | 55.9 | 56.1 | 51.2 | 39.9 | 34.8 | 20.5 | 3.2 | 3.3 |
| LnGrp LOS | E | E | E | E | E | E | D | D | C | C | A | A |
| Approach Vol, veh/h | | 680 | | | 616 | | | 776 | | | 758 | |
| Approach Delay, s/veh | | 58.9 | | | 56.0 | | | 41.5 | | | 5.9 | |
| Approach LOS | | E | | | E | | | D | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 39.0 | 39.0 | 14.5 | 27.4 | 16.4 | 61.6 | 14.7 | 27.2 | | | | |
| Change Period (Y+Rc), s | 6.5 | * 6.5 | 4.5 | 4.5 | 4.5 | 6.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 12.0 | * 33 | 10.2 | 45.3 | 12.0 | 32.5 | 13.5 | 42.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.0 | 17.7 | 6.5 | 20.8 | 7.0 | 3.9 | 10.3 | 20.6 | | | | |
| Green Ext Time (p_c), s | 0.3 | 2.2 | 0.9 | 2.1 | 0.1 | 2.6 | 0.0 | 2.1 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 39.3 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
8: Centre City Pkwy & Valley Pkwy

HCM 2010 Signalized Intersection Summary
Existing Conditions Mid-Day Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | |  |  |  |  |  | | |  |  |
| Traffic Volume (veh/h) | 0 | 0 | 0 | 224 | 1022 | 221 | 185 | 559 | 0 | 0 | 554 | 85 |
| Future Volume (veh/h) | 0 | 0 | 0 | 224 | 1022 | 221 | 185 | 559 | 0 | 0 | 554 | 85 |
| Number | | | | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | | | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | | | | 1863 | 1863 | 1863 | 1863 | 1863 | 0 | 0 | 1863 | 1863 |
| Adj Flow Rate, veh/h | | | | 231 | 1054 | 228 | 191 | 576 | 0 | 0 | 571 | 88 |
| Adj No. of Lanes | | | | 1 | 3 | 1 | 2 | 2 | 0 | 0 | 2 | 1 |
| Peak Hour Factor | | | | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | | | | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 2 | 2 |
| Cap, veh/h | | | | 477 | 1502 | 426 | 308 | 2163 | 0 | 0 | 1669 | 747 |
| Arrive On Green | | | | 0.27 | 0.27 | 0.27 | 0.09 | 0.61 | 0.00 | 0.00 | 0.47 | 0.47 |
| Sat Flow, veh/h | | | | 1774 | 5588 | 1583 | 3442 | 3632 | 0 | 0 | 3632 | 1583 |
| Grp Volume(v), veh/h | | | | 231 | 1054 | 228 | 191 | 576 | 0 | 0 | 571 | 88 |
| Grp Sat Flow(s),veh/h/ln | | | | 1774 | 1863 | 1583 | 1721 | 1770 | 0 | 0 | 1770 | 1583 |
| Q Serve(g_s), s | | | | 10.9 | 17.0 | 12.3 | 5.3 | 7.6 | 0.0 | 0.0 | 10.2 | 3.1 |
| Cycle Q Clear(g_c), s | | | | 10.9 | 17.0 | 12.3 | 5.3 | 7.6 | 0.0 | 0.0 | 10.2 | 3.1 |
| Prop In Lane | | | | 1.00 | | 1.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | | | | 477 | 1502 | 426 | 308 | 2163 | 0 | 0 | 1669 | 747 |
| V/C Ratio(X) | | | | 0.48 | 0.70 | 0.54 | 0.62 | 0.27 | 0.00 | 0.00 | 0.34 | 0.12 |
| Avail Cap(c_a), veh/h | | | | 761 | 2397 | 679 | 413 | 2163 | 0 | 0 | 1669 | 747 |
| HCM Platoon Ratio | | | | 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 | 0.00 | 0.95 | 0.95 |
| Uniform Delay (d), s/veh | | | | 30.7 | 33.0 | 31.2 | 43.9 | 9.0 | 0.0 | 0.0 | 16.6 | 14.8 |
| Incr Delay (d2), s/veh | | | | 0.6 | 0.5 | 0.8 | 1.5 | 0.3 | 0.0 | 0.0 | 0.5 | 0.3 |
| Initial Q Delay(d3),s/veh | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | | | | 5.5 | 8.7 | 11.0 | 2.6 | 3.8 | 0.0 | 0.0 | 5.0 | 1.4 |
| LnGrp Delay(d),s/veh | | | | 31.3 | 33.4 | 32.0 | 45.4 | 9.3 | 0.0 | 0.0 | 17.2 | 15.1 |
| LnGrp LOS | | | | C | C | C | D | A | | | B | B |
| Approach Vol, veh/h | | | | | 1513 | | | 767 | | | 659 | |
| Approach Delay, s/veh | | | | | 32.9 | | | 18.3 | | | 16.9 | |
| 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 | | 68.0 | | 32.0 | 14.0 | 54.1 | | | | | | |
| Change Period (Y+Rc), s | | 6.9 | | 5.1 | 5.0 | 6.9 | | | | | | |
| Max Green Setting (Gmax), s | | 45.1 | | 42.9 | 12.0 | 28.1 | | | | | | |
| Max Q Clear Time (g_c+I1), s | | 9.6 | | 19.0 | 7.3 | 12.2 | | | | | | |
| Green Ext Time (p_c), s | | 7.7 | | 7.9 | 0.2 | 6.0 | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 25.5 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 105 | 456 | 154 | 108 | 408 | 36 | 184 | 205 | 111 | 81 | 234 | 122 |
| Future Volume (veh/h) | 105 | 456 | 154 | 108 | 408 | 36 | 184 | 205 | 111 | 81 | 234 | 122 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 117 | 507 | 171 | 120 | 453 | 40 | 204 | 228 | 123 | 90 | 260 | 136 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 290 | 783 | 263 | 304 | 1018 | 90 | 232 | 702 | 365 | 114 | 567 | 288 |
| Arrive On Green | 0.05 | 0.10 | 0.10 | 0.17 | 0.31 | 0.31 | 0.13 | 0.31 | 0.31 | 0.06 | 0.25 | 0.25 |
| Sat Flow, veh/h | 1774 | 2604 | 874 | 1774 | 3292 | 290 | 1774 | 2253 | 1172 | 1774 | 2275 | 1154 |
| Grp Volume(v), veh/h | 117 | 344 | 334 | 120 | 243 | 250 | 204 | 177 | 174 | 90 | 201 | 195 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1709 | 1774 | 1770 | 1812 | 1774 | 1770 | 1656 | 1774 | 1770 | 1659 |
| Q Serve(g_s), s | 7.7 | 22.4 | 22.6 | 7.2 | 13.2 | 13.3 | 13.6 | 9.2 | 9.7 | 6.0 | 11.5 | 12.0 |
| Cycle Q Clear(g_c), s | 7.7 | 22.4 | 22.6 | 7.2 | 13.2 | 13.3 | 13.6 | 9.2 | 9.7 | 6.0 | 11.5 | 12.0 |
| Prop In Lane | 1.00 | | 0.51 | 1.00 | | 0.16 | 1.00 | | 0.71 | 1.00 | | 0.70 |
| Lane Grp Cap(c), veh/h | 290 | 532 | 514 | 304 | 547 | 560 | 232 | 552 | 516 | 114 | 441 | 413 |
| V/C Ratio(X) | 0.40 | 0.65 | 0.65 | 0.39 | 0.44 | 0.45 | 0.88 | 0.32 | 0.34 | 0.79 | 0.45 | 0.47 |
| Avail Cap(c_a), veh/h | 290 | 532 | 514 | 304 | 547 | 560 | 353 | 552 | 516 | 191 | 441 | 413 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.77 | 0.77 | 0.77 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 51.1 | 47.9 | 48.0 | 44.2 | 33.2 | 33.2 | 51.2 | 31.6 | 31.8 | 55.3 | 38.2 | 38.3 |
| Incr Delay (d2), s/veh | 0.3 | 5.9 | 6.3 | 0.2 | 2.0 | 2.0 | 10.0 | 1.5 | 1.7 | 4.5 | 3.4 | 3.8 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.8 | 11.9 | 11.6 | 3.6 | 6.7 | 7.0 | 7.3 | 4.7 | 4.7 | 3.1 | 6.0 | 6.0 |
| LnGrp Delay(d),s/veh | 51.5 | 53.8 | 54.2 | 44.4 | 35.2 | 35.2 | 61.2 | 33.0 | 33.4 | 59.9 | 41.5 | 42.2 |
| LnGrp LOS | D | D | D | D | D | D | E | C | C | E | D | D |
| Approach Vol, veh/h | | 795 | | | 613 | | | 555 | | | 486 | |
| Approach Delay, s/veh | | 53.6 | | | 37.0 | | | 43.5 | | | 45.2 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 24.7 | 41.0 | 19.8 | 34.5 | 23.7 | 42.0 | 12.3 | 42.0 | | | | |
| Change Period (Y+Rc), s | 4.1 | 4.9 | 4.1 | 4.6 | 4.1 | 4.9 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 15.9 | 36.1 | 23.9 | 26.4 | 14.9 | 37.1 | 12.9 | * 37 | | | | |
| Max Q Clear Time (g_c+I1), s | 9.2 | 24.6 | 15.6 | 14.0 | 9.7 | 15.3 | 8.0 | 11.7 | | | | |
| Green Ext Time (p_c), s | 0.2 | 2.2 | 0.2 | 1.3 | 0.2 | 1.8 | 0.1 | 1.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 45.5 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
10: Escondido Blvd & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Conditions Mid-Day Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 91 | 434 | 107 | 137 | 425 | 101 | 86 | 256 | 125 | 76 | 284 | 94 |
| Future Volume (veh/h) | 91 | 434 | 107 | 137 | 425 | 101 | 86 | 256 | 125 | 76 | 284 | 94 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 92 | 438 | 108 | 138 | 429 | 102 | 87 | 259 | 126 | 77 | 287 | 95 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 292 | 738 | 181 | 381 | 886 | 209 | 114 | 705 | 333 | 109 | 736 | 239 |
| Arrive On Green | 0.05 | 0.09 | 0.09 | 0.21 | 0.31 | 0.31 | 0.06 | 0.30 | 0.30 | 0.06 | 0.28 | 0.28 |
| Sat Flow, veh/h | 1774 | 2821 | 690 | 1774 | 2843 | 671 | 1774 | 2335 | 1103 | 1774 | 2629 | 853 |
| Grp Volume(v), veh/h | 92 | 273 | 273 | 138 | 266 | 265 | 87 | 194 | 191 | 77 | 191 | 191 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1741 | 1774 | 1770 | 1744 | 1774 | 1770 | 1668 | 1774 | 1770 | 1712 |
| Q Serve(g_s), s | 6.0 | 17.9 | 18.1 | 7.9 | 14.6 | 14.8 | 5.8 | 10.3 | 10.8 | 5.1 | 10.5 | 10.8 |
| Cycle Q Clear(g_c), s | 6.0 | 17.9 | 18.1 | 7.9 | 14.6 | 14.8 | 5.8 | 10.3 | 10.8 | 5.1 | 10.5 | 10.8 |
| Prop In Lane | 1.00 | | 0.40 | 1.00 | | 0.38 | 1.00 | | 0.66 | 1.00 | | 0.50 |
| Lane Grp Cap(c), veh/h | 292 | 463 | 456 | 381 | 552 | 544 | 114 | 534 | 504 | 109 | 495 | 479 |
| V/C Ratio(X) | 0.31 | 0.59 | 0.60 | 0.36 | 0.48 | 0.49 | 0.76 | 0.36 | 0.38 | 0.71 | 0.39 | 0.40 |
| Avail Cap(c_a), veh/h | 292 | 463 | 456 | 381 | 552 | 544 | 220 | 534 | 504 | 205 | 495 | 479 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.78 | 0.78 | 0.78 | 0.64 | 0.64 | 0.64 | 0.99 | 0.99 | 0.99 | 0.90 | 0.90 | 0.90 |
| Uniform Delay (d), s/veh | 50.2 | 48.6 | 48.7 | 40.1 | 33.4 | 33.5 | 55.2 | 32.8 | 33.0 | 55.2 | 34.9 | 35.0 |
| Incr Delay (d2), s/veh | 0.2 | 4.3 | 4.5 | 0.1 | 1.9 | 2.0 | 3.9 | 1.9 | 2.1 | 2.8 | 2.0 | 2.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.0 | 9.3 | 9.3 | 3.9 | 7.5 | 7.5 | 3.0 | 5.4 | 5.3 | 2.6 | 5.4 | 5.4 |
| LnGrp Delay(d),s/veh | 50.4 | 52.9 | 53.2 | 40.2 | 35.4 | 35.5 | 59.1 | 34.7 | 35.1 | 58.0 | 36.9 | 37.2 |
| LnGrp LOS | D | D | D | D | D | D | E | C | D | E | D | D |
| Approach Vol, veh/h | | 638 | | | 669 | | | 472 | | | 459 | |
| Approach Delay, s/veh | | 52.7 | | | 36.4 | | | 39.4 | | | 40.6 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 11.5 | 42.6 | 29.9 | 36.0 | 14.1 | 40.0 | 23.9 | 42.0 | | | | |
| Change Period (Y+Rc), s | 4.1 | 6.4 | 4.1 | 4.6 | 6.4 | * 6.4 | 4.1 | 4.6 | | | | |
| Max Green Setting (Gmax), s | 13.9 | 34.6 | 20.9 | 31.4 | 14.9 | * 34 | 14.9 | 37.4 | | | | |
| Max Q Clear Time (g_c+I1), s | 7.1 | 12.8 | 9.9 | 20.1 | 7.8 | 12.8 | 8.0 | 16.8 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.5 | 0.2 | 1.6 | 0.2 | 1.3 | 0.2 | 1.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 42.5 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 8 | 0 | 7 | 44 | 1 | 30 | 2 | 432 | 46 | 41 | 495 | 2 |
| Future Volume (veh/h) | 8 | 0 | 7 | 44 | 1 | 30 | 2 | 432 | 46 | 41 | 495 | 2 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1900 | 1863 | 1900 | 1863 | 1900 | 1863 | 1900 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 8 | 0 | 7 | 45 | 1 | 31 | 2 | 441 | 47 | 42 | 505 | 2 |
| Adj No. of Lanes | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 95 | 16 | 43 | 167 | 0 | 95 | 42 | 2343 | 248 | 77 | 2997 | 12 |
| Arrive On Green | 0.06 | 0.00 | 0.06 | 0.06 | 0.06 | 0.06 | 0.74 | 0.74 | 0.74 | 0.04 | 0.83 | 0.83 |
| Sat Flow, veh/h | 560 | 260 | 717 | 1403 | 0 | 1583 | 2 | 3161 | 334 | 1774 | 3616 | 14 |
| Grp Volume(v), veh/h | 15 | 0 | 0 | 45 | 0 | 31 | 260 | 0 | 230 | 42 | 247 | 260 |
| Grp Sat Flow(s),veh/h/ln | 1536 | 0 | 0 | 1403 | 0 | 1583 | 1861 | 0 | 1636 | 1774 | 1770 | 1860 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 1.9 | 0.0 | 1.7 | 0.0 | 0.0 | 3.8 | 2.1 | 2.5 | 2.5 |
| Cycle Q Clear(g_c), s | 0.7 | 0.0 | 0.0 | 2.6 | 0.0 | 1.7 | 3.8 | 0.0 | 3.8 | 2.1 | 2.5 | 2.5 |
| Prop In Lane | 0.53 | | 0.47 | 1.00 | | 1.00 | 0.01 | | 0.20 | 1.00 | | 0.01 |
| Lane Grp Cap(c), veh/h | 153 | 0 | 0 | 167 | 0 | 95 | 1419 | 0 | 1213 | 77 | 1467 | 1542 |
| V/C Ratio(X) | 0.10 | 0.00 | 0.00 | 0.27 | 0.00 | 0.33 | 0.18 | 0.00 | 0.19 | 0.55 | 0.17 | 0.17 |
| Avail Cap(c_a), veh/h | 464 | 0 | 0 | 457 | 0 | 422 | 1419 | 0 | 1213 | 237 | 1467 | 1542 |
| 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 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.93 | 0.93 | 0.93 |
| Uniform Delay (d), s/veh | 40.1 | 0.0 | 0.0 | 40.9 | 0.0 | 40.6 | 3.5 | 0.0 | 3.5 | 42.2 | 1.5 | 1.5 |
| Incr Delay (d2), s/veh | 0.1 | 0.0 | 0.0 | 0.3 | 0.0 | 0.7 | 0.3 | 0.0 | 0.3 | 2.1 | 0.2 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.4 | 0.0 | 0.0 | 1.1 | 0.0 | 0.8 | 2.0 | 0.0 | 1.8 | 1.1 | 1.3 | 1.3 |
| LnGrp Delay(d),s/veh | 40.2 | 0.0 | 0.0 | 41.2 | 0.0 | 41.3 | 3.8 | 0.0 | 3.9 | 44.3 | 1.8 | 1.8 |
| LnGrp LOS | D | | | D | | D | A | | A | D | A | A |
| Approach Vol, veh/h | | 15 | | | 76 | | | 490 | | | 549 | |
| Approach Delay, s/veh | | 40.2 | | | 41.3 | | | 3.8 | | | 5.0 | |
| Approach LOS | | D | | | D | | | A | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 7.9 | 71.7 | | 10.4 | | 79.6 | | 10.4 | | | | |
| Change Period (Y+Rc), s | 4.0 | 5.0 | | * 5 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 12.0 | 40.0 | | * 25 | | 56.0 | | 24.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.1 | 5.8 | | 2.7 | | 4.5 | | 4.6 | | | | |
| Green Ext Time (p_c), s | 0.0 | 6.7 | | 0.1 | | 7.0 | | 0.1 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 7.4 | | | | | | | | |
| HCM 2010 LOS | | | | A | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
12: Broadway & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Conditions Mid-Day Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 134 | 351 | 147 | 91 | 293 | 179 | 137 | 503 | 88 | 130 | 541 | 105 |
| Future Volume (veh/h) | 134 | 351 | 147 | 91 | 293 | 179 | 137 | 503 | 88 | 130 | 541 | 105 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 137 | 358 | 150 | 93 | 299 | 183 | 140 | 513 | 90 | 133 | 552 | 107 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 171 | 472 | 195 | 162 | 402 | 240 | 347 | 920 | 161 | 302 | 829 | 160 |
| Arrive On Green | 0.10 | 0.19 | 0.19 | 0.09 | 0.19 | 0.19 | 0.20 | 0.31 | 0.31 | 0.17 | 0.28 | 0.28 |
| Sat Flow, veh/h | 1774 | 2446 | 1009 | 1774 | 2135 | 1273 | 1774 | 3013 | 526 | 1774 | 2960 | 572 |
| Grp Volume(v), veh/h | 137 | 257 | 251 | 93 | 247 | 235 | 140 | 300 | 303 | 133 | 329 | 330 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1685 | 1774 | 1770 | 1638 | 1774 | 1770 | 1770 | 1774 | 1770 | 1762 |
| Q Serve(g_s), s | 5.7 | 10.3 | 10.6 | 3.8 | 9.9 | 10.2 | 5.2 | 10.7 | 10.7 | 5.0 | 12.3 | 12.4 |
| Cycle Q Clear(g_c), s | 5.7 | 10.3 | 10.6 | 3.8 | 9.9 | 10.2 | 5.2 | 10.7 | 10.7 | 5.0 | 12.3 | 12.4 |
| Prop In Lane | 1.00 | | 0.60 | 1.00 | | 0.78 | 1.00 | | 0.30 | 1.00 | | 0.32 |
| Lane Grp Cap(c), veh/h | 171 | 342 | 325 | 162 | 333 | 308 | 347 | 540 | 540 | 302 | 495 | 493 |
| V/C Ratio(X) | 0.80 | 0.75 | 0.77 | 0.57 | 0.74 | 0.76 | 0.40 | 0.56 | 0.56 | 0.44 | 0.66 | 0.67 |
| Avail Cap(c_a), veh/h | 177 | 493 | 469 | 162 | 472 | 437 | 347 | 540 | 540 | 302 | 495 | 493 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.74 | 0.74 | 0.74 | 1.00 | 1.00 | 1.00 | 0.88 | 0.88 | 0.88 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.2 | 28.6 | 28.7 | 32.7 | 28.7 | 28.9 | 26.4 | 21.8 | 21.8 | 27.9 | 23.9 | 23.9 |
| Incr Delay (d2), s/veh | 17.0 | 2.9 | 3.6 | 4.8 | 3.8 | 5.0 | 0.7 | 3.6 | 3.7 | 1.0 | 6.9 | 7.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.6 | 5.3 | 5.3 | 2.1 | 5.1 | 5.0 | 2.6 | 5.7 | 5.8 | 2.6 | 7.0 | 7.0 |
| LnGrp Delay(d),s/veh | 50.2 | 31.5 | 32.3 | 37.5 | 32.5 | 33.9 | 27.0 | 25.4 | 25.5 | 28.9 | 30.8 | 30.9 |
| LnGrp LOS | D | C | C | D | C | C | C | C | C | C | C | C |
| Approach Vol, veh/h | | 645 | | | 575 | | | 743 | | | 792 | |
| Approach Delay, s/veh | | 35.8 | | | 33.9 | | | 25.8 | | | 30.5 | |
| Approach LOS | | D | | | C | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 17.3 | 27.4 | 11.4 | 19.0 | 19.2 | 25.5 | 11.7 | 18.6 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 6.6 | 22.9 | 6.6 | 20.9 | 8.5 | 21.0 | 7.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 7.0 | 12.7 | 5.8 | 12.6 | 7.2 | 14.4 | 7.7 | 12.2 | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.6 | 0.3 | 1.9 | 0.1 | 2.1 | 0.0 | 1.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 31.2 | | | | | | | | | |
| HCM 2010 LOS | | | C | | | | | | | | | |

SEC CCP/Mission TIA
13: Broadway & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Conditions Mid-Day Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 118 | 423 | 87 | 53 | 411 | 174 | 113 | 349 | 36 | 193 | 388 | 99 |
| Future Volume (veh/h) | 118 | 423 | 87 | 53 | 411 | 174 | 113 | 349 | 36 | 193 | 388 | 99 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 123 | 441 | 91 | 55 | 428 | 181 | 118 | 364 | 38 | 201 | 404 | 103 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 154 | 574 | 118 | 192 | 530 | 222 | 150 | 906 | 94 | 312 | 1040 | 263 |
| Arrive On Green | 0.09 | 0.20 | 0.20 | 0.11 | 0.22 | 0.22 | 0.08 | 0.28 | 0.28 | 0.23 | 0.49 | 0.49 |
| Sat Flow, veh/h | 1774 | 2927 | 600 | 1774 | 2434 | 1019 | 1774 | 3237 | 336 | 1774 | 2801 | 707 |
| Grp Volume(v), veh/h | 123 | 265 | 267 | 55 | 310 | 299 | 118 | 198 | 204 | 201 | 254 | 253 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1757 | 1774 | 1770 | 1683 | 1774 | 1770 | 1803 | 1774 | 1770 | 1738 |
| Q Serve(g_s), s | 5.1 | 10.6 | 10.8 | 2.1 | 12.5 | 12.7 | 4.9 | 6.8 | 6.9 | 7.7 | 6.7 | 6.9 |
| Cycle Q Clear(g_c), s | 5.1 | 10.6 | 10.8 | 2.1 | 12.5 | 12.7 | 4.9 | 6.8 | 6.9 | 7.7 | 6.7 | 6.9 |
| Prop In Lane | 1.00 | | 0.34 | 1.00 | | 0.61 | 1.00 | | 0.19 | 1.00 | | 0.41 |
| Lane Grp Cap(c), veh/h | 154 | 347 | 345 | 192 | 385 | 366 | 150 | 495 | 505 | 312 | 657 | 645 |
| V/C Ratio(X) | 0.80 | 0.76 | 0.77 | 0.29 | 0.80 | 0.82 | 0.79 | 0.40 | 0.40 | 0.65 | 0.39 | 0.39 |
| Avail Cap(c_a), veh/h | 154 | 491 | 487 | 192 | 472 | 449 | 182 | 495 | 505 | 312 | 657 | 645 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.33 | 1.33 | 1.33 |
| Upstream Filter(I) | 0.78 | 0.78 | 0.78 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.82 | 0.82 | 0.82 |
| Uniform Delay (d), s/veh | 33.6 | 28.5 | 28.6 | 30.8 | 27.8 | 27.9 | 33.7 | 21.9 | 21.9 | 26.6 | 13.6 | 13.7 |
| Incr Delay (d2), s/veh | 20.5 | 3.6 | 3.9 | 0.8 | 8.1 | 9.3 | 17.1 | 2.4 | 2.4 | 3.7 | 1.4 | 1.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.4 | 5.5 | 5.6 | 1.1 | 6.9 | 6.8 | 3.1 | 3.6 | 3.7 | 4.1 | 3.5 | 3.5 |
| LnGrp Delay(d),s/veh | 54.1 | 32.1 | 32.4 | 31.6 | 36.0 | 37.2 | 50.8 | 24.3 | 24.3 | 30.3 | 15.0 | 15.1 |
| LnGrp LOS | D | C | C | C | D | D | D | C | C | C | B | B |
| Approach Vol, veh/h | | 655 | | | 664 | | | 520 | | | 708 | |
| Approach Delay, s/veh | | 36.4 | | | 36.2 | | | 30.3 | | | 19.4 | |
| Approach LOS | | D | | | D | | | C | | | B | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 17.7 | 25.5 | 12.6 | 19.2 | 10.8 | 32.3 | 11.0 | 20.8 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 9.5 | 21.0 | 5.7 | 20.8 | 7.7 | 22.8 | 6.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 9.7 | 8.9 | 4.1 | 12.8 | 6.9 | 8.9 | 7.1 | 14.7 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.8 | 0.6 | 1.9 | 0.0 | 3.1 | 0.0 | 1.7 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 30.4 | | | | | | | | | |
| HCM 2010 LOS | | | C | | | | | | | | | |

SEC CCP/Mission TIA
1: Rock Springs Rd & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Conditions PM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  |  |
| Traffic Volume (veh/h) | 235 | 841 | 108 | 62 | 475 | 187 | 54 | 518 | 52 | 103 | 247 | 61 |
| Future Volume (veh/h) | 235 | 841 | 108 | 62 | 475 | 187 | 54 | 518 | 52 | 103 | 247 | 61 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 242 | 867 | 111 | 64 | 490 | 193 | 56 | 534 | 54 | 106 | 255 | 63 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 270 | 1524 | 195 | 82 | 937 | 367 | 336 | 1177 | 119 | 255 | 675 | 574 |
| Arrive On Green | 0.15 | 0.48 | 0.48 | 0.05 | 0.38 | 0.38 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 |
| Sat Flow, veh/h | 1774 | 3157 | 404 | 1774 | 2487 | 974 | 1057 | 3247 | 327 | 825 | 1863 | 1583 |
| Grp Volume(v), veh/h | 242 | 486 | 492 | 64 | 348 | 335 | 56 | 290 | 298 | 106 | 255 | 63 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1791 | 1774 | 1770 | 1691 | 1057 | 1770 | 1805 | 825 | 1863 | 1583 |
| Q Serve(g_s), s | 16.1 | 23.5 | 23.5 | 4.3 | 18.3 | 18.5 | 5.0 | 15.0 | 15.1 | 13.5 | 12.1 | 3.2 |
| Cycle Q Clear(g_c), s | 16.1 | 23.5 | 23.5 | 4.3 | 18.3 | 18.5 | 17.1 | 15.0 | 15.1 | 28.6 | 12.1 | 3.2 |
| Prop In Lane | 1.00 | | 0.23 | 1.00 | | 0.58 | 1.00 | | 0.18 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 270 | 855 | 865 | 82 | 667 | 637 | 336 | 641 | 654 | 255 | 675 | 574 |
| V/C Ratio(X) | 0.89 | 0.57 | 0.57 | 0.78 | 0.52 | 0.53 | 0.17 | 0.45 | 0.45 | 0.42 | 0.38 | 0.11 |
| Avail Cap(c_a), veh/h | 399 | 855 | 865 | 148 | 667 | 637 | 336 | 641 | 654 | 255 | 675 | 574 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.86 | 0.86 | 0.86 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 49.9 | 22.1 | 22.1 | 56.6 | 29.0 | 29.1 | 34.6 | 29.2 | 29.2 | 40.1 | 28.3 | 25.4 |
| Incr Delay (d2), s/veh | 12.4 | 2.7 | 2.7 | 5.1 | 0.7 | 0.8 | 1.1 | 2.3 | 2.3 | 0.8 | 0.3 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.8 | 12.1 | 12.3 | 2.2 | 9.0 | 8.8 | 1.5 | 7.7 | 7.9 | 3.1 | 6.3 | 1.4 |
| LnGrp Delay(d),s/veh | 62.3 | 24.9 | 24.8 | 61.7 | 29.8 | 29.9 | 35.6 | 31.5 | 31.5 | 40.9 | 28.5 | 25.5 |
| LnGrp LOS | E | C | C | E | C | C | D | C | C | D | C | C |
| Approach Vol, veh/h | | 1220 | | | 747 | | | 644 | | | 424 | |
| Approach Delay, s/veh | | 32.3 | | | 32.5 | | | 31.8 | | | 31.2 | |
| Approach LOS | | C | | | C | | | 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 | 9.6 | 62.4 | | 48.0 | 22.3 | 49.7 | | 48.0 | | | | |
| Change Period (Y+Rc), s | 4.0 | 4.5 | | 4.5 | 4.0 | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | 10.0 | 53.5 | | 43.5 | 27.0 | 36.5 | | 43.5 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.3 | 25.5 | | 30.6 | 18.1 | 20.5 | | 19.1 | | | | |
| Green Ext Time (p_c), s | 0.0 | 15.1 | | 4.2 | 0.2 | 10.5 | | 5.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 32.1 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 34 | 931 | 88 | 104 | 659 | 101 | 100 | 44 | 205 | 162 | 50 | 23 |
| Future Volume (veh/h) | 34 | 931 | 88 | 104 | 659 | 101 | 100 | 44 | 205 | 162 | 50 | 23 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 35 | 960 | 91 | 107 | 679 | 104 | 103 | 45 | 211 | 167 | 52 | 24 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 162 | 1230 | 117 | 270 | 1345 | 206 | 128 | 410 | 348 | 194 | 301 | 139 |
| Arrive On Green | 0.09 | 0.38 | 0.38 | 0.10 | 0.29 | 0.29 | 0.05 | 0.15 | 0.15 | 0.11 | 0.25 | 0.25 |
| Sat Flow, veh/h | 1774 | 3268 | 310 | 1774 | 3078 | 471 | 1774 | 1863 | 1583 | 1774 | 1207 | 557 |
| Grp Volume(v), veh/h | 35 | 520 | 531 | 107 | 390 | 393 | 103 | 45 | 211 | 167 | 0 | 76 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1808 | 1774 | 1770 | 1780 | 1774 | 1863 | 1583 | 1774 | 0 | 1764 |
| Q Serve(g_s), s | 2.5 | 35.0 | 35.0 | 7.6 | 24.7 | 24.7 | 7.8 | 2.8 | 12.0 | 12.5 | 0.0 | 4.6 |
| Cycle Q Clear(g_c), s | 2.5 | 35.0 | 35.0 | 7.6 | 24.7 | 24.7 | 7.8 | 2.8 | 12.0 | 12.5 | 0.0 | 4.6 |
| Prop In Lane | 1.00 | | 0.17 | 1.00 | | 0.26 | 1.00 | | 1.00 | 1.00 | | 0.32 |
| Lane Grp Cap(c), veh/h | 162 | 666 | 680 | 270 | 773 | 778 | 128 | 410 | 348 | 194 | 0 | 440 |
| V/C Ratio(X) | 0.22 | 0.78 | 0.78 | 0.40 | 0.50 | 0.51 | 0.80 | 0.11 | 0.61 | 0.86 | 0.00 | 0.17 |
| Avail Cap(c_a), veh/h | 162 | 666 | 680 | 270 | 773 | 778 | 204 | 410 | 348 | 288 | 0 | 440 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.79 | 0.79 | 0.79 | 0.87 | 0.87 | 0.87 | 0.81 | 0.81 | 0.81 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 56.8 | 37.2 | 37.2 | 54.8 | 35.6 | 35.6 | 63.3 | 46.1 | 26.5 | 59.1 | 0.0 | 39.7 |
| Incr Delay (d2), s/veh | 0.6 | 7.1 | 6.9 | 1.0 | 2.0 | 2.0 | 11.1 | 0.4 | 6.2 | 17.0 | 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(50%),veh/ln | 1.2 | 18.3 | 18.7 | 3.8 | 12.5 | 12.6 | 4.2 | 1.5 | 5.8 | 7.0 | 0.0 | 2.3 |
| LnGrp Delay(d),s/veh | 57.5 | 44.3 | 44.1 | 55.8 | 37.6 | 37.7 | 74.4 | 46.5 | 32.7 | 76.1 | 0.0 | 40.6 |
| LnGrp LOS | E | D | D | E | D | D | E | D | C | E | | D |
| Approach Vol, veh/h | | 1086 | | | 890 | | | 359 | | | 243 | |
| Approach Delay, s/veh | | 44.6 | | | 39.8 | | | 46.4 | | | 65.0 | |
| Approach LOS | | D | | | D | | | D | | | E | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 25.1 | 56.2 | 14.9 | 38.8 | 16.9 | 64.4 | 18.9 | 34.8 | | | | |
| Change Period (Y+Rc), s | 4.6 | 5.4 | 5.1 | * 5.1 | 4.6 | * 5.4 | 4.1 | 5.1 | | | | |
| Max Green Setting (Gmax), s | 15.8 | 50.8 | 15.5 | * 34 | 8.1 | * 59 | 21.9 | 27.3 | | | | |
| Max Q Clear Time (g_c+I1), s | 9.6 | 37.0 | 9.8 | 6.6 | 4.5 | 26.7 | 14.5 | 14.0 | | | | |
| Green Ext Time (p_c), s | 0.2 | 8.9 | 0.2 | 0.4 | 0.1 | 10.7 | 0.3 | 1.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 45.1 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 67 | 850 | 181 | 72 | 487 | 95 | 122 | 202 | 165 | 65 | 189 | 23 |
| Future Volume (veh/h) | 67 | 850 | 181 | 72 | 487 | 95 | 122 | 202 | 165 | 65 | 189 | 23 |
| 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 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 85 | 1076 | 229 | 91 | 616 | 120 | 154 | 256 | 209 | 82 | 239 | 29 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 451 | 1991 | 422 | 263 | 2025 | 394 | 256 | 463 | 364 | 166 | 781 | 94 |
| Arrive On Green | 0.68 | 0.68 | 0.68 | 0.46 | 0.46 | 0.46 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Sat Flow, veh/h | 719 | 2907 | 616 | 420 | 2956 | 575 | 1107 | 1886 | 1484 | 924 | 3183 | 382 |
| Grp Volume(v), veh/h | 85 | 653 | 652 | 91 | 368 | 368 | 154 | 240 | 225 | 82 | 132 | 136 |
| Grp Sat Flow(s),veh/h/ln | 719 | 1770 | 1754 | 420 | 1770 | 1761 | 1107 | 1770 | 1601 | 924 | 1770 | 1795 |
| Q Serve(g_s), s | 8.1 | 24.9 | 25.2 | 22.8 | 17.7 | 17.7 | 17.8 | 16.0 | 16.7 | 11.5 | 8.2 | 8.4 |
| Cycle Q Clear(g_c), s | 25.8 | 24.9 | 25.2 | 47.9 | 17.7 | 17.7 | 26.2 | 16.0 | 16.7 | 28.2 | 8.2 | 8.4 |
| Prop In Lane | 1.00 | | 0.35 | 1.00 | | 0.33 | 1.00 | | 0.93 | 1.00 | | 0.21 |
| Lane Grp Cap(c), veh/h | 451 | 1212 | 1201 | 263 | 1212 | 1206 | 256 | 434 | 393 | 166 | 434 | 441 |
| V/C Ratio(X) | 0.19 | 0.54 | 0.54 | 0.35 | 0.30 | 0.30 | 0.60 | 0.55 | 0.57 | 0.49 | 0.30 | 0.31 |
| Avail Cap(c_a), veh/h | 451 | 1212 | 1201 | 263 | 1212 | 1206 | 299 | 502 | 454 | 201 | 502 | 509 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 0.67 | 0.67 | 0.67 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.84 | 0.84 | 0.84 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 0.91 |
| Uniform Delay (d), s/veh | 15.3 | 10.6 | 10.7 | 34.3 | 16.3 | 16.3 | 52.3 | 44.4 | 44.7 | 57.1 | 41.5 | 41.6 |
| Incr Delay (d2), s/veh | 0.9 | 1.7 | 1.8 | 3.0 | 0.5 | 0.5 | 1.9 | 0.8 | 1.0 | 1.5 | 0.3 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.7 | 12.6 | 12.7 | 2.9 | 8.9 | 8.8 | 5.6 | 7.9 | 7.5 | 3.0 | 4.1 | 4.2 |
| LnGrp Delay(d),s/veh | 16.2 | 12.3 | 12.4 | 37.3 | 16.8 | 16.9 | 54.2 | 45.3 | 45.7 | 58.7 | 41.8 | 41.8 |
| LnGrp LOS | B | B | B | D | B | B | D | D | D | E | D | D |
| Approach Vol, veh/h | | 1390 | | | 827 | | | 619 | | | 350 | |
| Approach Delay, s/veh | | 12.6 | | | 19.1 | | | 47.6 | | | 45.8 | |
| Approach LOS | | B | | | B | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 97.2 | | 37.8 | | 97.2 | | 37.8 | | | | |
| Change Period (Y+Rc), s | | * 4.7 | | * 4.7 | | * 4.7 | | * 4.7 | | | | |
| Max Green Setting (Gmax), s | | * 87 | | * 38 | | * 87 | | * 38 | | | | |
| Max Q Clear Time (g_c+I1), s | | 27.8 | | 28.2 | | 49.9 | | 30.2 | | | | |
| Green Ext Time (p_c), s | | 22.9 | | 3.3 | | 19.1 | | 2.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 24.7 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 39 | 896 | 191 | 152 | 622 | 152 | 348 | 622 | 292 | 181 | 235 | 29 |
| Future Volume (veh/h) | 39 | 896 | 191 | 152 | 622 | 152 | 348 | 622 | 292 | 181 | 235 | 29 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 40 | 924 | 197 | 157 | 641 | 157 | 359 | 641 | 301 | 187 | 242 | 30 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 175 | 1223 | 547 | 208 | 1002 | 245 | 363 | 1300 | 582 | 271 | 1201 | 537 |
| Arrive On Green | 0.05 | 0.35 | 0.35 | 0.06 | 0.36 | 0.36 | 0.11 | 0.37 | 0.37 | 0.08 | 0.34 | 0.34 |
| Sat Flow, veh/h | 3442 | 3539 | 1583 | 3442 | 2821 | 690 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 40 | 924 | 197 | 157 | 402 | 396 | 359 | 641 | 301 | 187 | 242 | 30 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1583 | 1721 | 1770 | 1741 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 1.8 | 38.2 | 15.3 | 7.4 | 31.3 | 31.3 | 17.2 | 23.1 | 24.5 | 8.7 | 8.0 | 2.1 |
| Cycle Q Clear(g_c), s | 1.8 | 38.2 | 15.3 | 7.4 | 31.3 | 31.3 | 17.2 | 23.1 | 24.5 | 8.7 | 8.0 | 2.1 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.40 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 175 | 1223 | 547 | 208 | 628 | 618 | 363 | 1300 | 582 | 271 | 1201 | 537 |
| V/C Ratio(X) | 0.23 | 0.76 | 0.36 | 0.75 | 0.64 | 0.64 | 0.99 | 0.49 | 0.52 | 0.69 | 0.20 | 0.06 |
| Avail Cap(c_a), veh/h | 209 | 1223 | 547 | 213 | 628 | 618 | 363 | 1300 | 582 | 313 | 1201 | 537 |
| 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 | 0.89 | 0.89 | 0.89 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 75.2 | 47.8 | 40.4 | 76.3 | 44.4 | 44.4 | 73.7 | 40.3 | 40.8 | 74.0 | 38.6 | 36.7 |
| Incr Delay (d2), s/veh | 0.5 | 4.4 | 1.8 | 12.3 | 4.9 | 5.0 | 41.6 | 1.2 | 2.9 | 3.7 | 0.4 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.9 | 19.4 | 7.0 | 3.9 | 16.2 | 15.9 | 10.3 | 11.5 | 11.2 | 4.3 | 4.0 | 1.0 |
| LnGrp Delay(d),s/veh | 75.7 | 52.2 | 42.2 | 88.6 | 49.3 | 49.4 | 115.3 | 41.5 | 43.7 | 77.8 | 39.0 | 36.9 |
| LnGrp LOS | E | D | D | F | D | D | F | D | D | E | D | D |
| Approach Vol, veh/h | | 1161 | | | 955 | | | 1301 | | | 459 | |
| Approach Delay, s/veh | | 51.3 | | | 55.8 | | | 62.4 | | | 54.7 | |
| Approach LOS | | D | | | E | | | E | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 19.1 | 67.5 | 15.1 | 63.3 | 23.7 | 62.9 | 13.5 | 64.9 | | | | |
| Change Period (Y+Rc), s | 6.1 | 6.9 | 5.1 | 6.3 | 6.3 | 6.9 | 5.1 | 6.3 | | | | |
| Max Green Setting (Gmax), s | 15.0 | 58.6 | 10.2 | 56.8 | 17.4 | 56.0 | 10.0 | 57.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 10.7 | 26.5 | 9.4 | 40.2 | 19.2 | 10.0 | 3.8 | 33.3 | | | | |
| Green Ext Time (p_c), s | 0.1 | 10.1 | 0.0 | 13.7 | 0.0 | 10.9 | 0.0 | 18.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 56.5 | | | | | | | | | |
| HCM 2010 LOS | | | E | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 16 | 1 | 12 | 107 | 1 | 204 | 13 | 1028 | 125 | 40 | 632 | 3 |
| Future Volume (veh/h) | 16 | 1 | 12 | 107 | 1 | 204 | 13 | 1028 | 125 | 40 | 632 | 3 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 17 | 1 | 13 | 113 | 1 | 215 | 14 | 1082 | 132 | 42 | 665 | 3 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 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 | 68 | 13 | 163 | 142 | 1 | 239 | 268 | 1733 | 775 | 294 | 1785 | 799 |
| Arrive On Green | 0.04 | 0.11 | 0.11 | 0.08 | 0.15 | 0.15 | 0.15 | 0.49 | 0.49 | 0.17 | 0.50 | 0.50 |
| Sat Flow, veh/h | 1774 | 114 | 1486 | 1774 | 7 | 1577 | 1774 | 3539 | 1583 | 1774 | 3539 | 1583 |
| Grp Volume(v), veh/h | 17 | 0 | 14 | 113 | 0 | 216 | 14 | 1082 | 132 | 42 | 665 | 3 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 0 | 1600 | 1774 | 0 | 1584 | 1774 | 1770 | 1583 | 1774 | 1770 | 1583 |
| Q Serve(g_s), s | 1.3 | 0.0 | 1.1 | 8.4 | 0.0 | 18.1 | 0.9 | 30.3 | 4.2 | 2.7 | 15.5 | 0.1 |
| Cycle Q Clear(g_c), s | 1.3 | 0.0 | 1.1 | 8.4 | 0.0 | 18.1 | 0.9 | 30.3 | 4.2 | 2.7 | 15.5 | 0.1 |
| Prop In Lane | 1.00 | | 0.93 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 68 | 0 | 175 | 142 | 0 | 240 | 268 | 1733 | 775 | 294 | 1785 | 799 |
| V/C Ratio(X) | 0.25 | 0.00 | 0.08 | 0.79 | 0.00 | 0.90 | 0.05 | 0.62 | 0.17 | 0.14 | 0.37 | 0.00 |
| Avail Cap(c_a), veh/h | 162 | 0 | 193 | 254 | 0 | 273 | 268 | 1733 | 775 | 294 | 1785 | 799 |
| 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 | 0.63 | 0.63 | 0.63 | 0.93 | 0.93 | 0.93 |
| Uniform Delay (d), s/veh | 63.0 | 0.0 | 54.0 | 61.0 | 0.0 | 56.3 | 49.0 | 25.3 | 8.7 | 48.1 | 20.4 | 9.3 |
| Incr Delay (d2), s/veh | 0.7 | 0.0 | 0.1 | 3.7 | 0.0 | 27.4 | 0.0 | 1.1 | 0.3 | 0.1 | 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(50%),veh/ln | 0.6 | 0.0 | 0.5 | 4.3 | 0.0 | 9.7 | 0.4 | 15.0 | 1.9 | 1.3 | 7.7 | 0.0 |
| LnGrp Delay(d),s/veh | 63.7 | 0.0 | 54.2 | 64.7 | 0.0 | 83.7 | 49.1 | 26.4 | 9.0 | 48.2 | 21.0 | 9.3 |
| LnGrp LOS | E | | D | E | | F | D | C | A | D | C | A |
| Approach Vol, veh/h | | 31 | | | 329 | | | 1228 | | | 710 | |
| Approach Delay, s/veh | | 59.4 | | | 77.2 | | | 24.8 | | | 22.5 | |
| Approach LOS | | E | | | E | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 27.0 | 73.0 | 15.5 | 19.5 | 25.0 | 75.0 | 9.9 | 25.1 | | | | |
| Change Period (Y+Rc), s | 4.6 | 6.9 | * 4.7 | * 4.7 | 4.6 | 6.9 | * 4.7 | * 4.7 | | | | |
| Max Green Setting (Gmax), s | 12.4 | 66.1 | * 19 | * 16 | 10.4 | 68.1 | * 12 | * 23 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.7 | 32.3 | 10.4 | 3.1 | 2.9 | 17.5 | 3.3 | 20.1 | | | | |
| Green Ext Time (p_c), s | 0.0 | 12.1 | 0.1 | 0.9 | 0.0 | 6.3 | 0.0 | 0.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 32.1 | | | | | | | | | |
| HCM 2010 LOS | | | C | | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
6: Centre City Pkwy & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Conditions PM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 275 | 871 | 144 | 67 | 411 | 321 | 109 | 891 | 71 | 201 | 561 | 249 |
| Future Volume (veh/h) | 275 | 871 | 144 | 67 | 411 | 321 | 109 | 891 | 71 | 201 | 561 | 249 |
| 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 | | 0.96 | 1.00 | | 0.95 | 1.00 | | 0.98 | 1.00 | | 0.98 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 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 | 1667 | 1863 | 1863 | 1667 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 281 | 889 | 147 | 68 | 419 | 328 | 111 | 909 | 72 | 205 | 572 | 254 |
| Adj No. of Lanes | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 308 | 1052 | 453 | 202 | 886 | 378 | 247 | 1085 | 478 | 271 | 1080 | 474 |
| Arrive On Green | 0.06 | 0.10 | 0.10 | 0.04 | 0.08 | 0.08 | 0.11 | 0.41 | 0.41 | 0.03 | 0.10 | 0.10 |
| Sat Flow, veh/h | 1774 | 3539 | 1525 | 1587 | 3539 | 1510 | 3079 | 3539 | 1559 | 3442 | 3539 | 1554 |
| Grp Volume(v), veh/h | 281 | 889 | 147 | 68 | 419 | 328 | 111 | 909 | 72 | 205 | 572 | 254 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1525 | 1587 | 1770 | 1510 | 1540 | 1770 | 1559 | 1721 | 1770 | 1554 |
| Q Serve(g_s), s | 21.3 | 33.3 | 12.1 | 5.6 | 15.3 | 29.0 | 4.6 | 31.2 | 3.9 | 8.0 | 20.7 | 21.0 |
| Cycle Q Clear(g_c), s | 21.3 | 33.3 | 12.1 | 5.6 | 15.3 | 29.0 | 4.6 | 31.2 | 3.9 | 8.0 | 20.7 | 21.0 |
| 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 | 308 | 1052 | 453 | 202 | 886 | 378 | 247 | 1085 | 478 | 271 | 1080 | 474 |
| V/C Ratio(X) | 0.91 | 0.85 | 0.32 | 0.34 | 0.47 | 0.87 | 0.45 | 0.84 | 0.15 | 0.76 | 0.53 | 0.54 |
| Avail Cap(c_a), veh/h | 361 | 1298 | 559 | 202 | 918 | 392 | 251 | 1085 | 478 | 275 | 1080 | 474 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 1.33 | 1.33 | 1.33 | 0.33 | 0.33 | 0.33 |
| Upstream Filter(I) | 0.61 | 0.61 | 0.61 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.96 | 0.96 | 0.96 |
| Uniform Delay (d), s/veh | 62.6 | 57.8 | 48.3 | 59.1 | 53.4 | 59.7 | 57.5 | 36.9 | 28.9 | 64.5 | 51.5 | 51.6 |
| Incr Delay (d2), s/veh | 15.7 | 2.6 | 0.2 | 0.4 | 0.3 | 17.5 | 0.5 | 7.7 | 0.7 | 9.7 | 1.8 | 4.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 11.8 | 16.8 | 5.2 | 2.5 | 7.5 | 14.0 | 2.0 | 16.4 | 1.8 | 4.2 | 10.4 | 9.6 |
| LnGrp Delay(d),s/veh | 78.2 | 60.4 | 48.4 | 59.5 | 53.7 | 77.2 | 58.0 | 44.7 | 29.5 | 74.1 | 53.3 | 55.7 |
| LnGrp LOS | E | E | D | E | D | E | E | D | C | E | D | E |
| Approach Vol, veh/h | | 1317 | | | 815 | | | 1092 | | | 1031 | |
| Approach Delay, s/veh | | 62.9 | | | 63.7 | | | 45.0 | | | 58.0 | |
| Approach LOS | | E | | | E | | | 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 | 15.1 | 47.8 | 21.6 | 45.0 | 15.3 | 47.6 | 28.0 | 38.7 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.4 | 4.5 | 4.9 | 4.5 | 6.4 | 4.5 | 4.9 | | | | |
| Max Green Setting (Gmax), s | 10.8 | 41.4 | 13.0 | 49.5 | 11.0 | 41.2 | 27.5 | 35.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 10.0 | 33.2 | 7.6 | 35.3 | 6.6 | 23.0 | 23.3 | 31.0 | | | | |
| Green Ext Time (p_c), s | 0.1 | 3.4 | 0.3 | 4.8 | 0.3 | 3.6 | 0.2 | 1.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 57.3 | | | | | | | | | |
| HCM 2010 LOS | | | E | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 167 | 774 | 96 | 80 | 372 | 110 | 187 | 830 | 180 | 143 | 543 | 81 |
| Future Volume (veh/h) | 167 | 774 | 96 | 80 | 372 | 110 | 187 | 830 | 180 | 143 | 543 | 81 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 178 | 823 | 102 | 85 | 396 | 117 | 199 | 883 | 191 | 152 | 578 | 86 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 204 | 932 | 116 | 126 | 676 | 197 | 306 | 1088 | 487 | 566 | 1408 | 630 |
| Arrive On Green | 0.04 | 0.10 | 0.10 | 0.14 | 0.50 | 0.50 | 0.09 | 0.31 | 0.31 | 0.33 | 0.80 | 0.80 |
| Sat Flow, veh/h | 1774 | 3170 | 393 | 1774 | 2703 | 790 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 178 | 459 | 466 | 85 | 258 | 255 | 199 | 883 | 191 | 152 | 578 | 86 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1793 | 1774 | 1770 | 1723 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 13.5 | 34.6 | 34.6 | 6.1 | 13.9 | 14.2 | 7.5 | 31.1 | 12.8 | 4.4 | 6.7 | 1.7 |
| Cycle Q Clear(g_c), s | 13.5 | 34.6 | 34.6 | 6.1 | 13.9 | 14.2 | 7.5 | 31.1 | 12.8 | 4.4 | 6.7 | 1.7 |
| Prop In Lane | 1.00 | | 0.22 | 1.00 | | 0.46 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 204 | 520 | 527 | 126 | 442 | 431 | 306 | 1088 | 487 | 566 | 1408 | 630 |
| V/C Ratio(X) | 0.87 | 0.88 | 0.88 | 0.67 | 0.58 | 0.59 | 0.65 | 0.81 | 0.39 | 0.27 | 0.41 | 0.14 |
| Avail Cap(c_a), veh/h | 256 | 634 | 643 | 172 | 551 | 536 | 337 | 1088 | 487 | 566 | 1408 | 630 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 0.83 | 0.83 | 0.83 | 0.90 | 0.90 | 0.90 | 0.89 | 0.89 | 0.89 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 63.9 | 58.6 | 58.7 | 56.4 | 28.8 | 28.9 | 59.5 | 43.1 | 36.8 | 39.3 | 9.0 | 8.5 |
| Incr Delay (d2), s/veh | 16.8 | 9.1 | 9.0 | 2.1 | 0.4 | 0.4 | 2.4 | 5.9 | 2.1 | 0.1 | 0.9 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 7.6 | 18.3 | 18.5 | 3.1 | 6.7 | 6.8 | 3.7 | 16.1 | 5.9 | 2.1 | 3.3 | 0.8 |
| LnGrp Delay(d),s/veh | 80.8 | 67.7 | 67.6 | 58.6 | 29.2 | 29.3 | 61.9 | 49.0 | 38.9 | 39.4 | 9.9 | 8.9 |
| LnGrp LOS | F | E | E | E | C | C | E | D | D | D | A | A |
| Approach Vol, veh/h | | 1103 | | | 598 | | | 1273 | | | 816 | |
| Approach Delay, s/veh | | 69.8 | | | 33.4 | | | 49.5 | | | 15.3 | |
| Approach LOS | | E | | | C | | | D | | | B | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 28.7 | 48.0 | 14.1 | 44.2 | 16.5 | 60.2 | 20.0 | 38.2 | | | | |
| Change Period (Y+Rc), s | 6.5 | * 6.5 | 4.5 | 4.5 | 4.5 | 6.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 12.0 | * 42 | 13.1 | 48.4 | 13.2 | 40.3 | 19.5 | 42.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.4 | 33.1 | 8.1 | 36.6 | 9.5 | 8.7 | 15.5 | 16.2 | | | | |
| Green Ext Time (p_c), s | 0.3 | 3.0 | 1.0 | 3.1 | 0.1 | 3.0 | 0.1 | 2.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 45.5 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | |  |  |  |  |  | | |  |  |
| Traffic Volume (veh/h) | 0 | 0 | 0 | 205 | 925 | 250 | 165 | 972 | 0 | 0 | 615 | 106 |
| Future Volume (veh/h) | 0 | 0 | 0 | 205 | 925 | 250 | 165 | 972 | 0 | 0 | 615 | 106 |
| Number | | | | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | | | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | | | | 1863 | 1863 | 1863 | 1863 | 1863 | 0 | 0 | 1863 | 1863 |
| Adj Flow Rate, veh/h | | | | 209 | 944 | 255 | 168 | 992 | 0 | 0 | 628 | 108 |
| Adj No. of Lanes | | | | 1 | 3 | 1 | 2 | 2 | 0 | 0 | 2 | 1 |
| Peak Hour Factor | | | | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Percent Heavy Veh, % | | | | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 2 | 2 |
| Cap, veh/h | | | | 409 | 1290 | 365 | 943 | 2385 | 0 | 0 | 1220 | 546 |
| Arrive On Green | | | | 0.23 | 0.23 | 0.23 | 0.27 | 0.67 | 0.00 | 0.00 | 0.34 | 0.34 |
| Sat Flow, veh/h | | | | 1774 | 5588 | 1583 | 3442 | 3632 | 0 | 0 | 3632 | 1583 |
| Grp Volume(v), veh/h | | | | 209 | 944 | 255 | 168 | 992 | 0 | 0 | 628 | 108 |
| Grp Sat Flow(s),veh/h/ln | | | | 1774 | 1863 | 1583 | 1721 | 1770 | 0 | 0 | 1770 | 1583 |
| Q Serve(g_s), s | | | | 12.8 | 19.5 | 18.5 | 4.7 | 15.9 | 0.0 | 0.0 | 17.7 | 6.0 |
| Cycle Q Clear(g_c), s | | | | 12.8 | 19.5 | 18.5 | 4.7 | 15.9 | 0.0 | 0.0 | 17.7 | 6.0 |
| Prop In Lane | | | | 1.00 | | 1.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | | | | 409 | 1290 | 365 | 943 | 2385 | 0 | 0 | 1220 | 546 |
| V/C Ratio(X) | | | | 0.51 | 0.73 | 0.70 | 0.18 | 0.42 | 0.00 | 0.00 | 0.51 | 0.20 |
| Avail Cap(c_a), veh/h | | | | 695 | 2191 | 621 | 943 | 2385 | 0 | 0 | 1220 | 546 |
| HCM Platoon Ratio | | | | 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 | 0.00 | 0.89 | 0.89 |
| Uniform Delay (d), s/veh | | | | 41.9 | 44.5 | 44.1 | 34.6 | 9.2 | 0.0 | 0.0 | 32.6 | 28.8 |
| Incr Delay (d2), s/veh | | | | 0.7 | 0.6 | 1.8 | 0.1 | 0.5 | 0.0 | 0.0 | 1.4 | 0.7 |
| Initial Q Delay(d3),s/veh | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | | | | 6.4 | 10.1 | 15.8 | 2.2 | 7.9 | 0.0 | 0.0 | 8.9 | 2.7 |
| LnGrp Delay(d),s/veh | | | | 42.6 | 45.1 | 45.9 | 34.7 | 9.8 | 0.0 | 0.0 | 34.0 | 29.5 |
| LnGrp LOS | | | | D | D | D | C | A | | | C | C |
| Approach Vol, veh/h | | | | | 1408 | | | 1160 | | | 736 | |
| Approach Delay, s/veh | | | | | 44.9 | | | 13.4 | | | 33.3 | |
| Approach LOS | | | | | D | | | B | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | 5 | 6 | | | | | | |
| Phs Duration (G+Y+Rc), s | | 91.1 | | 33.9 | 41.1 | 50.0 | | | | | | |
| Change Period (Y+Rc), s | | 6.9 | | 5.0 | 6.9 | * 6.9 | | | | | | |
| Max Green Setting (Gmax), s | | 64.1 | | 49.0 | 15.9 | * 43 | | | | | | |
| Max Q Clear Time (g_c+I1), s | | 17.9 | | 21.5 | 6.7 | 19.7 | | | | | | |
| Green Ext Time (p_c), s | | 7.5 | | 7.3 | 4.2 | 3.8 | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 31.2 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|--|---|---|--|---|---|--|---|---|--|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |   | |  |   | |  |   | |  |   | |
| Traffic Volume (veh/h) | 120 | 767 | 147 | 119 | 450 | 59 | 219 | 375 | 182 | 89 | 217 | 113 |
| Future Volume (veh/h) | 120 | 767 | 147 | 119 | 450 | 59 | 219 | 375 | 182 | 89 | 217 | 113 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 124 | 791 | 152 | 123 | 464 | 61 | 226 | 387 | 188 | 92 | 224 | 116 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 148 | 1268 | 244 | 147 | 1345 | 176 | 251 | 673 | 322 | 115 | 495 | 247 |
| Arrive On Green | 0.08 | 0.43 | 0.43 | 0.08 | 0.43 | 0.43 | 0.14 | 0.29 | 0.29 | 0.06 | 0.22 | 0.22 |
| Sat Flow, veh/h | 1774 | 2963 | 569 | 1774 | 3148 | 412 | 1774 | 2323 | 1113 | 1774 | 2288 | 1143 |
| Grp Volume(v), veh/h | 124 | 472 | 471 | 123 | 260 | 265 | 226 | 294 | 281 | 92 | 171 | 169 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1762 | 1774 | 1770 | 1790 | 1774 | 1770 | 1666 | 1774 | 1770 | 1661 |
| Q Serve(g_s), s | 9.3 | 28.1 | 28.1 | 9.2 | 13.3 | 13.4 | 16.9 | 19.1 | 19.5 | 6.9 | 11.3 | 11.9 |
| Cycle Q Clear(g_c), s | 9.3 | 28.1 | 28.1 | 9.2 | 13.3 | 13.4 | 16.9 | 19.1 | 19.5 | 6.9 | 11.3 | 11.9 |
| Prop In Lane | 1.00 | | 0.32 | 1.00 | | 0.23 | 1.00 | | 0.67 | 1.00 | | 0.69 |
| Lane Grp Cap(c), veh/h | 148 | 757 | 754 | 147 | 756 | 765 | 251 | 513 | 483 | 115 | 383 | 360 |
| V/C Ratio(X) | 0.84 | 0.62 | 0.62 | 0.84 | 0.34 | 0.35 | 0.90 | 0.57 | 0.58 | 0.80 | 0.45 | 0.47 |
| Avail Cap(c_a), veh/h | 235 | 757 | 754 | 222 | 756 | 765 | 353 | 513 | 483 | 183 | 383 | 360 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.52 | 0.52 | 0.52 | 0.78 | 0.78 | 0.78 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 61.0 | 30.1 | 30.1 | 61.0 | 25.9 | 26.0 | 57.0 | 40.8 | 41.0 | 62.3 | 45.9 | 46.1 |
| Incr Delay (d2), s/veh | 7.4 | 3.9 | 3.9 | 5.4 | 0.6 | 0.6 | 13.0 | 3.6 | 4.0 | 5.2 | 3.7 | 4.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 4.9 | 14.6 | 14.5 | 4.8 | 6.6 | 6.8 | 9.2 | 9.8 | 9.5 | 3.6 | 6.0 | 5.9 |
| LnGrp Delay(d),s/veh | 68.4 | 34.0 | 34.0 | 66.4 | 26.6 | 26.6 | 70.0 | 44.4 | 45.0 | 67.4 | 49.6 | 50.5 |
| LnGrp LOS | E | C | C | E | C | C | E | D | D | E | D | D |
| Approach Vol, veh/h | | 1067 | | | 648 | | | 801 | | | 432 | |
| Approach Delay, s/veh | | 38.0 | | | 34.2 | | | 51.8 | | | 53.7 | |
| Approach LOS | | D | | | 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 | 15.3 | 62.7 | 23.2 | 33.8 | 15.4 | 62.6 | 13.3 | 43.7 | | | | |
| Change Period (Y+Rc), s | 4.1 | 4.9 | 4.1 | 4.6 | 4.1 | 4.9 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 16.9 | 47.4 | 26.9 | 26.1 | 17.9 | 46.4 | 13.9 | * 39 | | | | |
| Max Q Clear Time (g_c+I1), s | 11.2 | 30.1 | 18.9 | 13.9 | 11.3 | 15.4 | 8.9 | 21.5 | | | | |
| Green Ext Time (p_c), s | 0.1 | 5.8 | 0.2 | 1.1 | 0.1 | 6.8 | 0.1 | 2.1 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 43.2 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
10: Escondido Blvd & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Conditions PM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 125 | 784 | 141 | 128 | 386 | 114 | 114 | 407 | 146 | 109 | 252 | 44 |
| Future Volume (veh/h) | 125 | 784 | 141 | 128 | 386 | 114 | 114 | 407 | 146 | 109 | 252 | 44 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 130 | 817 | 147 | 133 | 402 | 119 | 119 | 424 | 152 | 114 | 262 | 46 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 290 | 1097 | 197 | 293 | 993 | 291 | 145 | 638 | 227 | 138 | 688 | 119 |
| Arrive On Green | 0.33 | 0.73 | 0.73 | 0.17 | 0.37 | 0.37 | 0.08 | 0.25 | 0.25 | 0.08 | 0.23 | 0.23 |
| Sat Flow, veh/h | 1774 | 2998 | 539 | 1774 | 2702 | 791 | 1774 | 2562 | 909 | 1774 | 3018 | 523 |
| Grp Volume(v), veh/h | 130 | 482 | 482 | 133 | 262 | 259 | 119 | 292 | 284 | 114 | 152 | 156 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1768 | 1774 | 1770 | 1723 | 1774 | 1770 | 1702 | 1774 | 1770 | 1771 |
| Q Serve(g_s), s | 7.8 | 21.7 | 21.7 | 9.1 | 14.8 | 15.1 | 8.9 | 20.0 | 20.3 | 8.6 | 9.8 | 10.1 |
| Cycle Q Clear(g_c), s | 7.8 | 21.7 | 21.7 | 9.1 | 14.8 | 15.1 | 8.9 | 20.0 | 20.3 | 8.6 | 9.8 | 10.1 |
| Prop In Lane | 1.00 | | 0.31 | 1.00 | | 0.46 | 1.00 | | 0.53 | 1.00 | | 0.30 |
| Lane Grp Cap(c), veh/h | 290 | 648 | 647 | 293 | 650 | 633 | 145 | 441 | 424 | 138 | 404 | 404 |
| V/C Ratio(X) | 0.45 | 0.74 | 0.74 | 0.45 | 0.40 | 0.41 | 0.82 | 0.66 | 0.67 | 0.83 | 0.38 | 0.39 |
| Avail Cap(c_a), veh/h | 290 | 648 | 647 | 293 | 650 | 633 | 222 | 441 | 424 | 217 | 404 | 404 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.61 | 0.61 | 0.61 | 0.55 | 0.55 | 0.55 | 0.96 | 0.96 | 0.96 | 0.87 | 0.87 | 0.87 |
| Uniform Delay (d), s/veh | 40.6 | 14.4 | 14.4 | 50.9 | 31.7 | 31.8 | 61.0 | 45.6 | 45.7 | 61.4 | 44.0 | 44.1 |
| Incr Delay (d2), s/veh | 0.2 | 4.7 | 4.8 | 0.2 | 1.0 | 1.1 | 7.4 | 7.3 | 7.9 | 6.5 | 2.3 | 2.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.8 | 11.2 | 11.2 | 4.5 | 7.5 | 7.4 | 4.7 | 10.7 | 10.5 | 4.5 | 5.0 | 5.2 |
| LnGrp Delay(d),s/veh | 40.8 | 19.1 | 19.1 | 51.1 | 32.7 | 32.9 | 68.5 | 52.9 | 53.6 | 67.9 | 46.3 | 46.5 |
| LnGrp LOS | D | B | B | D | C | C | E | D | D | E | D | D |
| Approach Vol, veh/h | | 1094 | | | 654 | | | 695 | | | 422 | |
| Approach Delay, s/veh | | 21.7 | | | 36.5 | | | 55.8 | | | 52.2 | |
| Approach LOS | | C | | | D | | | E | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 14.6 | 40.0 | 26.4 | 54.0 | 17.4 | 37.2 | 26.2 | 54.2 | | | | |
| Change Period (Y+Rc), s | 4.1 | 6.4 | 4.1 | 4.6 | 6.4 | * 6.4 | 4.1 | 4.6 | | | | |
| Max Green Setting (Gmax), s | 16.5 | 31.2 | 18.7 | 49.4 | 16.9 | * 31 | 18.5 | 49.6 | | | | |
| Max Q Clear Time (g_c+I1), s | 10.6 | 22.3 | 11.1 | 23.7 | 10.9 | 12.1 | 9.8 | 17.1 | | | | |
| Green Ext Time (p_c), s | 0.1 | 1.7 | 0.2 | 4.1 | 0.2 | 1.0 | 0.2 | 2.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 37.9 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | | |  |  | |  |  |  |  | |
| Traffic Volume (veh/h) | 5 | 1 | 11 | 70 | 0 | 92 | 1 | 588 | 85 | 74 | 450 | 12 |
| Future Volume (veh/h) | 5 | 1 | 11 | 70 | 0 | 92 | 1 | 588 | 85 | 74 | 450 | 12 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1900 | 1863 | 1900 | 1900 | 1863 | 1863 | 1900 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 5 | 1 | 11 | 72 | 0 | 95 | 1 | 606 | 88 | 76 | 464 | 12 |
| Adj No. of Lanes | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 58 | 24 | 68 | 181 | 0 | 129 | 35 | 2220 | 321 | 98 | 2903 | 75 |
| Arrive On Green | 0.08 | 0.08 | 0.08 | 0.08 | 0.00 | 0.08 | 0.73 | 0.73 | 0.73 | 0.06 | 0.82 | 0.82 |
| Sat Flow, veh/h | 166 | 290 | 837 | 1380 | 0 | 1583 | 0 | 3040 | 440 | 1774 | 3525 | 91 |
| Grp Volume(v), veh/h | 17 | 0 | 0 | 72 | 0 | 95 | 371 | 0 | 324 | 76 | 233 | 243 |
| Grp Sat Flow(s),veh/h/ln | 1294 | 0 | 0 | 1380 | 0 | 1583 | 1862 | 0 | 1617 | 1774 | 1770 | 1847 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 6.2 | 0.0 | 0.0 | 7.1 | 4.4 | 2.8 | 2.8 |
| Cycle Q Clear(g_c), s | 5.3 | 0.0 | 0.0 | 5.3 | 0.0 | 6.2 | 7.0 | 0.0 | 7.1 | 4.4 | 2.8 | 2.8 |
| Prop In Lane | 0.29 | | 0.65 | 1.00 | | 1.00 | 0.00 | | 0.27 | 1.00 | | 0.05 |
| Lane Grp Cap(c), veh/h | 149 | 0 | 0 | 181 | 0 | 129 | 1395 | 0 | 1181 | 98 | 1457 | 1521 |
| V/C Ratio(X) | 0.11 | 0.00 | 0.00 | 0.40 | 0.00 | 0.74 | 0.27 | 0.00 | 0.27 | 0.78 | 0.16 | 0.16 |
| Avail Cap(c_a), veh/h | 406 | 0 | 0 | 413 | 0 | 392 | 1395 | 0 | 1181 | 287 | 1457 | 1521 |
| 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 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.89 | 0.89 | 0.89 |
| Uniform Delay (d), s/veh | 44.8 | 0.0 | 0.0 | 46.8 | 0.0 | 47.2 | 4.8 | 0.0 | 4.8 | 49.0 | 1.9 | 1.9 |
| Incr Delay (d2), s/veh | 0.1 | 0.0 | 0.0 | 0.5 | 0.0 | 3.1 | 0.5 | 0.0 | 0.6 | 4.4 | 0.2 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.5 | 0.0 | 0.0 | 2.0 | 0.0 | 2.8 | 3.8 | 0.0 | 3.3 | 2.3 | 1.4 | 1.5 |
| LnGrp Delay(d),s/veh | 44.9 | 0.0 | 0.0 | 47.3 | 0.0 | 50.3 | 5.2 | 0.0 | 5.3 | 53.4 | 2.1 | 2.1 |
| LnGrp LOS | D | | | D | | D | A | | A | D | A | A |
| Approach Vol, veh/h | | 17 | | | 167 | | | 695 | | | 552 | |
| Approach Delay, s/veh | | 44.9 | | | 49.0 | | | 5.3 | | | 9.2 | |
| Approach LOS | | D | | | D | | | A | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 9.8 | 81.7 | | 13.5 | | 91.5 | | 13.5 | | | | |
| Change Period (Y+Rc), s | 4.0 | 5.0 | | * 5 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 17.0 | 48.0 | | * 27 | | 69.0 | | 26.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.4 | 9.1 | | 7.3 | | 4.8 | | 8.2 | | | | |
| Green Ext Time (p_c), s | 0.1 | 8.6 | | 0.4 | | 8.9 | | 0.4 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 12.3 | | | | | | | | |
| HCM 2010 LOS | | | | B | | | | | | | | |
| Notes | | | | | | | | | | | | |

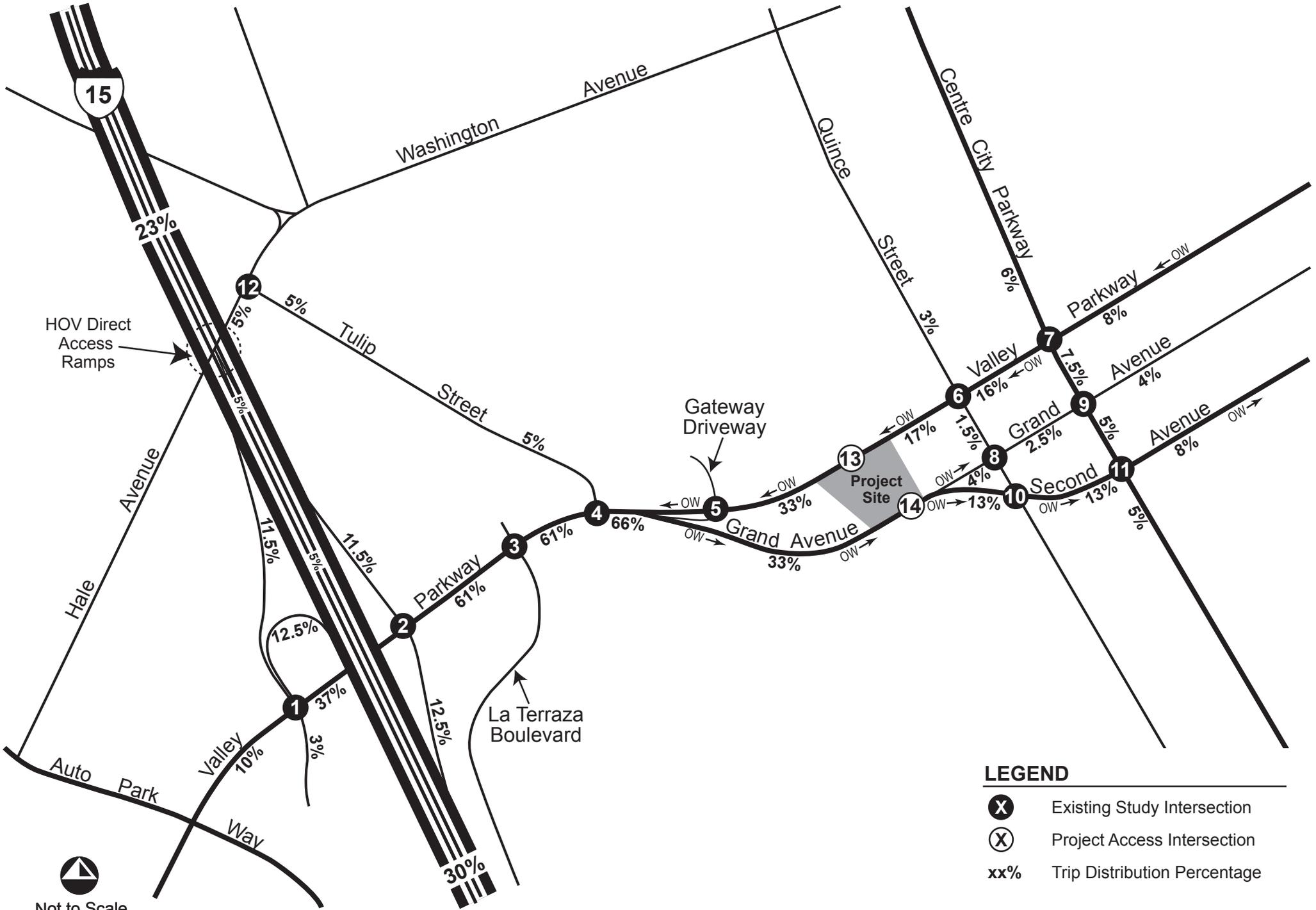
| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 200 | 666 | 177 | 100 | 400 | 192 | 142 | 710 | 122 | 233 | 676 | 88 |
| Future Volume (veh/h) | 200 | 666 | 177 | 100 | 400 | 192 | 142 | 710 | 122 | 233 | 676 | 88 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 211 | 701 | 186 | 105 | 421 | 202 | 149 | 747 | 128 | 245 | 712 | 93 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 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 | 256 | 769 | 204 | 132 | 485 | 230 | 238 | 878 | 150 | 279 | 987 | 129 |
| Arrive On Green | 0.14 | 0.28 | 0.28 | 0.07 | 0.21 | 0.21 | 0.04 | 0.10 | 0.10 | 0.16 | 0.31 | 0.31 |
| Sat Flow, veh/h | 1774 | 2768 | 734 | 1774 | 2330 | 1107 | 1774 | 3023 | 518 | 1774 | 3149 | 411 |
| Grp Volume(v), veh/h | 211 | 448 | 439 | 105 | 319 | 304 | 149 | 437 | 438 | 245 | 400 | 405 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1733 | 1774 | 1770 | 1667 | 1774 | 1770 | 1771 | 1774 | 1770 | 1790 |
| Q Serve(g_s), s | 10.4 | 22.0 | 22.0 | 5.2 | 15.7 | 15.9 | 7.4 | 21.9 | 21.9 | 12.2 | 18.0 | 18.1 |
| Cycle Q Clear(g_c), s | 10.4 | 22.0 | 22.0 | 5.2 | 15.7 | 15.9 | 7.4 | 21.9 | 21.9 | 12.2 | 18.0 | 18.1 |
| Prop In Lane | 1.00 | | 0.42 | 1.00 | | 0.66 | 1.00 | | 0.29 | 1.00 | | 0.23 |
| Lane Grp Cap(c), veh/h | 256 | 492 | 482 | 132 | 368 | 347 | 238 | 514 | 515 | 279 | 554 | 561 |
| V/C Ratio(X) | 0.82 | 0.91 | 0.91 | 0.80 | 0.87 | 0.88 | 0.62 | 0.85 | 0.85 | 0.88 | 0.72 | 0.72 |
| Avail Cap(c_a), veh/h | 256 | 507 | 497 | 132 | 393 | 371 | 238 | 514 | 515 | 286 | 554 | 561 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.65 | 0.65 | 0.65 | 1.00 | 1.00 | 1.00 | 0.70 | 0.70 | 0.70 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 37.4 | 31.4 | 31.4 | 41.0 | 34.4 | 34.5 | 40.8 | 38.8 | 38.8 | 37.1 | 27.4 | 27.4 |
| Incr Delay (d2), s/veh | 13.3 | 14.7 | 15.0 | 27.6 | 17.3 | 19.8 | 3.6 | 11.9 | 11.9 | 24.9 | 7.9 | 7.8 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.0 | 12.7 | 12.5 | 3.6 | 9.4 | 9.2 | 3.9 | 12.4 | 12.5 | 7.8 | 10.0 | 10.1 |
| LnGrp Delay(d),s/veh | 50.7 | 46.1 | 46.4 | 68.6 | 51.7 | 54.3 | 44.3 | 50.7 | 50.7 | 62.0 | 35.3 | 35.3 |
| LnGrp LOS | D | D | D | E | D | D | D | D | D | E | D | D |
| Approach Vol, veh/h | | 1098 | | | 728 | | | 1024 | | | 1050 | |
| Approach Delay, s/veh | | 47.1 | | | 55.2 | | | 49.8 | | | 41.5 | |
| Approach LOS | | D | | | E | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 18.6 | 30.6 | 11.2 | 29.5 | 16.6 | 32.7 | 17.5 | 23.2 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 14.5 | 25.0 | 6.7 | 25.8 | 11.3 | 28.2 | 12.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 14.2 | 23.9 | 7.2 | 24.0 | 9.4 | 20.1 | 12.4 | 17.9 | | | | |
| Green Ext Time (p_c), s | 0.0 | 0.7 | 0.0 | 1.0 | 1.1 | 3.1 | 0.1 | 0.8 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 47.8 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |

SEC CCP/Mission TIA
13: Broadway & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Conditions PM Peak Hour

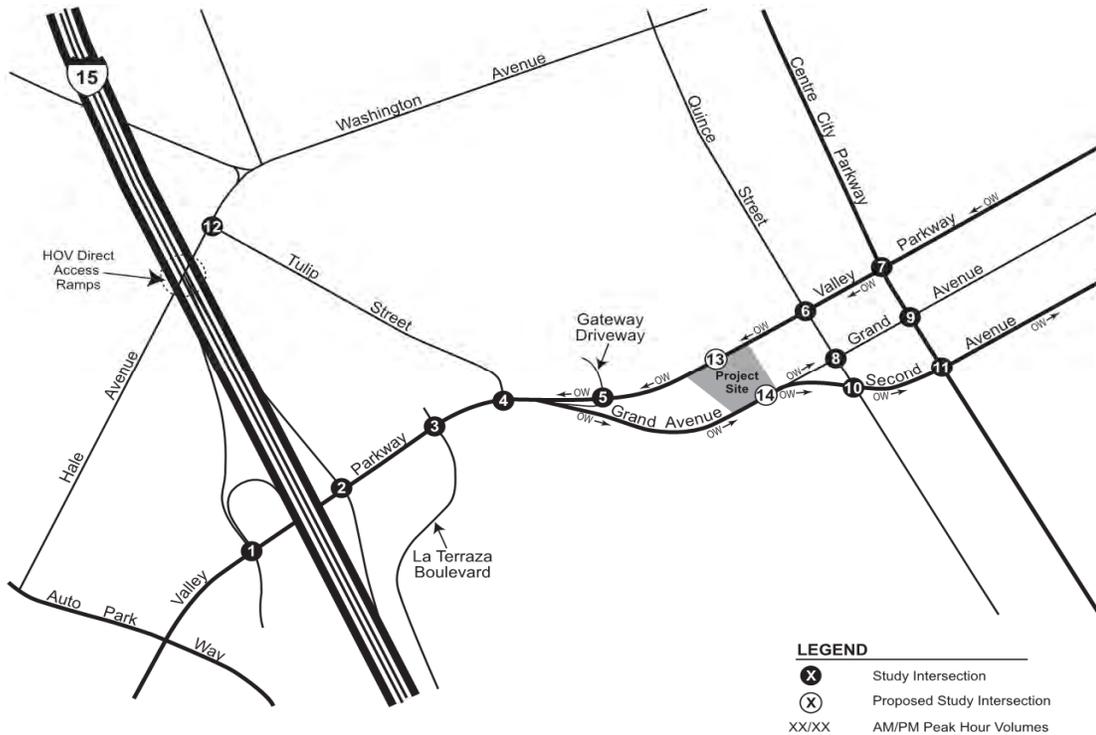
| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 207 | 703 | 69 | 64 | 371 | 212 | 142 | 489 | 48 | 251 | 449 | 114 |
| Future Volume (veh/h) | 207 | 703 | 69 | 64 | 371 | 212 | 142 | 489 | 48 | 251 | 449 | 114 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 216 | 732 | 72 | 67 | 386 | 221 | 148 | 509 | 50 | 261 | 468 | 119 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 268 | 1003 | 99 | 86 | 448 | 253 | 182 | 760 | 74 | 373 | 955 | 241 |
| Arrive On Green | 0.15 | 0.31 | 0.31 | 0.05 | 0.21 | 0.21 | 0.10 | 0.23 | 0.23 | 0.42 | 0.68 | 0.68 |
| Sat Flow, veh/h | 1774 | 3256 | 320 | 1774 | 2182 | 1233 | 1774 | 3257 | 319 | 1774 | 2800 | 707 |
| Grp Volume(v), veh/h | 216 | 398 | 406 | 67 | 312 | 295 | 148 | 276 | 283 | 261 | 295 | 292 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1806 | 1774 | 1770 | 1645 | 1774 | 1770 | 1806 | 1774 | 1770 | 1738 |
| Q Serve(g_s), s | 10.6 | 18.1 | 18.1 | 3.4 | 15.3 | 15.6 | 7.4 | 12.7 | 12.8 | 10.9 | 7.1 | 7.3 |
| Cycle Q Clear(g_c), s | 10.6 | 18.1 | 18.1 | 3.4 | 15.3 | 15.6 | 7.4 | 12.7 | 12.8 | 10.9 | 7.1 | 7.3 |
| Prop In Lane | 1.00 | | 0.18 | 1.00 | | 0.75 | 1.00 | | 0.18 | 1.00 | | 0.41 |
| Lane Grp Cap(c), veh/h | 268 | 545 | 557 | 86 | 364 | 338 | 182 | 413 | 422 | 373 | 603 | 593 |
| V/C Ratio(X) | 0.81 | 0.73 | 0.73 | 0.78 | 0.86 | 0.87 | 0.81 | 0.67 | 0.67 | 0.70 | 0.49 | 0.49 |
| Avail Cap(c_a), veh/h | 286 | 554 | 566 | 124 | 393 | 366 | 246 | 413 | 422 | 373 | 603 | 593 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 0.58 | 0.58 | 0.58 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.61 | 0.61 | 0.61 |
| Uniform Delay (d), s/veh | 36.9 | 27.8 | 27.8 | 42.3 | 34.5 | 34.6 | 39.6 | 31.3 | 31.4 | 23.8 | 10.6 | 10.6 |
| Incr Delay (d2), s/veh | 9.1 | 2.8 | 2.8 | 17.4 | 16.1 | 19.0 | 13.9 | 8.3 | 8.3 | 3.6 | 1.7 | 1.8 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 5.8 | 9.3 | 9.5 | 2.1 | 9.1 | 8.9 | 4.3 | 7.2 | 7.3 | 5.6 | 3.7 | 3.7 |
| LnGrp Delay(d),s/veh | 46.0 | 30.6 | 30.6 | 59.8 | 50.6 | 53.7 | 53.5 | 39.6 | 39.6 | 27.3 | 12.3 | 12.4 |
| LnGrp LOS | D | C | C | E | D | D | D | D | D | C | B | B |
| Approach Vol, veh/h | | 1020 | | | 674 | | | 707 | | | 848 | |
| Approach Delay, s/veh | | 33.8 | | | 52.9 | | | 42.5 | | | 17.0 | |
| Approach LOS | | C | | | D | | | D | | | B | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 23.4 | 25.5 | 8.9 | 32.2 | 13.7 | 35.2 | 18.1 | 23.0 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 16.5 | 21.0 | 6.3 | 28.2 | 12.5 | 25.0 | 14.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 12.9 | 14.8 | 5.4 | 20.1 | 9.4 | 9.3 | 12.6 | 17.6 | | | | |
| Green Ext Time (p_c), s | 0.7 | 1.7 | 0.0 | 3.5 | 0.1 | 3.9 | 1.1 | 0.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 35.3 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |

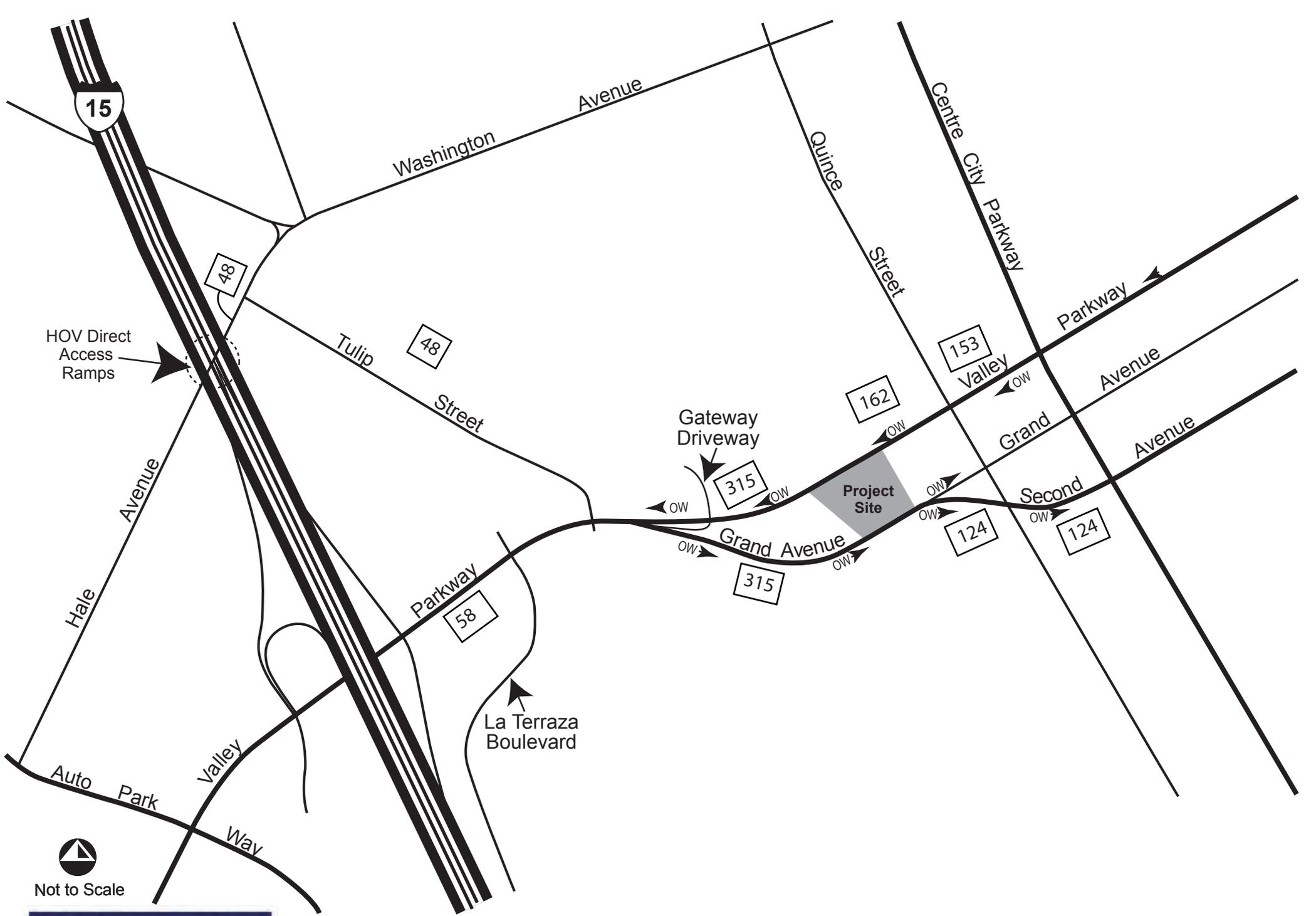
APPENDIX E
Cumulative Projects Information



Not to Scale

| I-15 SB Ramps / Valley Pkwy. | | I-15 NB Ramps / Valley Pkwy. | | Valley Pkwy. / La Terraza Blvd. | | Valley Pkwy. / Tulip Street | | |
|---------------------------------|---|-------------------------------|------------------------------------|----------------------------------|-------------------------------------|-----------------------------|-------------------------------|--------------|
| 5/12 ↗ | H-15 SB Ramps ↖ 14/8 ← 5/3 ↙ 2/1 | | H-15 NB Ramps ↗ 12/7 ↘ 21/11 | Plaza Las Palmas ← 33/18 | | 1/3 ↘ | Tulip St. ↖ 3/2 ← 33/18 | |
| Valley Pkwy. | 1 | Valley Pkwy. | 2 | Valley Pkwy. | 3 | Valley Pkwy. | 4 | Valley Pkwy. |
| 2/5 → | Escondido Promenade ↗ 1/2 | 8/19 → | H-15 NB Ramps ↗ 6/14 | 13/33 → | La Terraza Blvd. | 13/33 → | Private Dwy. | |
| Valley Pkwy. / Gateway Driveway | | Valley Pkwy. / Quince Street | | Valley Pkwy. / Centre City Pkwy. | | Grand Ave. / Quince Street | | |
| | Gateway Dwy. ← 36/20 | 1/2 ↘ | Quince St. ← 7/17 | 1/3 ↘ | Centre City Pkwy. ← 4/9 | | Quince St. | |
| Valley Pkwy. | 5 | Valley Pkwy. | 6 | Valley Pkwy. | 7 | Valley Pkwy. | 8 | Grand Ave. |
| | Gateway Dwy. | | Quince St. ↑ 2/1 | | Centre City Pkwy. ↖ 2/5 ↑ 3/2 | 2/1 ↗ 3/2 → | Quince St. | |
| Grand Ave. / Centre City Pkwy. | | Second Ave. / Quince Street | | Second Ave. / Centre City Pkwy. | | Hale Ave. / Tulip Street | | |
| | Centre City Pkwy. ↖ 1/2 | | Quince St. | | Central Ave. | | Hale Ave. | ↙ 3/2 |
| Grand Ave. | 9 | Grand Ave. | 10 | Second Ave. | 11 | Second Ave. | 12 | Tulip St. |
| 2/1 ↗ 1/1 → | Centre City Pkwy. ↑ 3/4 ↑ 1/1 | 14/8 → | Quince St. | 3/2 ↗ 9/5 → 3/2 ↘ | Central Ave. | ↑ 1/3 | Hale Ave. | ↗ 1/3 |
| Valley Pkwy. / Project Driveway | | Grand Ave. / Project Driveway | | | | | | |
| | Project Dwy. ↙ 7/18 | 18/10 ↘ | Project Dwy. | | | | | |
| Valley Pkwy. | 13 | Valley Pkwy. | 14 | Grand Ave. | | | | |
| | Project Dwy. ↙ 36/20 | 15/36 ↗ | | | | | | |



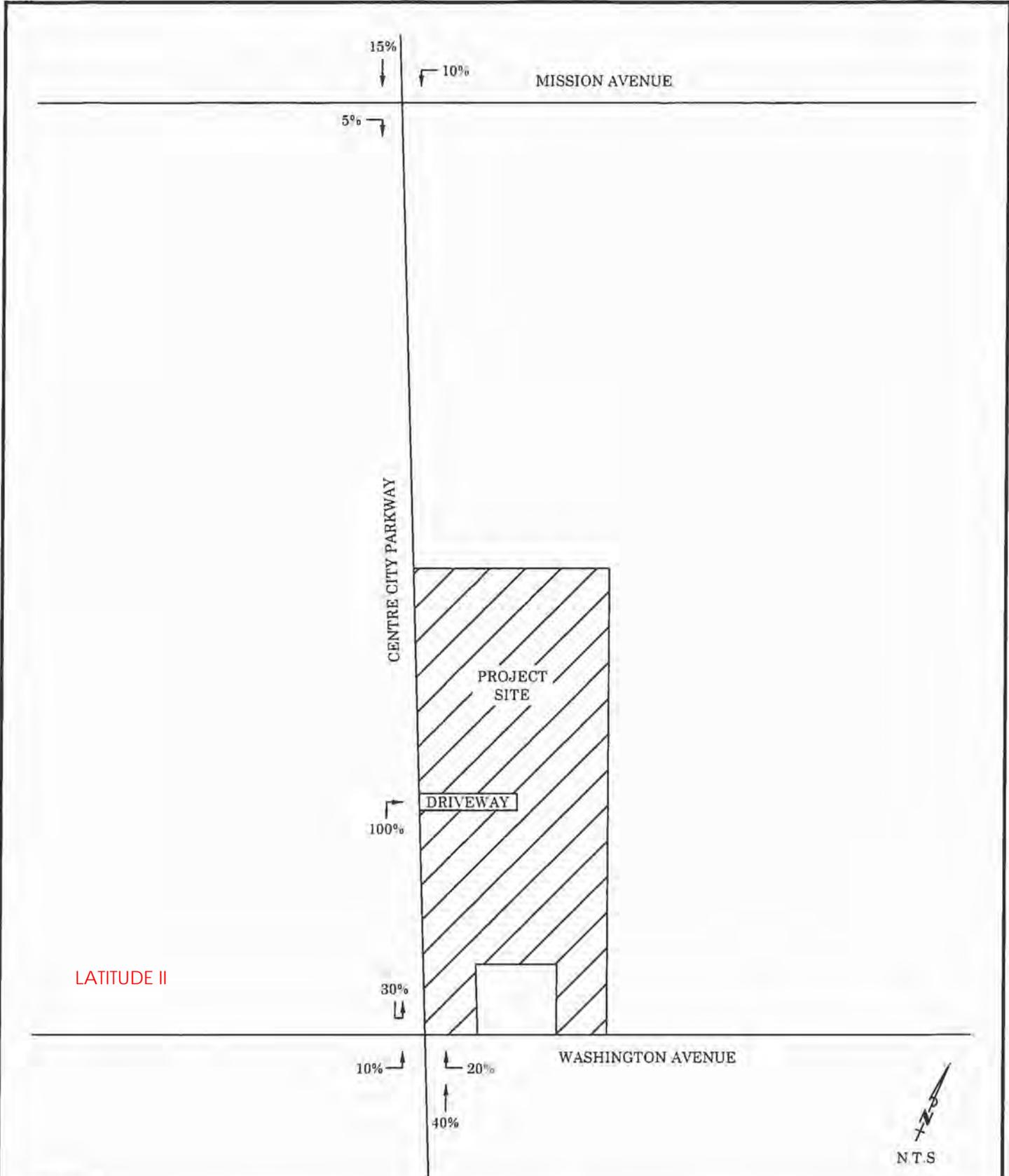


Not to Scale

**Table 8
Cumulative Projects Trip Generation**

| Project | | Land Use | Intensity | Unit | Daily Trips | AM Peak Hour | | | PM Peak Hour | | |
|---------------------------------------|--------------------------------------|---|-----------|-------|---------------|--------------|------------|------------|--------------|------------|------------|
| | | | | | | Total | In | Out | Total | In | Out |
| 1 | Centerpoint 78 Commercial Project | Supermarket | 43.500 | TSF | 6,525 | 261 | 183 | 78 | 392 | 196 | 196 |
| | | Fast-Food Restaurant (With Drive-Thru) | 3.200 | TSF | 2,080 | 146 | 73 | 73 | 88 | 44 | 44 |
| | | <i>Total Project Trips</i> | | | | 8,605 | 407 | 256 | 151 | 480 | 240 |
| 2 | Latitude II | Condominiums | 112 | DU | 896 | 72 | 14 | 57 | 90 | 63 | 27 |
| 3 | ADM 15-0121 (Mixed-Use Project) | Apartments | 20 | DU | 120 | 10 | 2 | 8 | 11 | 8 | 3 |
| | | Specialty Retail | 2.378 | TSF | 95 | 3 | 2 | 1 | 9 | 4 | 4 |
| | | <i>Total Project Trips</i> | | | | 215 | 12 | 4 | 9 | 19 | 12 |
| 4 | City Plaza | Apartments | 55 | DU | 330 | 26 | 5 | 21 | 30 | 21 | 9 |
| | | Specialty Retail | 5.198 | TSF | 208 | 6 | 4 | 2 | 19 | 9 | 9 |
| | | Office | 4.158 | TSF | 83 | 12 | 10 | 1 | 11 | 2 | 9 |
| | | <i>Total Project Trips</i> | | | | 621 | 44 | 20 | 25 | 59 | 32 |
| 5 | Springhill Suites | Hotel | 105 | rooms | 1,050 | 63 | 38 | 25 | 84 | 50 | 34 |
| 6 | La Terraza Office | Office | 36.614 | TSF | 732 | 102 | 92 | 10 | 95 | 19 | 76 |
| Total Cumulative Project Trips | | | | | 12,119 | 700 | 423 | 277 | 827 | 416 | 411 |

ESCONDIDO GATEWAY TIA



06/03/2015

Figure 1A
 Project Site/ Trip Distribution (%) - Peak Hour Inbound
 Escondido, California



MISSION AVENUE



CENTRE CITY PARKWAY



100%

30%

LATITUDE II

WASHINGTON AVENUE



06/03/2015

Figure 1B

Project Site/ Trip Distribution (%) - Peak Hour Outbound
Escondido, California



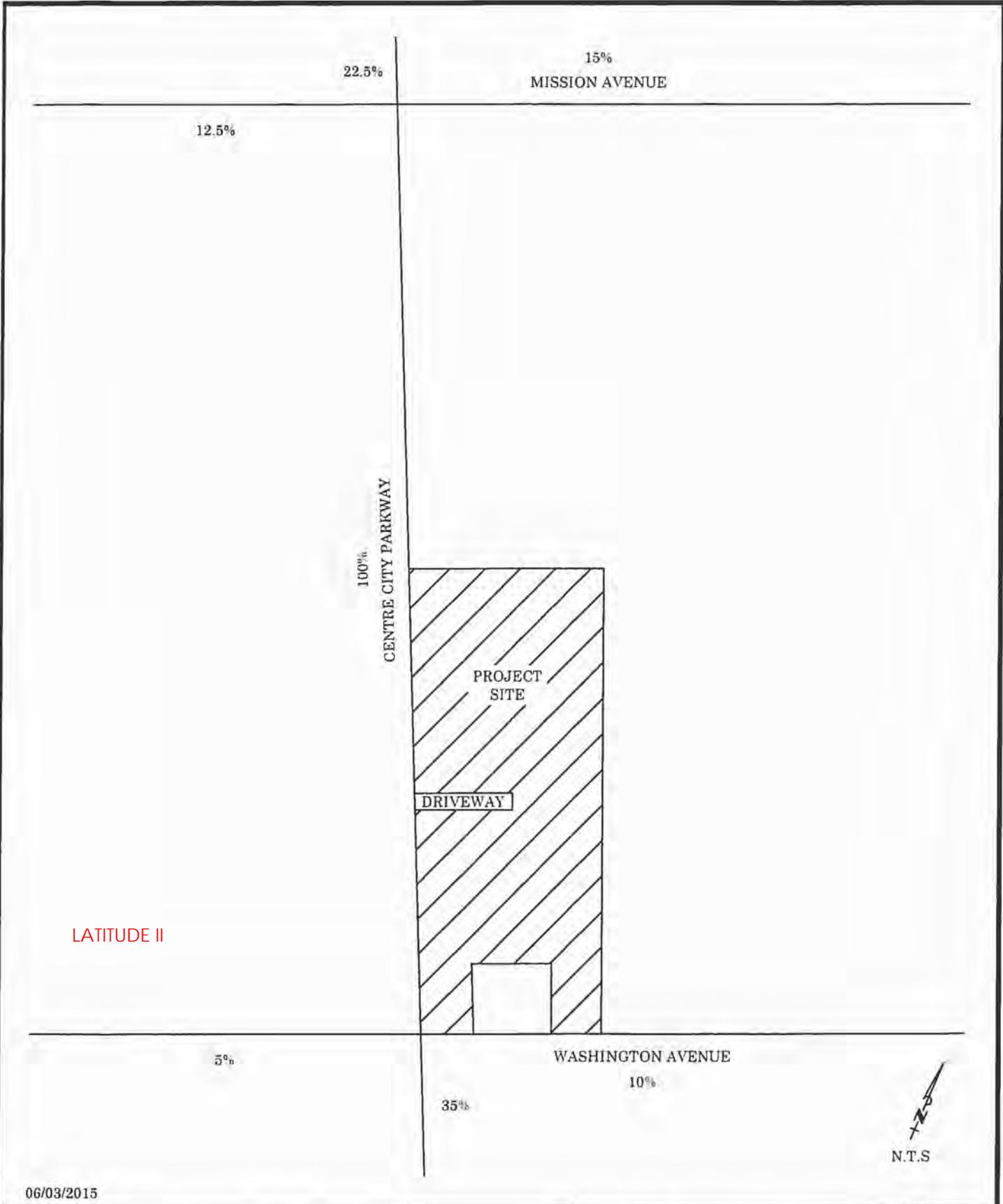
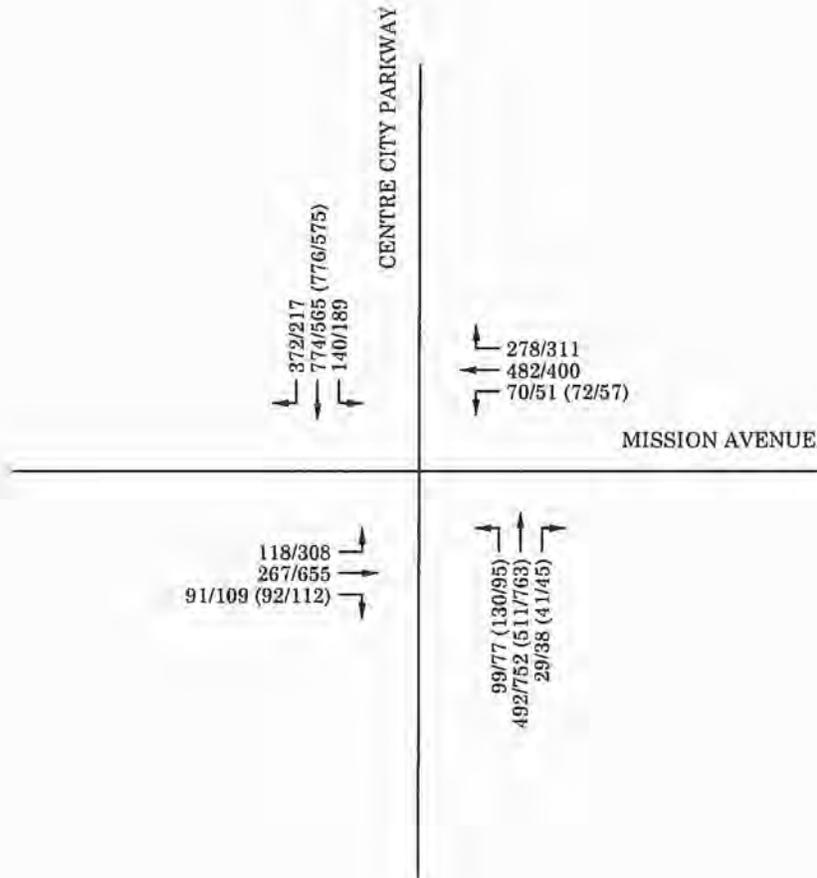


Figure 1C
 Project Site/ Trip Distribution (%) - Daily
 Escondido, California





LATITUDE II

Legend

XX/YY = AM/PM Peak Hour Volume **No Project**
 (XX/YY) = AM/PM Peak Hour Volume **With Project**



06/10/2015

Figure 2
 Intersection Peak Hour Volumes - Existing
 Centre City Parkway/ Mission Avenue



**TABLE 4-2
Project Trip Generation**

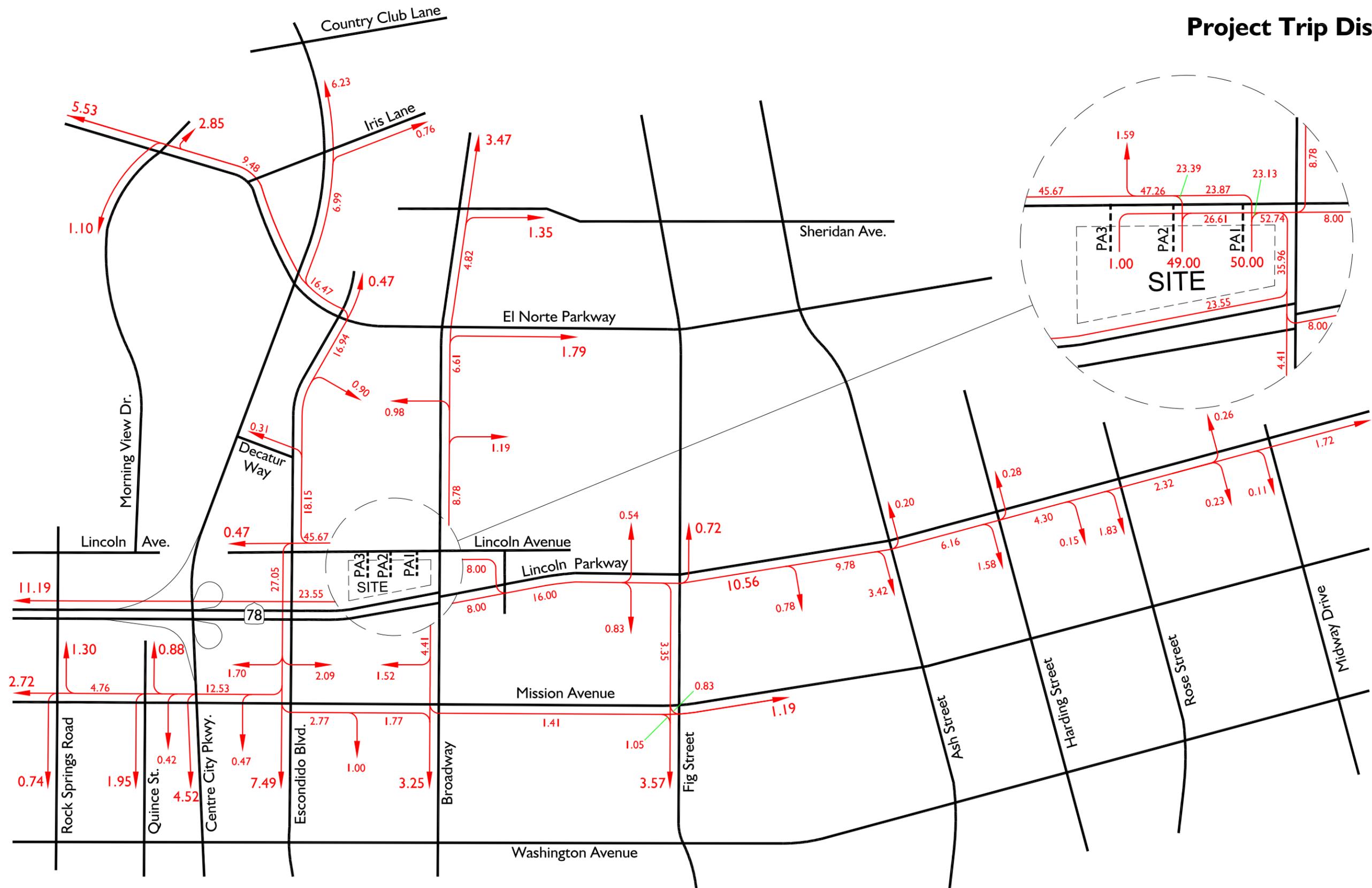
Currently Proposed Land Use

| | Land Use | Quantity | Units ¹ | Peak Hour | | | | | | Daily |
|--|---|----------|--------------------|------------|------------|------------|------------|------------|------------|--------------|
| | | | | AM | | | PM | | | |
| | | | | In | Out | Total | In | Out | Total | |
| 1 | Supermarket | 43.500 | TSF | 183 | 78 | 261 | 326 | 327 | 653 | 6,525 |
| | 40% Pass-By Trip Reduction ² | | | <i>n/a</i> | <i>n/a</i> | <i>n/a</i> | -130 | -131 | -261 | <i>n/a</i> |
| | Net Total Supermarket | | | 183 | 78 | 261 | 196 | 196 | 392 | 6,525 |
| 2 | Fast Food Restaurant (With Drive-Thru) | 3.200 | TSF | 73 | 73 | 146 | 73 | 73 | 146 | 2,080 |
| | 40% Pass-By Trip Reduction ² | | | <i>n/a</i> | <i>n/a</i> | <i>n/a</i> | -29 | -29 | -58 | <i>n/a</i> |
| | Net Total Fast Food | | | 73 | 73 | 146 | 44 | 44 | 88 | 2,080 |
| Full Project Trip Generation | | | | 256 | 151 | 407 | 399 | 400 | 799 | 8,605 |
| Net Total (With Pass-By Trip Reduction) | | | | 256 | 151 | 407 | 239 | 240 | 479 | 8,605 |

¹ TSF = Thousand Square Feet

² Suggested pass-by percentages per SANDAG Vehicular Traffic Generation Rates For San Diego Region. SANDAG only provides pass-by data for the PM Peak hour

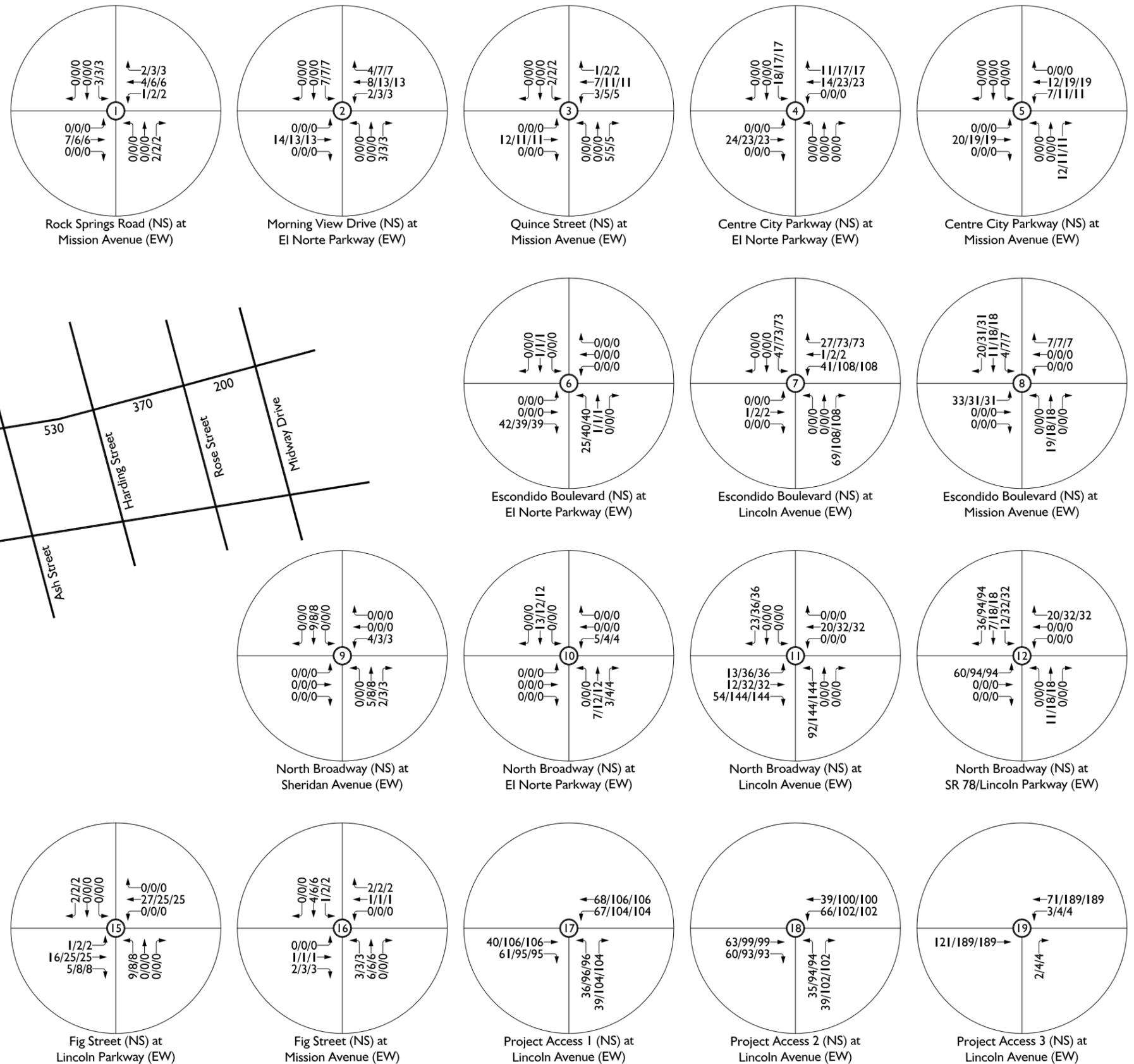
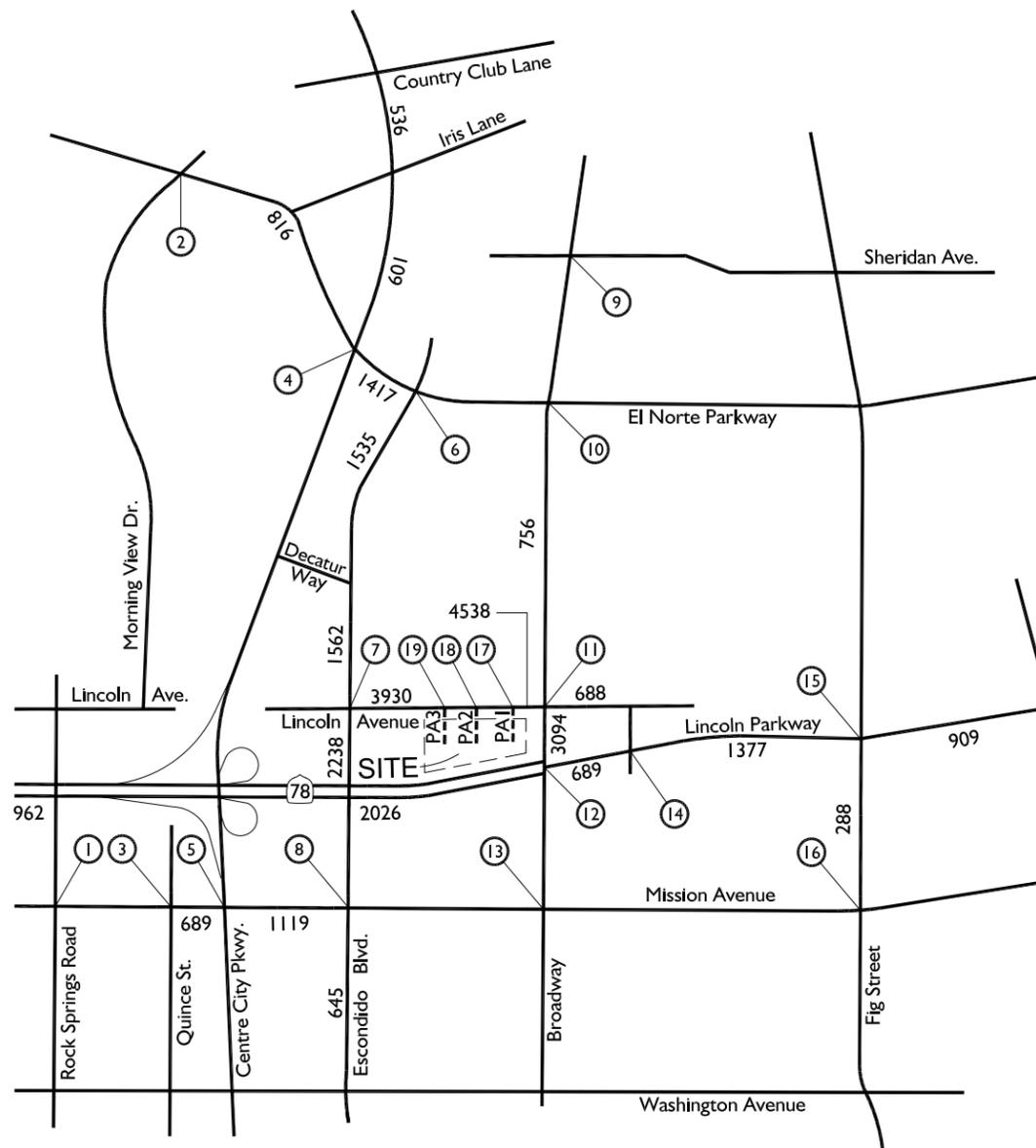
Project Trip Distribution



Legend:
 10 = Percent to/from Project

Note:
 Project Trip Distribution is based on SANDAG Series 12 Select Zone Assignment for Subarea TAZ 4683, provided in Appendix C.





Legend:
 10/20/30 = AM/MID/PM Peak Hour Volumes
 10.0 = Average Daily Traffic



Legend:
 Cumulative Project Site

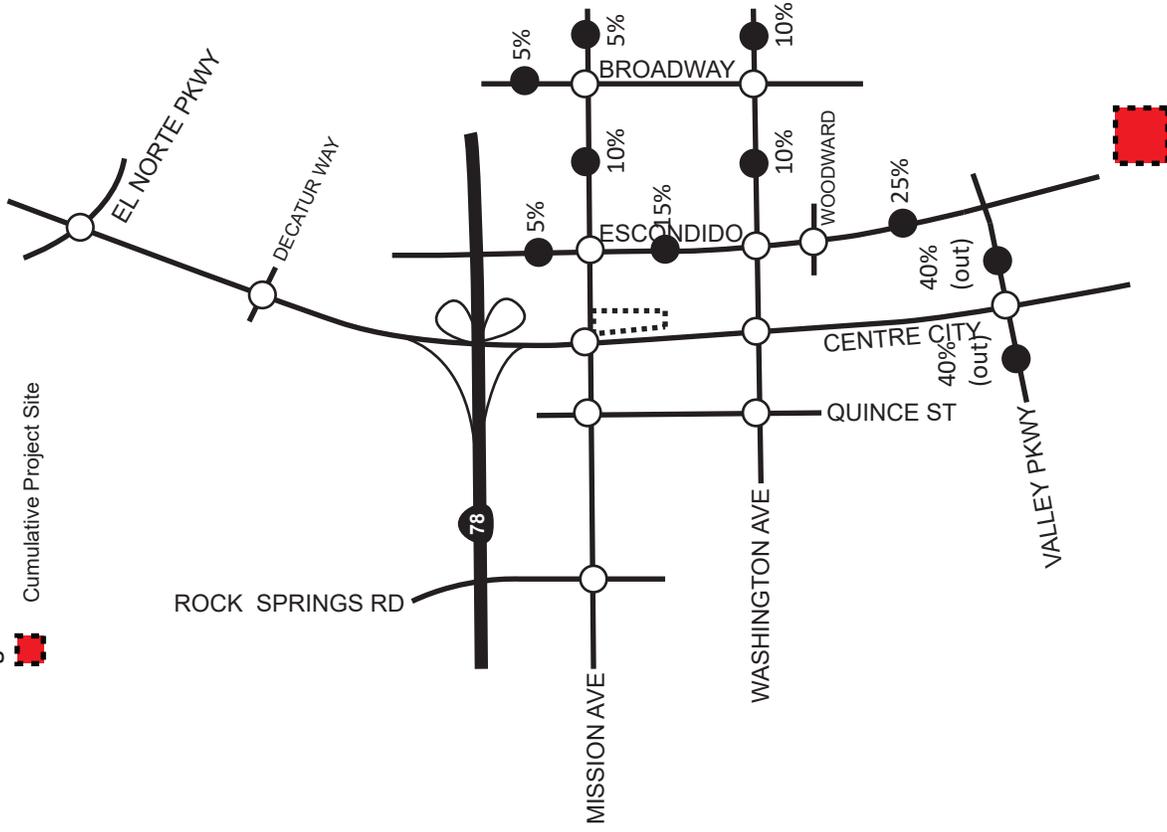


Exhibit: Projected City Plaza Trip Distribution in Study Area

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

Legend:



Cumulative Project Site

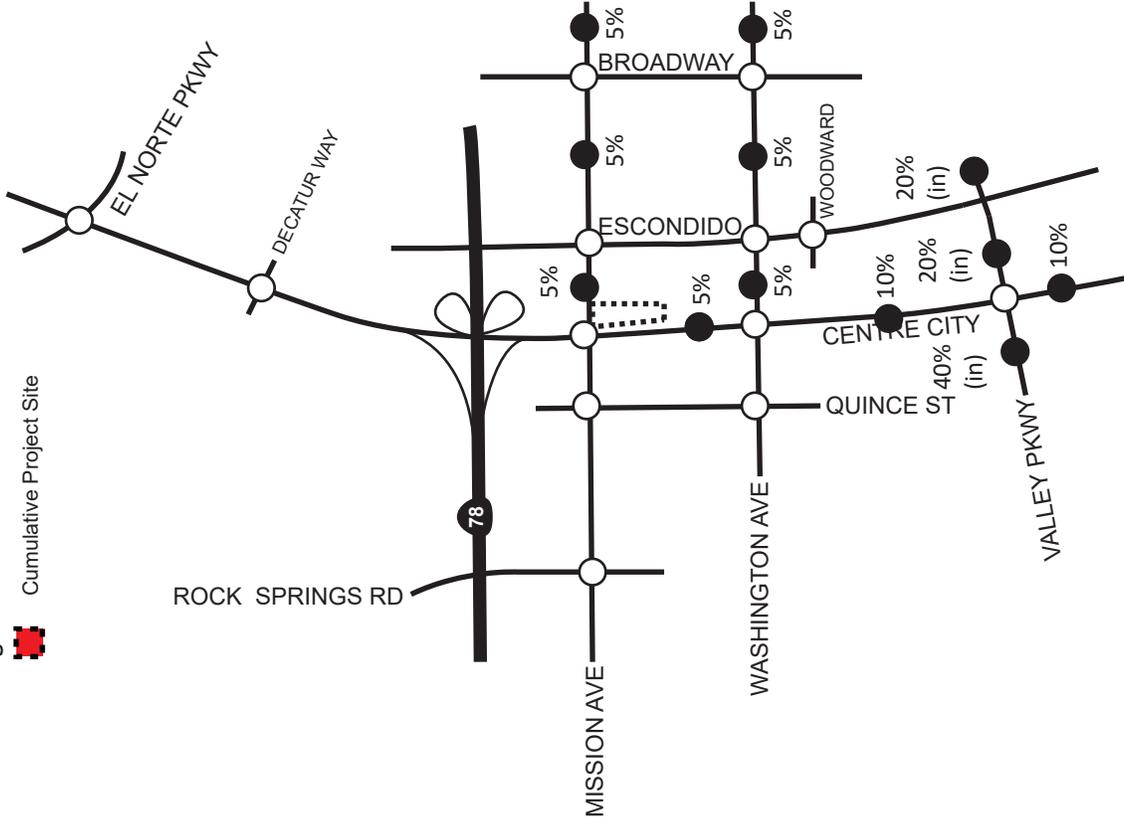


Exhibit: Projected La Terraza Office Distribution in Study Area

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

Legend:



Cumulative Project Site

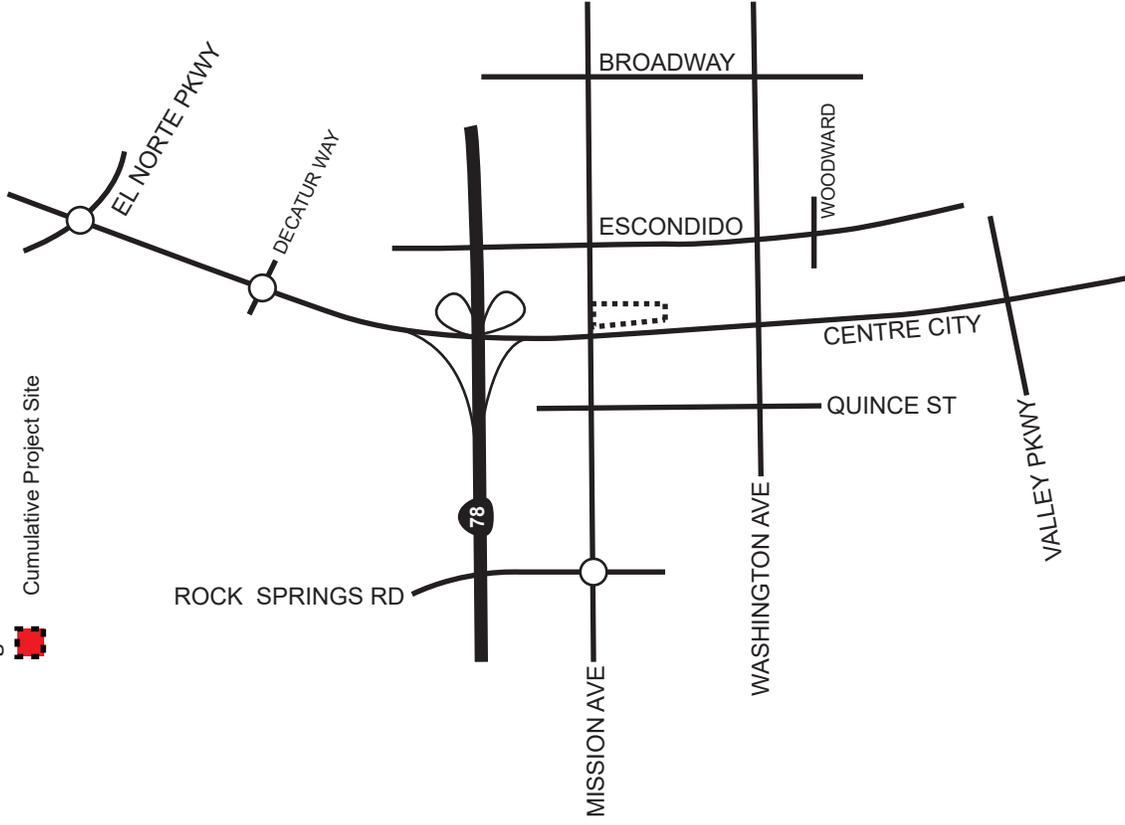


Exhibit: Projected Hotel La Terraza Trip Distribution in Study Area

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

Rock Springs/Mission Cumulative Project Assignment

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| AM PH | Latitude II | | | | 3 | 3 | 5 | | | | | 1 | |
| | Centerpointe 78 | | 7 | | 1 | 4 | 2 | | | | 2 | 3 | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | | | | | |
| | Total | 0 | 7 | 0 | 4 | 7 | 7 | 0 | 0 | 2 | 4 | 0 | 0 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Mid PH | Latitude II | | | 1 | 1 | 1 | 3 | | | | 1 | 1 | |
| | Centerpointe 78 | | 6 | | 2 | 6 | 3 | | | | 2 | 3 | |
| | Escondido Gateway | 0 | | | | | | | | | | | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | | | | | |
| | Total | 0 | 7 | 0 | 3 | 7 | 6 | 0 | 0 | 3 | 4 | 0 | 0 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| PM PH | Latitude II | | | 1 | 1 | 1 | 3 | | | | 1 | 1 | |
| | Centerpointe 78 | | 6 | | 2 | 6 | 3 | | | | 2 | 3 | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | | | | | |
| | Total | 0 | 7 | 0 | 3 | 7 | 6 | 0 | 0 | 3 | 4 | 0 | 0 |

Quince/Mission Cumulative Project Assignment

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| AM PH | Latitude II | | 1 | | | 11 | | | | | | | |
| | Centerpointe 78 | | 12 | | 3 | 7 | 1 | | | | 5 | 2 | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | | | | | |
| | Total | 0 | 13 | 0 | 3 | 18 | 1 | 0 | 0 | 5 | 2 | 0 | 0 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Mid PH | Latitude II | | 3 | | | 5 | | | | | | | |
| | Centerpointe 78 | | 11 | | 5 | 11 | 2 | | | | 5 | 2 | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | | | | | |
| | Total | 0 | 14 | 0 | 5 | 16 | 2 | 0 | 0 | 5 | 2 | 0 | 0 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| PM PH | Latitude II | | 3 | | | 5 | | | | | | | |
| | Centerpointe 78 | | 11 | | 5 | 11 | 2 | | | | 5 | 2 | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | | | | | |
| | Total | 0 | 14 | 0 | 5 | 16 | 2 | 0 | 0 | 5 | 2 | 0 | 0 |

Quince/Washington Cumulative Project Assignment

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| AM PH | Latitude II | | 2 | | | | | | | | | | |
| | Centerpointe 78 | | 2 | | | 2 | | | | | | | |
| | Escondido Gateway | | | | | | | | 1 | | | 2 | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | | | | | |
| | Total | 0 | 4 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 2 | 0 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Mid PH | Latitude II | | 7 | | | | | | | | | | |
| | Centerpointe 78 | | 2 | | | 2 | | | | | | | |
| | Escondido Gateway | | | | | | | | 2 | | | 1 | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | | | | | |
| | Total | 0 | 9 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 1 | 0 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| PM PH | Latitude II | | 7 | | | | | | | | | | |
| | Centerpointe 78 | | 2 | | | 2 | | | | | | | |
| | Escondido Gateway | | | | | | | | 2 | | | 1 | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | | | | | |
| | Total | 0 | 9 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 1 | 0 |

El Norte/CCP Cumulative Project Assignment

| AM PH | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | Latitude II | | | | | | | | | | | | |
| | Centerpointe 78 | | 24 | | | 14 | 11 | | | | 18 | | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | | | | | |
| | Total | 0 | 24 | 0 | 0 | 14 | 11 | 0 | 0 | 0 | 18 | 0 | 0 |

| Mid PH | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | Latitude II | | | | | | | | | | | | |
| | Centerpointe 78 | | 23 | | | 23 | 17 | | | | 17 | | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | | | | | |
| | Total | 0 | 23 | 0 | 0 | 23 | 17 | 0 | 0 | 0 | 17 | 0 | 0 |

| PM PH | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | Latitude II | | | | | | | | | | | | |
| | Centerpointe 78 | | 23 | | | 23 | 17 | | | | 17 | | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | | | | | |
| | Total | 0 | 23 | 0 | 0 | 23 | 17 | 0 | 0 | 0 | 17 | 0 | 0 |

CCP/Mission Cumulative Project Assignment

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| AM PH | Latitude II | | | 1 | 2 | | | 31 | 19 | 12 | | | 2 |
| | Centerpointe 78 | | 20 | | 7 | 12 | | | | 12 | | | |
| | Escondido Gateway | | | | | | | | | 3 | | | 1 |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | 4 | | | | | | | | |
| | Total | 0 | 20 | 1 | 13 | 12 | 0 | 31 | 19 | 27 | 0 | 3 | 0 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Mid PH | Latitude II | | | 3 | 6 | | | 18 | 9 | 7 | | | 10 |
| | Centerpointe 78 | | 19 | | 11 | 19 | | | | 11 | | | |
| | Escondido Gateway | | | | | | | | | 2 | | | 3 |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | 1 | | | | | 4 | | | |
| | Total | 0 | 19 | 3 | 18 | 19 | 0 | 18 | 9 | 24 | 0 | 13 | 0 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| PM PH | Latitude II | | | 3 | 6 | | | 18 | 9 | 7 | | | 10 |
| | Centerpointe 78 | | 19 | | 11 | 19 | | | | 11 | | | |
| | Escondido Gateway | | | | | | | | | 2 | | | 3 |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | 1 | | | | | 4 | | | |
| | Total | 0 | 19 | 3 | 18 | 19 | 0 | 18 | 9 | 24 | 0 | 13 | 0 |

CCP/Driveway Cumulative Project Assignment

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| AM PH | Latitude II | | | | | | | | 62 | | | 5 | |
| | Centerpointe 78 | | | | | | | | 12 | | | 7 | |
| | Escondido Gateway | | | | | | | | 3 | | | 1 | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | 4 | | | | | 4 | |
| | Total | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 77 | 0 | 0 | 17 | 0 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Mid PH | Latitude II | | | | | | | | 34 | | | 19 | |
| | Centerpointe 78 | | | | | | | | 11 | | | 11 | |
| | Escondido Gateway | | | | | | | | 2 | | | 3 | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | 4 | | | 1 | |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 0 | 0 | 34 | 0 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| PM PH | Latitude II | | | | | | | | 34 | | | 19 | |
| | Centerpointe 78 | | | | | | | | 11 | | | 11 | |
| | Escondido Gateway | | | | | | | | 2 | | | 3 | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | 4 | | | 1 | |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 0 | 0 | 34 | 0 |

CCP/Washington Cumulative Project Assignment

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| AM PH | Latitude II | 2 | | | | | 3 | | 6 | | 5 | 19 | |
| | Centerpointe 78 | | | | | | | | 12 | | | 7 | |
| | Escondido Gateway | | | | | | | | 3 | | | 1 | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | 5 | | | | | | 1 | 4 | |
| | Total | 2 | 0 | 0 | 5 | 0 | 3 | 0 | 21 | 1 | 5 | 31 | 0 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Mid PH | Latitude II | 7 | | | | | 13 | | 26 | | 19 | 11 | |
| | Centerpointe 78 | | | | | | | | 11 | | | 11 | |
| | Escondido Gateway | | | | | | | | 2 | | | 3 | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | | | | | |
| | Total | 7 | 0 | 0 | 0 | 0 | 13 | 0 | 39 | 0 | 19 | 25 | 0 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| PM PH | Latitude II | 7 | | | | | 13 | | 26 | | 19 | 11 | |
| | Centerpointe 78 | | | | | | | | 11 | | | 11 | |
| | Escondido Gateway | | | | | | | | 2 | | | 3 | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | 1 | | | | 4 | 4 | | 1 | |
| | Total | 7 | 0 | 0 | 1 | 0 | 13 | 0 | 43 | 4 | 19 | 26 | 0 |

CCP/Valley Cumulative Project Assignment

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| AM PH | Latitude II | | | | | | | | 6 | | | 10 | 9 |
| | Centerpointe 78 | | | | | | | | 12 | | | 4 | 3 |
| | Escondido Gateway | | | | | 4 | | 2 | 3 | | | | 1 |
| | City Plaza | | | | | 10 | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | 18 | | 9 | 1 | | | | 9 |
| | Total | 0 | 0 | 0 | 0 | 32 | 0 | 11 | 22 | 0 | 0 | 14 | 22 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Mid PH | Latitude II | | | | | | | | 26 | | | 6 | 5 |
| | Centerpointe 78 | | | | | | | | 11 | | | 6 | 5 |
| | Escondido Gateway | | | | | 9 | | 5 | 2 | | | | 3 |
| | City Plaza | | | | | 11 | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | 4 | | 1 | 8 | | | | 1 |
| | Total | 0 | 0 | 0 | 0 | 24 | 0 | 6 | 47 | 0 | 0 | 12 | 14 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| PM PH | Latitude II | | | | | | | | 26 | | | 6 | 5 |
| | Centerpointe 78 | | | | | | | | 11 | | | 6 | 5 |
| | Escondido Gateway | | | | | 9 | | 5 | 2 | | | | 3 |
| | City Plaza | | | | | 11 | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | 4 | | 1 | 8 | | | | 1 |
| | Total | 0 | 0 | 0 | 0 | 24 | 0 | 6 | 47 | 0 | 0 | 12 | 14 |

Driveway/Mission Cumulative Project Assignment

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| AM PH | Latitude II | | 12 | | | 2 | | | | | | | |
| | Centerpointe 78 | | 33 | | | 20 | | | | | | | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | | | | | |
| | Total | 0 | 45 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Mid PH | Latitude II | | 7 | | | 6 | | | | | | | |
| | Centerpointe 78 | | 31 | | | 31 | | | | | | | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | | | | | |
| | Total | 0 | 38 | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| PM PH | Latitude II | | 7 | | | 6 | | | | | | | |
| | Centerpointe 78 | | 31 | | | 31 | | | | | | | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | | | | | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | | | | | |
| | Total | 0 | 38 | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Escondido/Mission Cumulative Project Assignment

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| AM PH | Latitude II | 6 | 6 | | | 1 | | | | | | | 1 |
| | Centerpointe 78 | 33 | | | | | 7 | | 19 | | 4 | 11 | 20 |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | | 2 | | | | 2 | 2 | | 1 | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | 4 | | | | | | | |
| | Total | 39 | 6 | 0 | 2 | 5 | 7 | 0 | 21 | 2 | 4 | 12 | 21 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Mid PH | Latitude II | 3 | 4 | | | 3 | | | | | | | 3 |
| | Centerpointe 78 | 31 | | | | | 7 | | 18 | | 7 | 18 | 31 |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | | 3 | | | | 2 | 2 | | 2 | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | 4 | | | 1 | | | | | | | |
| | Total | 34 | 8 | 0 | 3 | 4 | 7 | 0 | 20 | 2 | 7 | 20 | 34 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| PM PH | Latitude II | 3 | 4 | | | 3 | | | | | | | 3 |
| | Centerpointe 78 | 31 | | | | | 7 | | 18 | | 7 | 18 | 31 |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | | 3 | | | | 2 | 2 | | 2 | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | 4 | | | 1 | | | | | | | |
| | Total | 34 | 8 | 0 | 3 | 4 | 7 | 0 | 20 | 2 | 7 | 20 | 34 |

Escondido/Washington Cumulative Project Assignment

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| AM PH | Latitude II | | | | | 3 | | | | | | | |
| | Centerpointe 78 | | | | | | | | 19 | | | 11 | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | | 2 | | | | 4 | 2 | | 3 | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | 1 | | | 5 | | | | | | | |
| | Total | 0 | 1 | 0 | 2 | 8 | 0 | 0 | 23 | 2 | 0 | 14 | 0 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Mid PH | Latitude II | | | | | 13 | | | | | | | |
| | Centerpointe 78 | | | | | | | | 18 | | | 18 | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | | 3 | | | | 4 | 3 | | 5 | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | 4 | | | 1 | | | | | | | |
| | Total | 0 | 4 | 0 | 3 | 14 | 0 | 0 | 22 | 3 | 0 | 23 | 0 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| PM PH | Latitude II | | | | | 13 | | | | | | | |
| | Centerpointe 78 | | | | | | | | 18 | | | 18 | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | | 3 | | | | 4 | 3 | | 5 | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | 4 | | | 1 | | | | | | | |
| | Total | 0 | 4 | 0 | 3 | 14 | 0 | 0 | 22 | 3 | 0 | 23 | 0 |

Escondido/Woodward Cumulative Project Assignment

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| AM PH | Latitude II | | | | | | | | | | | | |
| | Centerpointe 78 | | | | | | | | 19 | | | 11 | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | | | | | | 6 | | | 5 | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | | | | | |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 0 | 16 | 0 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Mid PH | Latitude II | | | | | | | | | | | | |
| | Centerpointe 78 | | | | | | | | 18 | | | 18 | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | | | | | | 7 | | | 8 | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | | | | | |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 0 | 26 | 0 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| PM PH | Latitude II | | | | | | | | | | | | |
| | Centerpointe 78 | | | | | | | | 18 | | | 18 | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | | | | | | 7 | | | 8 | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | | | | | | | | |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 0 | 26 | 0 |

Broadway/Mission Cumulative Project Assignment

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| AM PH | Latitude II | 3 | 3 | | | 1 | | | | | | | |
| | Centerpointe 78 | | | 3 | | | 4 | 5 | 4 | | 2 | 2 | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | 1 | 1 | | | 1 | | | | | | | 1 |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | | | 4 | | | | | | | |
| | Total | 4 | 4 | 3 | 0 | 6 | 4 | 5 | 4 | 0 | 2 | 2 | 1 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Mid PH | Latitude II | 2 | 2 | | | 2 | | | | | | | 1 |
| | Centerpointe 78 | | | 4 | | | 3 | 4 | 4 | | 3 | 4 | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | 1 | 1 | | | 2 | | | | | | | 1 |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | 4 | | | 1 | | | | | | | |
| | Total | 3 | 7 | 4 | 0 | 5 | 3 | 4 | 4 | 0 | 3 | 4 | 2 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| PM PH | Latitude II | 2 | 2 | | | 2 | | | | | | | 1 |
| | Centerpointe 78 | | | 4 | | | 3 | 4 | 4 | | 3 | 4 | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | 1 | 1 | | | 2 | | | | | | | 1 |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | 4 | | | 1 | | | | | | | |
| | Total | 3 | 7 | 4 | 0 | 5 | 3 | 4 | 4 | 0 | 3 | 4 | 2 |

Broadway/Washington Cumulative Project Assignment

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| AM PH | Latitude II | | | | | | | | | | | | |
| | Centerpointe 78 | | | | | | | | 4 | | | 2 | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | 2 | | | 3 | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | 1 | | | 5 | | | | | | |
| | Total | 0 | 3 | 0 | 0 | 8 | 0 | 0 | 4 | 0 | 0 | 2 | 0 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Mid PH | Latitude II | | | | | | | | | | | | |
| | Centerpointe 78 | | | | | | | | 4 | | | 4 | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | 2 | | | 3 | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | 4 | | | 1 | | | | | | |
| | Total | 0 | 6 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 |

| | Cumulative Project | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| PM PH | Latitude II | | | | | | | | | | | | |
| | Centerpointe 78 | | | | | | | | 4 | | | 4 | |
| | Escondido Gateway | | | | | | | | | | | | |
| | City Plaza | | | 2 | | | 3 | | | | | | |
| | Hotel La Terraza | | | | | | | | | | | | |
| | La Terraza Office | | | 4 | | | 1 | | | | | | |
| | Total | 0 | 6 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 |

APPENDIX F

Existing Plus Project Conditions HCM Analysis Sheets

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  |  |
| Traffic Volume (veh/h) | 75 | 307 | 30 | 45 | 949 | 115 | 43 | 203 | 23 | 171 | 376 | 196 |
| Future Volume (veh/h) | 75 | 307 | 30 | 45 | 949 | 115 | 43 | 203 | 23 | 171 | 376 | 196 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 80 | 327 | 32 | 48 | 1010 | 122 | 46 | 216 | 24 | 182 | 400 | 209 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 102 | 1765 | 172 | 61 | 1648 | 199 | 154 | 946 | 104 | 347 | 548 | 466 |
| Arrive On Green | 0.06 | 0.54 | 0.54 | 0.03 | 0.52 | 0.52 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 |
| Sat Flow, veh/h | 1774 | 3260 | 317 | 1774 | 3181 | 384 | 809 | 3216 | 354 | 1135 | 1863 | 1583 |
| Grp Volume(v), veh/h | 80 | 177 | 182 | 48 | 562 | 570 | 46 | 118 | 122 | 182 | 400 | 209 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1807 | 1774 | 1770 | 1795 | 809 | 1770 | 1800 | 1135 | 1863 | 1583 |
| Q Serve(g_s), s | 4.4 | 5.1 | 5.2 | 2.7 | 22.4 | 22.4 | 5.4 | 5.0 | 5.1 | 14.5 | 19.3 | 10.7 |
| Cycle Q Clear(g_c), s | 4.4 | 5.1 | 5.2 | 2.7 | 22.4 | 22.4 | 24.7 | 5.0 | 5.1 | 19.6 | 19.3 | 10.7 |
| Prop In Lane | 1.00 | | 0.18 | 1.00 | | 0.21 | 1.00 | | 0.20 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 102 | 958 | 978 | 61 | 917 | 930 | 154 | 520 | 529 | 347 | 548 | 466 |
| V/C Ratio(X) | 0.78 | 0.18 | 0.19 | 0.78 | 0.61 | 0.61 | 0.30 | 0.23 | 0.23 | 0.52 | 0.73 | 0.45 |
| Avail Cap(c_a), veh/h | 177 | 958 | 978 | 106 | 917 | 930 | 188 | 595 | 605 | 395 | 626 | 532 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.80 | 0.80 | 0.80 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 46.5 | 11.7 | 11.7 | 47.9 | 17.0 | 17.0 | 42.8 | 26.7 | 26.7 | 34.2 | 31.7 | 28.7 |
| Incr Delay (d2), s/veh | 4.8 | 0.4 | 0.4 | 6.4 | 2.5 | 2.4 | 0.8 | 0.2 | 0.2 | 0.9 | 3.4 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.3 | 2.6 | 2.6 | 1.4 | 11.5 | 11.7 | 1.2 | 2.5 | 2.6 | 4.6 | 10.4 | 4.7 |
| LnGrp Delay(d),s/veh | 51.3 | 12.1 | 12.1 | 54.3 | 19.5 | 19.4 | 43.6 | 26.9 | 26.9 | 35.1 | 35.1 | 29.2 |
| LnGrp LOS | D | B | B | D | B | B | D | C | C | D | D | C |
| Approach Vol, veh/h | | 439 | | | 1180 | | | 286 | | | 791 | |
| Approach Delay, s/veh | | 19.3 | | | 20.9 | | | 29.6 | | | 33.6 | |
| Approach LOS | | B | | | C | | | 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 | 7.5 | 58.6 | | 33.9 | 9.8 | 56.3 | | 33.9 | | | | |
| Change Period (Y+Rc), s | 4.0 | 4.5 | | 4.5 | 4.0 | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | 6.0 | 47.4 | | 33.6 | 10.0 | 43.4 | | 33.6 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.7 | 7.2 | | 21.6 | 6.4 | 24.4 | | 26.7 | | | | |
| Green Ext Time (p_c), s | 0.0 | 22.9 | | 3.7 | 0.0 | 13.7 | | 2.7 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 25.2 | | | | | | | | | |
| HCM 2010 LOS | | | C | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|-------|------|-------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 23 | 419 | 75 | 205 | 1152 | 69 | 140 | 23 | 109 | 52 | 26 | 29 |
| Future Volume (veh/h) | 23 | 419 | 75 | 205 | 1152 | 69 | 140 | 23 | 109 | 52 | 26 | 29 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 23 | 428 | 77 | 209 | 1176 | 70 | 143 | 23 | 111 | 53 | 27 | 30 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 466 | 830 | 148 | 694 | 1375 | 82 | 172 | 218 | 185 | 98 | 54 | 60 |
| Arrive On Green | 0.26 | 0.28 | 0.28 | 0.78 | 0.81 | 0.81 | 0.10 | 0.12 | 0.12 | 0.06 | 0.07 | 0.07 |
| Sat Flow, veh/h | 1774 | 3001 | 536 | 1774 | 3395 | 202 | 1774 | 1863 | 1583 | 1774 | 807 | 897 |
| Grp Volume(v), veh/h | 23 | 251 | 254 | 209 | 613 | 633 | 143 | 23 | 111 | 53 | 0 | 57 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1768 | 1774 | 1770 | 1827 | 1774 | 1863 | 1583 | 1774 | 0 | 1704 |
| Q Serve(g_s), s | 1.2 | 14.4 | 14.6 | 4.0 | 25.7 | 25.8 | 9.5 | 1.3 | 3.7 | 3.5 | 0.0 | 3.9 |
| Cycle Q Clear(g_c), s | 1.2 | 14.4 | 14.6 | 4.0 | 25.7 | 25.8 | 9.5 | 1.3 | 3.7 | 3.5 | 0.0 | 3.9 |
| Prop In Lane | 1.00 | | 0.30 | 1.00 | | 0.11 | 1.00 | | 1.00 | 1.00 | | 0.53 |
| Lane Grp Cap(c), veh/h | 466 | 490 | 489 | 694 | 717 | 740 | 172 | 218 | 185 | 98 | 0 | 114 |
| V/C Ratio(X) | 0.05 | 0.51 | 0.52 | 0.30 | 0.85 | 0.86 | 0.83 | 0.11 | 0.60 | 0.54 | 0.00 | 0.50 |
| Avail Cap(c_a), veh/h | 466 | 490 | 489 | 694 | 717 | 740 | 205 | 545 | 463 | 135 | 0 | 430 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.95 | 0.95 | 0.95 | 0.58 | 0.58 | 0.58 | 0.94 | 0.94 | 0.94 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.0 | 36.6 | 36.7 | 8.4 | 9.2 | 9.2 | 53.2 | 47.4 | 10.9 | 55.2 | 0.0 | 54.1 |
| Incr Delay (d2), s/veh | 0.0 | 3.6 | 3.7 | 0.2 | 7.7 | 7.5 | 20.6 | 0.2 | 3.5 | 5.5 | 0.0 | 4.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.6 | 7.5 | 7.6 | 1.9 | 13.1 | 13.5 | 5.6 | 0.7 | 1.8 | 1.9 | 0.0 | 1.9 |
| LnGrp Delay(d),s/veh | 33.1 | 40.2 | 40.4 | 8.6 | 16.9 | 16.8 | 73.8 | 47.6 | 14.4 | 60.7 | 0.0 | 58.2 |
| LnGrp LOS | C | D | D | A | B | B | E | D | B | E | | E |
| Approach Vol, veh/h | | 528 | | | 1455 | | | 277 | | | 110 | |
| Approach Delay, s/veh | | 40.0 | | | 15.6 | | | 47.8 | | | 59.4 | |
| Approach LOS | | D | | | B | | | D | | | E | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 51.5 | 38.6 | 16.8 | 13.1 | 36.1 | 54.0 | 10.7 | 19.1 | | | | |
| Change Period (Y+Rc), s | 4.6 | 5.4 | 5.1 | * 5.1 | 4.6 | * 5.4 | 4.1 | 5.1 | | | | |
| Max Green Setting (Gmax), s | 23.4 | 33.2 | 13.9 | * 30 | 8.5 | * 49 | 9.1 | 35.1 | | | | |
| Max Q Clear Time (g_c+10), s | 10.0 | 16.6 | 11.5 | 5.9 | 3.2 | 27.8 | 5.5 | 5.7 | | | | |
| Green Ext Time (p_c), s | 0.8 | 4.8 | 0.3 | 0.3 | 0.4 | 14.0 | 0.0 | 1.1 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 26.9 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 24 | 345 | 138 | 83 | 704 | 84 | 107 | 140 | 68 | 41 | 153 | 60 |
| Future Volume (veh/h) | 24 | 345 | 138 | 83 | 704 | 84 | 107 | 140 | 68 | 41 | 153 | 60 |
| 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 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 28 | 397 | 159 | 95 | 809 | 97 | 123 | 161 | 78 | 47 | 176 | 69 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 500 | 1778 | 703 | 623 | 2283 | 274 | 223 | 485 | 225 | 225 | 518 | 196 |
| Arrive On Green | 0.72 | 0.72 | 0.72 | 1.00 | 1.00 | 1.00 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 |
| Sat Flow, veh/h | 613 | 2479 | 981 | 849 | 3183 | 382 | 1130 | 2351 | 1089 | 1136 | 2514 | 951 |
| Grp Volume(v), veh/h | 28 | 282 | 274 | 95 | 450 | 456 | 123 | 119 | 120 | 47 | 122 | 123 |
| Grp Sat Flow(s),veh/h/ln | 613 | 1770 | 1690 | 849 | 1770 | 1795 | 1130 | 1770 | 1671 | 1136 | 1770 | 1695 |
| Q Serve(g_s), s | 1.6 | 6.4 | 6.6 | 1.2 | 0.0 | 0.0 | 12.5 | 6.9 | 7.4 | 4.4 | 7.1 | 7.5 |
| Cycle Q Clear(g_c), s | 1.6 | 6.4 | 6.6 | 7.8 | 0.0 | 0.0 | 20.0 | 6.9 | 7.4 | 11.8 | 7.1 | 7.5 |
| Prop In Lane | 1.00 | | 0.58 | 1.00 | | 0.21 | 1.00 | | 0.65 | 1.00 | | 0.56 |
| Lane Grp Cap(c), veh/h | 500 | 1269 | 1212 | 623 | 1269 | 1288 | 223 | 365 | 344 | 225 | 365 | 350 |
| V/C Ratio(X) | 0.06 | 0.22 | 0.23 | 0.15 | 0.35 | 0.35 | 0.55 | 0.33 | 0.35 | 0.21 | 0.33 | 0.35 |
| Avail Cap(c_a), veh/h | 500 | 1269 | 1212 | 623 | 1269 | 1288 | 399 | 640 | 604 | 401 | 640 | 613 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.75 | 0.75 | 0.75 | 1.00 | 1.00 | 1.00 | 0.73 | 0.73 | 0.73 |
| Uniform Delay (d), s/veh | 5.0 | 5.7 | 5.7 | 0.3 | 0.0 | 0.0 | 49.3 | 40.5 | 40.7 | 45.8 | 40.6 | 40.8 |
| Incr Delay (d2), s/veh | 0.2 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 1.6 | 0.4 | 0.4 | 0.2 | 0.3 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.3 | 3.3 | 3.2 | 0.3 | 0.2 | 0.2 | 4.0 | 3.4 | 3.4 | 1.4 | 3.5 | 3.5 |
| LnGrp Delay(d),s/veh | 5.2 | 6.1 | 6.2 | 0.7 | 0.6 | 0.6 | 50.9 | 40.9 | 41.2 | 46.0 | 40.9 | 41.1 |
| LnGrp LOS | A | A | A | A | A | A | D | D | D | D | D | D |
| Approach Vol, veh/h | | 584 | | | 1001 | | | 362 | | | 292 | |
| Approach Delay, s/veh | | 6.1 | | | 0.6 | | | 44.4 | | | 41.8 | |
| Approach LOS | | A | | | A | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 90.7 | | 29.3 | | 90.7 | | 29.3 | | | | |
| Change Period (Y+Rc), s | | 4.6 | | 4.6 | | 4.6 | | 4.6 | | | | |
| Max Green Setting (Gmax), s | | 67.4 | | 43.4 | | 67.4 | | 43.4 | | | | |
| Max Q Clear Time (g_c+1), s | | 8.6 | | 22.0 | | 9.8 | | 13.8 | | | | |
| Green Ext Time (p_c), s | | 11.1 | | 2.7 | | 11.1 | | 2.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 14.5 | | | | | | | | |
| HCM 2010 LOS | | | | B | | | | | | | | |

SEC CCP/Mission TIA
4: Centre City Pkwy & El Norte Pkwy

HCM 2010 Signalized Intersection Summary
Existing Plus Project AM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↖↖ | ↗↗ | ↘ | ↖↖ | ↗↗ | | ↖↖ | ↗↗ | ↘ | ↖↖ | ↗↗ | ↘ |
| Traffic Volume (veh/h) | 9 | 637 | 264 | 280 | 723 | 150 | 167 | 252 | 82 | 239 | 1061 | 59 |
| Future Volume (veh/h) | 9 | 637 | 264 | 280 | 723 | 150 | 167 | 252 | 82 | 239 | 1061 | 59 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 10 | 692 | 287 | 304 | 786 | 163 | 182 | 274 | 89 | 260 | 1153 | 64 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 77 | 987 | 442 | 343 | 1040 | 216 | 292 | 1365 | 611 | 303 | 1372 | 614 |
| Arrive On Green | 0.02 | 0.28 | 0.28 | 0.10 | 0.36 | 0.36 | 0.17 | 0.77 | 0.77 | 0.09 | 0.39 | 0.39 |
| Sat Flow, veh/h | 3442 | 3539 | 1583 | 3442 | 2920 | 606 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 10 | 692 | 287 | 304 | 476 | 473 | 182 | 274 | 89 | 260 | 1153 | 64 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1583 | 1721 | 1770 | 1756 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 0.5 | 28.9 | 26.3 | 14.4 | 39.1 | 39.1 | 8.1 | 3.5 | 2.4 | 12.3 | 48.8 | 4.3 |
| Cycle Q Clear(g_c), s | 0.5 | 28.9 | 26.3 | 14.4 | 39.1 | 39.1 | 8.1 | 3.5 | 2.4 | 12.3 | 48.8 | 4.3 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.34 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 77 | 987 | 442 | 343 | 630 | 625 | 292 | 1365 | 611 | 303 | 1372 | 614 |
| V/C Ratio(X) | 0.13 | 0.70 | 0.65 | 0.89 | 0.76 | 0.76 | 0.62 | 0.20 | 0.15 | 0.86 | 0.84 | 0.10 |
| Avail Cap(c_a), veh/h | 209 | 1094 | 489 | 353 | 630 | 625 | 292 | 1365 | 611 | 405 | 1372 | 614 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.98 | 0.98 | 0.98 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 79.1 | 53.3 | 52.4 | 73.4 | 46.8 | 46.8 | 66.1 | 12.0 | 11.9 | 74.2 | 45.9 | 32.2 |
| Incr Delay (d2), s/veh | 0.3 | 2.3 | 3.6 | 21.6 | 5.8 | 5.9 | 3.0 | 0.3 | 0.5 | 10.6 | 6.3 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.2 | 14.4 | 12.0 | 7.9 | 20.2 | 20.1 | 4.0 | 1.7 | 1.1 | 6.3 | 25.1 | 1.9 |
| LnGrp Delay(d),s/veh | 79.4 | 55.6 | 56.0 | 95.0 | 52.6 | 52.7 | 69.1 | 12.3 | 12.4 | 84.8 | 52.2 | 32.6 |
| LnGrp LOS | E | E | E | F | D | D | E | B | B | F | D | C |
| Approach Vol, veh/h | | 989 | | | 1253 | | | 545 | | | 1477 | |
| Approach Delay, s/veh | | 55.9 | | | 62.9 | | | 31.3 | | | 57.1 | |
| Approach LOS | | E | | | E | | | C | | | 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 | 30.6 | 70.5 | 21.5 | 52.3 | 20.3 | 70.9 | 8.8 | 65.1 | | | | |
| Change Period (Y+Rc), s | 6.1 | 6.9 | 5.1 | 6.3 | 6.3 | 6.9 | 5.1 | 6.3 | | | | |
| Max Green Setting (Gmax), s | 19.4 | 53.3 | 16.9 | 51.0 | 14.0 | 58.5 | 10.0 | 57.9 | | | | |
| Max Q Clear Time (g_c+M), s | 11.3 | 5.5 | 16.4 | 30.9 | 10.1 | 50.8 | 2.5 | 41.1 | | | | |
| Green Ext Time (p_c), s | 0.2 | 19.0 | 0.0 | 15.1 | 0.1 | 5.8 | 0.0 | 13.7 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | | 55.2 | | | | | | | |
| HCM 2010 LOS | | | | | E | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|-------|-------|------|-------|-------|-------|------|------|------|------|
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↑↑ | ↗ | ↖ | ↑↑ | ↗ |
| Traffic Volume (veh/h) | 4 | 0 | 10 | 308 | 8 | 82 | 31 | 421 | 38 | 66 | 1593 | 14 |
| Future Volume (veh/h) | 4 | 0 | 10 | 308 | 8 | 82 | 31 | 421 | 38 | 66 | 1593 | 14 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 4 | 0 | 11 | 331 | 9 | 88 | 33 | 453 | 41 | 71 | 1713 | 15 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 1 | 1 | 2 | 1 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 129 | 0 | 114 | 351 | 29 | 288 | 115 | 1928 | 862 | 103 | 1855 | 830 |
| Arrive On Green | 0.07 | 0.00 | 0.07 | 0.20 | 0.20 | 0.20 | 0.06 | 0.54 | 0.54 | 0.12 | 1.00 | 1.00 |
| Sat Flow, veh/h | 1774 | 0 | 1583 | 1774 | 149 | 1457 | 1774 | 3539 | 1583 | 1774 | 3539 | 1583 |
| Grp Volume(v), veh/h | 4 | 0 | 11 | 331 | 0 | 97 | 33 | 453 | 41 | 71 | 1713 | 15 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 0 | 1583 | 1774 | 0 | 1606 | 1774 | 1770 | 1583 | 1774 | 1770 | 1583 |
| Q Serve(g_s), s | 0.3 | 0.0 | 1.1 | 30.4 | 0.0 | 8.5 | 2.9 | 11.0 | 2.0 | 6.3 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 0.3 | 0.0 | 1.1 | 30.4 | 0.0 | 8.5 | 2.9 | 11.0 | 2.0 | 6.3 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.91 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 129 | 0 | 114 | 351 | 0 | 317 | 115 | 1928 | 862 | 103 | 1855 | 830 |
| V/C Ratio(X) | 0.03 | 0.00 | 0.10 | 0.94 | 0.00 | 0.31 | 0.29 | 0.23 | 0.05 | 0.69 | 0.92 | 0.02 |
| Avail Cap(c_a), veh/h | 129 | 0 | 115 | 394 | 0 | 356 | 115 | 1928 | 862 | 141 | 1855 | 830 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.54 | 0.54 | 0.54 |
| Uniform Delay (d), s/veh | 71.1 | 0.0 | 71.5 | 65.2 | 0.0 | 56.5 | 73.5 | 19.6 | 17.6 | 71.4 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.1 | 0.0 | 0.3 | 29.0 | 0.0 | 0.4 | 0.5 | 0.3 | 0.1 | 1.8 | 5.4 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.2 | 0.0 | 0.5 | 17.7 | 0.0 | 3.8 | 1.5 | 5.5 | 0.9 | 3.1 | 1.4 | 0.0 |
| LnGrp Delay(d),s/veh | 71.2 | 0.0 | 71.8 | 94.2 | 0.0 | 56.9 | 74.0 | 19.9 | 17.7 | 73.2 | 5.4 | 0.0 |
| LnGrp LOS | E | | E | F | | E | E | B | B | E | A | A |
| Approach Vol, veh/h | | 15 | | | 428 | | | 527 | | | 1799 | |
| Approach Delay, s/veh | | 71.6 | | | 85.7 | | | 23.1 | | | 8.1 | |
| Approach LOS | | E | | | F | | | C | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 34.2 | 96.8 | 37.4 | 16.6 | 17.6 | 93.4 | 16.7 | 37.3 | | | | |
| Change Period (Y+Rc), s | 4.6 | 6.9 | * 4.7 | * 4.7 | 6.9 | * 6.9 | * 4.7 | * 4.7 | | | | |
| Max Green Setting (Gmax), s | 10.5 | 82.4 | * 37 | * 12 | 9.0 | * 87 | * 12 | * 37 | | | | |
| Max Q Clear Time (g_c+10), s | 10.5 | 13.0 | 32.4 | 3.1 | 4.9 | 2.0 | 2.3 | 10.5 | | | | |
| Green Ext Time (p_c), s | 0.0 | 4.2 | 0.3 | 0.3 | 0.1 | 32.3 | 0.0 | 0.5 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 23.3 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|-------|------|------|------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 123 | 371 | 84 | 90 | 675 | 236 | 192 | 563 | 46 | 208 | 852 | 532 |
| Future Volume (veh/h) | 123 | 371 | 84 | 90 | 675 | 236 | 192 | 563 | 46 | 208 | 852 | 532 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 0.98 | 1.00 | | 0.98 | 1.00 | | 0.99 | 1.00 | | 0.98 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 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 | 1667 | 1863 | 1863 | 1667 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 128 | 386 | 88 | 94 | 703 | 246 | 200 | 586 | 48 | 217 | 888 | 554 |
| Adj No. of Lanes | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 162 | 959 | 420 | 115 | 880 | 385 | 483 | 1674 | 514 | 545 | 1171 | 516 |
| Arrive On Green | 0.18 | 0.54 | 0.54 | 0.02 | 0.08 | 0.08 | 0.31 | 0.66 | 0.66 | 0.16 | 0.33 | 0.33 |
| Sat Flow, veh/h | 1774 | 3539 | 1550 | 1587 | 3539 | 1547 | 3079 | 5085 | 1560 | 3442 | 3539 | 1559 |
| Grp Volume(v), veh/h | 128 | 386 | 88 | 94 | 703 | 246 | 200 | 586 | 48 | 217 | 888 | 554 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1550 | 1587 | 1770 | 1547 | 1540 | 1695 | 1560 | 1721 | 1770 | 1559 |
| Q Serve(g_s), s | 8.3 | 7.7 | 2.4 | 7.1 | 23.4 | 18.5 | 6.1 | 6.1 | 1.0 | 6.8 | 26.9 | 39.7 |
| Cycle Q Clear(g_c), s | 8.3 | 7.7 | 2.4 | 7.1 | 23.4 | 18.5 | 6.1 | 6.1 | 1.0 | 6.8 | 26.9 | 39.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 162 | 959 | 420 | 115 | 880 | 385 | 483 | 1674 | 514 | 545 | 1171 | 516 |
| V/C Ratio(X) | 0.79 | 0.40 | 0.21 | 0.82 | 0.80 | 0.64 | 0.41 | 0.35 | 0.09 | 0.40 | 0.76 | 1.07 |
| Avail Cap(c_a), veh/h | 200 | 1165 | 510 | 126 | 1047 | 458 | 483 | 1674 | 514 | 545 | 1171 | 516 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.96 | 0.96 | 0.96 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 48.0 | 21.8 | 9.6 | 57.8 | 52.1 | 49.9 | 36.8 | 14.8 | 8.0 | 45.4 | 35.9 | 40.2 |
| Incr Delay (d2), s/veh | 12.2 | 0.2 | 0.2 | 28.2 | 3.5 | 1.8 | 0.2 | 0.6 | 0.4 | 0.2 | 4.6 | 60.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.6 | 3.7 | 1.0 | 4.0 | 11.9 | 8.1 | 2.6 | 2.9 | 0.5 | 3.2 | 13.8 | 25.8 |
| LnGrp Delay(d),s/veh | 60.1 | 22.0 | 9.7 | 86.0 | 55.6 | 51.7 | 37.1 | 15.4 | 8.4 | 45.5 | 40.5 | 101.1 |
| LnGrp LOS | E | C | A | F | E | D | D | B | A | D | D | F |
| Approach Vol, veh/h | | 602 | | | 1043 | | | 834 | | | 1659 | |
| Approach Delay, s/veh | | 28.3 | | | 57.4 | | | 20.2 | | | 61.4 | |
| Approach LOS | | C | | | E | | | C | | | 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 | 33.5 | 45.9 | 13.2 | 37.4 | 23.3 | 46.1 | 15.8 | 34.7 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.4 | 4.5 | 4.9 | 4.5 | 6.4 | 4.9 | * 4.9 | | | | |
| Max Green Setting (Gmax), s | 39.5 | 39.5 | 9.5 | 39.5 | 11.0 | 39.7 | 13.5 | * 36 | | | | |
| Max Q Clear Time (g_c+1), s | 10.8 | 8.1 | 9.1 | 9.7 | 8.1 | 41.7 | 10.3 | 25.4 | | | | |
| Green Ext Time (p_c), s | 0.2 | 3.6 | 0.0 | 2.4 | 0.3 | 0.0 | 0.8 | 3.4 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 47.3 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|-------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 86 | 290 | 77 | 64 | 588 | 107 | 167 | 639 | 54 | 117 | 843 | 164 |
| Future Volume (veh/h) | 86 | 290 | 77 | 64 | 588 | 107 | 167 | 639 | 54 | 117 | 843 | 164 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 92 | 312 | 83 | 69 | 632 | 115 | 180 | 687 | 58 | 126 | 906 | 176 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 127 | 394 | 103 | 313 | 738 | 134 | 343 | 1047 | 468 | 697 | 1470 | 658 |
| Arrive On Green | 0.02 | 0.05 | 0.05 | 0.06 | 0.08 | 0.08 | 0.03 | 0.10 | 0.10 | 0.41 | 0.83 | 0.83 |
| Sat Flow, veh/h | 1774 | 2777 | 727 | 1774 | 2993 | 544 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 92 | 197 | 198 | 69 | 373 | 374 | 180 | 687 | 58 | 126 | 906 | 176 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1734 | 1774 | 1770 | 1767 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 6.2 | 13.2 | 13.6 | 4.5 | 25.0 | 25.1 | 6.2 | 22.5 | 4.0 | 2.8 | 10.7 | 2.9 |
| Cycle Q Clear(g_c), s | 6.2 | 13.2 | 13.6 | 4.5 | 25.0 | 25.1 | 6.2 | 22.5 | 4.0 | 2.8 | 10.7 | 2.9 |
| Prop In Lane | 1.00 | | 0.42 | 1.00 | | 0.31 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 127 | 251 | 246 | 313 | 437 | 436 | 343 | 1047 | 468 | 697 | 1470 | 658 |
| V/C Ratio(X) | 0.73 | 0.79 | 0.81 | 0.22 | 0.86 | 0.86 | 0.52 | 0.66 | 0.12 | 0.18 | 0.62 | 0.27 |
| Avail Cap(c_a), veh/h | 140 | 612 | 600 | 313 | 627 | 626 | 359 | 1047 | 468 | 697 | 1470 | 658 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 0.98 | 0.98 | 0.98 | 0.74 | 0.74 | 0.74 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 57.4 | 55.4 | 55.6 | 48.6 | 53.0 | 53.0 | 55.2 | 48.3 | 39.9 | 29.3 | 6.8 | 6.2 |
| Incr Delay (d2), s/veh | 12.3 | 2.0 | 2.3 | 0.1 | 4.3 | 4.5 | 0.5 | 3.0 | 0.5 | 0.0 | 1.9 | 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(50%),veh/ln | 8.5 | 6.6 | 6.7 | 2.2 | 12.8 | 12.8 | 3.0 | 11.5 | 1.8 | 1.3 | 5.2 | 1.4 |
| LnGrp Delay(d),s/veh | 69.7 | 57.4 | 57.9 | 48.7 | 57.3 | 57.5 | 55.7 | 51.3 | 40.4 | 29.3 | 8.8 | 7.2 |
| LnGrp LOS | E | E | E | D | E | E | E | D | D | C | A | A |
| Approach Vol, veh/h | | 487 | | | 816 | | | 925 | | | 1208 | |
| Approach Delay, s/veh | | 59.9 | | | 56.7 | | | 51.5 | | | 10.7 | |
| Approach LOS | | E | | | E | | | D | | | B | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 30.8 | 42.0 | 25.7 | 21.5 | 16.5 | 56.3 | 13.1 | 34.1 | | | | |
| Change Period (Y+Rc), s | 6.5 | * 6.5 | 4.5 | 4.5 | 4.5 | 6.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 12.5 | * 36 | 10.5 | 41.5 | 12.5 | 35.5 | 9.5 | 42.5 | | | | |
| Max Q Clear Time (g_c+1), s | 11.8 | 24.5 | 6.5 | 15.6 | 8.2 | 12.7 | 8.2 | 27.1 | | | | |
| Green Ext Time (p_c), s | 1.4 | 2.5 | 1.3 | 1.4 | 0.1 | 4.9 | 0.0 | 2.5 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 39.6 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|-----|------|-----|---------|---------|---------|---------|---------|------|------|---------|---------|
| Lane Configurations | | | | ↖ ↗ ↘ ↙ | ↖ ↗ ↘ ↙ | ↖ ↗ ↘ ↙ | ↖ ↗ ↘ ↙ | ↖ ↗ ↘ ↙ | | | ↖ ↗ ↘ ↙ | ↖ ↗ ↘ ↙ |
| Traffic Volume (veh/h) | 0 | 0 | 0 | 327 | 1228 | 223 | 168 | 633 | 0 | 0 | 876 | 106 |
| Future Volume (veh/h) | 0 | 0 | 0 | 327 | 1228 | 223 | 168 | 633 | 0 | 0 | 876 | 106 |
| Number | | | | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | | | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | | | | 1863 | 1863 | 1863 | 1863 | 1863 | 0 | 0 | 1863 | 1863 |
| Adj Flow Rate, veh/h | | | | 348 | 1306 | 237 | 179 | 673 | 0 | 0 | 932 | 113 |
| Adj No. of Lanes | | | | 1 | 3 | 1 | 2 | 2 | 0 | 0 | 2 | 1 |
| Peak Hour Factor | | | | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | | | | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 2 | 2 |
| Cap, veh/h | | | | 541 | 1705 | 483 | 527 | 2106 | 0 | 0 | 1360 | 608 |
| Arrive On Green | | | | 0.31 | 0.31 | 0.31 | 0.15 | 0.59 | 0.00 | 0.00 | 0.38 | 0.38 |
| Sat Flow, veh/h | | | | 1774 | 5588 | 1583 | 3442 | 3632 | 0 | 0 | 3632 | 1583 |
| Grp Volume(v), veh/h | | | | 348 | 1306 | 237 | 179 | 673 | 0 | 0 | 932 | 113 |
| Grp Sat Flow(s),veh/h/ln | | | | 1774 | 1863 | 1583 | 1721 | 1770 | 0 | 0 | 1770 | 1583 |
| Q Serve(g_s), s | | | | 20.4 | 25.4 | 14.7 | 5.6 | 11.4 | 0.0 | 0.0 | 26.4 | 5.7 |
| Cycle Q Clear(g_c), s | | | | 20.4 | 25.4 | 14.7 | 5.6 | 11.4 | 0.0 | 0.0 | 26.4 | 5.7 |
| Prop In Lane | | | | 1.00 | | 1.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | | | | 541 | 1705 | 483 | 527 | 2106 | 0 | 0 | 1360 | 608 |
| V/C Ratio(X) | | | | 0.64 | 0.77 | 0.49 | 0.34 | 0.32 | 0.00 | 0.00 | 0.69 | 0.19 |
| Avail Cap(c_a), veh/h | | | | 679 | 2138 | 606 | 527 | 2106 | 0 | 0 | 1360 | 608 |
| HCM Platoon Ratio | | | | 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 | 0.00 | 0.66 | 0.66 |
| Uniform Delay (d), s/veh | | | | 36.0 | 37.8 | 34.1 | 45.4 | 12.2 | 0.0 | 0.0 | 30.9 | 24.5 |
| Incr Delay (d2), s/veh | | | | 1.1 | 1.2 | 0.6 | 0.3 | 0.4 | 0.0 | 0.0 | 1.9 | 0.4 |
| Initial Q Delay(d3),s/veh | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | | | | 10.1 | 13.2 | 13.4 | 2.7 | 5.6 | 0.0 | 0.0 | 13.2 | 2.6 |
| LnGrp Delay(d),s/veh | | | | 37.1 | 39.0 | 34.7 | 45.7 | 12.6 | 0.0 | 0.0 | 32.8 | 25.0 |
| LnGrp LOS | | | | D | D | C | D | B | | | C | C |
| Approach Vol, veh/h | | | | | 1891 | | | 852 | | | 1045 | |
| Approach Delay, s/veh | | | | | 38.1 | | | 19.5 | | | 31.9 | |
| Approach LOS | | | | | D | | | B | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | 5 | 6 | | | | | | |
| Phs Duration (G+Y+Rc), s | | 78.3 | | 41.7 | 25.3 | 53.0 | | | | | | |
| Change Period (Y+Rc), s | | 6.9 | | 5.1 | 6.9 | * 6.9 | | | | | | |
| Max Green Setting (Gmax), s | | 62.1 | | 45.9 | 11.0 | * 46 | | | | | | |
| Max Q Clear Time (g_c+I1), s | | 13.4 | | 27.4 | 7.6 | 28.4 | | | | | | |
| Green Ext Time (p_c), s | | 4.6 | | 9.2 | 1.4 | 5.4 | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 32.2 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|-------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 60 | 311 | 162 | 88 | 608 | 31 | 154 | 151 | 75 | 96 | 341 | 186 |
| Future Volume (veh/h) | 60 | 311 | 162 | 88 | 608 | 31 | 154 | 151 | 75 | 96 | 341 | 186 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 67 | 349 | 182 | 99 | 683 | 35 | 173 | 170 | 84 | 108 | 383 | 209 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 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 | 254 | 644 | 330 | 313 | 1088 | 56 | 201 | 727 | 344 | 135 | 619 | 333 |
| Arrive On Green | 0.19 | 0.38 | 0.38 | 0.18 | 0.32 | 0.32 | 0.11 | 0.31 | 0.31 | 0.08 | 0.28 | 0.28 |
| Sat Flow, veh/h | 1774 | 2266 | 1161 | 1774 | 3426 | 175 | 1774 | 2334 | 1103 | 1774 | 2224 | 1197 |
| Grp Volume(v), veh/h | 67 | 271 | 260 | 99 | 353 | 365 | 173 | 127 | 127 | 108 | 304 | 288 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1658 | 1774 | 1770 | 1832 | 1774 | 1770 | 1668 | 1774 | 1770 | 1652 |
| Q Serve(g_s), s | 3.9 | 14.4 | 14.8 | 5.8 | 20.4 | 20.4 | 11.5 | 6.4 | 6.8 | 7.2 | 17.9 | 18.3 |
| Cycle Q Clear(g_c), s | 3.9 | 14.4 | 14.8 | 5.8 | 20.4 | 20.4 | 11.5 | 6.4 | 6.8 | 7.2 | 17.9 | 18.3 |
| Prop In Lane | 1.00 | | 0.70 | 1.00 | | 0.10 | 1.00 | | 0.66 | 1.00 | | 0.72 |
| Lane Grp Cap(c), veh/h | 254 | 503 | 471 | 313 | 562 | 582 | 201 | 552 | 520 | 135 | 493 | 460 |
| V/C Ratio(X) | 0.26 | 0.54 | 0.55 | 0.32 | 0.63 | 0.63 | 0.86 | 0.23 | 0.24 | 0.80 | 0.62 | 0.63 |
| Avail Cap(c_a), veh/h | 254 | 503 | 471 | 313 | 562 | 582 | 339 | 552 | 520 | 235 | 493 | 460 |
| HCM Platoon Ratio | 1.33 | 1.33 | 1.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.51 | 0.51 | 0.51 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 43.2 | 31.2 | 31.3 | 43.1 | 34.9 | 34.9 | 52.3 | 30.6 | 30.8 | 54.5 | 37.7 | 37.8 |
| Incr Delay (d2), s/veh | 0.2 | 4.1 | 4.6 | 0.1 | 2.7 | 2.6 | 4.9 | 0.9 | 1.1 | 4.1 | 5.7 | 6.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.9 | 7.6 | 7.3 | 2.9 | 10.4 | 10.8 | 5.9 | 3.2 | 3.3 | 3.7 | 9.5 | 9.1 |
| LnGrp Delay(d),s/veh | 43.4 | 35.3 | 35.9 | 43.2 | 37.6 | 37.5 | 57.1 | 31.6 | 31.8 | 58.7 | 43.4 | 44.2 |
| LnGrp LOS | D | D | D | D | D | D | E | C | C | E | D | D |
| Approach Vol, veh/h | | 598 | | | 817 | | | 427 | | | 700 | |
| Approach Delay, s/veh | | 36.5 | | | 38.2 | | | 42.0 | | | 46.1 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 35.3 | 39.0 | 17.7 | 38.0 | 21.3 | 43.0 | 13.7 | 42.0 | | | | |
| Change Period (Y+Rc), s | 4.1 | 4.9 | 4.1 | 4.6 | 4.1 | 4.9 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 14.9 | 34.1 | 22.9 | 30.4 | 10.9 | 38.1 | 15.9 | * 37 | | | | |
| Max Q Clear Time (g_c+1), s | 17.8 | 16.8 | 13.5 | 20.3 | 5.9 | 22.4 | 9.2 | 8.8 | | | | |
| Green Ext Time (p_c), s | 0.1 | 1.9 | 0.2 | 1.9 | 0.1 | 2.5 | 0.2 | 0.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 40.6 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
10: Escondido Blvd & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Project AM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|-------|------|-------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 56 | 324 | 112 | 65 | 543 | 99 | 99 | 241 | 63 | 105 | 382 | 72 |
| Future Volume (veh/h) | 56 | 324 | 112 | 65 | 543 | 99 | 99 | 241 | 63 | 105 | 382 | 72 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 67 | 390 | 135 | 78 | 654 | 119 | 119 | 290 | 76 | 127 | 460 | 87 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 209 | 984 | 337 | 109 | 958 | 174 | 146 | 870 | 224 | 153 | 882 | 166 |
| Arrive On Green | 0.04 | 0.13 | 0.13 | 0.06 | 0.32 | 0.32 | 0.08 | 0.31 | 0.31 | 0.09 | 0.30 | 0.30 |
| Sat Flow, veh/h | 1774 | 2590 | 886 | 1774 | 2993 | 544 | 1774 | 2787 | 718 | 1774 | 2975 | 559 |
| Grp Volume(v), veh/h | 67 | 265 | 260 | 78 | 386 | 387 | 119 | 182 | 184 | 127 | 273 | 274 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1706 | 1774 | 1770 | 1767 | 1774 | 1770 | 1736 | 1774 | 1770 | 1764 |
| Q Serve(g_s), s | 4.4 | 16.5 | 16.8 | 5.2 | 22.8 | 22.9 | 7.9 | 9.5 | 9.8 | 8.5 | 15.4 | 15.6 |
| Cycle Q Clear(g_c), s | 4.4 | 16.5 | 16.8 | 5.2 | 22.8 | 22.9 | 7.9 | 9.5 | 9.8 | 8.5 | 15.4 | 15.6 |
| Prop In Lane | 1.00 | | 0.52 | 1.00 | | 0.31 | 1.00 | | 0.41 | 1.00 | | 0.32 |
| Lane Grp Cap(c), veh/h | 209 | 672 | 648 | 109 | 566 | 565 | 146 | 552 | 542 | 153 | 525 | 523 |
| V/C Ratio(X) | 0.32 | 0.39 | 0.40 | 0.71 | 0.68 | 0.68 | 0.81 | 0.33 | 0.34 | 0.83 | 0.52 | 0.52 |
| Avail Cap(c_a), veh/h | 209 | 672 | 648 | 205 | 566 | 565 | 220 | 552 | 542 | 220 | 525 | 523 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.95 | 0.95 | 0.95 | 0.47 | 0.47 | 0.47 | 0.98 | 0.98 | 0.98 | 0.85 | 0.85 | 0.85 |
| Uniform Delay (d), s/veh | 53.0 | 39.8 | 39.9 | 55.3 | 35.5 | 35.5 | 54.1 | 31.7 | 31.8 | 54.0 | 35.1 | 35.1 |
| Incr Delay (d2), s/veh | 0.3 | 1.6 | 1.7 | 1.5 | 3.1 | 3.2 | 7.5 | 1.6 | 1.7 | 9.5 | 3.1 | 3.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.2 | 8.4 | 8.3 | 2.6 | 11.7 | 11.7 | 4.2 | 4.8 | 4.9 | 4.6 | 7.9 | 8.0 |
| LnGrp Delay(d),s/veh | 53.3 | 41.4 | 41.6 | 56.8 | 38.6 | 38.7 | 61.6 | 33.2 | 33.4 | 63.5 | 38.2 | 38.3 |
| LnGrp LOS | D | D | D | E | D | D | E | C | C | E | D | D |
| Approach Vol, veh/h | | 592 | | | 851 | | | 485 | | | 674 | |
| Approach Delay, s/veh | | 42.9 | | | 40.3 | | | 40.3 | | | 43.0 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 14.5 | 43.8 | 11.5 | 50.2 | 16.3 | 42.0 | 18.7 | 43.0 | | | | |
| Change Period (Y+Rc), s | 4.1 | 6.4 | 4.1 | 4.6 | 6.4 | * 6.4 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 14.9 | 35.6 | 13.9 | 36.4 | 14.9 | * 36 | 11.9 | * 38 | | | | |
| Max Q Clear Time (g_c+10), s | 10.5 | 11.8 | 7.2 | 18.8 | 9.9 | 17.6 | 6.4 | 24.9 | | | | |
| Green Ext Time (p_c), s | 0.1 | 1.4 | 0.0 | 1.9 | 0.2 | 1.9 | 0.1 | 2.7 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 41.6 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | ↕ | | ↕ | | ↕ | | ↕ | ↕ | |
| Traffic Volume (veh/h) | 13 | 2 | 24 | 71 | 1 | 76 | 2 | 336 | 54 | 69 | 474 | 6 |
| Future Volume (veh/h) | 13 | 2 | 24 | 71 | 1 | 76 | 2 | 336 | 54 | 69 | 474 | 6 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1900 | 1863 | 1900 | 1863 | 1900 | 1863 | 1900 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 15 | 2 | 27 | 80 | 1 | 85 | 2 | 378 | 61 | 78 | 533 | 7 |
| Adj No. of Lanes | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 1 | 2 | 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 | 83 | 21 | 76 | 204 | 0 | 126 | 44 | 2092 | 333 | 101 | 2872 | 38 |
| Arrive On Green | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.70 | 0.70 | 0.70 | 0.06 | 0.80 | 0.80 |
| Sat Flow, veh/h | 333 | 267 | 953 | 1375 | 0 | 1583 | 2 | 2993 | 477 | 1774 | 3577 | 47 |
| Grp Volume(v), veh/h | 44 | 0 | 0 | 80 | 0 | 85 | 235 | 0 | 206 | 78 | 264 | 276 |
| Grp Sat Flow(s),veh/h/ln1553 | 0 | 0 | 1375 | 0 | 1583 | 1860 | 0 | 1611 | 1774 | 1770 | 1854 | |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 2.1 | 0.0 | 4.4 | 0.0 | 0.0 | 3.8 | 3.7 | 2.9 | 2.9 |
| Cycle Q Clear(g_c), s | 2.1 | 0.0 | 0.0 | 4.2 | 0.0 | 4.4 | 3.7 | 0.0 | 3.8 | 3.7 | 2.9 | 2.9 |
| Prop In Lane | 0.34 | | 0.61 | 1.00 | | 1.00 | 0.01 | | 0.30 | 1.00 | | 0.03 |
| Lane Grp Cap(c), veh/h | 180 | 0 | 0 | 204 | 0 | 126 | 1343 | 0 | 1126 | 101 | 1421 | 1489 |
| V/C Ratio(X) | 0.24 | 0.00 | 0.00 | 0.39 | 0.00 | 0.67 | 0.17 | 0.00 | 0.18 | 0.77 | 0.19 | 0.19 |
| Avail Cap(c_a), veh/h | 525 | 0 | 0 | 515 | 0 | 484 | 1343 | 0 | 1126 | 313 | 1421 | 1489 |
| 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 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.84 | 0.84 | 0.84 |
| Uniform Delay (d), s/veh | 37.0 | 0.0 | 0.0 | 37.8 | 0.0 | 38.0 | 4.4 | 0.0 | 4.4 | 39.6 | 1.9 | 1.9 |
| Incr Delay (d2), s/veh | 0.3 | 0.0 | 0.0 | 0.5 | 0.0 | 2.3 | 0.3 | 0.0 | 0.4 | 4.0 | 0.2 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln1.0 | 0.0 | 0.0 | 0.0 | 1.8 | 0.0 | 2.0 | 2.0 | 0.0 | 1.8 | 1.9 | 1.5 | 1.6 |
| LnGrp Delay(d),s/veh | 37.2 | 0.0 | 0.0 | 38.3 | 0.0 | 40.4 | 4.7 | 0.0 | 4.8 | 43.5 | 2.2 | 2.2 |
| LnGrp LOS | D | | | D | | D | A | | A | D | A | A |
| Approach Vol, veh/h | | 44 | | | 165 | | | 441 | | | 618 | |
| Approach Delay, s/veh | | 37.2 | | | 39.4 | | | 4.7 | | | 7.4 | |
| Approach LOS | | D | | | D | | | A | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s8.8 | 64.4 | | | 11.8 | | 73.2 | | 11.8 | | | | |
| Change Period (Y+Rc), s 4.0 | 5.0 | | | * 5 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s 15.0 | 30.0 | | | * 27 | | 49.0 | | 26.0 | | | | |
| Max Q Clear Time (g_c+1), s 15.0 | 5.8 | | | 4.1 | | 4.9 | | 6.4 | | | | |
| Green Ext Time (p_c), s 0.0 | 6.1 | | | 0.4 | | 6.8 | | 0.4 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 11.7 | | | | | | | | |
| HCM 2010 LOS | | | | B | | | | | | | | |
| Notes | | | | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 98 | 260 | 104 | 71 | 490 | 217 | 124 | 423 | 38 | 181 | 808 | 140 |
| Future Volume (veh/h) | 98 | 260 | 104 | 71 | 490 | 217 | 124 | 423 | 38 | 181 | 808 | 140 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 102 | 271 | 108 | 74 | 510 | 226 | 129 | 441 | 40 | 189 | 842 | 146 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 130 | 684 | 266 | 95 | 608 | 268 | 179 | 982 | 89 | 228 | 984 | 171 |
| Arrive On Green | 0.07 | 0.27 | 0.27 | 0.05 | 0.25 | 0.25 | 0.10 | 0.30 | 0.30 | 0.13 | 0.33 | 0.33 |
| Sat Flow, veh/h | 1774 | 2492 | 969 | 1774 | 2391 | 1055 | 1774 | 3283 | 297 | 1774 | 3017 | 523 |
| Grp Volume(v), veh/h | 102 | 190 | 189 | 74 | 377 | 359 | 129 | 237 | 244 | 189 | 494 | 494 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1692 | 1774 | 1770 | 1677 | 1774 | 1770 | 1810 | 1774 | 1770 | 1770 |
| Q Serve(g_s), s | 4.2 | 6.4 | 6.7 | 3.0 | 14.8 | 14.9 | 5.2 | 8.0 | 8.0 | 7.6 | 19.2 | 19.2 |
| Cycle Q Clear(g_c), s | 4.2 | 6.4 | 6.7 | 3.0 | 14.8 | 14.9 | 5.2 | 8.0 | 8.0 | 7.6 | 19.2 | 19.2 |
| Prop In Lane | 1.00 | | 0.57 | 1.00 | | 0.63 | 1.00 | | 0.16 | 1.00 | | 0.30 |
| Lane Grp Cap(c), veh/h | 130 | 486 | 464 | 95 | 450 | 427 | 179 | 529 | 542 | 228 | 577 | 578 |
| V/C Ratio(X) | 0.78 | 0.39 | 0.41 | 0.78 | 0.84 | 0.84 | 0.72 | 0.45 | 0.45 | 0.83 | 0.86 | 0.86 |
| Avail Cap(c_a), veh/h | 133 | 486 | 464 | 133 | 481 | 456 | 181 | 529 | 542 | 229 | 577 | 578 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.5 | 21.7 | 21.8 | 34.4 | 26.0 | 26.0 | 32.0 | 20.9 | 20.9 | 31.3 | 23.2 | 23.2 |
| Incr Delay (d2), s/veh | 25.4 | 0.5 | 0.6 | 17.7 | 11.7 | 12.7 | 12.8 | 2.7 | 2.7 | 21.8 | 15.0 | 15.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.0 | 3.2 | 3.2 | 1.9 | 8.7 | 8.4 | 3.2 | 4.3 | 4.4 | 5.1 | 11.7 | 11.7 |
| LnGrp Delay(d),s/veh | 58.9 | 22.2 | 22.4 | 52.1 | 37.6 | 38.7 | 44.8 | 23.6 | 23.6 | 53.0 | 38.1 | 38.1 |
| LnGrp LOS | E | C | C | D | D | D | D | C | C | D | D | D |
| Approach Vol, veh/h | | 481 | | | 810 | | | 610 | | | 1177 | |
| Approach Delay, s/veh | | 30.1 | | | 39.4 | | | 28.1 | | | 40.5 | |
| Approach LOS | | C | | | D | | | C | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 13.9 | 26.5 | 8.4 | 24.7 | 11.9 | 28.5 | 9.9 | 23.2 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 22.0 | 5.5 | 20.0 | 7.5 | 24.0 | 5.5 | 20.0 | | | | | |
| Max Q Clear Time (g_c+1), s | 10.0 | 5.0 | 8.7 | 7.2 | 21.2 | 6.2 | 16.9 | | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.5 | 0.0 | 5.1 | 0.1 | 1.6 | 0.0 | 1.8 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 36.1 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 75 | 285 | 72 | 73 | 557 | 204 | 77 | 254 | 19 | 187 | 602 | 77 |
| Future Volume (veh/h) | 75 | 285 | 72 | 73 | 557 | 204 | 77 | 254 | 19 | 187 | 602 | 77 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 79 | 300 | 76 | 77 | 586 | 215 | 81 | 267 | 20 | 197 | 634 | 81 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 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 | 101 | 428 | 107 | 299 | 670 | 245 | 104 | 979 | 73 | 238 | 1166 | 149 |
| Arrive On Green | 0.06 | 0.15 | 0.15 | 0.17 | 0.26 | 0.26 | 0.06 | 0.29 | 0.29 | 0.13 | 0.37 | 0.37 |
| Sat Flow, veh/h | 1774 | 2808 | 700 | 1774 | 2539 | 930 | 1774 | 3340 | 249 | 1774 | 3158 | 403 |
| Grp Volume(v), veh/h | 79 | 187 | 189 | 77 | 408 | 393 | 81 | 141 | 146 | 197 | 355 | 360 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1739 | 1774 | 1770 | 1699 | 1774 | 1770 | 1819 | 1774 | 1770 | 1792 |
| Q Serve(g_s), s | 3.1 | 7.2 | 7.4 | 2.7 | 15.8 | 15.9 | 3.2 | 4.4 | 4.4 | 7.7 | 11.3 | 11.4 |
| Cycle Q Clear(g_c), s | 3.1 | 7.2 | 7.4 | 2.7 | 15.8 | 15.9 | 3.2 | 4.4 | 4.4 | 7.7 | 11.3 | 11.4 |
| Prop In Lane | 1.00 | | 0.40 | 1.00 | | 0.55 | 1.00 | | 0.14 | 1.00 | | 0.22 |
| Lane Grp Cap(c), veh/h | 101 | 270 | 265 | 299 | 467 | 448 | 104 | 519 | 533 | 238 | 653 | 661 |
| V/C Ratio(X) | 0.78 | 0.69 | 0.71 | 0.26 | 0.87 | 0.88 | 0.78 | 0.27 | 0.27 | 0.83 | 0.54 | 0.54 |
| Avail Cap(c_a), veh/h | 136 | 494 | 486 | 299 | 494 | 474 | 146 | 519 | 533 | 260 | 653 | 661 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.3 | 28.8 | 28.8 | 25.9 | 25.2 | 25.2 | 33.3 | 19.4 | 19.5 | 30.2 | 17.8 | 17.8 |
| Incr Delay (d2), s/veh | 18.3 | 3.2 | 3.5 | 0.5 | 15.3 | 16.1 | 16.0 | 1.3 | 1.3 | 18.1 | 3.2 | 3.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.0 | 3.7 | 3.8 | 1.4 | 9.7 | 9.4 | 2.0 | 2.3 | 2.4 | 5.0 | 6.1 | 6.2 |
| LnGrp Delay(d),s/veh | 51.6 | 31.9 | 32.4 | 26.3 | 40.5 | 41.3 | 49.2 | 20.7 | 20.7 | 48.2 | 21.1 | 21.0 |
| LnGrp LOS | D | C | C | C | D | D | D | C | C | D | C | C |
| Approach Vol, veh/h | | 455 | | | 878 | | | 368 | | | 912 | |
| Approach Delay, s/veh | | 35.5 | | | 39.6 | | | 27.0 | | | 26.9 | |
| Approach LOS | | D | | | D | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 14.1 | 25.5 | 16.6 | 15.4 | 8.7 | 30.9 | 8.6 | 23.4 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 10.5 | 21.0 | 5.5 | 20.0 | 5.9 | 25.6 | 5.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+1.75), s | 19.5 | 6.4 | 4.7 | 9.4 | 5.2 | 13.4 | 5.1 | 17.9 | | | | |
| Green Ext Time (p_c), s | 0.1 | 1.3 | 0.0 | 1.5 | 0.0 | 4.0 | 0.0 | 1.1 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 32.7 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |

Intersection

Int Delay, s/veh 0.6

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | | ↑ | ↑↑ | ↑ | | ↑↑ |
| Traffic Vol, veh/h | 0 | 94 | 706 | 84 | 0 | 1028 |
| Future Vol, veh/h | 0 | 94 | 706 | 84 | 0 | 1028 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | 75 | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 102 | 767 | 91 | 0 | 1117 |

| Major/Minor | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|---------|
| Conflicting Flow All | - | 384 | 0 0 |
| Stage 1 | - | - | - - |
| Stage 2 | - | - | - - |
| Critical Hdwy | - | 6.94 | - - |
| Critical Hdwy Stg 1 | - | - | - - |
| Critical Hdwy Stg 2 | - | - | - - |
| Follow-up Hdwy | - | 3.32 | - - |
| Pot Cap-1 Maneuver | 0 | 614 | - - 0 - |
| Stage 1 | 0 | - | - - 0 - |
| Stage 2 | 0 | - | - - 0 - |
| Platoon blocked, % | | | - - |
| Mov Cap-1 Maneuver | - | 614 | - - - - |
| Mov Cap-2 Maneuver | - | - | - - - - |
| Stage 1 | - | - | - - - - |
| Stage 2 | - | - | - - - - |

| Approach | WB | NB | SB |
|----------------------|----|----|----|
| HCM Control Delay, s | 12 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT |
|-----------------------|-----|----------|-----|
| Capacity (veh/h) | - | - 614 | - |
| HCM Lane V/C Ratio | - | - 0.166 | - |
| HCM Control Delay (s) | - | - 12 | - |
| HCM Lane LOS | - | - B | - |
| HCM 95th %tile Q(veh) | - | - 0.6 | - |

Intersection

Int Delay, s/veh 0.6

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | | | ↑↑ | | ↑ |
| Traffic Vol, veh/h | 560 | 98 | 0 | 1001 | 0 | 89 |
| Future Vol, veh/h | 560 | 98 | 0 | 1001 | 0 | 89 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 609 | 107 | 0 | 1088 | 0 | 97 |

| Major/Minor | Major1 | Major2 | Minor1 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 358 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | - | - | 6.94 |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | - | - | 3.32 |
| Pot Cap-1 Maneuver | - | 0 | 638 |
| Stage 1 | - | 0 | - |
| Stage 2 | - | 0 | - |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | - | - | 638 |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 11.6 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|-----------------------|-------|-----|-----|-----|
| Capacity (veh/h) | 638 | - | - | - |
| HCM Lane V/C Ratio | 0.152 | - | - | - |
| HCM Control Delay (s) | 11.6 | - | - | - |
| HCM Lane LOS | B | - | - | - |
| HCM 95th %tile Q(veh) | 0.5 | - | - | - |

SEC CCP/Mission TIA
1: Rock Springs Rd & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Project Mid-Day Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  |  |
| Traffic Volume (veh/h) | 103 | 531 | 86 | 65 | 566 | 149 | 110 | 190 | 84 | 59 | 217 | 60 |
| Future Volume (veh/h) | 103 | 531 | 86 | 65 | 566 | 149 | 110 | 190 | 84 | 59 | 217 | 60 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 107 | 553 | 90 | 68 | 590 | 155 | 115 | 198 | 88 | 61 | 226 | 62 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 135 | 1748 | 284 | 88 | 1517 | 398 | 228 | 598 | 256 | 265 | 461 | 392 |
| Arrive On Green | 0.08 | 0.57 | 0.57 | 0.05 | 0.55 | 0.55 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Sat Flow, veh/h | 1774 | 3050 | 495 | 1774 | 2776 | 728 | 1087 | 2415 | 1035 | 1089 | 1863 | 1583 |
| Grp Volume(v), veh/h | 107 | 320 | 323 | 68 | 376 | 369 | 115 | 143 | 143 | 61 | 226 | 62 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1775 | 1774 | 1770 | 1734 | 1087 | 1770 | 1680 | 1089 | 1863 | 1583 |
| Q Serve(g_s), s | 5.9 | 9.4 | 9.5 | 3.8 | 12.2 | 12.3 | 10.1 | 6.6 | 7.0 | 4.9 | 10.4 | 3.1 |
| Cycle Q Clear(g_c), s | 5.9 | 9.4 | 9.5 | 3.8 | 12.2 | 12.3 | 20.5 | 6.6 | 7.0 | 11.9 | 10.4 | 3.1 |
| Prop In Lane | 1.00 | | 0.28 | 1.00 | | 0.42 | 1.00 | | 0.62 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 135 | 1014 | 1018 | 88 | 967 | 948 | 228 | 438 | 416 | 265 | 461 | 392 |
| V/C Ratio(X) | 0.79 | 0.32 | 0.32 | 0.78 | 0.39 | 0.39 | 0.50 | 0.33 | 0.34 | 0.23 | 0.49 | 0.16 |
| Avail Cap(c_a), veh/h | 284 | 1014 | 1018 | 195 | 967 | 948 | 301 | 557 | 529 | 339 | 587 | 499 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.89 | 0.89 | 0.89 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 45.4 | 11.1 | 11.1 | 47.0 | 13.0 | 13.1 | 41.0 | 30.8 | 30.9 | 35.8 | 32.2 | 29.5 |
| Incr Delay (d2), s/veh | 4.0 | 0.8 | 0.8 | 4.9 | 1.0 | 1.1 | 1.3 | 0.3 | 0.4 | 0.3 | 0.6 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.1 | 4.8 | 4.8 | 2.0 | 6.2 | 6.1 | 3.1 | 3.3 | 3.3 | 1.5 | 5.4 | 1.4 |
| LnGrp Delay(d),s/veh | 49.4 | 11.9 | 12.0 | 51.9 | 14.1 | 14.1 | 42.3 | 31.1 | 31.3 | 36.1 | 32.8 | 29.6 |
| LnGrp LOS | D | B | B | D | B | B | D | C | C | D | C | C |
| Approach Vol, veh/h | | 750 | | | 813 | | | 401 | | | 349 | |
| Approach Delay, s/veh | | 17.3 | | | 17.3 | | | 34.4 | | | 32.8 | |
| Approach LOS | | B | | | B | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 8.9 | 61.8 | | 29.3 | 11.6 | 59.2 | | 29.3 | | | | |
| Change Period (Y+Rc), s | 4.0 | 4.5 | | 4.5 | 4.0 | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | 11.0 | 44.5 | | 31.5 | 16.0 | 39.5 | | 31.5 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.8 | 11.5 | | 13.9 | 7.9 | 14.3 | | 22.5 | | | | |
| Green Ext Time (p_c), s | 0.0 | 12.9 | | 3.0 | 0.1 | 11.5 | | 2.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 22.6 | | | | | | | | | |
| HCM 2010 LOS | | | C | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|-------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 53 | 687 | 80 | 134 | 692 | 134 | 111 | 62 | 149 | 136 | 80 | 38 |
| Future Volume (veh/h) | 53 | 687 | 80 | 134 | 692 | 134 | 111 | 62 | 149 | 136 | 80 | 38 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 55 | 716 | 83 | 140 | 721 | 140 | 116 | 65 | 155 | 142 | 83 | 40 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 420 | 996 | 115 | 549 | 1136 | 220 | 228 | 225 | 191 | 174 | 108 | 52 |
| Arrive On Green | 0.24 | 0.31 | 0.31 | 0.62 | 0.77 | 0.77 | 0.04 | 0.04 | 0.04 | 0.10 | 0.09 | 0.09 |
| Sat Flow, veh/h | 1774 | 3197 | 370 | 1774 | 2957 | 574 | 1774 | 1863 | 1583 | 1774 | 1189 | 573 |
| Grp Volume(v), veh/h | 55 | 396 | 403 | 140 | 431 | 430 | 116 | 65 | 155 | 142 | 0 | 123 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1797 | 1774 | 1770 | 1761 | 1774 | 1863 | 1583 | 1774 | 0 | 1762 |
| Q Serve(g_s), s | 2.9 | 23.8 | 23.9 | 4.3 | 13.2 | 13.2 | 7.7 | 4.1 | 11.7 | 9.4 | 0.0 | 8.2 |
| Cycle Q Clear(g_c), s | 2.9 | 23.8 | 23.9 | 4.3 | 13.2 | 13.2 | 7.7 | 4.1 | 11.7 | 9.4 | 0.0 | 8.2 |
| Prop In Lane | 1.00 | | 0.21 | 1.00 | | 0.33 | 1.00 | | 1.00 | 1.00 | | 0.33 |
| Lane Grp Cap(c), veh/h | 420 | 552 | 560 | 549 | 680 | 677 | 228 | 225 | 191 | 174 | 0 | 159 |
| V/C Ratio(X) | 0.13 | 0.72 | 0.72 | 0.26 | 0.63 | 0.63 | 0.51 | 0.29 | 0.81 | 0.81 | 0.00 | 0.77 |
| Avail Cap(c_a), veh/h | 420 | 552 | 560 | 549 | 680 | 677 | 232 | 433 | 368 | 265 | 0 | 442 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.96 | 0.96 | 0.96 | 0.81 | 0.81 | 0.81 | 0.87 | 0.87 | 0.87 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 36.1 | 36.6 | 36.6 | 16.6 | 10.1 | 10.1 | 53.7 | 52.6 | 56.3 | 53.0 | 0.0 | 53.4 |
| Incr Delay (d2), s/veh | 0.2 | 7.6 | 7.5 | 0.2 | 3.7 | 3.7 | 1.8 | 0.7 | 8.3 | 12.4 | 0.0 | 9.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.5 | 12.8 | 13.0 | 2.1 | 6.9 | 6.9 | 3.9 | 2.1 | 5.6 | 5.2 | 0.0 | 4.4 |
| LnGrp Delay(d),s/veh | 36.2 | 44.2 | 44.1 | 16.9 | 13.8 | 13.8 | 55.6 | 53.3 | 64.6 | 65.4 | 0.0 | 62.5 |
| LnGrp LOS | D | D | D | B | B | B | E | D | E | E | | E |
| Approach Vol, veh/h | | 854 | | | 1001 | | | 336 | | | 265 | |
| Approach Delay, s/veh | | 43.6 | | | 14.2 | | | 59.3 | | | 64.1 | |
| Approach LOS | | D | | | B | | | E | | | E | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 11.7 | 42.8 | 19.5 | 16.0 | 33.0 | 51.5 | 15.9 | 19.6 | | | | |
| Change Period (Y+Rc), s | 4.6 | 5.4 | 4.1 | 5.1 | 4.6 | * 5.4 | 4.1 | 5.1 | | | | |
| Max Green Setting (Gmax), s | 17.5 | 37.4 | 15.7 | 30.1 | 9.4 | * 46 | 17.9 | 27.9 | | | | |
| Max Q Clear Time (g_c+1), s | 10.3 | 25.9 | 9.7 | 10.2 | 4.9 | 15.2 | 11.4 | 13.7 | | | | |
| Green Ext Time (p_c), s | 0.5 | 6.1 | 0.5 | 0.7 | 0.3 | 11.8 | 0.5 | 0.8 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 36.0 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
3: Quince St & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Project Mid-Day Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↔ | ↕ | | ↔ | ↕ | | ↔ | ↕ | | ↔ | ↕ | |
| Traffic Volume (veh/h) | 28 | 481 | 91 | 83 | 511 | 106 | 75 | 121 | 123 | 46 | 141 | 35 |
| Future Volume (veh/h) | 28 | 481 | 91 | 83 | 511 | 106 | 75 | 121 | 123 | 46 | 141 | 35 |
| 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 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 29 | 501 | 95 | 86 | 532 | 110 | 78 | 126 | 128 | 48 | 147 | 36 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 664 | 2290 | 432 | 652 | 2252 | 464 | 186 | 271 | 242 | 148 | 434 | 103 |
| Arrive On Green | 0.77 | 0.77 | 0.77 | 1.00 | 1.00 | 1.00 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Sat Flow, veh/h | 784 | 2972 | 561 | 818 | 2924 | 602 | 1196 | 1770 | 1583 | 1121 | 2837 | 676 |
| Grp Volume(v), veh/h | 29 | 297 | 299 | 86 | 321 | 321 | 78 | 126 | 128 | 48 | 90 | 93 |
| Grp Sat Flow(s),veh/h/ln | 784 | 1770 | 1764 | 818 | 1770 | 1756 | 1196 | 1770 | 1583 | 1121 | 1770 | 1743 |
| Q Serve(g_s), s | 1.1 | 5.6 | 5.6 | 0.9 | 0.0 | 0.0 | 7.5 | 7.8 | 8.9 | 4.9 | 5.5 | 5.7 |
| Cycle Q Clear(g_c), s | 1.1 | 5.6 | 5.6 | 6.5 | 0.0 | 0.0 | 13.2 | 7.8 | 8.9 | 13.9 | 5.5 | 5.7 |
| Prop In Lane | 1.00 | | 0.32 | 1.00 | | 0.34 | 1.00 | | 1.00 | 1.00 | | 0.39 |
| Lane Grp Cap(c), veh/h | 664 | 1363 | 1359 | 652 | 1363 | 1353 | 186 | 271 | 242 | 148 | 271 | 267 |
| V/C Ratio(X) | 0.04 | 0.22 | 0.22 | 0.13 | 0.24 | 0.24 | 0.42 | 0.47 | 0.53 | 0.32 | 0.33 | 0.35 |
| Avail Cap(c_a), veh/h | 664 | 1363 | 1359 | 652 | 1363 | 1353 | 446 | 655 | 586 | 391 | 655 | 645 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.73 | 0.73 | 0.73 | 1.00 | 1.00 | 1.00 | 0.77 | 0.77 | 0.77 |
| Uniform Delay (d), s/veh | 3.3 | 3.8 | 3.8 | 0.2 | 0.0 | 0.0 | 51.4 | 46.3 | 46.8 | 53.2 | 45.4 | 45.5 |
| Incr Delay (d2), s/veh | 0.1 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 1.1 | 0.9 | 1.3 | 0.7 | 0.4 | 0.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.2 | 2.8 | 2.9 | 0.2 | 0.1 | 0.1 | 2.5 | 3.9 | 4.0 | 1.6 | 2.7 | 2.8 |
| LnGrp Delay(d),s/veh | 3.4 | 4.2 | 4.2 | 0.5 | 0.3 | 0.3 | 52.5 | 47.3 | 48.2 | 53.9 | 45.8 | 45.9 |
| LnGrp LOS | A | A | A | A | A | A | D | D | D | D | D | D |
| Approach Vol, veh/h | | 625 | | | 728 | | | 332 | | | 231 | |
| Approach Delay, s/veh | | 4.1 | | | 0.3 | | | 48.8 | | | 47.5 | |
| Approach LOS | | A | | | A | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 97.0 | | 23.0 | | 97.0 | | 23.0 | | | | |
| Change Period (Y+Rc), s | | 4.6 | | 4.6 | | 4.6 | | 4.6 | | | | |
| Max Green Setting (Gmax), s | | 66.4 | | 44.4 | | 66.4 | | 44.4 | | | | |
| Max Q Clear Time (g_c+I1), s | | 7.6 | | 15.2 | | 8.5 | | 15.9 | | | | |
| Green Ext Time (p_c), s | | 8.5 | | 2.5 | | 8.5 | | 2.5 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 15.7 | | | | | | | | |
| HCM 2010 LOS | | | | B | | | | | | | | |

SEC CCP/Mission TIA
4: Centre City Pkwy & El Norte Pkwy

HCM 2010 Signalized Intersection Summary
Existing Plus Project Mid-Day Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↖↗ | ↕ | ↖ | ↖↗ | ↕ | | ↖↗ | ↕ | ↖ | ↖↗ | ↕ | ↖ |
| Traffic Volume (veh/h) | 30 | 489 | 204 | 179 | 468 | 78 | 231 | 281 | 120 | 111 | 292 | 38 |
| Future Volume (veh/h) | 30 | 489 | 204 | 179 | 468 | 78 | 231 | 281 | 120 | 111 | 292 | 38 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 31 | 509 | 212 | 186 | 488 | 81 | 241 | 293 | 125 | 116 | 304 | 40 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 171 | 866 | 387 | 241 | 806 | 133 | 337 | 1502 | 672 | 310 | 1469 | 657 |
| Arrive On Green | 0.05 | 0.24 | 0.24 | 0.07 | 0.27 | 0.27 | 0.10 | 0.42 | 0.42 | 0.09 | 0.42 | 0.42 |
| Sat Flow, veh/h | 3442 | 3539 | 1583 | 3442 | 3041 | 502 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 31 | 509 | 212 | 186 | 283 | 286 | 241 | 293 | 125 | 116 | 304 | 40 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1583 | 1721 | 1770 | 1774 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 1.2 | 18.1 | 16.7 | 7.6 | 20.0 | 20.2 | 9.7 | 7.4 | 7.0 | 4.5 | 7.8 | 2.2 |
| Cycle Q Clear(g_c), s | 1.2 | 18.1 | 16.7 | 7.6 | 20.0 | 20.2 | 9.7 | 7.4 | 7.0 | 4.5 | 7.8 | 2.2 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.28 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 171 | 866 | 387 | 241 | 469 | 470 | 337 | 1502 | 672 | 310 | 1469 | 657 |
| V/C Ratio(X) | 0.18 | 0.59 | 0.55 | 0.77 | 0.60 | 0.61 | 0.71 | 0.20 | 0.19 | 0.37 | 0.21 | 0.06 |
| Avail Cap(c_a), veh/h | 241 | 1301 | 582 | 349 | 706 | 708 | 402 | 1502 | 672 | 313 | 1469 | 657 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 65.1 | 47.6 | 47.0 | 65.3 | 45.9 | 46.0 | 62.5 | 25.8 | 25.7 | 61.2 | 26.7 | 25.1 |
| Incr Delay (d2), s/veh | 0.4 | 1.1 | 2.1 | 3.4 | 2.1 | 2.2 | 3.4 | 0.3 | 0.6 | 0.3 | 0.3 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.6 | 9.0 | 7.5 | 3.7 | 10.0 | 10.1 | 4.8 | 3.7 | 3.2 | 2.2 | 3.9 | 1.0 |
| LnGrp Delay(d),s/veh | 65.5 | 48.7 | 49.1 | 68.7 | 48.0 | 48.1 | 65.9 | 26.1 | 26.3 | 61.5 | 27.0 | 25.2 |
| LnGrp LOS | E | D | D | E | D | D | E | C | C | E | C | C |
| Approach Vol, veh/h | | 752 | | | 755 | | | 659 | | | 460 | |
| Approach Delay, s/veh | | 49.5 | | | 53.2 | | | 40.7 | | | 35.6 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 19.0 | 67.5 | 15.1 | 41.2 | 20.3 | 66.2 | 12.2 | 44.2 | | | | |
| Change Period (Y+Rc), s | 6.1 | 6.9 | 5.1 | 6.3 | 6.3 | 6.9 | 5.1 | 6.3 | | | | |
| Max Green Setting (Gmax), s | 10.0 | 60.6 | 14.5 | 52.5 | 16.7 | 56.7 | 10.0 | 57.0 | | | | |
| Max Q Clear Time (g_c+1), s | 10.5 | 9.4 | 9.6 | 20.1 | 11.7 | 9.8 | 3.2 | 22.2 | | | | |
| Green Ext Time (p_c), s | 0.1 | 6.1 | 0.1 | 14.8 | 0.2 | 6.1 | 0.0 | 15.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 45.9 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |

SEC CCP/Mission TIA
5: Centre City Pkwy & Decatur Way

HCM 2010 Signalized Intersection Summary
Existing Plus Project Mid-Day Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|-------|-------|------|-------|-------|-------|------|------|------|------|
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↑↑ | ↗ | ↖ | ↑↑ | ↗ |
| Traffic Volume (veh/h) | 6 | 1 | 22 | 125 | 1 | 108 | 23 | 534 | 53 | 47 | 690 | 2 |
| Future Volume (veh/h) | 6 | 1 | 22 | 125 | 1 | 108 | 23 | 534 | 53 | 47 | 690 | 2 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 7 | 1 | 25 | 140 | 1 | 121 | 26 | 600 | 60 | 53 | 775 | 2 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 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 | 35 | 10 | 239 | 250 | 4 | 436 | 80 | 1161 | 520 | 160 | 1209 | 541 |
| Arrive On Green | 0.02 | 0.16 | 0.16 | 0.14 | 0.28 | 0.28 | 0.05 | 0.33 | 0.33 | 0.09 | 0.34 | 0.34 |
| Sat Flow, veh/h | 1774 | 61 | 1531 | 1774 | 13 | 1572 | 1774 | 3539 | 1583 | 1774 | 3539 | 1583 |
| Grp Volume(v), veh/h | 7 | 0 | 26 | 140 | 0 | 122 | 26 | 600 | 60 | 53 | 775 | 2 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 0 | 1593 | 1774 | 0 | 1585 | 1774 | 1770 | 1583 | 1774 | 1770 | 1583 |
| Q Serve(g_s), s | 0.3 | 0.0 | 1.0 | 5.4 | 0.0 | 4.4 | 1.0 | 10.1 | 1.9 | 2.1 | 13.6 | 0.0 |
| Cycle Q Clear(g_c), s | 0.3 | 0.0 | 1.0 | 5.4 | 0.0 | 4.4 | 1.0 | 10.1 | 1.9 | 2.1 | 13.6 | 0.0 |
| Prop In Lane | 1.00 | | 0.96 | 1.00 | | 0.99 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 35 | 0 | 249 | 250 | 0 | 440 | 80 | 1161 | 520 | 160 | 1209 | 541 |
| V/C Ratio(X) | 0.20 | 0.00 | 0.10 | 0.56 | 0.00 | 0.28 | 0.32 | 0.52 | 0.12 | 0.33 | 0.64 | 0.00 |
| Avail Cap(c_a), veh/h | 266 | 0 | 954 | 266 | 0 | 949 | 217 | 1161 | 520 | 241 | 1209 | 541 |
| 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 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 35.4 | 0.0 | 26.6 | 29.4 | 0.0 | 20.8 | 34.0 | 20.0 | 17.2 | 31.4 | 20.4 | 8.5 |
| Incr Delay (d2), s/veh | 1.0 | 0.0 | 0.1 | 1.2 | 0.0 | 0.3 | 0.9 | 1.6 | 0.5 | 0.4 | 2.6 | 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(50%),veh/ln | 0.1 | 0.0 | 0.5 | 2.7 | 0.0 | 2.0 | 0.5 | 5.2 | 0.9 | 1.0 | 7.0 | 0.0 |
| LnGrp Delay(d),s/veh | 36.4 | 0.0 | 26.7 | 30.6 | 0.0 | 21.0 | 34.9 | 21.6 | 17.7 | 31.8 | 23.0 | 8.5 |
| LnGrp LOS | D | | C | C | | C | C | C | B | C | C | A |
| Approach Vol, veh/h | | 33 | | | 262 | | | 686 | | | 830 | |
| Approach Delay, s/veh | | 28.8 | | | 26.1 | | | 21.8 | | | 23.5 | |
| 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 | 11.2 | 31.0 | 15.1 | 16.2 | 10.2 | 32.0 | 6.2 | 25.1 | | | | |
| Change Period (Y+Rc), s | 4.6 | 6.9 | * 4.7 | * 4.7 | 6.9 | * 6.9 | * 4.7 | * 4.7 | | | | |
| Max Green Setting (Gmax), s | 10.0 | 24.1 | * 11 | * 44 | 9.0 | * 25 | * 11 | * 44 | | | | |
| Max Q Clear Time (g_c+1), s | 11.0 | 12.1 | 7.4 | 3.0 | 3.0 | 15.6 | 2.3 | 6.4 | | | | |
| Green Ext Time (p_c), s | 0.0 | 3.8 | 0.1 | 0.8 | 2.0 | 4.0 | 0.0 | 0.8 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 23.3 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|-------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 221 | 585 | 103 | 107 | 504 | 262 | 135 | 479 | 74 | 283 | 625 | 357 |
| Future Volume (veh/h) | 221 | 585 | 103 | 107 | 504 | 262 | 135 | 479 | 74 | 283 | 625 | 357 |
| 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 | | 0.97 | 1.00 | | 0.95 | 1.00 | | 0.98 | 1.00 | | 0.98 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 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 | 1667 | 1863 | 1863 | 1667 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 226 | 597 | 105 | 109 | 514 | 267 | 138 | 489 | 76 | 289 | 638 | 364 |
| Adj No. of Lanes | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 2 | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 272 | 1149 | 499 | 132 | 888 | 379 | 503 | 1259 | 385 | 605 | 920 | 405 |
| Arrive On Green | 0.31 | 0.65 | 0.65 | 0.03 | 0.08 | 0.08 | 0.22 | 0.33 | 0.33 | 0.18 | 0.26 | 0.26 |
| Sat Flow, veh/h | 1774 | 3539 | 1539 | 1587 | 3539 | 1512 | 3079 | 5085 | 1557 | 3442 | 3539 | 1559 |
| Grp Volume(v), veh/h | 226 | 597 | 105 | 109 | 514 | 267 | 138 | 489 | 76 | 289 | 638 | 364 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1539 | 1587 | 1770 | 1512 | 1540 | 1695 | 1557 | 1721 | 1770 | 1559 |
| Q Serve(g_s), s | 14.2 | 10.7 | 2.1 | 8.2 | 16.8 | 20.6 | 4.5 | 8.9 | 3.2 | 9.1 | 19.5 | 27.0 |
| Cycle Q Clear(g_c), s | 14.2 | 10.7 | 2.1 | 8.2 | 16.8 | 20.6 | 4.5 | 8.9 | 3.2 | 9.1 | 19.5 | 27.0 |
| 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 | 272 | 1149 | 499 | 132 | 888 | 379 | 503 | 1259 | 385 | 605 | 920 | 405 |
| V/C Ratio(X) | 0.83 | 0.52 | 0.21 | 0.83 | 0.58 | 0.70 | 0.27 | 0.39 | 0.20 | 0.48 | 0.69 | 0.90 |
| Avail Cap(c_a), veh/h | 333 | 1351 | 587 | 155 | 1032 | 441 | 503 | 1259 | 385 | 605 | 920 | 405 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 1.33 | 1.33 | 1.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.86 | 0.86 | 0.86 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 40.2 | 16.1 | 6.1 | 57.5 | 48.9 | 50.7 | 41.0 | 33.3 | 18.8 | 44.5 | 40.1 | 42.9 |
| Incr Delay (d2), s/veh | 10.2 | 0.2 | 0.1 | 23.2 | 0.4 | 3.7 | 0.1 | 0.9 | 1.1 | 0.2 | 4.3 | 25.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 7.7 | 5.2 | 0.9 | 4.5 | 8.3 | 9.0 | 1.9 | 4.3 | 1.5 | 4.3 | 10.1 | 14.4 |
| LnGrp Delay(d),s/veh | 50.4 | 16.3 | 6.2 | 80.7 | 49.4 | 54.4 | 41.2 | 34.2 | 19.9 | 44.7 | 44.4 | 68.1 |
| LnGrp LOS | D | B | A | F | D | D | D | C | B | D | D | E |
| Approach Vol, veh/h | | 928 | | | 890 | | | 703 | | | 1291 | |
| Approach Delay, s/veh | | 23.5 | | | 54.7 | | | 34.0 | | | 51.1 | |
| Approach LOS | | C | | | D | | | C | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 35.6 | 36.1 | 14.4 | 43.8 | 24.1 | 37.6 | 23.3 | 35.0 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.4 | 4.5 | 4.9 | 4.5 | 6.4 | 4.9 | * 4.9 | | | | |
| Max Green Setting (Gmax), s | 12.5 | 29.7 | 11.7 | 45.8 | 11.0 | 31.2 | 22.5 | * 35 | | | | |
| Max Q Clear Time (g_c+I), s | 11.5 | 10.9 | 10.2 | 12.7 | 6.5 | 29.0 | 16.2 | 22.6 | | | | |
| Green Ext Time (p_c), s | 0.2 | 2.7 | 0.0 | 4.0 | 0.4 | 1.1 | 2.2 | 2.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 42.1 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|-------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↗ | ↖ | ↗ | ↗ | ↖ |
| Traffic Volume (veh/h) | 147 | 451 | 99 | 67 | 437 | 152 | 149 | 548 | 86 | 116 | 500 | 169 |
| Future Volume (veh/h) | 147 | 451 | 99 | 67 | 437 | 152 | 149 | 548 | 86 | 116 | 500 | 169 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 148 | 456 | 100 | 68 | 441 | 154 | 151 | 554 | 87 | 117 | 505 | 171 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 176 | 553 | 120 | 199 | 527 | 183 | 342 | 959 | 429 | 834 | 1524 | 682 |
| Arrive On Green | 0.03 | 0.06 | 0.06 | 0.04 | 0.07 | 0.07 | 0.10 | 0.27 | 0.27 | 0.48 | 0.86 | 0.86 |
| Sat Flow, veh/h | 1774 | 2891 | 630 | 1774 | 2581 | 893 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 148 | 278 | 278 | 68 | 301 | 294 | 151 | 554 | 87 | 117 | 505 | 171 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1752 | 1774 | 1770 | 1705 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 10.0 | 18.6 | 18.8 | 4.5 | 20.2 | 20.5 | 5.0 | 16.2 | 5.1 | 2.3 | 3.3 | 2.3 |
| Cycle Q Clear(g_c), s | 10.0 | 18.6 | 18.8 | 4.5 | 20.2 | 20.5 | 5.0 | 16.2 | 5.1 | 2.3 | 3.3 | 2.3 |
| Prop In Lane | 1.00 | | 0.36 | 1.00 | | 0.52 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 176 | 338 | 335 | 199 | 362 | 348 | 342 | 959 | 429 | 834 | 1524 | 682 |
| V/C Ratio(X) | 0.84 | 0.82 | 0.83 | 0.34 | 0.83 | 0.84 | 0.44 | 0.58 | 0.20 | 0.14 | 0.33 | 0.25 |
| Avail Cap(c_a), veh/h | 200 | 668 | 661 | 199 | 619 | 597 | 344 | 959 | 429 | 834 | 1524 | 682 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 0.98 | 0.98 | 0.98 | 0.85 | 0.85 | 0.85 | 0.96 | 0.96 | 0.96 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 57.1 | 54.2 | 54.3 | 53.4 | 53.9 | 54.1 | 50.9 | 37.8 | 33.8 | 24.0 | 5.0 | 4.9 |
| Incr Delay (d2), s/veh | 21.4 | 1.9 | 2.0 | 0.3 | 1.7 | 1.9 | 0.3 | 2.4 | 1.0 | 0.0 | 0.6 | 0.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.0 | 9.3 | 9.3 | 2.2 | 10.1 | 9.8 | 2.4 | 8.2 | 2.4 | 1.1 | 1.7 | 1.1 |
| LnGrp Delay(d),s/veh | 78.5 | 56.1 | 56.3 | 53.8 | 55.6 | 55.9 | 51.2 | 40.3 | 34.8 | 24.0 | 5.6 | 5.8 |
| LnGrp LOS | E | E | E | D | E | E | D | D | C | C | A | A |
| Approach Vol, veh/h | | 704 | | | 663 | | | 792 | | | 793 | |
| Approach Delay, s/veh | | 60.9 | | | 55.5 | | | 41.7 | | | 8.3 | |
| Approach LOS | | E | | | E | | | D | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 35.6 | 39.0 | 18.0 | 27.4 | 16.4 | 58.2 | 16.4 | 29.0 | | | | |
| Change Period (Y+Rc), s | 6.5 | * 6.5 | 4.5 | 4.5 | 4.5 | 6.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 12.0 | * 33 | 10.2 | 45.3 | 12.0 | 32.5 | 13.5 | 42.0 | | | | |
| Max Q Clear Time (g_c+1), s | 11.3 | 18.2 | 6.5 | 20.8 | 7.0 | 5.3 | 12.0 | 22.5 | | | | |
| Green Ext Time (p_c), s | 0.3 | 2.2 | 1.0 | 2.1 | 0.1 | 2.7 | 0.0 | 2.1 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 40.4 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
8: Centre City Pkwy & Valley Pkwy

HCM 2010 Signalized Intersection Summary
Existing Plus Project Mid-Day Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|-----|------|-----|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | ↔ | ↔↔↔ | ↔ | ↔↔ | ↔↔ | | | ↔↔ | ↔ |
| Traffic Volume (veh/h) | 0 | 0 | 0 | 224 | 1022 | 221 | 185 | 574 | 0 | 0 | 561 | 92 |
| Future Volume (veh/h) | 0 | 0 | 0 | 224 | 1022 | 221 | 185 | 574 | 0 | 0 | 561 | 92 |
| Number | | | | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | | | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | | | | 1863 | 1863 | 1863 | 1863 | 1863 | 0 | 0 | 1863 | 1863 |
| Adj Flow Rate, veh/h | | | | 231 | 1054 | 228 | 191 | 592 | 0 | 0 | 578 | 95 |
| Adj No. of Lanes | | | | 1 | 3 | 1 | 2 | 2 | 0 | 0 | 2 | 1 |
| Peak Hour Factor | | | | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | | | | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 2 | 2 |
| Cap, veh/h | | | | 477 | 1502 | 426 | 308 | 2163 | 0 | 0 | 1669 | 747 |
| Arrive On Green | | | | 0.27 | 0.27 | 0.27 | 0.09 | 0.61 | 0.00 | 0.00 | 0.47 | 0.47 |
| Sat Flow, veh/h | | | | 1774 | 5588 | 1583 | 3442 | 3632 | 0 | 0 | 3632 | 1583 |
| Grp Volume(v), veh/h | | | | 231 | 1054 | 228 | 191 | 592 | 0 | 0 | 578 | 95 |
| Grp Sat Flow(s),veh/h/ln | | | | 1774 | 1863 | 1583 | 1721 | 1770 | 0 | 0 | 1770 | 1583 |
| Q Serve(g_s), s | | | | 10.9 | 17.0 | 12.3 | 5.3 | 7.8 | 0.0 | 0.0 | 10.3 | 3.4 |
| Cycle Q Clear(g_c), s | | | | 10.9 | 17.0 | 12.3 | 5.3 | 7.8 | 0.0 | 0.0 | 10.3 | 3.4 |
| Prop In Lane | | | | 1.00 | | 1.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | | | | 477 | 1502 | 426 | 308 | 2163 | 0 | 0 | 1669 | 747 |
| V/C Ratio(X) | | | | 0.48 | 0.70 | 0.54 | 0.62 | 0.27 | 0.00 | 0.00 | 0.35 | 0.13 |
| Avail Cap(c_a), veh/h | | | | 761 | 2397 | 679 | 413 | 2163 | 0 | 0 | 1669 | 747 |
| HCM Platoon Ratio | | | | 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 | 0.00 | 0.95 | 0.95 |
| Uniform Delay (d), s/veh | | | | 30.7 | 33.0 | 31.2 | 43.9 | 9.1 | 0.0 | 0.0 | 16.7 | 14.8 |
| Incr Delay (d2), s/veh | | | | 0.6 | 0.5 | 0.8 | 1.5 | 0.3 | 0.0 | 0.0 | 0.5 | 0.3 |
| Initial Q Delay(d3),s/veh | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | | | | 5.5 | 8.7 | 11.0 | 2.6 | 3.9 | 0.0 | 0.0 | 5.2 | 1.5 |
| LnGrp Delay(d),s/veh | | | | 31.3 | 33.4 | 32.0 | 45.4 | 9.4 | 0.0 | 0.0 | 17.2 | 15.2 |
| LnGrp LOS | | | | C | C | C | D | A | | | B | B |
| Approach Vol, veh/h | | | | | 1513 | | | 783 | | | 673 | |
| Approach Delay, s/veh | | | | | 32.9 | | | 18.2 | | | 16.9 | |
| 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 | | 68.0 | | 32.0 | 14.0 | 54.1 | | | | | | |
| Change Period (Y+Rc), s | | 6.9 | | 5.1 | 5.0 | 6.9 | | | | | | |
| Max Green Setting (Gmax), s | | 45.1 | | 42.9 | 12.0 | 28.1 | | | | | | |
| Max Q Clear Time (g_c+I1), s | | 9.8 | | 19.0 | 7.3 | 12.3 | | | | | | |
| Green Ext Time (p_c), s | | 8.0 | | 7.9 | 0.2 | 6.1 | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 25.4 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|-------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 112 | 479 | 195 | 108 | 433 | 36 | 184 | 205 | 111 | 81 | 234 | 129 |
| Future Volume (veh/h) | 112 | 479 | 195 | 108 | 433 | 36 | 184 | 205 | 111 | 81 | 234 | 129 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 124 | 532 | 217 | 120 | 481 | 40 | 204 | 228 | 123 | 90 | 260 | 143 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 290 | 739 | 300 | 304 | 1023 | 85 | 232 | 702 | 365 | 114 | 556 | 296 |
| Arrive On Green | 0.05 | 0.10 | 0.10 | 0.17 | 0.31 | 0.31 | 0.13 | 0.31 | 0.31 | 0.06 | 0.25 | 0.25 |
| Sat Flow, veh/h | 1774 | 2457 | 999 | 1774 | 3310 | 274 | 1774 | 2253 | 1172 | 1774 | 2232 | 1190 |
| Grp Volume(v), veh/h | 124 | 383 | 366 | 120 | 257 | 264 | 204 | 177 | 174 | 90 | 204 | 199 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1686 | 1774 | 1770 | 1814 | 1774 | 1770 | 1656 | 1774 | 1770 | 1653 |
| Q Serve(g_s), s | 8.1 | 25.2 | 25.3 | 7.2 | 14.1 | 14.1 | 13.6 | 9.2 | 9.7 | 6.0 | 11.8 | 12.3 |
| Cycle Q Clear(g_c), s | 8.1 | 25.2 | 25.3 | 7.2 | 14.1 | 14.1 | 13.6 | 9.2 | 9.7 | 6.0 | 11.8 | 12.3 |
| Prop In Lane | 1.00 | | 0.59 | 1.00 | | 0.15 | 1.00 | | 0.71 | 1.00 | | 0.72 |
| Lane Grp Cap(c), veh/h | 290 | 532 | 507 | 304 | 547 | 561 | 232 | 552 | 516 | 114 | 441 | 412 |
| V/C Ratio(X) | 0.43 | 0.72 | 0.72 | 0.39 | 0.47 | 0.47 | 0.88 | 0.32 | 0.34 | 0.79 | 0.46 | 0.48 |
| Avail Cap(c_a), veh/h | 290 | 532 | 507 | 304 | 547 | 561 | 353 | 552 | 516 | 191 | 441 | 412 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.76 | 0.76 | 0.76 | 0.94 | 0.94 | 0.94 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 51.3 | 49.1 | 49.2 | 44.2 | 33.5 | 33.5 | 51.2 | 31.6 | 31.8 | 55.3 | 38.2 | 38.4 |
| Incr Delay (d2), s/veh | 0.4 | 8.1 | 8.6 | 0.2 | 2.2 | 2.1 | 9.9 | 1.4 | 1.7 | 4.5 | 3.5 | 4.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.0 | 13.5 | 13.1 | 3.6 | 7.2 | 7.4 | 7.3 | 4.7 | 4.7 | 3.1 | 6.2 | 6.1 |
| LnGrp Delay(d),s/veh | 51.7 | 57.2 | 57.8 | 44.4 | 35.7 | 35.7 | 61.1 | 33.0 | 33.4 | 59.9 | 41.7 | 42.5 |
| LnGrp LOS | D | E | E | D | D | D | E | C | C | E | D | D |
| Approach Vol, veh/h | | 873 | | | 641 | | | 555 | | | 493 | |
| Approach Delay, s/veh | | 56.7 | | | 37.3 | | | 43.5 | | | 45.3 | |
| Approach LOS | | E | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 34.7 | 41.0 | 19.8 | 34.5 | 23.7 | 42.0 | 12.3 | 42.0 | | | | |
| Change Period (Y+Rc), s | 4.1 | 4.9 | 4.1 | 4.6 | 4.1 | 4.9 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 15.9 | 36.1 | 23.9 | 26.4 | 14.9 | 37.1 | 12.9 | * 37 | | | | |
| Max Q Clear Time (g_c+1), s | 19.2 | 27.3 | 15.6 | 14.3 | 10.1 | 16.1 | 8.0 | 11.7 | | | | |
| Green Ext Time (p_c), s | 0.2 | 2.1 | 0.2 | 1.3 | 0.2 | 1.9 | 0.1 | 1.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 46.8 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
10: Escondido Blvd & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Project Mid-Day Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|-------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 91 | 434 | 107 | 137 | 449 | 101 | 108 | 256 | 125 | 97 | 304 | 94 |
| Future Volume (veh/h) | 91 | 434 | 107 | 137 | 449 | 101 | 108 | 256 | 125 | 97 | 304 | 94 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 92 | 438 | 108 | 138 | 454 | 102 | 109 | 259 | 126 | 98 | 307 | 95 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 271 | 738 | 181 | 360 | 897 | 200 | 136 | 716 | 338 | 122 | 749 | 228 |
| Arrive On Green | 0.05 | 0.09 | 0.09 | 0.20 | 0.31 | 0.31 | 0.08 | 0.31 | 0.31 | 0.07 | 0.28 | 0.28 |
| Sat Flow, veh/h | 1774 | 2821 | 690 | 1774 | 2877 | 642 | 1774 | 2335 | 1103 | 1774 | 2675 | 813 |
| Grp Volume(v), veh/h | 92 | 273 | 273 | 138 | 278 | 278 | 109 | 194 | 191 | 98 | 201 | 201 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1741 | 1774 | 1770 | 1749 | 1774 | 1770 | 1668 | 1774 | 1770 | 1719 |
| Q Serve(g_s), s | 6.0 | 17.9 | 18.1 | 8.1 | 15.4 | 15.6 | 7.3 | 10.3 | 10.7 | 6.5 | 11.1 | 11.4 |
| Cycle Q Clear(g_c), s | 6.0 | 17.9 | 18.1 | 8.1 | 15.4 | 15.6 | 7.3 | 10.3 | 10.7 | 6.5 | 11.1 | 11.4 |
| Prop In Lane | 1.00 | | 0.40 | 1.00 | | 0.37 | 1.00 | | 0.66 | 1.00 | | 0.47 |
| Lane Grp Cap(c), veh/h | 271 | 463 | 456 | 360 | 552 | 545 | 136 | 543 | 512 | 122 | 495 | 481 |
| V/C Ratio(X) | 0.34 | 0.59 | 0.60 | 0.38 | 0.50 | 0.51 | 0.80 | 0.36 | 0.37 | 0.80 | 0.41 | 0.42 |
| Avail Cap(c_a), veh/h | 271 | 463 | 456 | 360 | 552 | 545 | 220 | 543 | 512 | 205 | 495 | 481 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.78 | 0.78 | 0.78 | 0.63 | 0.63 | 0.63 | 0.98 | 0.98 | 0.98 | 0.90 | 0.90 | 0.90 |
| Uniform Delay (d), s/veh | 51.1 | 48.6 | 48.7 | 41.4 | 33.7 | 33.8 | 54.5 | 32.4 | 32.5 | 55.1 | 35.1 | 35.2 |
| Incr Delay (d2), s/veh | 0.2 | 4.3 | 4.5 | 0.2 | 2.1 | 2.1 | 4.1 | 1.8 | 2.0 | 4.2 | 2.2 | 2.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.0 | 9.3 | 9.3 | 4.0 | 7.8 | 7.9 | 3.7 | 5.3 | 5.2 | 3.4 | 5.7 | 5.7 |
| LnGrp Delay(d),s/veh | 51.3 | 52.9 | 53.2 | 41.5 | 35.8 | 35.9 | 58.6 | 34.2 | 34.6 | 59.2 | 37.3 | 37.6 |
| LnGrp LOS | D | D | D | D | D | D | E | C | C | E | D | D |
| Approach Vol, veh/h | | 638 | | | 694 | | | 494 | | | 500 | |
| Approach Delay, s/veh | | 52.8 | | | 37.0 | | | 39.7 | | | 41.7 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 12.4 | 43.2 | 28.4 | 36.0 | 15.6 | 40.0 | 22.4 | 42.0 | | | | |
| Change Period (Y+Rc), s | 4.1 | 6.4 | 4.1 | 4.6 | 6.4 | * 6.4 | 4.1 | 4.6 | | | | |
| Max Green Setting (Gmax), s | 13.9 | 34.6 | 20.9 | 31.4 | 14.9 | * 34 | 14.9 | 37.4 | | | | |
| Max Q Clear Time (g_c+1), s | 10.5 | 12.7 | 10.1 | 20.1 | 9.3 | 13.4 | 8.0 | 17.6 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.5 | 0.2 | 1.6 | 0.2 | 1.4 | 0.2 | 2.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 42.9 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | ↕ | | ↕ | | ↕ | | ↕ | ↕ | |
| Traffic Volume (veh/h) | 12 | 0 | 7 | 44 | 1 | 34 | 2 | 444 | 46 | 44 | 508 | 5 |
| Future Volume (veh/h) | 12 | 0 | 7 | 44 | 1 | 34 | 2 | 444 | 46 | 44 | 508 | 5 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1900 | 1863 | 1900 | 1863 | 1900 | 1863 | 1900 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 12 | 0 | 7 | 45 | 1 | 35 | 2 | 453 | 47 | 45 | 518 | 5 |
| Adj No. of Lanes | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 110 | 13 | 34 | 170 | 0 | 97 | 42 | 2340 | 241 | 80 | 2973 | 29 |
| Arrive On Green | 0.06 | 0.00 | 0.06 | 0.06 | 0.06 | 0.06 | 0.74 | 0.74 | 0.74 | 0.05 | 0.83 | 0.83 |
| Sat Flow, veh/h | 729 | 219 | 553 | 1403 | 0 | 1583 | 2 | 3170 | 326 | 1774 | 3592 | 35 |
| Grp Volume(v), veh/h | 19 | 0 | 0 | 45 | 0 | 35 | 266 | 0 | 236 | 45 | 255 | 268 |
| Grp Sat Flow(s),veh/h/ln1501 | 0 | 0 | 1403 | 0 | 1583 | 1861 | 0 | 1638 | 1774 | 1770 | 1857 | |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 1.6 | 0.0 | 1.9 | 0.0 | 0.0 | 4.0 | 2.2 | 2.6 | 2.6 |
| Cycle Q Clear(g_c), s | 0.9 | 0.0 | 0.0 | 2.5 | 0.0 | 1.9 | 3.9 | 0.0 | 4.0 | 2.2 | 2.6 | 2.6 |
| Prop In Lane | 0.63 | | 0.37 | 1.00 | | 1.00 | 0.01 | | 0.20 | 1.00 | | 0.02 |
| Lane Grp Cap(c), veh/h | 157 | 0 | 0 | 170 | 0 | 97 | 1414 | 0 | 1209 | 80 | 1465 | 1537 |
| V/C Ratio(X) | 0.12 | 0.00 | 0.00 | 0.27 | 0.00 | 0.36 | 0.19 | 0.00 | 0.20 | 0.56 | 0.17 | 0.17 |
| Avail Cap(c_a), veh/h | 461 | 0 | 0 | 458 | 0 | 422 | 1414 | 0 | 1209 | 237 | 1465 | 1537 |
| 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 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.91 | 0.91 | 0.91 |
| Uniform Delay (d), s/veh | 40.1 | 0.0 | 0.0 | 40.8 | 0.0 | 40.6 | 3.6 | 0.0 | 3.6 | 42.1 | 1.6 | 1.6 |
| Incr Delay (d2), s/veh | 0.1 | 0.0 | 0.0 | 0.3 | 0.0 | 0.8 | 0.3 | 0.0 | 0.4 | 2.1 | 0.2 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln0.5 | 0.0 | 0.0 | 1.1 | 0.0 | 0.9 | 2.1 | 0.0 | 1.9 | 1.1 | 1.4 | 1.4 | |
| LnGrp Delay(d),s/veh | 40.2 | 0.0 | 0.0 | 41.1 | 0.0 | 41.4 | 3.9 | 0.0 | 4.0 | 44.2 | 1.8 | 1.8 |
| LnGrp LOS | D | | | D | | D | A | | A | D | A | A |
| Approach Vol, veh/h | | 19 | | | 80 | | | 502 | | | 568 | |
| Approach Delay, s/veh | | 40.2 | | | 41.2 | | | 3.9 | | | 5.2 | |
| Approach LOS | | D | | | D | | | A | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s8.1 | 71.4 | | | 10.5 | | 79.5 | | 10.5 | | | | |
| Change Period (Y+Rc), s 4.0 | 5.0 | | | * 5 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax) 12.0 | 40.0 | | | * 25 | | 56.0 | | 24.0 | | | | |
| Max Q Clear Time (g_c+1) 11.2 | 6.0 | | | 2.9 | | 4.6 | | 4.5 | | | | |
| Green Ext Time (p_c), s 0.0 | 7.0 | | | 0.1 | | 7.3 | | 0.1 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 7.7 | | | | | | | | |
| HCM 2010 LOS | | | | A | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
12: Broadway & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Project Mid-Day Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 141 | 361 | 147 | 91 | 304 | 179 | 137 | 503 | 88 | 130 | 541 | 112 |
| Future Volume (veh/h) | 141 | 361 | 147 | 91 | 304 | 179 | 137 | 503 | 88 | 130 | 541 | 112 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 144 | 368 | 150 | 93 | 310 | 183 | 140 | 513 | 90 | 133 | 552 | 114 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 177 | 483 | 194 | 168 | 412 | 238 | 336 | 920 | 161 | 291 | 819 | 169 |
| Arrive On Green | 0.10 | 0.20 | 0.20 | 0.09 | 0.19 | 0.19 | 0.19 | 0.31 | 0.31 | 0.16 | 0.28 | 0.28 |
| Sat Flow, veh/h | 1774 | 2467 | 991 | 1774 | 2164 | 1248 | 1774 | 3013 | 526 | 1774 | 2924 | 602 |
| Grp Volume(v), veh/h | 144 | 262 | 256 | 93 | 252 | 241 | 140 | 300 | 303 | 133 | 333 | 333 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1688 | 1774 | 1770 | 1643 | 1774 | 1770 | 1770 | 1774 | 1770 | 1757 |
| Q Serve(g_s), s | 6.0 | 10.5 | 10.8 | 3.8 | 10.1 | 10.4 | 5.2 | 10.7 | 10.7 | 5.1 | 12.5 | 12.6 |
| Cycle Q Clear(g_c), s | 6.0 | 10.5 | 10.8 | 3.8 | 10.1 | 10.4 | 5.2 | 10.7 | 10.7 | 5.1 | 12.5 | 12.6 |
| Prop In Lane | 1.00 | | 0.59 | 1.00 | | 0.76 | 1.00 | | 0.30 | 1.00 | | 0.34 |
| Lane Grp Cap(c), veh/h | 177 | 346 | 330 | 168 | 337 | 313 | 336 | 540 | 540 | 291 | 495 | 492 |
| V/C Ratio(X) | 0.81 | 0.76 | 0.77 | 0.55 | 0.75 | 0.77 | 0.42 | 0.56 | 0.56 | 0.46 | 0.67 | 0.68 |
| Avail Cap(c_a), veh/h | 177 | 493 | 470 | 168 | 472 | 438 | 336 | 540 | 540 | 291 | 495 | 492 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.67 | 0.67 | 0.67 | 1.00 | 1.00 | 1.00 | 0.88 | 0.88 | 0.88 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.1 | 28.5 | 28.6 | 32.4 | 28.7 | 28.8 | 26.7 | 21.8 | 21.8 | 28.3 | 24.0 | 24.0 |
| Incr Delay (d2), s/veh | 17.2 | 2.8 | 3.4 | 3.9 | 4.1 | 5.4 | 0.7 | 3.6 | 3.7 | 1.1 | 7.1 | 7.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.8 | 5.4 | 5.3 | 2.0 | 5.3 | 5.2 | 2.6 | 5.7 | 5.8 | 2.6 | 7.1 | 7.1 |
| LnGrp Delay(d),s/veh | 50.2 | 31.3 | 32.0 | 36.3 | 32.8 | 34.2 | 27.5 | 25.4 | 25.5 | 29.4 | 31.1 | 31.3 |
| LnGrp LOS | D | C | C | D | C | C | C | C | C | C | C | C |
| Approach Vol, veh/h | | 662 | | | 586 | | | 743 | | | 799 | |
| Approach Delay, s/veh | | 35.7 | | | 33.9 | | | 25.8 | | | 30.9 | |
| Approach LOS | | D | | | C | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 16.8 | 27.4 | 11.6 | 19.2 | 18.7 | 25.5 | 12.0 | 18.8 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 6.6 | 22.9 | 6.6 | 20.9 | 8.5 | 21.0 | 7.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+1T), s | 12.7 | 12.7 | 5.8 | 12.8 | 7.2 | 14.6 | 8.0 | 12.4 | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.6 | 0.3 | 1.9 | 0.1 | 2.1 | 0.0 | 1.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 31.3 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |

SEC CCP/Mission TIA
13: Broadway & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Project Mid-Day Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↔ | ↕ | | ↔ | ↕ | | ↔ | ↕ | | ↔ | ↕ | |
| Traffic Volume (veh/h) | 118 | 433 | 94 | 53 | 422 | 174 | 120 | 349 | 36 | 193 | 388 | 99 |
| Future Volume (veh/h) | 118 | 433 | 94 | 53 | 422 | 174 | 120 | 349 | 36 | 193 | 388 | 99 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 123 | 451 | 98 | 55 | 440 | 181 | 125 | 364 | 38 | 201 | 404 | 103 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 154 | 583 | 126 | 188 | 541 | 221 | 158 | 906 | 94 | 306 | 1019 | 257 |
| Arrive On Green | 0.09 | 0.20 | 0.20 | 0.11 | 0.22 | 0.22 | 0.09 | 0.28 | 0.28 | 0.17 | 0.36 | 0.36 |
| Sat Flow, veh/h | 1774 | 2897 | 625 | 1774 | 2455 | 1001 | 1774 | 3237 | 336 | 1774 | 2801 | 707 |
| Grp Volume(v), veh/h | 123 | 274 | 275 | 55 | 316 | 305 | 125 | 198 | 204 | 201 | 254 | 253 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1752 | 1774 | 1770 | 1686 | 1774 | 1770 | 1803 | 1774 | 1770 | 1738 |
| Q Serve(g_s), s | 5.1 | 11.0 | 11.1 | 2.1 | 12.7 | 12.9 | 5.2 | 6.8 | 6.9 | 7.9 | 8.0 | 8.1 |
| Cycle Q Clear(g_c), s | 5.1 | 11.0 | 11.1 | 2.1 | 12.7 | 12.9 | 5.2 | 6.8 | 6.9 | 7.9 | 8.0 | 8.1 |
| Prop In Lane | 1.00 | | 0.36 | 1.00 | | 0.59 | 1.00 | | 0.19 | 1.00 | | 0.41 |
| Lane Grp Cap(c), veh/h | 154 | 356 | 353 | 188 | 390 | 372 | 158 | 495 | 505 | 306 | 644 | 632 |
| V/C Ratio(X) | 0.80 | 0.77 | 0.78 | 0.29 | 0.81 | 0.82 | 0.79 | 0.40 | 0.40 | 0.66 | 0.39 | 0.40 |
| Avail Cap(c_a), veh/h | 154 | 491 | 486 | 188 | 472 | 450 | 182 | 495 | 505 | 306 | 644 | 632 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.77 | 0.77 | 0.77 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.81 | 0.81 | 0.81 |
| Uniform Delay (d), s/veh | 33.6 | 28.3 | 28.4 | 30.9 | 27.7 | 27.8 | 33.5 | 21.9 | 21.9 | 28.9 | 17.7 | 17.8 |
| Incr Delay (d2), s/veh | 20.2 | 3.9 | 4.2 | 0.9 | 8.6 | 9.7 | 18.6 | 2.4 | 2.4 | 4.0 | 1.5 | 1.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.4 | 5.7 | 5.8 | 1.1 | 7.2 | 7.0 | 3.3 | 3.6 | 3.7 | 4.2 | 4.1 | 4.1 |
| LnGrp Delay(d),s/veh | 53.9 | 32.2 | 32.6 | 31.8 | 36.3 | 37.6 | 52.1 | 24.3 | 24.3 | 33.0 | 19.2 | 19.3 |
| LnGrp LOS | D | C | C | C | D | D | D | C | C | C | B | B |
| Approach Vol, veh/h | | 672 | | | 676 | | | 527 | | | 708 | |
| Approach Delay, s/veh | | 36.3 | | | 36.5 | | | 30.9 | | | 23.1 | |
| Approach LOS | | D | | | D | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 7.5 | 25.5 | 12.5 | 19.6 | 11.2 | 31.8 | 11.0 | 21.0 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 5 | 21.0 | 5.7 | 20.8 | 7.7 | 22.8 | 6.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+1/3), s | 9 | 8.9 | 4.1 | 13.1 | 7.2 | 10.1 | 7.1 | 14.9 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.8 | 0.6 | 2.0 | 0.0 | 2.9 | 0.0 | 1.6 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 31.7 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |

Intersection

Int Delay, s/veh 0.7

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | | ↑ | ↑↑ | ↑ | | ↑↑ |
| Traffic Vol, veh/h | 0 | 94 | 593 | 84 | 0 | 837 |
| Future Vol, veh/h | 0 | 94 | 593 | 84 | 0 | 837 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | 75 | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 102 | 645 | 91 | 0 | 910 |

| Major/Minor | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|---------|
| Conflicting Flow All | - | 322 | 0 0 |
| Stage 1 | - | - | - - |
| Stage 2 | - | - | - - |
| Critical Hdwy | - | 6.94 | - - |
| Critical Hdwy Stg 1 | - | - | - - |
| Critical Hdwy Stg 2 | - | - | - - |
| Follow-up Hdwy | - | 3.32 | - - |
| Pot Cap-1 Maneuver | 0 | 674 | - - 0 - |
| Stage 1 | 0 | - | - - 0 - |
| Stage 2 | 0 | - | - - 0 - |
| Platoon blocked, % | | | - - |
| Mov Cap-1 Maneuver | - | 674 | - - - - |
| Mov Cap-2 Maneuver | - | - | - - - - |
| Stage 1 | - | - | - - - - |
| Stage 2 | - | - | - - - - |

| Approach | WB | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 11.3 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT |
|-----------------------|-----|----------|-----|
| Capacity (veh/h) | - | - 674 | - |
| HCM Lane V/C Ratio | - | - 0.152 | - |
| HCM Control Delay (s) | - | - 11.3 | - |
| HCM Lane LOS | - | - B | - |
| HCM 95th %tile Q(veh) | - | - 0.5 | - |

Intersection

Int Delay, s/veh 0.6

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | | | ↑↑ | | ↑ |
| Traffic Vol, veh/h | 877 | 98 | 0 | 873 | 0 | 89 |
| Future Vol, veh/h | 877 | 98 | 0 | 873 | 0 | 89 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 953 | 107 | 0 | 949 | 0 | 97 |

| Major/Minor | Major1 | Major2 | Minor1 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 530 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | - | - | 6.94 |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | - | - | 3.32 |
| Pot Cap-1 Maneuver | - | 0 | 493 |
| Stage 1 | - | 0 | - |
| Stage 2 | - | 0 | - |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | - | - | 493 |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 14.1 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|-----------------------|-------|-----|-----|-----|
| Capacity (veh/h) | 493 | - | - | - |
| HCM Lane V/C Ratio | 0.196 | - | - | - |
| HCM Control Delay (s) | 14.1 | - | - | - |
| HCM Lane LOS | B | - | - | - |
| HCM 95th %tile Q(veh) | 0.7 | - | - | - |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  |  |
| Traffic Volume (veh/h) | 235 | 849 | 108 | 65 | 482 | 193 | 54 | 518 | 55 | 109 | 247 | 61 |
| Future Volume (veh/h) | 235 | 849 | 108 | 65 | 482 | 193 | 54 | 518 | 55 | 109 | 247 | 61 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 242 | 875 | 111 | 67 | 497 | 199 | 56 | 534 | 57 | 112 | 255 | 63 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 270 | 1520 | 193 | 86 | 932 | 371 | 336 | 1170 | 125 | 254 | 675 | 574 |
| Arrive On Green | 0.15 | 0.48 | 0.48 | 0.05 | 0.38 | 0.38 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 |
| Sat Flow, veh/h | 1774 | 3161 | 401 | 1774 | 2473 | 985 | 1057 | 3228 | 344 | 822 | 1863 | 1583 |
| Grp Volume(v), veh/h | 242 | 490 | 496 | 67 | 355 | 341 | 56 | 292 | 299 | 112 | 255 | 63 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1792 | 1774 | 1770 | 1689 | 1057 | 1770 | 1802 | 822 | 1863 | 1583 |
| Q Serve(g_s), s | 16.1 | 23.9 | 23.9 | 4.5 | 18.8 | 18.9 | 5.0 | 15.1 | 15.2 | 14.5 | 12.1 | 3.2 |
| Cycle Q Clear(g_c), s | 16.1 | 23.9 | 23.9 | 4.5 | 18.8 | 18.9 | 17.1 | 15.1 | 15.2 | 29.7 | 12.1 | 3.2 |
| Prop In Lane | 1.00 | | 0.22 | 1.00 | | 0.58 | 1.00 | | 0.19 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 270 | 851 | 862 | 86 | 667 | 636 | 336 | 641 | 653 | 254 | 675 | 574 |
| V/C Ratio(X) | 0.89 | 0.58 | 0.58 | 0.78 | 0.53 | 0.54 | 0.17 | 0.46 | 0.46 | 0.44 | 0.38 | 0.11 |
| Avail Cap(c_a), veh/h | 399 | 851 | 862 | 148 | 667 | 636 | 336 | 641 | 653 | 254 | 675 | 574 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.86 | 0.86 | 0.86 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 49.9 | 22.4 | 22.4 | 56.5 | 29.2 | 29.2 | 34.6 | 29.2 | 29.2 | 40.6 | 28.3 | 25.4 |
| Incr Delay (d2), s/veh | 12.4 | 2.8 | 2.8 | 4.9 | 0.8 | 0.9 | 1.1 | 2.3 | 2.3 | 0.9 | 0.3 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.8 | 12.2 | 12.4 | 2.3 | 9.3 | 9.0 | 1.5 | 7.8 | 8.0 | 3.4 | 6.3 | 1.4 |
| LnGrp Delay(d),s/veh | 62.3 | 25.2 | 25.2 | 61.4 | 30.0 | 30.1 | 35.6 | 31.5 | 31.5 | 41.5 | 28.5 | 25.5 |
| LnGrp LOS | E | C | C | E | C | C | D | C | C | D | C | C |
| Approach Vol, veh/h | | 1228 | | | 763 | | | 647 | | | 430 | |
| Approach Delay, s/veh | | 32.5 | | | 32.8 | | | 31.9 | | | 31.4 | |
| Approach LOS | | C | | | C | | | 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 | 9.8 | 62.2 | | 48.0 | 22.3 | 49.7 | | 48.0 | | | | |
| Change Period (Y+Rc), s | 4.0 | 4.5 | | 4.5 | 4.0 | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | 10.0 | 53.5 | | 43.5 | 27.0 | 36.5 | | 43.5 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.5 | 25.9 | | 31.7 | 18.1 | 20.9 | | 19.1 | | | | |
| Green Ext Time (p_c), s | 0.0 | 15.2 | | 4.1 | 0.2 | 10.4 | | 5.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 32.3 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|-------|------|-------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 34 | 951 | 88 | 107 | 678 | 101 | 100 | 44 | 208 | 162 | 50 | 23 |
| Future Volume (veh/h) | 34 | 951 | 88 | 107 | 678 | 101 | 100 | 44 | 208 | 162 | 50 | 23 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 35 | 980 | 91 | 110 | 699 | 104 | 103 | 45 | 214 | 167 | 52 | 24 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 162 | 1232 | 114 | 270 | 1351 | 201 | 128 | 410 | 348 | 194 | 301 | 139 |
| Arrive On Green | 0.09 | 0.38 | 0.38 | 0.15 | 0.44 | 0.44 | 0.05 | 0.15 | 0.15 | 0.11 | 0.25 | 0.25 |
| Sat Flow, veh/h | 1774 | 3275 | 304 | 1774 | 3092 | 460 | 1774 | 1863 | 1583 | 1774 | 1207 | 557 |
| Grp Volume(v), veh/h | 35 | 530 | 541 | 110 | 400 | 403 | 103 | 45 | 214 | 167 | 0 | 76 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1809 | 1774 | 1770 | 1782 | 1774 | 1863 | 1583 | 1774 | 0 | 1764 |
| Q Serve(g_s), s | 2.5 | 36.0 | 36.0 | 7.6 | 22.2 | 22.2 | 7.8 | 2.8 | 12.2 | 12.5 | 0.0 | 4.6 |
| Cycle Q Clear(g_c), s | 2.5 | 36.0 | 36.0 | 7.6 | 22.2 | 22.2 | 7.8 | 2.8 | 12.2 | 12.5 | 0.0 | 4.6 |
| Prop In Lane | 1.00 | | 0.17 | 1.00 | | 0.26 | 1.00 | | 1.00 | 1.00 | | 0.32 |
| Lane Grp Cap(c), veh/h | 162 | 666 | 681 | 270 | 773 | 779 | 128 | 410 | 348 | 194 | 0 | 440 |
| V/C Ratio(X) | 0.22 | 0.80 | 0.80 | 0.41 | 0.52 | 0.52 | 0.80 | 0.11 | 0.61 | 0.86 | 0.00 | 0.17 |
| Avail Cap(c_a), veh/h | 162 | 666 | 681 | 270 | 773 | 779 | 204 | 410 | 348 | 288 | 0 | 440 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.67 | 0.67 | 0.67 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.78 | 0.78 | 0.78 | 0.84 | 0.84 | 0.84 | 0.80 | 0.80 | 0.80 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 56.8 | 37.5 | 37.5 | 51.7 | 27.6 | 27.6 | 63.3 | 46.1 | 26.5 | 59.1 | 0.0 | 39.7 |
| Incr Delay (d2), s/veh | 0.6 | 7.6 | 7.4 | 1.0 | 2.1 | 2.1 | 10.9 | 0.4 | 6.3 | 17.0 | 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(50%),veh/ln | 1.2 | 18.9 | 19.3 | 3.8 | 11.2 | 11.3 | 4.2 | 1.5 | 6.0 | 7.0 | 0.0 | 2.3 |
| LnGrp Delay(d),s/veh | 57.5 | 45.1 | 44.9 | 52.7 | 29.7 | 29.7 | 74.2 | 46.5 | 32.9 | 76.1 | 0.0 | 40.6 |
| LnGrp LOS | E | D | D | D | C | C | E | D | C | E | | D |
| Approach Vol, veh/h | | 1106 | | | 913 | | | 362 | | | 243 | |
| Approach Delay, s/veh | | 45.4 | | | 32.5 | | | 46.3 | | | 65.0 | |
| Approach LOS | | D | | | 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 | 35.1 | 56.2 | 14.9 | 38.8 | 16.9 | 64.4 | 18.9 | 34.8 | | | | |
| Change Period (Y+Rc), s | 4.6 | 5.4 | 5.1 | * 5.1 | 4.6 | * 5.4 | 4.1 | 5.1 | | | | |
| Max Green Setting (Gmax), s | 15.8 | 50.8 | 15.5 | * 34 | 8.1 | * 59 | 21.9 | 27.3 | | | | |
| Max Q Clear Time (g_c+1), s | 19.6 | 38.0 | 9.8 | 6.6 | 4.5 | 24.2 | 14.5 | 14.2 | | | | |
| Green Ext Time (p_c), s | 0.2 | 8.5 | 0.2 | 0.4 | 0.1 | 11.3 | 0.3 | 1.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 42.8 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|-------|------|-------|------|-------|------|-------|------|------|------|------|
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↗ | |
| Traffic Volume (veh/h) | 67 | 859 | 181 | 79 | 496 | 95 | 122 | 202 | 173 | 65 | 189 | 23 |
| Future Volume (veh/h) | 67 | 859 | 181 | 79 | 496 | 95 | 122 | 202 | 173 | 65 | 189 | 23 |
| 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 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 85 | 1087 | 229 | 100 | 628 | 120 | 154 | 256 | 219 | 82 | 239 | 29 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 442 | 1986 | 417 | 257 | 2023 | 386 | 260 | 458 | 378 | 165 | 791 | 95 |
| Arrive On Green | 0.68 | 0.68 | 0.68 | 0.46 | 0.46 | 0.46 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Sat Flow, veh/h | 711 | 2913 | 611 | 416 | 2967 | 566 | 1107 | 1844 | 1520 | 915 | 3183 | 382 |
| Grp Volume(v), veh/h | 85 | 658 | 658 | 100 | 374 | 374 | 154 | 245 | 230 | 82 | 132 | 136 |
| Grp Sat Flow(s),veh/h/ln | 711 | 1770 | 1755 | 416 | 1770 | 1763 | 1107 | 1770 | 1594 | 915 | 1770 | 1795 |
| Q Serve(g_s), s | 8.3 | 25.5 | 25.7 | 26.0 | 18.1 | 18.1 | 17.7 | 16.3 | 17.1 | 11.7 | 8.2 | 8.3 |
| Cycle Q Clear(g_c), s | 26.4 | 25.5 | 25.7 | 51.7 | 18.1 | 18.1 | 26.1 | 16.3 | 17.1 | 28.7 | 8.2 | 8.3 |
| Prop In Lane | 1.00 | | 0.35 | 1.00 | | 0.32 | 1.00 | | 0.95 | 1.00 | | 0.21 |
| Lane Grp Cap(c), veh/h | 442 | 1206 | 1196 | 257 | 1206 | 1202 | 260 | 440 | 396 | 165 | 440 | 446 |
| V/C Ratio(X) | 0.19 | 0.55 | 0.55 | 0.39 | 0.31 | 0.31 | 0.59 | 0.56 | 0.58 | 0.50 | 0.30 | 0.31 |
| Avail Cap(c_a), veh/h | 442 | 1206 | 1196 | 257 | 1206 | 1202 | 299 | 502 | 452 | 197 | 502 | 509 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 0.67 | 0.67 | 0.67 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.81 | 0.81 | 0.81 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 0.91 |
| Uniform Delay (d), s/veh | 15.7 | 10.9 | 10.9 | 36.0 | 16.6 | 16.6 | 51.8 | 44.2 | 44.5 | 57.1 | 41.2 | 41.2 |
| Incr Delay (d2), s/veh | 1.0 | 1.8 | 1.8 | 3.6 | 0.5 | 0.5 | 1.8 | 0.8 | 1.1 | 1.6 | 0.3 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 7 | 12.8 | 13.0 | 3.2 | 9.0 | 9.0 | 5.6 | 8.1 | 7.6 | 3.0 | 4.0 | 4.2 |
| LnGrp Delay(d),s/veh | 16.7 | 12.7 | 12.8 | 39.6 | 17.1 | 17.1 | 53.7 | 45.1 | 45.6 | 58.7 | 41.4 | 41.5 |
| LnGrp LOS | B | B | B | D | B | B | D | D | D | E | D | D |
| Approach Vol, veh/h | | 1401 | | | 848 | | | 629 | | | 350 | |
| Approach Delay, s/veh | | 12.9 | | | 19.8 | | | 47.4 | | | 45.5 | |
| Approach LOS | | B | | | B | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 96.7 | | 38.3 | | 96.7 | | 38.3 | | | | |
| Change Period (Y+Rc), s | | * 4.7 | | * 4.7 | | * 4.7 | | * 4.7 | | | | |
| Max Green Setting (Gmax), s | | * 87 | | * 38 | | * 87 | | * 38 | | | | |
| Max Q Clear Time (g_c+1), s | | 28.4 | | 28.1 | | 53.7 | | 30.7 | | | | |
| Green Ext Time (p_c), s | | 23.7 | | 3.4 | | 18.6 | | 2.8 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 25.0 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Lane Configurations | ↔↔ | ↑↑ | ↗ | ↔↔ | ↑↑ | | ↔↔ | ↑↑ | ↗ | ↔↔ | ↑↑ | ↗ |
| Traffic Volume (veh/h) | 39 | 896 | 199 | 155 | 622 | 152 | 355 | 626 | 295 | 181 | 240 | 29 |
| Future Volume (veh/h) | 39 | 896 | 199 | 155 | 622 | 152 | 355 | 626 | 295 | 181 | 240 | 29 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 40 | 924 | 205 | 160 | 641 | 157 | 366 | 645 | 304 | 187 | 247 | 30 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 175 | 1223 | 547 | 208 | 1002 | 245 | 363 | 1300 | 582 | 271 | 1201 | 537 |
| Arrive On Green | 0.05 | 0.35 | 0.35 | 0.06 | 0.36 | 0.36 | 0.11 | 0.37 | 0.37 | 0.08 | 0.34 | 0.34 |
| Sat Flow, veh/h | 3442 | 3539 | 1583 | 3442 | 2821 | 690 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 40 | 924 | 205 | 160 | 402 | 396 | 366 | 645 | 304 | 187 | 247 | 30 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1583 | 1721 | 1770 | 1741 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 1.8 | 38.2 | 16.1 | 7.6 | 31.3 | 31.3 | 17.4 | 23.3 | 24.8 | 8.7 | 8.2 | 2.1 |
| Cycle Q Clear(g_c), s | 1.8 | 38.2 | 16.1 | 7.6 | 31.3 | 31.3 | 17.4 | 23.3 | 24.8 | 8.7 | 8.2 | 2.1 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.40 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 175 | 1223 | 547 | 208 | 628 | 618 | 363 | 1300 | 582 | 271 | 1201 | 537 |
| V/C Ratio(X) | 0.23 | 0.76 | 0.37 | 0.77 | 0.64 | 0.64 | 1.01 | 0.50 | 0.52 | 0.69 | 0.21 | 0.06 |
| Avail Cap(c_a), veh/h | 209 | 1223 | 547 | 213 | 628 | 618 | 363 | 1300 | 582 | 313 | 1201 | 537 |
| 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 | 0.89 | 0.89 | 0.89 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 75.2 | 47.8 | 40.6 | 76.4 | 44.4 | 44.4 | 73.8 | 40.4 | 40.9 | 74.0 | 38.7 | 36.7 |
| Incr Delay (d2), s/veh | 0.5 | 4.4 | 2.0 | 13.7 | 4.9 | 5.0 | 46.7 | 1.2 | 3.0 | 3.7 | 0.4 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.9 | 19.4 | 7.3 | 4.0 | 16.2 | 15.9 | 10.6 | 11.6 | 11.3 | 4.3 | 4.1 | 1.0 |
| LnGrp Delay(d),s/veh | 75.7 | 52.2 | 42.6 | 90.1 | 49.3 | 49.4 | 120.5 | 41.6 | 43.8 | 77.8 | 39.1 | 36.9 |
| LnGrp LOS | E | D | D | F | D | D | F | D | D | E | D | D |
| Approach Vol, veh/h | | 1169 | | | 958 | | | 1315 | | | 464 | |
| Approach Delay, s/veh | | 51.3 | | | 56.2 | | | 64.1 | | | 54.5 | |
| Approach LOS | | D | | | E | | | E | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 19.1 | 67.5 | 15.1 | 63.3 | 23.7 | 62.9 | 13.5 | 64.9 | | | | |
| Change Period (Y+Rc), s | 6.1 | 6.9 | 5.1 | 6.3 | 6.3 | 6.9 | 5.1 | 6.3 | | | | |
| Max Green Setting (Gmax), s | 15.0 | 58.6 | 10.2 | 56.8 | 17.4 | 56.0 | 10.0 | 57.0 | | | | |
| Max Q Clear Time (g_c+10), s | 11.0 | 26.8 | 9.6 | 40.2 | 19.4 | 10.2 | 3.8 | 33.3 | | | | |
| Green Ext Time (p_c), s | 0.1 | 10.2 | 0.0 | 13.7 | 0.0 | 11.1 | 0.0 | 18.4 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | | 57.2 | | | | | | | |
| HCM 2010 LOS | | | | | E | | | | | | | |

SEC CCP/Mission TIA
5: Centre City Pkwy & Decatur Way

HCM 2010 Signalized Intersection Summary
Existing Plus Project PM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|-------|-------|------|------|-------|-------|------|------|------|------|
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↑↑ | ↗ | ↖ | ↑↑ | ↗ |
| Traffic Volume (veh/h) | 16 | 1 | 14 | 107 | 1 | 204 | 14 | 1043 | 125 | 40 | 647 | 3 |
| Future Volume (veh/h) | 16 | 1 | 14 | 107 | 1 | 204 | 14 | 1043 | 125 | 40 | 647 | 3 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 17 | 1 | 15 | 113 | 1 | 215 | 15 | 1098 | 132 | 42 | 681 | 3 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 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 | 68 | 11 | 164 | 142 | 1 | 239 | 268 | 1733 | 775 | 294 | 1785 | 799 |
| Arrive On Green | 0.04 | 0.11 | 0.11 | 0.08 | 0.15 | 0.15 | 0.15 | 0.49 | 0.49 | 0.17 | 0.50 | 0.50 |
| Sat Flow, veh/h | 1774 | 100 | 1498 | 1774 | 7 | 1577 | 1774 | 3539 | 1583 | 1774 | 3539 | 1583 |
| Grp Volume(v), veh/h | 17 | 0 | 16 | 113 | 0 | 216 | 15 | 1098 | 132 | 42 | 681 | 3 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 0 | 1598 | 1774 | 0 | 1584 | 1774 | 1770 | 1583 | 1774 | 1770 | 1583 |
| Q Serve(g_s), s | 1.3 | 0.0 | 1.2 | 8.4 | 0.0 | 18.1 | 1.0 | 31.0 | 4.2 | 2.7 | 15.9 | 0.1 |
| Cycle Q Clear(g_c), s | 1.3 | 0.0 | 1.2 | 8.4 | 0.0 | 18.1 | 1.0 | 31.0 | 4.2 | 2.7 | 15.9 | 0.1 |
| Prop In Lane | 1.00 | | 0.94 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 68 | 0 | 175 | 142 | 0 | 240 | 268 | 1733 | 775 | 294 | 1785 | 799 |
| V/C Ratio(X) | 0.25 | 0.00 | 0.09 | 0.79 | 0.00 | 0.90 | 0.06 | 0.63 | 0.17 | 0.14 | 0.38 | 0.00 |
| Avail Cap(c_a), veh/h | 162 | 0 | 193 | 254 | 0 | 273 | 268 | 1733 | 775 | 294 | 1785 | 799 |
| 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 | 0.93 | 0.93 | 0.93 |
| Uniform Delay (d), s/veh | 63.0 | 0.0 | 54.1 | 61.0 | 0.0 | 56.3 | 49.1 | 25.5 | 8.7 | 48.1 | 20.5 | 9.3 |
| Incr Delay (d2), s/veh | 0.7 | 0.0 | 0.2 | 3.7 | 0.0 | 27.4 | 0.0 | 1.8 | 0.5 | 0.1 | 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(50%),veh/ln | 0.6 | 0.0 | 0.5 | 4.3 | 0.0 | 9.7 | 0.5 | 15.5 | 2.0 | 1.3 | 7.9 | 0.0 |
| LnGrp Delay(d),s/veh | 63.7 | 0.0 | 54.2 | 64.7 | 0.0 | 83.7 | 49.1 | 27.3 | 9.2 | 48.2 | 21.1 | 9.3 |
| LnGrp LOS | E | | D | E | | F | D | C | A | D | C | A |
| Approach Vol, veh/h | | 33 | | | 329 | | | 1245 | | | 726 | |
| Approach Delay, s/veh | | 59.1 | | | 77.2 | | | 25.6 | | | 22.6 | |
| Approach LOS | | E | | | E | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 37.0 | 73.0 | 15.5 | 19.5 | 25.0 | 75.0 | 9.9 | 25.1 | | | | |
| Change Period (Y+Rc), s | 4.6 | 6.9 | * 4.7 | * 4.7 | 4.6 | 6.9 | * 4.7 | * 4.7 | | | | |
| Max Green Setting (Gmax), s | 12.4 | 66.1 | * 19 | * 16 | 10.4 | 68.1 | * 12 | * 23 | | | | |
| Max Q Clear Time (g_c+1), s | 11.7 | 33.0 | 10.4 | 3.2 | 3.0 | 17.9 | 3.3 | 20.1 | | | | |
| Green Ext Time (p_c), s | 0.0 | 12.2 | 0.1 | 0.9 | 0.0 | 6.5 | 0.0 | 0.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 32.4 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 275 | 894 | 144 | 94 | 411 | 321 | 162 | 922 | 71 | 233 | 561 | 249 |
| Future Volume (veh/h) | 275 | 894 | 144 | 94 | 411 | 321 | 162 | 922 | 71 | 233 | 561 | 249 |
| 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 | | 0.96 | 1.00 | | 0.95 | 1.00 | | 0.98 | 1.00 | | 0.98 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 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 | 1667 | 1863 | 1863 | 1667 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 281 | 912 | 147 | 96 | 419 | 328 | 165 | 941 | 72 | 238 | 572 | 254 |
| Adj No. of Lanes | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 2 | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 308 | 1074 | 463 | 192 | 886 | 378 | 251 | 1559 | 478 | 275 | 1080 | 474 |
| Arrive On Green | 0.06 | 0.10 | 0.10 | 0.04 | 0.08 | 0.08 | 0.16 | 0.61 | 0.61 | 0.03 | 0.10 | 0.10 |
| Sat Flow, veh/h | 1774 | 3539 | 1526 | 1587 | 3539 | 1510 | 3079 | 5085 | 1559 | 3442 | 3539 | 1554 |
| Grp Volume(v), veh/h | 281 | 912 | 147 | 96 | 419 | 328 | 165 | 941 | 72 | 238 | 572 | 254 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1526 | 1587 | 1770 | 1510 | 1540 | 1695 | 1559 | 1721 | 1770 | 1554 |
| Q Serve(g_s), s | 21.3 | 34.2 | 12.1 | 8.0 | 15.3 | 29.0 | 6.8 | 15.3 | 2.7 | 9.3 | 20.7 | 21.0 |
| Cycle Q Clear(g_c), s | 21.3 | 34.2 | 12.1 | 8.0 | 15.3 | 29.0 | 6.8 | 15.3 | 2.7 | 9.3 | 20.7 | 21.0 |
| 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 | 308 | 1074 | 463 | 192 | 886 | 378 | 251 | 1559 | 478 | 275 | 1080 | 474 |
| V/C Ratio(X) | 0.91 | 0.85 | 0.32 | 0.50 | 0.47 | 0.87 | 0.66 | 0.60 | 0.15 | 0.86 | 0.53 | 0.54 |
| Avail Cap(c_a), veh/h | 361 | 1298 | 560 | 192 | 918 | 392 | 251 | 1559 | 478 | 275 | 1080 | 474 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 |
| Upstream Filter(I) | 0.60 | 0.60 | 0.60 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 62.6 | 57.7 | 47.8 | 60.8 | 53.4 | 59.7 | 54.7 | 21.1 | 18.6 | 65.0 | 51.5 | 51.6 |
| Incr Delay (d2), s/veh | 15.3 | 2.7 | 0.2 | 0.8 | 0.3 | 17.5 | 4.9 | 1.7 | 0.7 | 22.8 | 1.9 | 4.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 11.8 | 17.2 | 5.1 | 3.6 | 7.5 | 14.0 | 3.0 | 7.3 | 1.2 | 5.3 | 10.5 | 9.6 |
| LnGrp Delay(d),s/veh | 77.9 | 60.4 | 47.9 | 61.6 | 53.7 | 77.2 | 59.7 | 22.8 | 19.3 | 87.8 | 53.4 | 55.9 |
| LnGrp LOS | E | E | D | E | D | E | E | C | B | F | D | E |
| Approach Vol, veh/h | | 1340 | | | 843 | | | 1178 | | | 1064 | |
| Approach Delay, s/veh | | 62.7 | | | 63.8 | | | 27.7 | | | 61.7 | |
| Approach LOS | | E | | | E | | | C | | | 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 | 15.3 | 47.8 | 20.8 | 45.9 | 15.5 | 47.6 | 28.0 | 38.7 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.4 | 4.5 | 4.9 | 4.5 | 6.4 | 4.5 | 4.9 | | | | |
| Max Green Setting (Gmax), s | 10.8 | 41.4 | 13.0 | 49.5 | 11.0 | 41.2 | 27.5 | 35.0 | | | | |
| Max Q Clear Time (g_c+I), s | 3.0 | 17.3 | 10.0 | 36.2 | 8.8 | 23.0 | 23.3 | 31.0 | | | | |
| Green Ext Time (p_c), s | 0.0 | 5.9 | 0.2 | 4.7 | 0.2 | 3.6 | 0.2 | 1.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 53.3 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|-------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 187 | 774 | 96 | 80 | 372 | 148 | 187 | 842 | 180 | 143 | 555 | 100 |
| Future Volume (veh/h) | 187 | 774 | 96 | 80 | 372 | 148 | 187 | 842 | 180 | 143 | 555 | 100 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 199 | 823 | 102 | 85 | 396 | 157 | 199 | 896 | 191 | 152 | 590 | 106 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 225 | 932 | 116 | 126 | 592 | 232 | 306 | 1088 | 487 | 566 | 1408 | 630 |
| Arrive On Green | 0.04 | 0.10 | 0.10 | 0.14 | 0.48 | 0.48 | 0.09 | 0.31 | 0.31 | 0.33 | 0.80 | 0.80 |
| Sat Flow, veh/h | 1774 | 3170 | 393 | 1774 | 2487 | 974 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 199 | 459 | 466 | 85 | 280 | 273 | 199 | 896 | 191 | 152 | 590 | 106 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1793 | 1774 | 1770 | 1691 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 15.1 | 34.6 | 34.6 | 6.1 | 16.4 | 16.8 | 7.5 | 31.7 | 12.8 | 4.4 | 6.9 | 2.1 |
| Cycle Q Clear(g_c), s | 15.1 | 34.6 | 34.6 | 6.1 | 16.4 | 16.8 | 7.5 | 31.7 | 12.8 | 4.4 | 6.9 | 2.1 |
| Prop In Lane | 1.00 | | 0.22 | 1.00 | | 0.58 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 225 | 520 | 527 | 126 | 422 | 403 | 306 | 1088 | 487 | 566 | 1408 | 630 |
| V/C Ratio(X) | 0.88 | 0.88 | 0.88 | 0.67 | 0.67 | 0.68 | 0.65 | 0.82 | 0.39 | 0.27 | 0.42 | 0.17 |
| Avail Cap(c_a), veh/h | 256 | 634 | 643 | 172 | 551 | 526 | 337 | 1088 | 487 | 566 | 1408 | 630 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 0.82 | 0.82 | 0.82 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 63.7 | 58.6 | 58.7 | 56.4 | 31.2 | 31.3 | 59.5 | 43.4 | 36.8 | 39.3 | 9.0 | 8.5 |
| Incr Delay (d2), s/veh | 21.1 | 9.0 | 8.9 | 2.1 | 0.7 | 0.9 | 2.4 | 6.3 | 2.1 | 0.1 | 0.9 | 0.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.7 | 18.3 | 18.5 | 3.1 | 7.9 | 7.9 | 3.7 | 16.4 | 5.9 | 2.1 | 3.4 | 1.0 |
| LnGrp Delay(d),s/veh | 84.8 | 67.7 | 67.6 | 58.5 | 31.9 | 32.3 | 61.8 | 49.7 | 38.9 | 39.4 | 9.9 | 9.1 |
| LnGrp LOS | F | E | E | E | C | C | E | D | D | D | A | A |
| Approach Vol, veh/h | | 1124 | | | 638 | | | 1286 | | | 848 | |
| Approach Delay, s/veh | | 70.7 | | | 35.6 | | | 50.0 | | | 15.1 | |
| Approach LOS | | E | | | D | | | D | | | B | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 38.7 | 48.0 | 14.1 | 44.2 | 16.5 | 60.2 | 21.6 | 36.7 | | | | |
| Change Period (Y+Rc), s | 6.5 | * 6.5 | 4.5 | 4.5 | 4.5 | 6.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 12.0 | * 42 | 13.1 | 48.4 | 13.2 | 40.3 | 19.5 | 42.0 | | | | |
| Max Q Clear Time (g_c+1), s | 10.4 | 33.7 | 8.1 | 36.6 | 9.5 | 8.9 | 17.1 | 18.8 | | | | |
| Green Ext Time (p_c), s | 0.3 | 2.9 | 1.1 | 3.1 | 0.1 | 3.1 | 0.1 | 2.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 46.0 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|-----|------|-----|-------|-------|-------|-------|-------|------|------|-------|-------|
| Lane Configurations | | | | ↖ ↗ ↘ | ↖ ↗ ↘ | ↖ ↗ ↘ | ↖ ↗ ↘ | ↖ ↗ ↘ | | | ↖ ↗ ↘ | ↖ ↗ ↘ |
| Traffic Volume (veh/h) | 0 | 0 | 0 | 205 | 925 | 250 | 165 | 984 | 0 | 0 | 621 | 112 |
| Future Volume (veh/h) | 0 | 0 | 0 | 205 | 925 | 250 | 165 | 984 | 0 | 0 | 621 | 112 |
| Number | | | | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | | | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | | | | 1863 | 1863 | 1863 | 1863 | 1863 | 0 | 0 | 1863 | 1863 |
| Adj Flow Rate, veh/h | | | | 209 | 944 | 255 | 168 | 1004 | 0 | 0 | 634 | 114 |
| Adj No. of Lanes | | | | 1 | 3 | 1 | 2 | 2 | 0 | 0 | 2 | 1 |
| Peak Hour Factor | | | | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Percent Heavy Veh, % | | | | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 2 | 2 |
| Cap, veh/h | | | | 409 | 1290 | 365 | 943 | 2385 | 0 | 0 | 1220 | 546 |
| Arrive On Green | | | | 0.23 | 0.23 | 0.23 | 0.27 | 0.67 | 0.00 | 0.00 | 0.34 | 0.34 |
| Sat Flow, veh/h | | | | 1774 | 5588 | 1583 | 3442 | 3632 | 0 | 0 | 3632 | 1583 |
| Grp Volume(v), veh/h | | | | 209 | 944 | 255 | 168 | 1004 | 0 | 0 | 634 | 114 |
| Grp Sat Flow(s),veh/h/ln | | | | 1774 | 1863 | 1583 | 1721 | 1770 | 0 | 0 | 1770 | 1583 |
| Q Serve(g_s), s | | | | 12.8 | 19.5 | 18.5 | 4.7 | 16.1 | 0.0 | 0.0 | 17.9 | 6.4 |
| Cycle Q Clear(g_c), s | | | | 12.8 | 19.5 | 18.5 | 4.7 | 16.1 | 0.0 | 0.0 | 17.9 | 6.4 |
| Prop In Lane | | | | 1.00 | | 1.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | | | | 409 | 1290 | 365 | 943 | 2385 | 0 | 0 | 1220 | 546 |
| V/C Ratio(X) | | | | 0.51 | 0.73 | 0.70 | 0.18 | 0.42 | 0.00 | 0.00 | 0.52 | 0.21 |
| Avail Cap(c_a), veh/h | | | | 695 | 2191 | 621 | 943 | 2385 | 0 | 0 | 1220 | 546 |
| HCM Platoon Ratio | | | | 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 | 0.00 | 0.88 | 0.88 |
| Uniform Delay (d), s/veh | | | | 41.9 | 44.5 | 44.1 | 34.6 | 9.3 | 0.0 | 0.0 | 32.7 | 28.9 |
| Incr Delay (d2), s/veh | | | | 0.7 | 0.6 | 1.8 | 0.1 | 0.5 | 0.0 | 0.0 | 1.4 | 0.8 |
| Initial Q Delay(d3),s/veh | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | | | | 6.4 | 10.1 | 15.8 | 2.2 | 8.0 | 0.0 | 0.0 | 9.0 | 2.9 |
| LnGrp Delay(d),s/veh | | | | 42.6 | 45.1 | 45.9 | 34.7 | 9.8 | 0.0 | 0.0 | 34.1 | 29.7 |
| LnGrp LOS | | | | D | D | D | C | A | | | C | C |
| Approach Vol, veh/h | | | | | 1408 | | | 1172 | | | 748 | |
| Approach Delay, s/veh | | | | | 44.9 | | | 13.4 | | | 33.4 | |
| Approach LOS | | | | | D | | | B | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | 5 | 6 | | | | | | |
| Phs Duration (G+Y+Rc), s | | 91.1 | | 33.9 | 41.1 | 50.0 | | | | | | |
| Change Period (Y+Rc), s | | 6.9 | | 5.0 | 6.9 | * 6.9 | | | | | | |
| Max Green Setting (Gmax), s | | 64.1 | | 49.0 | 15.9 | * 43 | | | | | | |
| Max Q Clear Time (g_c+I1), s | | 18.1 | | 21.5 | 6.7 | 19.9 | | | | | | |
| Green Ext Time (p_c), s | | 7.6 | | 7.3 | 4.3 | 3.8 | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | | 31.2 | | | | | | | |
| HCM 2010 LOS | | | | | C | | | | | | | |
| Notes | | | | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|-------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 126 | 788 | 184 | 119 | 471 | 59 | 219 | 375 | 182 | 89 | 217 | 119 |
| Future Volume (veh/h) | 126 | 788 | 184 | 119 | 471 | 59 | 219 | 375 | 182 | 89 | 217 | 119 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 130 | 812 | 190 | 123 | 486 | 61 | 226 | 387 | 188 | 92 | 224 | 123 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 154 | 1219 | 285 | 147 | 1342 | 168 | 251 | 673 | 322 | 115 | 485 | 256 |
| Arrive On Green | 0.09 | 0.43 | 0.43 | 0.08 | 0.42 | 0.42 | 0.14 | 0.29 | 0.29 | 0.06 | 0.22 | 0.22 |
| Sat Flow, veh/h | 1774 | 2848 | 666 | 1774 | 3167 | 396 | 1774 | 2323 | 1113 | 1774 | 2239 | 1184 |
| Grp Volume(v), veh/h | 130 | 504 | 498 | 123 | 271 | 276 | 226 | 294 | 281 | 92 | 175 | 172 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1745 | 1774 | 1770 | 1793 | 1774 | 1770 | 1666 | 1774 | 1770 | 1654 |
| Q Serve(g_s), s | 9.7 | 30.8 | 30.8 | 9.2 | 14.0 | 14.2 | 16.9 | 19.1 | 19.5 | 6.9 | 11.6 | 12.3 |
| Cycle Q Clear(g_c), s | 9.7 | 30.8 | 30.8 | 9.2 | 14.0 | 14.2 | 16.9 | 19.1 | 19.5 | 6.9 | 11.6 | 12.3 |
| Prop In Lane | 1.00 | | 0.38 | 1.00 | | 0.22 | 1.00 | | 0.67 | 1.00 | | 0.72 |
| Lane Grp Cap(c), veh/h | 154 | 757 | 747 | 147 | 750 | 760 | 251 | 513 | 483 | 115 | 383 | 358 |
| V/C Ratio(X) | 0.84 | 0.67 | 0.67 | 0.84 | 0.36 | 0.36 | 0.90 | 0.57 | 0.58 | 0.80 | 0.46 | 0.48 |
| Avail Cap(c_a), veh/h | 235 | 757 | 747 | 222 | 750 | 760 | 353 | 513 | 483 | 183 | 383 | 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 | 0.50 | 0.50 | 0.50 | 0.76 | 0.76 | 0.76 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 60.7 | 30.9 | 30.9 | 61.0 | 26.5 | 26.5 | 57.0 | 40.8 | 41.0 | 62.3 | 46.0 | 46.2 |
| Incr Delay (d2), s/veh | 9.8 | 4.6 | 4.7 | 5.3 | 0.7 | 0.7 | 12.9 | 3.5 | 3.9 | 5.2 | 3.9 | 4.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 5.2 | 16.0 | 15.8 | 4.8 | 7.0 | 7.1 | 9.2 | 9.8 | 9.5 | 3.6 | 6.1 | 6.0 |
| LnGrp Delay(d),s/veh | 70.5 | 35.5 | 35.6 | 66.3 | 27.1 | 27.2 | 69.9 | 44.4 | 44.9 | 67.4 | 49.9 | 50.8 |
| LnGrp LOS | E | D | D | E | C | C | E | D | D | E | D | D |
| Approach Vol, veh/h | | 1132 | | | 670 | | | 801 | | | 439 | |
| Approach Delay, s/veh | | 39.5 | | | 34.3 | | | 51.8 | | | 53.9 | |
| Approach LOS | | D | | | 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 | 15.3 | 62.7 | 23.2 | 33.8 | 15.8 | 62.1 | 13.3 | 43.7 | | | | |
| Change Period (Y+Rc), s | 4.1 | 4.9 | 4.1 | 4.6 | 4.1 | 4.9 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 10.9 | 47.4 | 26.9 | 26.1 | 17.9 | 46.4 | 13.9 | * 39 | | | | |
| Max Q Clear Time (g_c+M), s | 10.9 | 32.8 | 18.9 | 14.3 | 11.7 | 16.2 | 8.9 | 21.5 | | | | |
| Green Ext Time (p_c), s | 0.1 | 5.8 | 0.2 | 1.1 | 0.1 | 7.3 | 0.1 | 2.1 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 43.7 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|-------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 125 | 784 | 141 | 128 | 406 | 114 | 132 | 407 | 146 | 128 | 270 | 44 |
| Future Volume (veh/h) | 125 | 784 | 141 | 128 | 406 | 114 | 132 | 407 | 146 | 128 | 270 | 44 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 130 | 817 | 147 | 133 | 423 | 119 | 138 | 424 | 152 | 133 | 281 | 46 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 271 | 1097 | 197 | 274 | 1005 | 280 | 164 | 638 | 227 | 157 | 696 | 113 |
| Arrive On Green | 0.31 | 0.73 | 0.73 | 0.15 | 0.37 | 0.37 | 0.09 | 0.25 | 0.25 | 0.09 | 0.23 | 0.23 |
| Sat Flow, veh/h | 1774 | 2998 | 539 | 1774 | 2735 | 762 | 1774 | 2562 | 909 | 1774 | 3052 | 494 |
| Grp Volume(v), veh/h | 130 | 482 | 482 | 133 | 272 | 270 | 138 | 292 | 284 | 133 | 162 | 165 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1768 | 1774 | 1770 | 1728 | 1774 | 1770 | 1702 | 1774 | 1770 | 1776 |
| Q Serve(g_s), s | 8.0 | 21.7 | 21.7 | 9.3 | 15.5 | 15.8 | 10.3 | 20.0 | 20.3 | 10.0 | 10.5 | 10.7 |
| Cycle Q Clear(g_c), s | 8.0 | 21.7 | 21.7 | 9.3 | 15.5 | 15.8 | 10.3 | 20.0 | 20.3 | 10.0 | 10.5 | 10.7 |
| Prop In Lane | 1.00 | | 0.31 | 1.00 | | 0.44 | 1.00 | | 0.53 | 1.00 | | 0.28 |
| Lane Grp Cap(c), veh/h | 271 | 648 | 647 | 274 | 650 | 635 | 164 | 441 | 424 | 157 | 404 | 405 |
| V/C Ratio(X) | 0.48 | 0.74 | 0.74 | 0.49 | 0.42 | 0.42 | 0.84 | 0.66 | 0.67 | 0.85 | 0.40 | 0.41 |
| Avail Cap(c_a), veh/h | 271 | 648 | 647 | 274 | 650 | 635 | 222 | 441 | 424 | 217 | 404 | 405 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.61 | 0.61 | 0.61 | 0.53 | 0.53 | 0.53 | 0.96 | 0.96 | 0.96 | 0.87 | 0.87 | 0.87 |
| Uniform Delay (d), s/veh | 42.5 | 14.4 | 14.4 | 52.2 | 31.9 | 32.0 | 60.3 | 45.6 | 45.7 | 60.6 | 44.3 | 44.3 |
| Incr Delay (d2), s/veh | 0.3 | 4.7 | 4.8 | 0.3 | 1.1 | 1.1 | 14.2 | 7.3 | 7.9 | 13.3 | 2.5 | 2.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.0 | 11.2 | 11.2 | 4.6 | 7.8 | 7.8 | 5.7 | 10.7 | 10.5 | 5.5 | 5.4 | 5.5 |
| LnGrp Delay(d),s/veh | 42.8 | 19.1 | 19.1 | 52.5 | 33.0 | 33.1 | 74.5 | 52.9 | 53.6 | 73.9 | 46.8 | 47.0 |
| LnGrp LOS | D | B | B | D | C | C | E | D | D | E | D | D |
| Approach Vol, veh/h | | 1094 | | | 675 | | | 714 | | | 460 | |
| Approach Delay, s/veh | | 21.9 | | | 36.9 | | | 57.3 | | | 54.7 | |
| Approach LOS | | C | | | D | | | E | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 36.1 | 40.0 | 24.9 | 54.0 | 18.9 | 37.2 | 24.7 | 54.2 | | | | |
| Change Period (Y+Rc), s | 4.1 | 6.4 | 4.1 | 4.6 | 6.4 | * 6.4 | 4.1 | 4.6 | | | | |
| Max Green Setting (Gmax), s | 10.5 | 31.2 | 18.7 | 49.4 | 16.9 | * 31 | 18.5 | 49.6 | | | | |
| Max Q Clear Time (g_c+M2), s | 11.0 | 22.3 | 11.3 | 23.7 | 12.3 | 12.7 | 10.0 | 17.8 | | | | |
| Green Ext Time (p_c), s | 0.1 | 1.7 | 0.2 | 4.1 | 0.2 | 1.1 | 0.2 | 2.1 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 39.1 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↔ | | | ↔ | ↔ | | ↔ | | ↔ | ↔ | |
| Traffic Volume (veh/h) | 8 | 1 | 11 | 70 | 0 | 95 | 1 | 600 | 85 | 77 | 462 | 15 |
| Future Volume (veh/h) | 8 | 1 | 11 | 70 | 0 | 95 | 1 | 600 | 85 | 77 | 462 | 15 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1900 | 1863 | 1900 | 1900 | 1863 | 1863 | 1900 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 8 | 1 | 11 | 72 | 0 | 98 | 1 | 619 | 88 | 79 | 476 | 15 |
| Adj No. of Lanes | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 70 | 22 | 53 | 189 | 0 | 132 | 35 | 2214 | 314 | 101 | 2878 | 91 |
| Arrive On Green | 0.08 | 0.08 | 0.08 | 0.08 | 0.00 | 0.08 | 0.73 | 0.73 | 0.73 | 0.06 | 0.82 | 0.82 |
| Sat Flow, veh/h | 259 | 267 | 643 | 1450 | 0 | 1583 | 0 | 3049 | 432 | 1774 | 3503 | 110 |
| Grp Volume(v), veh/h | 20 | 0 | 0 | 72 | 0 | 98 | 378 | 0 | 330 | 79 | 240 | 251 |
| Grp Sat Flow(s),veh/h/ln | 169 | 0 | 0 | 1450 | 0 | 1583 | 1862 | 0 | 1619 | 1774 | 1770 | 1843 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.4 | 0.0 | 0.0 | 7.4 | 4.6 | 2.9 | 3.0 |
| Cycle Q Clear(g_c), s | 4.9 | 0.0 | 0.0 | 4.9 | 0.0 | 6.4 | 7.3 | 0.0 | 7.4 | 4.6 | 2.9 | 3.0 |
| Prop In Lane | 0.40 | | 0.55 | 1.00 | | 1.00 | 0.00 | | 0.27 | 1.00 | | 0.06 |
| Lane Grp Cap(c), veh/h | 145 | 0 | 0 | 189 | 0 | 132 | 1387 | 0 | 1176 | 101 | 1454 | 1514 |
| V/C Ratio(X) | 0.14 | 0.00 | 0.00 | 0.38 | 0.00 | 0.74 | 0.27 | 0.00 | 0.28 | 0.78 | 0.17 | 0.17 |
| Avail Cap(c_a), veh/h | 393 | 0 | 0 | 419 | 0 | 392 | 1387 | 0 | 1176 | 287 | 1454 | 1514 |
| 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 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.89 | 0.89 | 0.89 |
| Uniform Delay (d), s/veh | 44.7 | 0.0 | 0.0 | 46.4 | 0.0 | 47.0 | 4.9 | 0.0 | 4.9 | 48.8 | 1.9 | 1.9 |
| Incr Delay (d2), s/veh | 0.2 | 0.0 | 0.0 | 0.5 | 0.0 | 3.1 | 0.5 | 0.0 | 0.6 | 4.3 | 0.2 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.5 | 0.0 | 0.0 | 2.0 | 0.0 | 2.9 | 3.9 | 0.0 | 3.4 | 2.4 | 1.5 | 1.6 |
| LnGrp Delay(d),s/veh | 44.8 | 0.0 | 0.0 | 46.8 | 0.0 | 50.1 | 5.4 | 0.0 | 5.5 | 53.1 | 2.2 | 2.1 |
| LnGrp LOS | D | | | D | | D | A | | A | D | A | A |
| Approach Vol, veh/h | | 20 | | | 170 | | | 708 | | | 570 | |
| Approach Delay, s/veh | | 44.8 | | | 48.7 | | | 5.5 | | | 9.2 | |
| Approach LOS | | D | | | D | | | A | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 10.0 | 81.3 | | 13.7 | | 91.3 | | 13.7 | | | | |
| Change Period (Y+Rc), s | 4.0 | 5.0 | | * 5 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 48.0 | | | * 27 | | 69.0 | | 26.0 | | | | |
| Max Q Clear Time (g_c+1), s | 9.4 | | | 6.9 | | 5.0 | | 8.4 | | | | |
| Green Ext Time (p_c), s | 0.1 | 8.8 | | 0.4 | | 9.3 | | 0.4 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 12.5 | | | | | | | | |
| HCM 2010 LOS | | | | B | | | | | | | | |
| Notes | | | | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 206 | 675 | 177 | 100 | 409 | 192 | 142 | 710 | 122 | 233 | 676 | 94 |
| Future Volume (veh/h) | 206 | 675 | 177 | 100 | 409 | 192 | 142 | 710 | 122 | 233 | 676 | 94 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 217 | 711 | 186 | 105 | 431 | 202 | 149 | 747 | 128 | 245 | 712 | 99 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 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 | 255 | 776 | 203 | 132 | 493 | 229 | 236 | 874 | 150 | 279 | 978 | 136 |
| Arrive On Green | 0.14 | 0.28 | 0.28 | 0.07 | 0.21 | 0.21 | 0.04 | 0.10 | 0.10 | 0.16 | 0.31 | 0.31 |
| Sat Flow, veh/h | 1774 | 2778 | 726 | 1774 | 2349 | 1091 | 1774 | 3023 | 518 | 1774 | 3122 | 434 |
| Grp Volume(v), veh/h | 217 | 453 | 444 | 105 | 324 | 309 | 149 | 437 | 438 | 245 | 403 | 408 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1735 | 1774 | 1770 | 1670 | 1774 | 1770 | 1771 | 1774 | 1770 | 1786 |
| Q Serve(g_s), s | 10.7 | 22.3 | 22.3 | 5.2 | 15.9 | 16.2 | 7.4 | 21.9 | 21.9 | 12.2 | 18.2 | 18.3 |
| Cycle Q Clear(g_c), s | 10.7 | 22.3 | 22.3 | 5.2 | 15.9 | 16.2 | 7.4 | 21.9 | 21.9 | 12.2 | 18.2 | 18.3 |
| Prop In Lane | 1.00 | | 0.42 | 1.00 | | 0.65 | 1.00 | | 0.29 | 1.00 | | 0.24 |
| Lane Grp Cap(c), veh/h | 255 | 494 | 484 | 132 | 371 | 351 | 236 | 511 | 512 | 279 | 554 | 560 |
| V/C Ratio(X) | 0.85 | 0.92 | 0.92 | 0.80 | 0.87 | 0.88 | 0.63 | 0.85 | 0.86 | 0.88 | 0.73 | 0.73 |
| Avail Cap(c_a), veh/h | 255 | 507 | 497 | 132 | 393 | 371 | 236 | 511 | 512 | 286 | 554 | 560 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.59 | 0.59 | 0.59 | 1.00 | 1.00 | 1.00 | 0.70 | 0.70 | 0.70 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 37.6 | 31.4 | 31.4 | 41.0 | 34.4 | 34.5 | 40.9 | 38.8 | 38.9 | 37.1 | 27.5 | 27.5 |
| Incr Delay (d2), s/veh | 14.9 | 14.3 | 14.5 | 27.6 | 18.1 | 20.5 | 3.8 | 12.2 | 12.2 | 24.9 | 8.1 | 8.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.3 | 12.8 | 12.6 | 3.6 | 9.6 | 9.5 | 3.9 | 12.5 | 12.5 | 7.8 | 10.1 | 10.2 |
| LnGrp Delay(d),s/veh | 52.4 | 45.7 | 45.9 | 68.6 | 52.5 | 55.0 | 44.6 | 51.0 | 51.1 | 62.0 | 35.6 | 35.6 |
| LnGrp LOS | D | D | D | E | D | E | D | D | D | E | D | D |
| Approach Vol, veh/h | | 1114 | | | 738 | | | 1024 | | | 1056 | |
| Approach Delay, s/veh | | 47.1 | | | 55.8 | | | 50.1 | | | 41.7 | |
| Approach LOS | | D | | | E | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 18.6 | 30.5 | 11.2 | 29.6 | 16.5 | 32.7 | 17.5 | 23.4 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 14.5 | 25.0 | 6.7 | 25.8 | 11.3 | 28.2 | 12.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+M), s | 14.2 | 23.9 | 7.2 | 24.3 | 9.4 | 20.3 | 12.7 | 18.2 | | | | |
| Green Ext Time (p_c), s | 0.0 | 0.7 | 0.0 | 0.8 | 1.1 | 3.0 | 0.0 | 0.7 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 48.1 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↗ | |
| Traffic Volume (veh/h) | 207 | 712 | 75 | 64 | 380 | 212 | 148 | 489 | 48 | 251 | 449 | 114 |
| Future Volume (veh/h) | 207 | 712 | 75 | 64 | 380 | 212 | 148 | 489 | 48 | 251 | 449 | 114 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 216 | 742 | 78 | 67 | 396 | 221 | 154 | 509 | 50 | 261 | 468 | 119 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 268 | 1003 | 105 | 86 | 457 | 252 | 188 | 760 | 74 | 369 | 939 | 237 |
| Arrive On Green | 0.15 | 0.31 | 0.31 | 0.05 | 0.21 | 0.21 | 0.11 | 0.23 | 0.23 | 0.42 | 0.67 | 0.67 |
| Sat Flow, veh/h | 1774 | 3233 | 340 | 1774 | 2203 | 1215 | 1774 | 3257 | 319 | 1774 | 2800 | 707 |
| Grp Volume(v), veh/h | 216 | 406 | 414 | 67 | 317 | 300 | 154 | 276 | 283 | 261 | 295 | 292 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1803 | 1774 | 1770 | 1648 | 1774 | 1770 | 1806 | 1774 | 1770 | 1738 |
| Q Serve(g_s), s | 10.6 | 18.5 | 18.5 | 3.4 | 15.6 | 15.9 | 7.6 | 12.7 | 12.8 | 11.0 | 7.4 | 7.5 |
| Cycle Q Clear(g_c), s | 10.6 | 18.5 | 18.5 | 3.4 | 15.6 | 15.9 | 7.6 | 12.7 | 12.8 | 11.0 | 7.4 | 7.5 |
| Prop In Lane | 1.00 | | 0.19 | 1.00 | | 0.74 | 1.00 | | 0.18 | 1.00 | | 0.41 |
| Lane Grp Cap(c), veh/h | 268 | 549 | 559 | 86 | 367 | 342 | 188 | 413 | 422 | 369 | 593 | 583 |
| V/C Ratio(X) | 0.80 | 0.74 | 0.74 | 0.78 | 0.86 | 0.88 | 0.82 | 0.67 | 0.67 | 0.71 | 0.50 | 0.50 |
| Avail Cap(c_a), veh/h | 286 | 554 | 565 | 124 | 393 | 366 | 246 | 413 | 422 | 369 | 593 | 583 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 0.57 | 0.57 | 0.57 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.60 | 0.60 | 0.60 |
| Uniform Delay (d), s/veh | 36.9 | 27.8 | 27.8 | 42.3 | 34.4 | 34.5 | 39.4 | 31.3 | 31.4 | 24.0 | 11.1 | 11.1 |
| Incr Delay (d2), s/veh | 8.9 | 3.0 | 3.0 | 17.4 | 16.9 | 19.8 | 15.1 | 8.3 | 8.3 | 3.8 | 1.8 | 1.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 15.8 | 9.5 | 9.7 | 2.1 | 9.3 | 9.1 | 4.6 | 7.2 | 7.3 | 5.6 | 3.7 | 3.7 |
| LnGrp Delay(d),s/veh | 45.8 | 30.8 | 30.8 | 59.8 | 51.4 | 54.3 | 54.4 | 39.6 | 39.6 | 27.8 | 12.9 | 13.0 |
| LnGrp LOS | D | C | C | E | D | D | D | D | D | C | B | B |
| Approach Vol, veh/h | | 1036 | | | 684 | | | 713 | | | 848 | |
| Approach Delay, s/veh | | 33.9 | | | 53.5 | | | 42.8 | | | 17.5 | |
| Approach LOS | | C | | | D | | | D | | | B | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 33.2 | 25.5 | 8.9 | 32.4 | 14.0 | 34.7 | 18.1 | 23.2 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 10.5 | 21.0 | 6.3 | 28.2 | 12.5 | 25.0 | 14.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+M), s | 14.8 | 5.4 | 20.5 | 9.6 | 9.5 | 12.6 | 17.9 | | | | | |
| Green Ext Time (p_c), s | 0.9 | 1.7 | 0.0 | 3.4 | 0.1 | 3.9 | 1.1 | 0.8 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 35.7 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |

Intersection

Int Delay, s/veh 0.9

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | | ↗ | ↕↕ | ↗ | | ↕↕ |
| Traffic Vol, veh/h | 0 | 120 | 1037 | 103 | 0 | 803 |
| Future Vol, veh/h | 0 | 120 | 1037 | 103 | 0 | 803 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | 75 | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 130 | 1127 | 112 | 0 | 873 |

| Major/Minor | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|---------|
| Conflicting Flow All | - | 564 | 0 0 |
| Stage 1 | - | - | - - |
| Stage 2 | - | - | - - |
| Critical Hdwy | - | 6.94 | - - |
| Critical Hdwy Stg 1 | - | - | - - |
| Critical Hdwy Stg 2 | - | - | - - |
| Follow-up Hdwy | - | 3.32 | - - |
| Pot Cap-1 Maneuver | 0 | 469 | - - 0 - |
| Stage 1 | 0 | - | - - 0 - |
| Stage 2 | 0 | - | - - 0 - |
| Platoon blocked, % | | | - - - |
| Mov Cap-1 Maneuver | - | 469 | - - - - |
| Mov Cap-2 Maneuver | - | - | - - - - |
| Stage 1 | - | - | - - - - |
| Stage 2 | - | - | - - - - |

| Approach | WB | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 15.6 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT |
|-----------------------|-----|----------|-----|
| Capacity (veh/h) | - | - 469 | - |
| HCM Lane V/C Ratio | - | - 0.278 | - |
| HCM Control Delay (s) | - | - 15.6 | - |
| HCM Lane LOS | - | - C | - |
| HCM 95th %tile Q(veh) | - | - 1.1 | - |

Intersection

Int Delay, s/veh 0.9

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | | | ↑↑ | | ↑ |
| Traffic Vol, veh/h | 1109 | 116 | 0 | 826 | 0 | 114 |
| Future Vol, veh/h | 1109 | 116 | 0 | 826 | 0 | 114 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1205 | 126 | 0 | 898 | 0 | 124 |

| Major/Minor | Major1 | Major2 | Minor1 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 666 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | - | - | 6.94 |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | - | - | 3.32 |
| Pot Cap-1 Maneuver | - | 0 | 402 |
| Stage 1 | - | 0 | - |
| Stage 2 | - | 0 | - |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | - | - | 402 |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 17.9 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|-----------------------|-------|-----|-----|-----|
| Capacity (veh/h) | 402 | - | - | - |
| HCM Lane V/C Ratio | 0.308 | - | - | - |
| HCM Control Delay (s) | 17.9 | - | - | - |
| HCM Lane LOS | C | - | - | - |
| HCM 95th %tile Q(veh) | 1.3 | - | - | - |

APPENDIX G

Existing Plus Project Plus Improvements HCM Analysis Sheets

HCM 2010 Signalized Intersection Summary
2: Quince St & Mission Ave

05/04/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 23 | 419 | 75 | 205 | 1152 | 69 | 140 | 23 | 109 | 52 | 26 | 29 |
| Future Volume (veh/h) | 23 | 419 | 75 | 205 | 1152 | 69 | 140 | 23 | 109 | 52 | 26 | 29 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 23 | 428 | 77 | 209 | 1176 | 70 | 143 | 23 | 111 | 53 | 27 | 30 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 466 | 825 | 147 | 697 | 1375 | 82 | 172 | 218 | 185 | 98 | 54 | 60 |
| Arrive On Green | 0.26 | 0.28 | 0.28 | 0.79 | 0.81 | 0.81 | 0.10 | 0.12 | 0.12 | 0.06 | 0.07 | 0.07 |
| Sat Flow, veh/h | 1774 | 3001 | 536 | 1774 | 3395 | 202 | 1774 | 1863 | 1583 | 1774 | 807 | 897 |
| Grp Volume(v), veh/h | 23 | 251 | 254 | 209 | 613 | 633 | 143 | 23 | 111 | 53 | 0 | 57 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1768 | 1774 | 1770 | 1827 | 1774 | 1863 | 1583 | 1774 | 0 | 1704 |
| Q Serve(g_s), s | 1.2 | 14.4 | 14.6 | 4.0 | 25.7 | 25.8 | 9.5 | 1.3 | 3.7 | 3.5 | 0.0 | 3.9 |
| Cycle Q Clear(g_c), s | 1.2 | 14.4 | 14.6 | 4.0 | 25.7 | 25.8 | 9.5 | 1.3 | 3.7 | 3.5 | 0.0 | 3.9 |
| Prop In Lane | 1.00 | | 0.30 | 1.00 | | 0.11 | 1.00 | | 1.00 | 1.00 | | 0.53 |
| Lane Grp Cap(c), veh/h | 466 | 487 | 486 | 697 | 717 | 740 | 172 | 218 | 185 | 98 | 0 | 114 |
| V/C Ratio(X) | 0.05 | 0.52 | 0.52 | 0.30 | 0.85 | 0.86 | 0.83 | 0.11 | 0.60 | 0.54 | 0.00 | 0.50 |
| Avail Cap(c_a), veh/h | 466 | 487 | 486 | 697 | 717 | 740 | 205 | 545 | 463 | 135 | 0 | 430 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.95 | 0.95 | 0.95 | 0.59 | 0.59 | 0.59 | 0.94 | 0.94 | 0.94 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.0 | 36.8 | 36.8 | 8.2 | 9.2 | 9.2 | 53.2 | 47.4 | 10.8 | 55.2 | 0.0 | 54.1 |
| Incr Delay (d2), s/veh | 0.0 | 3.7 | 3.8 | 0.2 | 7.8 | 7.6 | 20.6 | 0.2 | 3.5 | 5.5 | 0.0 | 4.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.6 | 7.5 | 7.6 | 1.9 | 13.1 | 13.5 | 5.6 | 0.7 | 1.8 | 1.9 | 0.0 | 1.9 |
| LnGrp Delay(d),s/veh | 33.1 | 40.5 | 40.6 | 8.4 | 17.0 | 16.8 | 73.8 | 47.6 | 14.3 | 60.7 | 0.0 | 58.2 |
| LnGrp LOS | C | D | D | A | B | B | E | D | B | E | | E |
| Approach Vol, veh/h | | 528 | | | 1455 | | | 277 | | | | 110 |
| Approach Delay, s/veh | | 40.2 | | | 15.7 | | | 47.8 | | | | 59.4 |
| Approach LOS | | D | | | B | | | D | | | | E |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 51.7 | 38.4 | 16.8 | 13.1 | 36.1 | 54.0 | 10.7 | 19.1 | | | | |
| Change Period (Y+Rc), s | 4.6 | 5.4 | 5.1 | * 5.1 | 4.6 | * 5.4 | 4.1 | 5.1 | | | | |
| Max Green Setting (Gmax), s | 23.6 | 33.0 | 13.9 | * 30 | 8.5 | * 49 | 9.1 | 35.1 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.0 | 16.6 | 11.5 | 5.9 | 3.2 | 27.8 | 5.5 | 5.7 | | | | |
| Green Ext Time (p_c), s | 0.8 | 4.8 | 0.3 | 0.3 | 0.4 | 14.0 | 0.0 | 1.1 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 26.9 | | | | | | | | | |
| HCM 2010 LOS | | | C | | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary
6: Centre City Pkwy & Mission Ave

05/04/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 123 | 371 | 84 | 90 | 675 | 236 | 192 | 563 | 46 | 208 | 852 | 532 |
| Future Volume (veh/h) | 123 | 371 | 84 | 90 | 675 | 236 | 192 | 563 | 46 | 208 | 852 | 532 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 0.97 | 1.00 | | 0.98 | 1.00 | | 0.99 | 1.00 | | 0.99 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 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 | 1667 | 1863 | 1863 | 1667 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 128 | 386 | 88 | 94 | 703 | 246 | 200 | 586 | 48 | 217 | 888 | 554 |
| Adj No. of Lanes | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 3 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 154 | 580 | 253 | 471 | 826 | 361 | 282 | 1640 | 503 | 593 | 1483 | 654 |
| Arrive On Green | 0.09 | 0.16 | 0.16 | 0.31 | 0.47 | 0.47 | 0.03 | 0.11 | 0.11 | 0.17 | 0.42 | 0.42 |
| Sat Flow, veh/h | 1774 | 3539 | 1541 | 3079 | 3539 | 1545 | 3079 | 5085 | 1560 | 3442 | 3539 | 1560 |
| Grp Volume(v), veh/h | 128 | 386 | 88 | 94 | 703 | 246 | 200 | 586 | 48 | 217 | 888 | 554 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1541 | 1540 | 1770 | 1545 | 1540 | 1695 | 1560 | 1721 | 1770 | 1560 |
| Q Serve(g_s), s | 8.5 | 12.3 | 4.8 | 2.7 | 21.1 | 9.7 | 7.7 | 12.8 | 3.3 | 6.7 | 23.3 | 38.4 |
| Cycle Q Clear(g_c), s | 8.5 | 12.3 | 4.8 | 2.7 | 21.1 | 9.7 | 7.7 | 12.8 | 3.3 | 6.7 | 23.3 | 38.4 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 154 | 580 | 253 | 471 | 826 | 361 | 282 | 1640 | 503 | 593 | 1483 | 654 |
| V/C Ratio(X) | 0.83 | 0.67 | 0.35 | 0.20 | 0.85 | 0.68 | 0.71 | 0.36 | 0.10 | 0.37 | 0.60 | 0.85 |
| Avail Cap(c_a), veh/h | 185 | 1150 | 501 | 471 | 1047 | 457 | 295 | 1640 | 503 | 593 | 1483 | 654 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.96 | 0.96 | 0.96 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 53.9 | 47.1 | 28.2 | 36.2 | 30.1 | 12.1 | 56.6 | 42.1 | 37.8 | 43.9 | 27.0 | 31.4 |
| Incr Delay (d2), s/veh | 19.3 | 0.9 | 0.6 | 0.1 | 5.2 | 2.4 | 6.1 | 0.6 | 0.4 | 0.1 | 1.8 | 12.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 5.0 | 6.1 | 2.1 | 1.2 | 10.7 | 4.3 | 3.5 | 6.1 | 1.5 | 3.2 | 11.7 | 18.8 |
| LnGrp Delay(d),s/veh | 73.2 | 48.0 | 28.8 | 36.3 | 35.3 | 14.5 | 62.7 | 42.7 | 38.2 | 44.0 | 28.8 | 44.2 |
| LnGrp LOS | E | D | C | D | D | B | E | D | D | D | C | D |
| Approach Vol, veh/h | | 602 | | | 1043 | | | 834 | | | 1659 | |
| Approach Delay, s/veh | | 50.6 | | | 30.5 | | | 47.2 | | | 36.0 | |
| Approach LOS | | D | | | 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 | 27.1 | 45.1 | 23.2 | 24.6 | 15.5 | 56.7 | 14.9 | 32.9 | | | | |
| Change Period (Y+Rc), s | 6.4 | * 6.4 | 4.9 | * 4.9 | 4.5 | 6.4 | 4.5 | 4.9 | | | | |
| Max Green Setting (Gmax), s | 13.0 | * 39 | 9.0 | * 39 | 11.5 | 40.2 | 12.5 | 35.5 | | | | |
| Max Q Clear Time (g_c+I1), s | 8.7 | 14.8 | 4.7 | 14.3 | 9.7 | 40.4 | 10.5 | 23.1 | | | | |
| Green Ext Time (p_c), s | 2.0 | 3.4 | 2.0 | 2.2 | 0.1 | 0.0 | 0.0 | 3.6 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 39.0 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary
 9: Escondido Blvd & Mission Ave

05/04/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |   | |  |   | |  |   | |  |   | |
| Traffic Volume (veh/h) | 60 | 311 | 162 | 88 | 608 | 31 | 154 | 151 | 75 | 96 | 341 | 186 |
| Future Volume (veh/h) | 60 | 311 | 162 | 88 | 608 | 31 | 154 | 151 | 75 | 96 | 341 | 186 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 67 | 349 | 182 | 99 | 683 | 35 | 173 | 170 | 84 | 108 | 383 | 209 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 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 | 254 | 644 | 330 | 313 | 1088 | 56 | 201 | 727 | 344 | 135 | 619 | 333 |
| Arrive On Green | 0.29 | 0.57 | 0.57 | 0.18 | 0.32 | 0.32 | 0.11 | 0.31 | 0.31 | 0.08 | 0.28 | 0.28 |
| Sat Flow, veh/h | 1774 | 2266 | 1161 | 1774 | 3426 | 175 | 1774 | 2334 | 1103 | 1774 | 2224 | 1197 |
| Grp Volume(v), veh/h | 67 | 271 | 260 | 99 | 353 | 365 | 173 | 127 | 127 | 108 | 304 | 288 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1658 | 1774 | 1770 | 1832 | 1774 | 1770 | 1668 | 1774 | 1770 | 1652 |
| Q Serve(g_s), s | 3.5 | 11.4 | 11.8 | 5.8 | 20.4 | 20.4 | 11.5 | 6.4 | 6.8 | 7.2 | 17.9 | 18.3 |
| Cycle Q Clear(g_c), s | 3.5 | 11.4 | 11.8 | 5.8 | 20.4 | 20.4 | 11.5 | 6.4 | 6.8 | 7.2 | 17.9 | 18.3 |
| Prop In Lane | 1.00 | | 0.70 | 1.00 | | 0.10 | 1.00 | | 0.66 | 1.00 | | 0.72 |
| Lane Grp Cap(c), veh/h | 254 | 503 | 471 | 313 | 562 | 582 | 201 | 552 | 520 | 135 | 493 | 460 |
| V/C Ratio(X) | 0.26 | 0.54 | 0.55 | 0.32 | 0.63 | 0.63 | 0.86 | 0.23 | 0.24 | 0.80 | 0.62 | 0.63 |
| Avail Cap(c_a), veh/h | 254 | 503 | 471 | 313 | 562 | 582 | 339 | 552 | 520 | 235 | 493 | 460 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.51 | 0.51 | 0.51 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 37.9 | 21.0 | 21.1 | 43.1 | 34.9 | 34.9 | 52.3 | 30.6 | 30.8 | 54.5 | 37.7 | 37.8 |
| Incr Delay (d2), s/veh | 0.2 | 4.1 | 4.6 | 0.1 | 2.7 | 2.6 | 4.9 | 0.9 | 1.1 | 4.1 | 5.7 | 6.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.7 | 6.0 | 5.9 | 2.9 | 10.4 | 10.8 | 5.9 | 3.2 | 3.3 | 3.7 | 9.5 | 9.1 |
| LnGrp Delay(d),s/veh | 38.1 | 25.1 | 25.7 | 43.2 | 37.6 | 37.5 | 57.1 | 31.6 | 31.8 | 58.7 | 43.4 | 44.2 |
| LnGrp LOS | D | C | C | D | D | D | E | C | C | E | D | D |
| Approach Vol, veh/h | | 598 | | | 817 | | | 427 | | | 700 | |
| Approach Delay, s/veh | | 26.8 | | | 38.2 | | | 42.0 | | | 46.1 | |
| Approach LOS | | C | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 25.3 | 39.0 | 17.7 | 38.0 | 21.3 | 43.0 | 13.7 | 42.0 | | | | |
| Change Period (Y+Rc), s | 4.1 | 4.9 | 4.1 | 4.6 | 4.1 | 4.9 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 14.9 | 34.1 | 22.9 | 30.4 | 10.9 | 38.1 | 15.9 | * 37 | | | | |
| Max Q Clear Time (g_c+I1), s | 7.8 | 13.8 | 13.5 | 20.3 | 5.5 | 22.4 | 9.2 | 8.8 | | | | |
| Green Ext Time (p_c), s | 0.1 | 2.0 | 0.2 | 1.9 | 0.1 | 2.5 | 0.2 | 0.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 38.3 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary
 7: Centre City Pkwy & Washington Ave

05/04/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 86 | 290 | 77 | 64 | 588 | 107 | 167 | 639 | 54 | 117 | 843 | 164 |
| Future Volume (veh/h) | 86 | 290 | 77 | 64 | 588 | 107 | 167 | 639 | 54 | 117 | 843 | 164 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 92 | 312 | 83 | 69 | 632 | 115 | 180 | 687 | 58 | 126 | 906 | 176 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 127 | 394 | 103 | 313 | 738 | 134 | 343 | 1047 | 468 | 697 | 1470 | 658 |
| Arrive On Green | 0.02 | 0.05 | 0.05 | 0.06 | 0.08 | 0.08 | 0.03 | 0.10 | 0.10 | 0.27 | 0.55 | 0.55 |
| Sat Flow, veh/h | 1774 | 2777 | 727 | 1774 | 2993 | 544 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 92 | 197 | 198 | 69 | 373 | 374 | 180 | 687 | 58 | 126 | 906 | 176 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1734 | 1774 | 1770 | 1767 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 6.2 | 13.2 | 13.6 | 4.5 | 25.0 | 25.1 | 6.2 | 22.5 | 4.0 | 3.4 | 20.8 | 7.0 |
| Cycle Q Clear(g_c), s | 6.2 | 13.2 | 13.6 | 4.5 | 25.0 | 25.1 | 6.2 | 22.5 | 4.0 | 3.4 | 20.8 | 7.0 |
| Prop In Lane | 1.00 | | 0.42 | 1.00 | | 0.31 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 127 | 251 | 246 | 313 | 437 | 436 | 343 | 1047 | 468 | 697 | 1470 | 658 |
| V/C Ratio(X) | 0.73 | 0.79 | 0.81 | 0.22 | 0.86 | 0.86 | 0.52 | 0.66 | 0.12 | 0.18 | 0.62 | 0.27 |
| Avail Cap(c_a), veh/h | 140 | 612 | 600 | 313 | 627 | 626 | 359 | 1047 | 468 | 697 | 1470 | 658 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 1.33 | 1.33 | 1.33 |
| Upstream Filter(I) | 0.98 | 0.98 | 0.98 | 0.74 | 0.74 | 0.74 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 57.4 | 55.4 | 55.6 | 48.6 | 53.0 | 53.0 | 55.2 | 48.3 | 39.9 | 36.2 | 20.4 | 17.3 |
| Incr Delay (d2), s/veh | 12.3 | 2.0 | 2.3 | 0.1 | 4.3 | 4.5 | 0.5 | 3.0 | 0.5 | 0.0 | 1.9 | 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(50%),veh/ln | 3.5 | 6.6 | 6.7 | 2.2 | 12.8 | 12.8 | 3.0 | 11.5 | 1.8 | 1.6 | 10.5 | 3.2 |
| LnGrp Delay(d),s/veh | 69.7 | 57.4 | 57.9 | 48.7 | 57.3 | 57.5 | 55.7 | 51.3 | 40.4 | 36.2 | 22.3 | 18.3 |
| LnGrp LOS | E | E | E | D | E | E | E | D | D | D | C | B |
| Approach Vol, veh/h | | 487 | | | 816 | | | 925 | | | 1208 | |
| Approach Delay, s/veh | | 59.9 | | | 56.7 | | | 51.5 | | | 23.2 | |
| Approach LOS | | E | | | E | | | D | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 30.8 | 42.0 | 25.7 | 21.5 | 16.5 | 56.3 | 13.1 | 34.1 | | | | |
| Change Period (Y+Rc), s | 6.5 | * 6.5 | 4.5 | 4.5 | 4.5 | 6.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 12.5 | * 36 | 10.5 | 41.5 | 12.5 | 35.5 | 9.5 | 42.5 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.4 | 24.5 | 6.5 | 15.6 | 8.2 | 22.8 | 8.2 | 27.1 | | | | |
| Green Ext Time (p_c), s | 1.3 | 2.5 | 1.3 | 1.4 | 0.1 | 4.0 | 0.0 | 2.5 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 44.0 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary
 2: Quince St & Mission Ave

05/04/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  | |
| Traffic Volume (veh/h) | 53 | 687 | 80 | 134 | 692 | 134 | 111 | 62 | 149 | 136 | 80 | 38 |
| Future Volume (veh/h) | 53 | 687 | 80 | 134 | 692 | 134 | 111 | 62 | 149 | 136 | 80 | 38 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 55 | 716 | 83 | 140 | 721 | 140 | 116 | 65 | 155 | 142 | 83 | 40 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 424 | 996 | 115 | 553 | 1136 | 220 | 224 | 221 | 187 | 174 | 108 | 52 |
| Arrive On Green | 0.24 | 0.31 | 0.31 | 0.62 | 0.77 | 0.77 | 0.17 | 0.16 | 0.16 | 0.10 | 0.09 | 0.09 |
| Sat Flow, veh/h | 1774 | 3197 | 370 | 1774 | 2957 | 574 | 1774 | 1863 | 1583 | 1774 | 1189 | 573 |
| Grp Volume(v), veh/h | 55 | 396 | 403 | 140 | 431 | 430 | 116 | 65 | 155 | 142 | 0 | 123 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1797 | 1774 | 1770 | 1761 | 1774 | 1863 | 1583 | 1774 | 0 | 1762 |
| Q Serve(g_s), s | 2.9 | 23.8 | 23.9 | 4.2 | 13.2 | 13.2 | 7.2 | 3.7 | 11.4 | 9.4 | 0.0 | 8.2 |
| Cycle Q Clear(g_c), s | 2.9 | 23.8 | 23.9 | 4.2 | 13.2 | 13.2 | 7.2 | 3.7 | 11.4 | 9.4 | 0.0 | 8.2 |
| Prop In Lane | 1.00 | | 0.21 | 1.00 | | 0.33 | 1.00 | | 1.00 | 1.00 | | 0.33 |
| Lane Grp Cap(c), veh/h | 424 | 552 | 560 | 553 | 680 | 677 | 224 | 221 | 187 | 174 | 0 | 159 |
| V/C Ratio(X) | 0.13 | 0.72 | 0.72 | 0.25 | 0.63 | 0.63 | 0.52 | 0.29 | 0.83 | 0.81 | 0.00 | 0.77 |
| Avail Cap(c_a), veh/h | 424 | 552 | 560 | 553 | 680 | 677 | 232 | 433 | 368 | 265 | 0 | 442 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.33 | 1.33 | 1.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.96 | 0.96 | 0.96 | 0.82 | 0.82 | 0.82 | 0.87 | 0.87 | 0.87 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 35.9 | 36.6 | 36.6 | 16.4 | 10.1 | 10.1 | 46.6 | 46.1 | 49.4 | 53.0 | 0.0 | 53.4 |
| Incr Delay (d2), s/veh | 0.2 | 7.6 | 7.5 | 0.2 | 3.7 | 3.7 | 1.9 | 0.8 | 9.3 | 12.4 | 0.0 | 9.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.5 | 12.8 | 13.0 | 2.1 | 6.9 | 6.9 | 3.6 | 1.9 | 5.5 | 5.2 | 0.0 | 4.4 |
| LnGrp Delay(d),s/veh | 36.0 | 44.2 | 44.1 | 16.6 | 13.8 | 13.8 | 48.5 | 46.9 | 58.6 | 65.4 | 0.0 | 62.5 |
| LnGrp LOS | D | D | D | B | B | B | D | D | E | E | | E |
| Approach Vol, veh/h | | 854 | | | 1001 | | | 336 | | | 265 | |
| Approach Delay, s/veh | | 43.6 | | | 14.2 | | | 52.9 | | | 64.1 | |
| Approach LOS | | D | | | B | | | D | | | E | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 42.0 | 42.8 | 19.3 | 16.0 | 33.3 | 51.5 | 15.9 | 19.3 | | | | |
| Change Period (Y+Rc), s | 4.6 | 5.4 | 4.1 | 5.1 | 4.6 | * 5.4 | 4.1 | 5.1 | | | | |
| Max Green Setting (Gmax), s | 17.6 | 37.4 | 15.7 | 30.1 | 9.4 | * 46 | 17.9 | 27.9 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.2 | 25.9 | 9.2 | 10.2 | 4.9 | 15.2 | 11.4 | 13.4 | | | | |
| Green Ext Time (p_c), s | 0.5 | 6.1 | 0.5 | 0.7 | 0.3 | 11.8 | 0.5 | 0.8 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 35.1 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary

6: Centre City Pkwy & Mission Ave

05/04/2017

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|-------|------|-------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 221 | 585 | 103 | 107 | 504 | 262 | 135 | 479 | 74 | 283 | 625 | 357 |
| Future Volume (veh/h) | 221 | 585 | 103 | 107 | 504 | 262 | 135 | 479 | 74 | 283 | 625 | 357 |
| 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 | | 0.97 | 1.00 | | 0.95 | 1.00 | | 0.98 | 1.00 | | 0.99 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 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 | 1667 | 1863 | 1863 | 1667 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 226 | 597 | 105 | 109 | 514 | 267 | 138 | 489 | 76 | 289 | 638 | 364 |
| Adj No. of Lanes | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 3 | 1 | 2 | 2 | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 250 | 833 | 360 | 379 | 782 | 332 | 279 | 1259 | 385 | 709 | 1340 | 591 |
| Arrive On Green | 0.28 | 0.47 | 0.47 | 0.25 | 0.44 | 0.44 | 0.03 | 0.08 | 0.08 | 0.21 | 0.38 | 0.38 |
| Sat Flow, veh/h | 1774 | 3539 | 1529 | 3079 | 3539 | 1505 | 3079 | 5085 | 1557 | 3442 | 3539 | 1561 |
| Grp Volume(v), veh/h | 226 | 597 | 105 | 109 | 514 | 267 | 138 | 489 | 76 | 289 | 638 | 364 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1529 | 1540 | 1770 | 1505 | 1540 | 1695 | 1557 | 1721 | 1770 | 1561 |
| Q Serve(g_s), s | 14.7 | 16.2 | 3.9 | 3.4 | 13.7 | 11.3 | 5.3 | 10.9 | 5.5 | 8.7 | 16.4 | 22.7 |
| Cycle Q Clear(g_c), s | 14.7 | 16.2 | 3.9 | 3.4 | 13.7 | 11.3 | 5.3 | 10.9 | 5.5 | 8.7 | 16.4 | 22.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 250 | 833 | 360 | 379 | 782 | 332 | 279 | 1259 | 385 | 709 | 1340 | 591 |
| V/C Ratio(X) | 0.91 | 0.72 | 0.29 | 0.29 | 0.66 | 0.80 | 0.49 | 0.39 | 0.20 | 0.41 | 0.48 | 0.62 |
| Avail Cap(c_a), veh/h | 333 | 1351 | 584 | 379 | 1032 | 439 | 282 | 1259 | 385 | 709 | 1340 | 591 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.86 | 0.86 | 0.86 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 42.3 | 28.6 | 15.6 | 41.0 | 29.9 | 11.8 | 55.5 | 46.5 | 44.0 | 41.3 | 28.3 | 30.2 |
| Incr Delay (d2), s/veh | 17.2 | 0.8 | 0.3 | 0.2 | 0.7 | 7.0 | 0.5 | 0.9 | 1.1 | 0.1 | 1.2 | 4.8 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.3 | 7.9 | 1.6 | 1.5 | 6.6 | 5.2 | 2.3 | 5.3 | 2.5 | 4.1 | 8.2 | 10.5 |
| LnGrp Delay(d),s/veh | 59.6 | 29.3 | 15.8 | 41.1 | 30.6 | 18.8 | 56.0 | 47.4 | 45.1 | 41.4 | 29.5 | 35.0 |
| LnGrp LOS | E | C | B | D | C | B | E | D | D | D | C | C |
| Approach Vol, veh/h | | 928 | | | 890 | | | 703 | | | 1291 | |
| Approach Delay, s/veh | | 35.2 | | | 28.4 | | | 48.8 | | | 33.7 | |
| Approach LOS | | D | | | C | | | D | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 31.1 | 36.1 | 19.7 | 33.1 | 15.4 | 51.8 | 21.4 | 31.4 | | | | |
| Change Period (Y+Rc), s | 6.4 | * 6.4 | 4.9 | * 4.9 | 4.5 | 6.4 | 4.5 | 4.9 | | | | |
| Max Green Setting (Gmax), s | 12.5 | * 30 | 11.7 | * 46 | 11.0 | 31.2 | 22.5 | 35.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 10.7 | 12.9 | 5.4 | 18.2 | 7.3 | 24.7 | 16.7 | 15.7 | | | | |
| Green Ext Time (p_c), s | 0.2 | 2.6 | 2.1 | 3.7 | 0.1 | 2.9 | 0.2 | 3.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 35.6 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary
 9: Escondido Blvd & Mission Ave

05/04/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 112 | 479 | 195 | 108 | 433 | 36 | 184 | 205 | 111 | 81 | 234 | 129 |
| Future Volume (veh/h) | 112 | 479 | 195 | 108 | 433 | 36 | 184 | 205 | 111 | 81 | 234 | 129 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 124 | 532 | 217 | 120 | 481 | 40 | 204 | 228 | 123 | 90 | 260 | 143 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 290 | 739 | 300 | 304 | 1023 | 85 | 232 | 702 | 365 | 114 | 556 | 296 |
| Arrive On Green | 0.11 | 0.20 | 0.20 | 0.17 | 0.31 | 0.31 | 0.13 | 0.31 | 0.31 | 0.06 | 0.25 | 0.25 |
| Sat Flow, veh/h | 1774 | 2457 | 999 | 1774 | 3310 | 274 | 1774 | 2253 | 1172 | 1774 | 2232 | 1190 |
| Grp Volume(v), veh/h | 124 | 383 | 366 | 120 | 257 | 264 | 204 | 177 | 174 | 90 | 204 | 199 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1686 | 1774 | 1770 | 1814 | 1774 | 1770 | 1656 | 1774 | 1770 | 1653 |
| Q Serve(g_s), s | 7.8 | 24.2 | 24.4 | 7.2 | 14.1 | 14.1 | 13.6 | 9.2 | 9.7 | 6.0 | 11.8 | 12.3 |
| Cycle Q Clear(g_c), s | 7.8 | 24.2 | 24.4 | 7.2 | 14.1 | 14.1 | 13.6 | 9.2 | 9.7 | 6.0 | 11.8 | 12.3 |
| Prop In Lane | 1.00 | | 0.59 | 1.00 | | 0.15 | 1.00 | | 0.71 | 1.00 | | 0.72 |
| Lane Grp Cap(c), veh/h | 290 | 532 | 507 | 304 | 547 | 561 | 232 | 552 | 516 | 114 | 441 | 412 |
| V/C Ratio(X) | 0.43 | 0.72 | 0.72 | 0.39 | 0.47 | 0.47 | 0.88 | 0.32 | 0.34 | 0.79 | 0.46 | 0.48 |
| Avail Cap(c_a), veh/h | 290 | 532 | 507 | 304 | 547 | 561 | 353 | 552 | 516 | 191 | 441 | 412 |
| HCM Platoon Ratio | 0.67 | 0.67 | 0.67 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.76 | 0.76 | 0.76 | 0.94 | 0.94 | 0.94 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 48.2 | 43.2 | 43.2 | 44.2 | 33.5 | 33.5 | 51.2 | 31.6 | 31.8 | 55.3 | 38.2 | 38.4 |
| Incr Delay (d2), s/veh | 0.4 | 8.1 | 8.6 | 0.2 | 2.2 | 2.1 | 9.9 | 1.4 | 1.7 | 4.5 | 3.5 | 4.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.9 | 13.0 | 12.6 | 3.6 | 7.2 | 7.4 | 7.3 | 4.7 | 4.7 | 3.1 | 6.2 | 6.1 |
| LnGrp Delay(d),s/veh | 48.6 | 51.3 | 51.9 | 44.4 | 35.7 | 35.7 | 61.1 | 33.0 | 33.4 | 59.9 | 41.7 | 42.5 |
| LnGrp LOS | D | D | D | D | D | D | E | C | C | E | D | D |
| Approach Vol, veh/h | | 873 | | | 641 | | | 555 | | | 493 | |
| Approach Delay, s/veh | | 51.1 | | | 37.3 | | | 43.5 | | | 45.3 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 24.7 | 41.0 | 19.8 | 34.5 | 23.7 | 42.0 | 12.3 | 42.0 | | | | |
| Change Period (Y+Rc), s | 4.1 | 4.9 | 4.1 | 4.6 | 4.1 | 4.9 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 15.9 | 36.1 | 23.9 | 26.4 | 14.9 | 37.1 | 12.9 | * 37 | | | | |
| Max Q Clear Time (g_c+I1), s | 9.2 | 26.4 | 15.6 | 14.3 | 9.8 | 16.1 | 8.0 | 11.7 | | | | |
| Green Ext Time (p_c), s | 0.2 | 2.3 | 0.2 | 1.3 | 0.2 | 1.9 | 0.1 | 1.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 44.9 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary
 7: Centre City Pkwy & Washington Ave

05/04/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 147 | 451 | 99 | 67 | 437 | 152 | 149 | 548 | 86 | 116 | 500 | 169 |
| Future Volume (veh/h) | 147 | 451 | 99 | 67 | 437 | 152 | 149 | 548 | 86 | 116 | 500 | 169 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 148 | 456 | 100 | 68 | 441 | 154 | 151 | 554 | 87 | 117 | 505 | 171 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 176 | 553 | 120 | 199 | 527 | 183 | 342 | 959 | 429 | 834 | 1524 | 682 |
| Arrive On Green | 0.03 | 0.06 | 0.06 | 0.04 | 0.07 | 0.07 | 0.10 | 0.27 | 0.27 | 0.32 | 0.57 | 0.57 |
| Sat Flow, veh/h | 1774 | 2891 | 630 | 1774 | 2581 | 893 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 148 | 278 | 278 | 68 | 301 | 294 | 151 | 554 | 87 | 117 | 505 | 171 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1752 | 1774 | 1770 | 1705 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 10.0 | 18.6 | 18.8 | 4.5 | 20.2 | 20.5 | 5.0 | 16.2 | 5.1 | 2.9 | 9.0 | 6.5 |
| Cycle Q Clear(g_c), s | 10.0 | 18.6 | 18.8 | 4.5 | 20.2 | 20.5 | 5.0 | 16.2 | 5.1 | 2.9 | 9.0 | 6.5 |
| Prop In Lane | 1.00 | | 0.36 | 1.00 | | 0.52 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 176 | 338 | 335 | 199 | 362 | 348 | 342 | 959 | 429 | 834 | 1524 | 682 |
| V/C Ratio(X) | 0.84 | 0.82 | 0.83 | 0.34 | 0.83 | 0.84 | 0.44 | 0.58 | 0.20 | 0.14 | 0.33 | 0.25 |
| Avail Cap(c_a), veh/h | 200 | 668 | 661 | 199 | 619 | 597 | 344 | 959 | 429 | 834 | 1524 | 682 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.33 | 1.33 | 1.33 |
| Upstream Filter(I) | 0.98 | 0.98 | 0.98 | 0.85 | 0.85 | 0.85 | 0.96 | 0.96 | 0.96 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 57.1 | 54.2 | 54.3 | 53.4 | 53.9 | 54.1 | 50.9 | 37.8 | 33.8 | 31.8 | 16.5 | 16.0 |
| Incr Delay (d2), s/veh | 21.4 | 1.9 | 2.0 | 0.3 | 1.7 | 1.9 | 0.3 | 2.4 | 1.0 | 0.0 | 0.6 | 0.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.0 | 9.3 | 9.3 | 2.2 | 10.1 | 9.8 | 2.4 | 8.2 | 2.4 | 1.4 | 4.5 | 3.0 |
| LnGrp Delay(d),s/veh | 78.5 | 56.1 | 56.3 | 53.8 | 55.6 | 55.9 | 51.2 | 40.3 | 34.8 | 31.8 | 17.1 | 16.9 |
| LnGrp LOS | E | E | E | D | E | E | D | D | C | C | B | B |
| Approach Vol, veh/h | | 704 | | | 663 | | | 792 | | | 793 | |
| Approach Delay, s/veh | | 60.9 | | | 55.5 | | | 41.7 | | | 19.2 | |
| Approach LOS | | E | | | E | | | D | | | B | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 35.6 | 39.0 | 18.0 | 27.4 | 16.4 | 58.2 | 16.4 | 29.0 | | | | |
| Change Period (Y+Rc), s | 6.5 | * 6.5 | 4.5 | 4.5 | 4.5 | 6.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 12.0 | * 33 | 10.2 | 45.3 | 12.0 | 32.5 | 13.5 | 42.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.9 | 18.2 | 6.5 | 20.8 | 7.0 | 11.0 | 12.0 | 22.5 | | | | |
| Green Ext Time (p_c), s | 0.2 | 2.2 | 1.0 | 2.1 | 0.1 | 2.6 | 0.0 | 2.1 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 43.4 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary
 2: Quince St & Mission Ave

05/05/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  | |
| Traffic Volume (veh/h) | 34 | 951 | 88 | 107 | 678 | 101 | 100 | 44 | 208 | 162 | 50 | 23 |
| Future Volume (veh/h) | 34 | 951 | 88 | 107 | 678 | 101 | 100 | 44 | 208 | 162 | 50 | 23 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 35 | 980 | 91 | 110 | 699 | 104 | 103 | 45 | 214 | 167 | 52 | 24 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 162 | 1232 | 114 | 269 | 1351 | 201 | 129 | 410 | 349 | 194 | 301 | 139 |
| Arrive On Green | 0.09 | 0.38 | 0.38 | 0.30 | 0.87 | 0.87 | 0.02 | 0.07 | 0.07 | 0.11 | 0.25 | 0.25 |
| Sat Flow, veh/h | 1774 | 3275 | 304 | 1774 | 3092 | 460 | 1774 | 1863 | 1583 | 1774 | 1207 | 557 |
| Grp Volume(v), veh/h | 35 | 530 | 541 | 110 | 400 | 403 | 103 | 45 | 214 | 167 | 0 | 76 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1809 | 1774 | 1770 | 1782 | 1774 | 1863 | 1583 | 1774 | 0 | 1764 |
| Q Serve(g_s), s | 2.5 | 36.0 | 36.0 | 6.7 | 7.0 | 7.0 | 7.8 | 3.0 | 12.6 | 12.5 | 0.0 | 4.6 |
| Cycle Q Clear(g_c), s | 2.5 | 36.0 | 36.0 | 6.7 | 7.0 | 7.0 | 7.8 | 3.0 | 12.6 | 12.5 | 0.0 | 4.6 |
| Prop In Lane | 1.00 | | 0.17 | 1.00 | | 0.26 | 1.00 | | 1.00 | 1.00 | | 0.32 |
| Lane Grp Cap(c), veh/h | 162 | 666 | 681 | 269 | 773 | 779 | 129 | 410 | 349 | 194 | 0 | 440 |
| V/C Ratio(X) | 0.22 | 0.80 | 0.80 | 0.41 | 0.52 | 0.52 | 0.80 | 0.11 | 0.61 | 0.86 | 0.00 | 0.17 |
| Avail Cap(c_a), veh/h | 162 | 666 | 681 | 269 | 773 | 779 | 204 | 410 | 349 | 288 | 0 | 440 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.78 | 0.78 | 0.78 | 0.87 | 0.87 | 0.87 | 0.80 | 0.80 | 0.80 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 56.9 | 37.5 | 37.5 | 42.2 | 5.2 | 5.2 | 64.9 | 50.2 | 29.0 | 59.1 | 0.0 | 39.7 |
| Incr Delay (d2), s/veh | 0.6 | 7.6 | 7.4 | 1.0 | 2.1 | 2.1 | 10.7 | 0.4 | 6.3 | 17.0 | 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(50%),veh/ln | 1.2 | 18.9 | 19.3 | 3.3 | 3.7 | 3.7 | 4.2 | 1.6 | 6.2 | 7.0 | 0.0 | 2.3 |
| LnGrp Delay(d),s/veh | 57.5 | 45.1 | 44.9 | 43.2 | 7.4 | 7.4 | 75.6 | 50.7 | 35.3 | 76.1 | 0.0 | 40.6 |
| LnGrp LOS | E | D | D | D | A | A | E | D | D | E | | D |
| Approach Vol, veh/h | | 1106 | | | 913 | | | 362 | | | 243 | |
| Approach Delay, s/veh | | 45.4 | | | 11.7 | | | 48.7 | | | 65.0 | |
| Approach LOS | | D | | | B | | | D | | | E | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 25.1 | 56.2 | 14.9 | 38.8 | 16.9 | 64.4 | 18.9 | 34.8 | | | | |
| Change Period (Y+Rc), s | 4.6 | 5.4 | 5.1 | * 5.1 | 4.6 | * 5.4 | 4.1 | 5.1 | | | | |
| Max Green Setting (Gmax), s | 15.8 | 50.8 | 15.5 | * 34 | 8.1 | * 59 | 21.9 | 27.3 | | | | |
| Max Q Clear Time (g_c+I1), s | 8.7 | 38.0 | 9.8 | 6.6 | 4.5 | 9.0 | 14.5 | 14.6 | | | | |
| Green Ext Time (p_c), s | 0.2 | 8.5 | 0.2 | 0.4 | 0.1 | 12.5 | 0.3 | 1.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 35.9 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary

6: Centre City Pkwy & Mission Ave

05/05/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 275 | 894 | 144 | 94 | 411 | 321 | 162 | 922 | 71 | 233 | 561 | 249 |
| Future Volume (veh/h) | 275 | 894 | 144 | 94 | 411 | 321 | 162 | 922 | 71 | 233 | 561 | 249 |
| 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 | | 0.96 | 1.00 | | 0.95 | 1.00 | | 0.98 | 1.00 | | 0.98 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 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 | 1667 | 1863 | 1863 | 1667 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 281 | 912 | 147 | 96 | 419 | 328 | 165 | 941 | 72 | 238 | 572 | 254 |
| Adj No. of Lanes | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 3 | 1 | 2 | 2 | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 303 | 1036 | 447 | 314 | 804 | 342 | 250 | 1605 | 492 | 285 | 1172 | 515 |
| Arrive On Green | 0.23 | 0.39 | 0.39 | 0.17 | 0.38 | 0.38 | 0.03 | 0.10 | 0.10 | 0.17 | 0.66 | 0.66 |
| Sat Flow, veh/h | 1774 | 3539 | 1525 | 3079 | 3539 | 1505 | 3079 | 5085 | 1559 | 3442 | 3539 | 1555 |
| Grp Volume(v), veh/h | 281 | 912 | 147 | 96 | 419 | 328 | 165 | 941 | 72 | 238 | 572 | 254 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1525 | 1540 | 1770 | 1505 | 1540 | 1695 | 1559 | 1721 | 1770 | 1555 |
| Q Serve(g_s), s | 20.9 | 32.3 | 6.7 | 3.7 | 12.4 | 21.1 | 7.2 | 23.8 | 5.7 | 9.0 | 10.9 | 11.1 |
| Cycle Q Clear(g_c), s | 20.9 | 32.3 | 6.7 | 3.7 | 12.4 | 21.1 | 7.2 | 23.8 | 5.7 | 9.0 | 10.9 | 11.1 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 303 | 1036 | 447 | 314 | 804 | 342 | 250 | 1605 | 492 | 285 | 1172 | 515 |
| V/C Ratio(X) | 0.93 | 0.88 | 0.33 | 0.31 | 0.52 | 0.96 | 0.66 | 0.59 | 0.15 | 0.83 | 0.49 | 0.49 |
| Avail Cap(c_a), veh/h | 323 | 1327 | 572 | 314 | 918 | 390 | 354 | 1605 | 492 | 319 | 1172 | 515 |
| HCM Platoon Ratio | 1.33 | 1.33 | 1.33 | 1.67 | 1.67 | 1.67 | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 0.60 | 0.60 | 0.60 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 51.4 | 39.0 | 17.1 | 51.8 | 36.2 | 22.2 | 63.8 | 52.1 | 43.9 | 55.4 | 17.1 | 17.1 |
| Incr Delay (d2), s/veh | 21.1 | 3.4 | 0.2 | 0.2 | 0.4 | 32.8 | 1.1 | 1.6 | 0.6 | 14.2 | 1.5 | 3.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 12.0 | 16.2 | 2.8 | 1.6 | 6.1 | 11.8 | 3.1 | 11.5 | 2.5 | 4.8 | 5.4 | 5.1 |
| LnGrp Delay(d),s/veh | 72.5 | 42.4 | 17.2 | 52.0 | 36.6 | 55.0 | 64.9 | 53.6 | 44.6 | 69.6 | 18.5 | 20.5 |
| LnGrp LOS | E | D | B | D | D | D | E | D | D | E | B | C |
| Approach Vol, veh/h | | 1340 | | | 843 | | | 1178 | | | 1064 | |
| Approach Delay, s/veh | | 46.0 | | | 45.5 | | | 54.7 | | | 30.4 | |
| Approach LOS | | D | | | D | | | D | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 17.6 | 49.0 | 18.7 | 44.4 | 15.5 | 51.1 | 27.5 | 35.6 | | | | |
| Change Period (Y+Rc), s | 6.4 | * 6.4 | 4.9 | * 4.9 | 4.5 | 6.4 | 4.5 | 4.9 | | | | |
| Max Green Setting (Gmax), s | 12.5 | * 43 | 9.0 | * 51 | 15.5 | 39.6 | 24.6 | 35.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 11.0 | 25.8 | 5.7 | 34.3 | 9.2 | 13.1 | 22.9 | 23.1 | | | | |
| Green Ext Time (p_c), s | 0.2 | 5.2 | 1.2 | 5.2 | 0.1 | 4.4 | 0.1 | 2.4 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 44.5 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary
 9: Escondido Blvd & Mission Ave

05/05/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 126 | 788 | 184 | 119 | 471 | 59 | 219 | 375 | 182 | 89 | 217 | 119 |
| Future Volume (veh/h) | 126 | 788 | 184 | 119 | 471 | 59 | 219 | 375 | 182 | 89 | 217 | 119 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 130 | 812 | 190 | 123 | 486 | 61 | 226 | 387 | 188 | 92 | 224 | 123 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 154 | 1219 | 285 | 147 | 1342 | 168 | 251 | 673 | 322 | 115 | 485 | 256 |
| Arrive On Green | 0.09 | 0.43 | 0.43 | 0.08 | 0.42 | 0.42 | 0.14 | 0.29 | 0.29 | 0.06 | 0.22 | 0.22 |
| Sat Flow, veh/h | 1774 | 2848 | 666 | 1774 | 3167 | 396 | 1774 | 2323 | 1113 | 1774 | 2239 | 1184 |
| Grp Volume(v), veh/h | 130 | 504 | 498 | 123 | 271 | 276 | 226 | 294 | 281 | 92 | 175 | 172 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1745 | 1774 | 1770 | 1793 | 1774 | 1770 | 1666 | 1774 | 1770 | 1654 |
| Q Serve(g_s), s | 9.7 | 30.8 | 30.8 | 9.2 | 14.0 | 14.2 | 16.9 | 19.1 | 19.5 | 6.9 | 11.6 | 12.3 |
| Cycle Q Clear(g_c), s | 9.7 | 30.8 | 30.8 | 9.2 | 14.0 | 14.2 | 16.9 | 19.1 | 19.5 | 6.9 | 11.6 | 12.3 |
| Prop In Lane | 1.00 | | 0.38 | 1.00 | | 0.22 | 1.00 | | 0.67 | 1.00 | | 0.72 |
| Lane Grp Cap(c), veh/h | 154 | 757 | 747 | 147 | 750 | 760 | 251 | 513 | 483 | 115 | 383 | 358 |
| V/C Ratio(X) | 0.84 | 0.67 | 0.67 | 0.84 | 0.36 | 0.36 | 0.90 | 0.57 | 0.58 | 0.80 | 0.46 | 0.48 |
| Avail Cap(c_a), veh/h | 235 | 757 | 747 | 222 | 750 | 760 | 353 | 513 | 483 | 183 | 383 | 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 | 0.50 | 0.50 | 0.50 | 0.76 | 0.76 | 0.76 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 60.7 | 30.9 | 30.9 | 61.0 | 26.5 | 26.5 | 57.0 | 40.8 | 41.0 | 62.3 | 46.0 | 46.2 |
| Incr Delay (d2), s/veh | 9.8 | 4.6 | 4.7 | 5.3 | 0.7 | 0.7 | 12.9 | 3.5 | 3.9 | 5.2 | 3.9 | 4.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 5.2 | 16.0 | 15.8 | 4.8 | 7.0 | 7.1 | 9.2 | 9.8 | 9.5 | 3.6 | 6.1 | 6.0 |
| LnGrp Delay(d),s/veh | 70.5 | 35.5 | 35.6 | 66.3 | 27.1 | 27.2 | 69.9 | 44.4 | 44.9 | 67.4 | 49.9 | 50.8 |
| LnGrp LOS | E | D | D | E | C | C | E | D | D | E | D | D |
| Approach Vol, veh/h | | 1132 | | | 670 | | | 801 | | | 439 | |
| Approach Delay, s/veh | | 39.5 | | | 34.3 | | | 51.8 | | | 53.9 | |
| Approach LOS | | D | | | 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 | 15.3 | 62.7 | 23.2 | 33.8 | 15.8 | 62.1 | 13.3 | 43.7 | | | | |
| Change Period (Y+Rc), s | 4.1 | 4.9 | 4.1 | 4.6 | 4.1 | 4.9 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 16.9 | 47.4 | 26.9 | 26.1 | 17.9 | 46.4 | 13.9 | * 39 | | | | |
| Max Q Clear Time (g_c+I1), s | 11.2 | 32.8 | 18.9 | 14.3 | 11.7 | 16.2 | 8.9 | 21.5 | | | | |
| Green Ext Time (p_c), s | 0.1 | 5.8 | 0.2 | 1.1 | 0.1 | 7.3 | 0.1 | 2.1 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 43.7 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary

7: Centre City Pkwy & Washington Ave

05/05/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 187 | 774 | 96 | 80 | 372 | 148 | 187 | 842 | 180 | 143 | 555 | 100 |
| Future Volume (veh/h) | 187 | 774 | 96 | 80 | 372 | 148 | 187 | 842 | 180 | 143 | 555 | 100 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 199 | 823 | 102 | 85 | 396 | 157 | 199 | 896 | 191 | 152 | 590 | 106 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 225 | 932 | 116 | 126 | 592 | 232 | 306 | 1088 | 487 | 566 | 1408 | 630 |
| Arrive On Green | 0.04 | 0.10 | 0.10 | 0.14 | 0.48 | 0.48 | 0.09 | 0.31 | 0.31 | 0.05 | 0.13 | 0.13 |
| Sat Flow, veh/h | 1774 | 3170 | 393 | 1774 | 2487 | 974 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 199 | 459 | 466 | 85 | 280 | 273 | 199 | 896 | 191 | 152 | 590 | 106 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1793 | 1774 | 1770 | 1691 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 15.1 | 34.6 | 34.6 | 6.1 | 16.4 | 16.8 | 7.5 | 31.7 | 12.8 | 5.7 | 20.7 | 8.0 |
| Cycle Q Clear(g_c), s | 15.1 | 34.6 | 34.6 | 6.1 | 16.4 | 16.8 | 7.5 | 31.7 | 12.8 | 5.7 | 20.7 | 8.0 |
| Prop In Lane | 1.00 | | 0.22 | 1.00 | | 0.58 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 225 | 520 | 527 | 126 | 422 | 403 | 306 | 1088 | 487 | 566 | 1408 | 630 |
| V/C Ratio(X) | 0.88 | 0.88 | 0.88 | 0.67 | 0.67 | 0.68 | 0.65 | 0.82 | 0.39 | 0.27 | 0.42 | 0.17 |
| Avail Cap(c_a), veh/h | 256 | 634 | 643 | 172 | 551 | 526 | 337 | 1088 | 487 | 566 | 1408 | 630 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 |
| Upstream Filter(I) | 0.82 | 0.82 | 0.82 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 63.7 | 58.6 | 58.7 | 56.4 | 31.2 | 31.3 | 59.5 | 43.4 | 36.8 | 56.0 | 44.3 | 38.8 |
| Incr Delay (d2), s/veh | 21.1 | 9.0 | 8.9 | 2.1 | 0.7 | 0.9 | 2.4 | 6.3 | 2.1 | 0.1 | 0.9 | 0.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.7 | 18.3 | 18.5 | 3.1 | 7.9 | 7.9 | 3.7 | 16.4 | 5.9 | 2.7 | 10.3 | 3.6 |
| LnGrp Delay(d),s/veh | 84.8 | 67.7 | 67.6 | 58.5 | 31.9 | 32.3 | 61.8 | 49.7 | 38.9 | 56.1 | 45.2 | 39.4 |
| LnGrp LOS | F | E | E | E | C | C | E | D | D | E | D | D |
| Approach Vol, veh/h | | 1124 | | | 638 | | | 1286 | | | 848 | |
| Approach Delay, s/veh | | 70.7 | | | 35.6 | | | 50.0 | | | 46.4 | |
| Approach LOS | | E | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 28.7 | 48.0 | 14.1 | 44.2 | 16.5 | 60.2 | 21.6 | 36.7 | | | | |
| Change Period (Y+Rc), s | 6.5 | * 6.5 | 4.5 | 4.5 | 4.5 | 6.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 12.0 | * 42 | 13.1 | 48.4 | 13.2 | 40.3 | 19.5 | 42.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 7.7 | 33.7 | 8.1 | 36.6 | 9.5 | 22.7 | 17.1 | 18.8 | | | | |
| Green Ext Time (p_c), s | 0.2 | 2.9 | 1.1 | 3.1 | 0.1 | 2.9 | 0.1 | 2.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 52.8 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

APPENDIX H
Existing Plus Cumulative HCM Analysis Sheets

SEC CCP/Mission TIA
1: Rock Springs Rd & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative AM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  |  |
| Traffic Volume (veh/h) | 77 | 311 | 31 | 47 | 967 | 117 | 44 | 207 | 21 | 171 | 384 | 200 |
| Future Volume (veh/h) | 77 | 311 | 31 | 47 | 967 | 117 | 44 | 207 | 21 | 171 | 384 | 200 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 82 | 331 | 33 | 50 | 1029 | 124 | 47 | 220 | 22 | 182 | 409 | 213 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 105 | 1741 | 172 | 64 | 1629 | 196 | 153 | 973 | 96 | 353 | 557 | 473 |
| Arrive On Green | 0.06 | 0.54 | 0.54 | 0.04 | 0.51 | 0.51 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 |
| Sat Flow, veh/h | 1774 | 3253 | 322 | 1774 | 3182 | 383 | 799 | 3253 | 322 | 1133 | 1863 | 1583 |
| Grp Volume(v), veh/h | 82 | 179 | 185 | 50 | 572 | 581 | 47 | 119 | 123 | 182 | 409 | 213 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1806 | 1774 | 1770 | 1795 | 799 | 1770 | 1806 | 1133 | 1863 | 1583 |
| Q Serve(g_s), s | 4.6 | 5.2 | 5.3 | 2.8 | 23.3 | 23.4 | 5.6 | 5.0 | 5.1 | 14.4 | 19.7 | 10.9 |
| Cycle Q Clear(g_c), s | 4.6 | 5.2 | 5.3 | 2.8 | 23.3 | 23.4 | 25.3 | 5.0 | 5.1 | 19.5 | 19.7 | 10.9 |
| Prop In Lane | 1.00 | | 0.18 | 1.00 | | 0.21 | 1.00 | | 0.18 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 105 | 947 | 966 | 64 | 906 | 919 | 153 | 529 | 540 | 353 | 557 | 473 |
| V/C Ratio(X) | 0.78 | 0.19 | 0.19 | 0.78 | 0.63 | 0.63 | 0.31 | 0.22 | 0.23 | 0.52 | 0.73 | 0.45 |
| Avail Cap(c_a), veh/h | 177 | 947 | 966 | 106 | 906 | 919 | 183 | 595 | 607 | 395 | 626 | 532 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.79 | 0.79 | 0.79 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 46.4 | 12.0 | 12.0 | 47.8 | 17.6 | 17.6 | 42.9 | 26.3 | 26.4 | 33.7 | 31.5 | 28.4 |
| Incr Delay (d2), s/veh | 4.7 | 0.4 | 0.4 | 6.0 | 2.6 | 2.6 | 0.8 | 0.2 | 0.2 | 0.9 | 3.6 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.4 | 2.7 | 2.7 | 1.5 | 11.9 | 12.1 | 1.3 | 2.5 | 2.6 | 4.6 | 10.7 | 4.8 |
| LnGrp Delay(d),s/veh | 51.1 | 12.5 | 12.5 | 53.9 | 20.2 | 20.2 | 43.7 | 26.5 | 26.5 | 34.6 | 35.1 | 28.9 |
| LnGrp LOS | D | B | B | D | C | C | D | C | C | C | D | C |
| Approach Vol, veh/h | | 446 | | | 1203 | | | 289 | | | 804 | |
| Approach Delay, s/veh | | 19.6 | | | 21.6 | | | 29.3 | | | 33.3 | |
| Approach LOS | | B | | | C | | | 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 | 7.6 | 58.0 | | 34.4 | 9.9 | 55.7 | | 34.4 | | | | |
| Change Period (Y+Rc), s | 4.0 | 4.5 | | 4.5 | 4.0 | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | 6.0 | 47.4 | | 33.6 | 10.0 | 43.4 | | 33.6 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.8 | 7.3 | | 21.7 | 6.6 | 25.4 | | 27.3 | | | | |
| Green Ext Time (p_c), s | 0.0 | 23.4 | | 3.7 | 0.0 | 13.4 | | 2.6 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 25.5 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |

SEC CCP/Mission TIA
2: Quince St & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative AM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|--|---|---|--|---|--|---|---|---|--|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |   | |  |   | |  |  |  |  |   |  |
| Traffic Volume (veh/h) | 23 | 416 | 77 | 209 | 1172 | 71 | 143 | 23 | 112 | 55 | 27 | 30 |
| Future Volume (veh/h) | 23 | 416 | 77 | 209 | 1172 | 71 | 143 | 23 | 112 | 55 | 27 | 30 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 23 | 424 | 79 | 213 | 1196 | 72 | 146 | 23 | 114 | 56 | 28 | 31 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 463 | 825 | 153 | 691 | 1374 | 83 | 175 | 219 | 186 | 100 | 54 | 60 |
| Arrive On Green | 0.26 | 0.28 | 0.28 | 0.78 | 0.81 | 0.81 | 0.10 | 0.12 | 0.12 | 0.06 | 0.07 | 0.07 |
| Sat Flow, veh/h | 1774 | 2983 | 552 | 1774 | 3392 | 204 | 1774 | 1863 | 1583 | 1774 | 809 | 896 |
| Grp Volume(v), veh/h | 23 | 250 | 253 | 213 | 623 | 645 | 146 | 23 | 114 | 56 | 0 | 59 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1765 | 1774 | 1770 | 1827 | 1774 | 1863 | 1583 | 1774 | 0 | 1705 |
| Q Serve(g_s), s | 1.2 | 14.3 | 14.5 | 4.2 | 27.2 | 27.3 | 9.7 | 1.3 | 3.8 | 3.7 | 0.0 | 4.0 |
| Cycle Q Clear(g_c), s | 1.2 | 14.3 | 14.5 | 4.2 | 27.2 | 27.3 | 9.7 | 1.3 | 3.8 | 3.7 | 0.0 | 4.0 |
| Prop In Lane | 1.00 | | 0.31 | 1.00 | | 0.11 | 1.00 | | 1.00 | 1.00 | | 0.53 |
| Lane Grp Cap(c), veh/h | 463 | 490 | 488 | 691 | 717 | 740 | 175 | 219 | 186 | 100 | 0 | 114 |
| V/C Ratio(X) | 0.05 | 0.51 | 0.52 | 0.31 | 0.87 | 0.87 | 0.83 | 0.11 | 0.61 | 0.56 | 0.00 | 0.52 |
| Avail Cap(c_a), veh/h | 463 | 490 | 488 | 691 | 717 | 740 | 205 | 545 | 463 | 135 | 0 | 430 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.95 | 0.95 | 0.95 | 0.58 | 0.58 | 0.58 | 0.94 | 0.94 | 0.94 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.2 | 36.6 | 36.6 | 8.6 | 9.4 | 9.4 | 53.1 | 47.3 | 11.0 | 55.2 | 0.0 | 54.1 |
| Incr Delay (d2), s/veh | 0.1 | 3.6 | 3.7 | 0.2 | 8.5 | 8.3 | 21.4 | 0.2 | 3.7 | 5.8 | 0.0 | 4.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.6 | 7.4 | 7.6 | 2.0 | 14.2 | 14.6 | 5.8 | 0.7 | 1.9 | 2.0 | 0.0 | 2.0 |
| LnGrp Delay(d),s/veh | 33.2 | 40.2 | 40.3 | 8.7 | 17.8 | 17.7 | 74.5 | 47.6 | 14.7 | 61.0 | 0.0 | 58.5 |
| LnGrp LOS | C | D | D | A | B | B | E | D | B | E | | E |
| Approach Vol, veh/h | | 526 | | | 1481 | | | 283 | | | 115 | |
| Approach Delay, s/veh | | 39.9 | | | 16.5 | | | 48.2 | | | 59.7 | |
| Approach LOS | | D | | | B | | | D | | | E | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 51.3 | 38.6 | 17.0 | 13.1 | 35.9 | 54.0 | 10.9 | 19.2 | | | | |
| Change Period (Y+Rc), s | 4.6 | 5.4 | 5.1 | * 5.1 | 4.6 | * 5.4 | 4.1 | 5.1 | | | | |
| Max Green Setting (Gmax), s | 23.4 | 33.2 | 13.9 | * 30 | 8.5 | * 49 | 9.1 | 35.1 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.2 | 16.5 | 11.7 | 6.0 | 3.2 | 29.3 | 5.7 | 5.8 | | | | |
| Green Ext Time (p_c), s | 0.8 | 4.8 | 0.3 | 0.3 | 0.4 | 13.4 | 0.0 | 1.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 27.4 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
3: Quince St & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative AM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 24 | 345 | 141 | 77 | 710 | 86 | 109 | 144 | 60 | 42 | 158 | 61 |
| Future Volume (veh/h) | 24 | 345 | 141 | 77 | 710 | 86 | 109 | 144 | 60 | 42 | 158 | 61 |
| 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 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 28 | 397 | 162 | 89 | 816 | 99 | 125 | 166 | 69 | 48 | 182 | 70 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 493 | 1757 | 708 | 617 | 2267 | 275 | 225 | 519 | 208 | 232 | 531 | 197 |
| Arrive On Green | 0.71 | 0.71 | 0.71 | 1.00 | 1.00 | 1.00 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 |
| Sat Flow, veh/h | 608 | 2464 | 993 | 847 | 3179 | 386 | 1123 | 2471 | 987 | 1141 | 2528 | 939 |
| Grp Volume(v), veh/h | 28 | 284 | 275 | 89 | 454 | 461 | 125 | 117 | 118 | 48 | 125 | 127 |
| Grp Sat Flow(s),veh/h/ln | 608 | 1770 | 1687 | 847 | 1770 | 1795 | 1123 | 1770 | 1688 | 1141 | 1770 | 1697 |
| Q Serve(g_s), s | 1.7 | 6.6 | 6.7 | 1.2 | 0.0 | 0.0 | 12.8 | 6.7 | 7.1 | 4.5 | 7.2 | 7.6 |
| Cycle Q Clear(g_c), s | 1.7 | 6.6 | 6.7 | 7.9 | 0.0 | 0.0 | 20.5 | 6.7 | 7.1 | 11.6 | 7.2 | 7.6 |
| Prop In Lane | 1.00 | | 0.59 | 1.00 | | 0.21 | 1.00 | | 0.58 | 1.00 | | 0.55 |
| Lane Grp Cap(c), veh/h | 493 | 1262 | 1203 | 617 | 1262 | 1280 | 225 | 372 | 355 | 232 | 372 | 357 |
| V/C Ratio(X) | 0.06 | 0.22 | 0.23 | 0.14 | 0.36 | 0.36 | 0.56 | 0.31 | 0.33 | 0.21 | 0.34 | 0.35 |
| Avail Cap(c_a), veh/h | 493 | 1262 | 1203 | 617 | 1262 | 1280 | 395 | 640 | 611 | 405 | 640 | 614 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.78 | 0.78 | 0.78 | 1.00 | 1.00 | 1.00 | 0.72 | 0.72 | 0.72 |
| Uniform Delay (d), s/veh | 5.2 | 5.9 | 5.9 | 0.3 | 0.0 | 0.0 | 49.2 | 40.1 | 40.2 | 45.2 | 40.3 | 40.4 |
| Incr Delay (d2), s/veh | 0.2 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 1.6 | 0.4 | 0.4 | 0.2 | 0.3 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.3 | 3.3 | 3.3 | 0.3 | 0.2 | 0.2 | 4.1 | 3.3 | 3.4 | 1.4 | 3.5 | 3.6 |
| LnGrp Delay(d),s/veh | 5.4 | 6.3 | 6.3 | 0.7 | 0.6 | 0.6 | 50.8 | 40.4 | 40.6 | 45.4 | 40.6 | 40.8 |
| LnGrp LOS | A | A | A | A | A | A | D | D | D | D | D | D |
| Approach Vol, veh/h | | 587 | | | 1004 | | | 360 | | | 300 | |
| Approach Delay, s/veh | | 6.3 | | | 0.6 | | | 44.1 | | | 41.4 | |
| Approach LOS | | A | | | A | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 90.2 | | 29.8 | | 90.2 | | 29.8 | | | | |
| Change Period (Y+Rc), s | | 4.6 | | 4.6 | | 4.6 | | 4.6 | | | | |
| Max Green Setting (Gmax), s | | 67.4 | | 43.4 | | 67.4 | | 43.4 | | | | |
| Max Q Clear Time (g_c+I1), s | | 8.7 | | 22.5 | | 9.9 | | 13.6 | | | | |
| Green Ext Time (p_c), s | | 11.2 | | 2.8 | | 11.2 | | 2.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 14.5 | | | | | | | | |
| HCM 2010 LOS | | | | B | | | | | | | | |

SEC CCP/Mission TIA
4: Centre City Pkwy & El Norte Pkwy

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative AM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 9 | 674 | 260 | 282 | 752 | 164 | 162 | 252 | 81 | 262 | 1077 | 60 |
| Future Volume (veh/h) | 9 | 674 | 260 | 282 | 752 | 164 | 162 | 252 | 81 | 262 | 1077 | 60 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 10 | 733 | 283 | 307 | 817 | 178 | 176 | 274 | 88 | 285 | 1171 | 65 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 77 | 997 | 446 | 346 | 1040 | 227 | 292 | 1327 | 594 | 327 | 1359 | 608 |
| Arrive On Green | 0.02 | 0.28 | 0.28 | 0.10 | 0.36 | 0.36 | 0.17 | 0.75 | 0.75 | 0.10 | 0.38 | 0.38 |
| Sat Flow, veh/h | 3442 | 3539 | 1583 | 3442 | 2891 | 630 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 10 | 733 | 283 | 307 | 500 | 495 | 176 | 274 | 88 | 285 | 1171 | 65 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1583 | 1721 | 1770 | 1752 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 0.5 | 31.0 | 25.8 | 14.5 | 41.6 | 41.6 | 7.8 | 3.8 | 2.6 | 13.5 | 50.2 | 4.4 |
| Cycle Q Clear(g_c), s | 0.5 | 31.0 | 25.8 | 14.5 | 41.6 | 41.6 | 7.8 | 3.8 | 2.6 | 13.5 | 50.2 | 4.4 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.36 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 77 | 997 | 446 | 346 | 637 | 630 | 292 | 1327 | 594 | 327 | 1359 | 608 |
| V/C Ratio(X) | 0.13 | 0.74 | 0.63 | 0.89 | 0.79 | 0.79 | 0.60 | 0.21 | 0.15 | 0.87 | 0.86 | 0.11 |
| Avail Cap(c_a), veh/h | 209 | 1094 | 489 | 353 | 637 | 630 | 292 | 1327 | 594 | 405 | 1359 | 608 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.99 | 0.99 | 0.99 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 79.1 | 53.7 | 51.8 | 73.3 | 47.1 | 47.1 | 65.9 | 13.4 | 13.2 | 73.7 | 46.8 | 32.6 |
| Incr Delay (d2), s/veh | 0.3 | 2.9 | 3.2 | 22.0 | 7.0 | 7.1 | 2.5 | 0.3 | 0.5 | 13.7 | 7.4 | 0.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.2 | 15.6 | 11.7 | 8.0 | 21.5 | 21.3 | 3.8 | 1.8 | 1.2 | 7.0 | 25.9 | 2.0 |
| LnGrp Delay(d),s/veh | 79.4 | 56.6 | 55.1 | 95.3 | 54.2 | 54.3 | 68.4 | 13.7 | 13.7 | 87.3 | 54.1 | 33.0 |
| LnGrp LOS | E | E | E | F | D | D | E | B | B | F | D | C |
| Approach Vol, veh/h | | 1026 | | | 1302 | | | 538 | | | 1521 | |
| Approach Delay, s/veh | | 56.4 | | | 63.9 | | | 31.6 | | | 59.4 | |
| Approach LOS | | E | | | E | | | C | | | 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 | 21.8 | 68.8 | 21.7 | 52.8 | 20.3 | 70.3 | 8.8 | 65.7 | | | | |
| Change Period (Y+Rc), s | 6.1 | 6.9 | 5.1 | 6.3 | 6.3 | 6.9 | 5.1 | 6.3 | | | | |
| Max Green Setting (Gmax), s | 19.4 | 53.3 | 16.9 | 51.0 | 14.0 | 58.5 | 10.0 | 57.9 | | | | |
| Max Q Clear Time (g_c+I1), s | 15.5 | 5.8 | 16.5 | 33.0 | 9.8 | 52.2 | 2.5 | 43.6 | | | | |
| Green Ext Time (p_c), s | 0.2 | 19.3 | 0.0 | 13.5 | 0.1 | 4.9 | 0.0 | 12.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 56.6 | | | | | | | | | |
| HCM 2010 LOS | | | E | | | | | | | | | |

SEC CCP/Mission TIA
5: Centre City Pkwy & Decatur Way

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative AM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 4 | 0 | 8 | 314 | 8 | 84 | 30 | 412 | 39 | 67 | 1607 | 14 |
| Future Volume (veh/h) | 4 | 0 | 8 | 314 | 8 | 84 | 30 | 412 | 39 | 67 | 1607 | 14 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 4 | 0 | 9 | 338 | 9 | 90 | 32 | 443 | 42 | 72 | 1728 | 15 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 1 | 1 | 2 | 1 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 129 | 0 | 114 | 358 | 29 | 294 | 108 | 1914 | 856 | 104 | 1855 | 830 |
| Arrive On Green | 0.07 | 0.00 | 0.07 | 0.20 | 0.20 | 0.20 | 0.06 | 0.54 | 0.54 | 0.12 | 1.00 | 1.00 |
| Sat Flow, veh/h | 1774 | 0 | 1583 | 1774 | 146 | 1459 | 1774 | 3539 | 1583 | 1774 | 3539 | 1583 |
| Grp Volume(v), veh/h | 4 | 0 | 9 | 338 | 0 | 99 | 32 | 443 | 42 | 72 | 1728 | 15 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 0 | 1583 | 1774 | 0 | 1605 | 1774 | 1770 | 1583 | 1774 | 1770 | 1583 |
| Q Serve(g_s), s | 0.3 | 0.0 | 0.9 | 31.0 | 0.0 | 8.7 | 2.8 | 10.8 | 2.1 | 6.4 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 0.3 | 0.0 | 0.9 | 31.0 | 0.0 | 8.7 | 2.8 | 10.8 | 2.1 | 6.4 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.91 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 129 | 0 | 114 | 358 | 0 | 323 | 108 | 1914 | 856 | 104 | 1855 | 830 |
| V/C Ratio(X) | 0.03 | 0.00 | 0.08 | 0.94 | 0.00 | 0.31 | 0.30 | 0.23 | 0.05 | 0.70 | 0.93 | 0.02 |
| Avail Cap(c_a), veh/h | 129 | 0 | 115 | 394 | 0 | 356 | 108 | 1914 | 856 | 141 | 1855 | 830 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.87 | 0.87 | 0.87 | 0.51 | 0.51 | 0.51 |
| Uniform Delay (d), s/veh | 71.1 | 0.0 | 71.4 | 64.9 | 0.0 | 56.1 | 74.1 | 19.9 | 17.9 | 71.5 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.1 | 0.0 | 0.2 | 29.7 | 0.0 | 0.4 | 0.5 | 0.2 | 0.1 | 2.0 | 5.7 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.2 | 0.0 | 0.4 | 18.2 | 0.0 | 3.9 | 1.4 | 5.4 | 0.9 | 3.2 | 1.5 | 0.0 |
| LnGrp Delay(d),s/veh | 71.2 | 0.0 | 71.6 | 94.7 | 0.0 | 56.5 | 74.6 | 20.1 | 18.0 | 73.5 | 5.7 | 0.0 |
| LnGrp LOS | E | | E | F | | E | E | C | B | E | A | A |
| Approach Vol, veh/h | | 13 | | | 437 | | | 517 | | | 1815 | |
| Approach Delay, s/veh | | 71.5 | | | 86.0 | | | 23.3 | | | 8.3 | |
| Approach LOS | | E | | | F | | | C | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 14.2 | 96.1 | 38.0 | 16.6 | 17.0 | 93.4 | 16.7 | 37.9 | | | | |
| Change Period (Y+Rc), s | 4.6 | 6.9 | * 4.7 | * 4.7 | 6.9 | * 6.9 | * 4.7 | * 4.7 | | | | |
| Max Green Setting (Gmax), s | 13.1 | 82.4 | * 37 | * 12 | 9.0 | * 87 | * 12 | * 37 | | | | |
| Max Q Clear Time (g_c+I1), s | 8.4 | 12.8 | 33.0 | 2.9 | 4.8 | 2.0 | 2.3 | 10.7 | | | | |
| Green Ext Time (p_c), s | 0.0 | 4.1 | 0.3 | 0.3 | 0.1 | 32.9 | 0.0 | 0.5 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 23.6 | | | | | | | | | |
| HCM 2010 LOS | | | C | | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 125 | 371 | 87 | 71 | 701 | 241 | 166 | 558 | 74 | 173 | 872 | 543 |
| Future Volume (veh/h) | 125 | 371 | 87 | 71 | 701 | 241 | 166 | 558 | 74 | 173 | 872 | 543 |
| 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 | | 0.98 | 1.00 | | 0.98 | 1.00 | | 0.99 | 1.00 | | 0.98 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 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 | 1667 | 1863 | 1863 | 1667 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 130 | 386 | 91 | 74 | 730 | 251 | 173 | 581 | 77 | 180 | 908 | 566 |
| Adj No. of Lanes | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 164 | 996 | 436 | 109 | 901 | 394 | 462 | 1165 | 514 | 522 | 1171 | 516 |
| Arrive On Green | 0.18 | 0.56 | 0.56 | 0.02 | 0.08 | 0.08 | 0.15 | 0.33 | 0.33 | 0.15 | 0.33 | 0.33 |
| Sat Flow, veh/h | 1774 | 3539 | 1551 | 1587 | 3539 | 1547 | 3079 | 3539 | 1560 | 3442 | 3539 | 1559 |
| Grp Volume(v), veh/h | 130 | 386 | 91 | 74 | 730 | 251 | 173 | 581 | 77 | 180 | 908 | 566 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1551 | 1587 | 1770 | 1547 | 1540 | 1770 | 1560 | 1721 | 1770 | 1559 |
| Q Serve(g_s), s | 8.4 | 7.3 | 2.4 | 5.6 | 24.3 | 18.8 | 6.1 | 15.8 | 3.2 | 5.6 | 27.7 | 39.7 |
| Cycle Q Clear(g_c), s | 8.4 | 7.3 | 2.4 | 5.6 | 24.3 | 18.8 | 6.1 | 15.8 | 3.2 | 5.6 | 27.7 | 39.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 164 | 996 | 436 | 109 | 901 | 394 | 462 | 1165 | 514 | 522 | 1171 | 516 |
| V/C Ratio(X) | 0.79 | 0.39 | 0.21 | 0.68 | 0.81 | 0.64 | 0.37 | 0.50 | 0.15 | 0.35 | 0.78 | 1.10 |
| Avail Cap(c_a), veh/h | 200 | 1165 | 510 | 126 | 1047 | 458 | 462 | 1165 | 514 | 522 | 1171 | 516 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.96 | 0.96 | 0.96 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.48 | 0.48 | 0.48 |
| Uniform Delay (d), s/veh | 47.9 | 20.4 | 9.1 | 57.3 | 52.1 | 49.6 | 45.9 | 32.3 | 16.5 | 45.6 | 36.1 | 40.2 |
| Incr Delay (d2), s/veh | 12.9 | 0.2 | 0.2 | 8.1 | 4.0 | 1.9 | 0.2 | 1.5 | 0.6 | 0.1 | 2.5 | 57.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 4.7 | 3.6 | 1.0 | 2.7 | 12.4 | 8.3 | 2.6 | 8.0 | 1.5 | 2.7 | 13.9 | 25.4 |
| LnGrp Delay(d),s/veh | 60.7 | 20.6 | 9.3 | 65.4 | 56.1 | 51.5 | 46.1 | 33.8 | 17.1 | 45.6 | 38.6 | 98.0 |
| LnGrp LOS | E | C | A | E | E | D | D | C | B | D | D | F |
| Approach Vol, veh/h | | 607 | | | 1055 | | | 831 | | | 1654 | |
| Approach Delay, s/veh | | 27.5 | | | 55.7 | | | 34.8 | | | 59.7 | |
| Approach LOS | | C | | | E | | | C | | | 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 | 22.7 | 45.9 | 12.7 | 38.7 | 22.5 | 46.1 | 16.0 | 35.5 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.4 | 4.5 | 4.9 | 4.5 | 6.4 | 4.9 | * 4.9 | | | | |
| Max Green Setting (Gmax), s | 11.2 | 39.5 | 9.5 | 39.5 | 11.0 | 39.7 | 13.5 | * 36 | | | | |
| Max Q Clear Time (g_c+I1), s | 7.6 | 17.8 | 7.6 | 9.3 | 8.1 | 41.7 | 10.4 | 26.3 | | | | |
| Green Ext Time (p_c), s | 0.3 | 3.3 | 0.0 | 2.4 | 0.2 | 0.0 | 0.8 | 3.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 49.0 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 65 | 296 | 79 | 70 | 600 | 65 | 170 | 658 | 56 | 124 | 878 | 146 |
| Future Volume (veh/h) | 65 | 296 | 79 | 70 | 600 | 65 | 170 | 658 | 56 | 124 | 878 | 146 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 70 | 318 | 85 | 75 | 645 | 70 | 183 | 708 | 60 | 133 | 944 | 157 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 120 | 400 | 105 | 281 | 757 | 82 | 343 | 1047 | 468 | 751 | 1525 | 682 |
| Arrive On Green | 0.02 | 0.05 | 0.05 | 0.05 | 0.08 | 0.08 | 0.03 | 0.10 | 0.10 | 0.44 | 0.86 | 0.86 |
| Sat Flow, veh/h | 1774 | 2773 | 730 | 1774 | 3222 | 349 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 70 | 201 | 202 | 75 | 354 | 361 | 183 | 708 | 60 | 133 | 944 | 157 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1734 | 1774 | 1770 | 1801 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 4.7 | 13.5 | 13.8 | 4.9 | 23.7 | 23.8 | 6.3 | 23.2 | 4.2 | 2.8 | 9.5 | 2.1 |
| Cycle Q Clear(g_c), s | 4.7 | 13.5 | 13.8 | 4.9 | 23.7 | 23.8 | 6.3 | 23.2 | 4.2 | 2.8 | 9.5 | 2.1 |
| Prop In Lane | 1.00 | | 0.42 | 1.00 | | 0.19 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 120 | 255 | 250 | 281 | 416 | 423 | 343 | 1047 | 468 | 751 | 1525 | 682 |
| V/C Ratio(X) | 0.58 | 0.79 | 0.81 | 0.27 | 0.85 | 0.85 | 0.53 | 0.68 | 0.13 | 0.18 | 0.62 | 0.23 |
| Avail Cap(c_a), veh/h | 140 | 612 | 600 | 281 | 627 | 638 | 359 | 1047 | 468 | 751 | 1525 | 682 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 0.98 | 0.98 | 0.98 | 0.75 | 0.75 | 0.75 | 0.94 | 0.94 | 0.94 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 57.0 | 55.3 | 55.5 | 50.2 | 53.3 | 53.3 | 55.3 | 48.6 | 40.0 | 27.2 | 5.4 | 4.9 |
| Incr Delay (d2), s/veh | 1.6 | 2.0 | 2.3 | 0.1 | 3.5 | 3.6 | 0.6 | 3.3 | 0.5 | 0.0 | 1.9 | 0.8 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.4 | 6.8 | 6.8 | 2.4 | 12.1 | 12.3 | 3.0 | 11.9 | 1.9 | 1.3 | 4.6 | 1.0 |
| LnGrp Delay(d),s/veh | 58.6 | 57.3 | 57.8 | 50.3 | 56.8 | 56.9 | 55.8 | 51.9 | 40.5 | 27.3 | 7.3 | 5.6 |
| LnGrp LOS | E | E | E | D | E | E | E | D | D | C | A | A |
| Approach Vol, veh/h | | 473 | | | 790 | | | 951 | | | 1234 | |
| Approach Delay, s/veh | | 57.7 | | | 56.2 | | | 51.9 | | | 9.2 | |
| Approach LOS | | E | | | E | | | D | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 32.7 | 42.0 | 23.5 | 21.8 | 16.5 | 58.2 | 12.6 | 32.7 | | | | |
| Change Period (Y+Rc), s | 6.5 | * 6.5 | 4.5 | 4.5 | 4.5 | 6.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 12.5 | * 36 | 10.5 | 41.5 | 12.5 | 35.5 | 9.5 | 42.5 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.8 | 25.2 | 6.9 | 15.8 | 8.3 | 11.5 | 6.7 | 25.8 | | | | |
| Green Ext Time (p_c), s | 1.5 | 2.5 | 1.1 | 1.5 | 0.1 | 5.2 | 0.0 | 2.4 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 38.4 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
8: Centre City Pkwy & Valley Pkwy

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative AM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | |  |  |  |  |  | | |  |  |
| Traffic Volume (veh/h) | 0 | 0 | 0 | 334 | 1285 | 227 | 182 | 652 | 0 | 0 | 900 | 123 |
| Future Volume (veh/h) | 0 | 0 | 0 | 334 | 1285 | 227 | 182 | 652 | 0 | 0 | 900 | 123 |
| Number | | | | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | | | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | | | | 1863 | 1863 | 1863 | 1863 | 1863 | 0 | 0 | 1863 | 1863 |
| Adj Flow Rate, veh/h | | | | 355 | 1367 | 241 | 194 | 694 | 0 | 0 | 957 | 131 |
| Adj No. of Lanes | | | | 1 | 3 | 1 | 2 | 2 | 0 | 0 | 2 | 1 |
| Peak Hour Factor | | | | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | | | | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 2 | 2 |
| Cap, veh/h | | | | 560 | 1763 | 500 | 492 | 2069 | 0 | 0 | 1360 | 608 |
| Arrive On Green | | | | 0.32 | 0.32 | 0.32 | 0.14 | 0.58 | 0.00 | 0.00 | 0.38 | 0.38 |
| Sat Flow, veh/h | | | | 1774 | 5588 | 1583 | 3442 | 3632 | 0 | 0 | 3632 | 1583 |
| Grp Volume(v), veh/h | | | | 355 | 1367 | 241 | 194 | 694 | 0 | 0 | 957 | 131 |
| Grp Sat Flow(s),veh/h/ln | | | | 1774 | 1863 | 1583 | 1721 | 1770 | 0 | 0 | 1770 | 1583 |
| Q Serve(g_s), s | | | | 20.5 | 26.6 | 14.7 | 6.1 | 12.2 | 0.0 | 0.0 | 27.4 | 6.7 |
| Cycle Q Clear(g_c), s | | | | 20.5 | 26.6 | 14.7 | 6.1 | 12.2 | 0.0 | 0.0 | 27.4 | 6.7 |
| Prop In Lane | | | | 1.00 | | 1.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | | | | 560 | 1763 | 500 | 492 | 2069 | 0 | 0 | 1360 | 608 |
| V/C Ratio(X) | | | | 0.63 | 0.78 | 0.48 | 0.39 | 0.34 | 0.00 | 0.00 | 0.70 | 0.22 |
| Avail Cap(c_a), veh/h | | | | 679 | 2138 | 606 | 492 | 2069 | 0 | 0 | 1360 | 608 |
| HCM Platoon Ratio | | | | 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 | 0.00 | 0.68 | 0.68 |
| Uniform Delay (d), s/veh | | | | 35.1 | 37.2 | 33.2 | 46.7 | 12.9 | 0.0 | 0.0 | 31.2 | 24.8 |
| Incr Delay (d2), s/veh | | | | 1.1 | 1.4 | 0.5 | 0.4 | 0.4 | 0.0 | 0.0 | 2.1 | 0.6 |
| Initial Q Delay(d3),s/veh | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | | | | 10.2 | 13.9 | 13.5 | 2.9 | 6.0 | 0.0 | 0.0 | 13.7 | 3.0 |
| LnGrp Delay(d),s/veh | | | | 36.2 | 38.6 | 33.7 | 47.1 | 13.3 | 0.0 | 0.0 | 33.3 | 25.4 |
| LnGrp LOS | | | | D | D | C | D | B | | | C | C |
| Approach Vol, veh/h | | | | | 1963 | | | 888 | | | 1088 | |
| Approach Delay, s/veh | | | | | 37.6 | | | 20.7 | | | 32.3 | |
| Approach LOS | | | | | D | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | 5 | 6 | | | | | | |
| Phs Duration (G+Y+Rc), s | | 77.0 | | 43.0 | 24.0 | 53.0 | | | | | | |
| Change Period (Y+Rc), s | | 6.9 | | 5.1 | 6.9 | * 6.9 | | | | | | |
| Max Green Setting (Gmax), s | | 62.1 | | 45.9 | 11.0 | * 46 | | | | | | |
| Max Q Clear Time (g_c+I1), s | | 14.2 | | 28.6 | 8.1 | 29.4 | | | | | | |
| Green Ext Time (p_c), s | | 4.9 | | 9.3 | 1.0 | 5.5 | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 32.3 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 93 | 300 | 123 | 92 | 600 | 39 | 157 | 175 | 79 | 102 | 360 | 204 |
| Future Volume (veh/h) | 93 | 300 | 123 | 92 | 600 | 39 | 157 | 175 | 79 | 102 | 360 | 204 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 104 | 337 | 138 | 103 | 674 | 44 | 176 | 197 | 89 | 115 | 404 | 229 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 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 | 246 | 701 | 282 | 305 | 1071 | 70 | 204 | 749 | 326 | 143 | 615 | 345 |
| Arrive On Green | 0.18 | 0.38 | 0.38 | 0.17 | 0.32 | 0.32 | 0.12 | 0.31 | 0.31 | 0.08 | 0.28 | 0.28 |
| Sat Flow, veh/h | 1774 | 2466 | 992 | 1774 | 3373 | 220 | 1774 | 2402 | 1046 | 1774 | 2189 | 1227 |
| Grp Volume(v), veh/h | 104 | 240 | 235 | 103 | 353 | 365 | 176 | 143 | 143 | 115 | 326 | 307 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1688 | 1774 | 1770 | 1824 | 1774 | 1770 | 1678 | 1774 | 1770 | 1646 |
| Q Serve(g_s), s | 6.2 | 12.4 | 12.7 | 6.1 | 20.4 | 20.5 | 11.7 | 7.3 | 7.7 | 7.6 | 19.5 | 19.8 |
| Cycle Q Clear(g_c), s | 6.2 | 12.4 | 12.7 | 6.1 | 20.4 | 20.5 | 11.7 | 7.3 | 7.7 | 7.6 | 19.5 | 19.8 |
| Prop In Lane | 1.00 | | 0.59 | 1.00 | | 0.12 | 1.00 | | 0.62 | 1.00 | | 0.75 |
| Lane Grp Cap(c), veh/h | 246 | 503 | 480 | 305 | 562 | 579 | 204 | 552 | 523 | 143 | 497 | 463 |
| V/C Ratio(X) | 0.42 | 0.48 | 0.49 | 0.34 | 0.63 | 0.63 | 0.86 | 0.26 | 0.27 | 0.81 | 0.65 | 0.66 |
| Avail Cap(c_a), veh/h | 246 | 503 | 480 | 305 | 562 | 579 | 339 | 552 | 523 | 235 | 497 | 463 |
| HCM Platoon Ratio | 1.33 | 1.33 | 1.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.49 | 0.49 | 0.49 | 0.94 | 0.94 | 0.94 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 44.7 | 30.6 | 30.7 | 43.7 | 34.9 | 34.9 | 52.2 | 30.9 | 31.1 | 54.3 | 38.0 | 38.1 |
| Incr Delay (d2), s/veh | 0.4 | 3.2 | 3.5 | 0.1 | 2.6 | 2.6 | 5.5 | 1.1 | 1.2 | 4.0 | 6.6 | 7.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.1 | 6.5 | 6.4 | 3.0 | 10.4 | 10.7 | 6.0 | 3.7 | 3.7 | 3.9 | 10.4 | 9.9 |
| LnGrp Delay(d),s/veh | 45.1 | 33.8 | 34.2 | 43.8 | 37.6 | 37.5 | 57.7 | 32.0 | 32.3 | 58.3 | 44.6 | 45.5 |
| LnGrp LOS | D | C | C | D | D | D | E | C | C | E | D | D |
| Approach Vol, veh/h | | 579 | | | 821 | | | 462 | | | 748 | |
| Approach Delay, s/veh | | 36.0 | | | 38.3 | | | 41.9 | | | 47.1 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 24.8 | 39.0 | 17.9 | 38.3 | 20.8 | 43.0 | 14.2 | 42.0 | | | | |
| Change Period (Y+Rc), s | 4.1 | 4.9 | 4.1 | 4.6 | 4.1 | 4.9 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 14.9 | 34.1 | 22.9 | 30.4 | 10.9 | 38.1 | 15.9 | * 37 | | | | |
| Max Q Clear Time (g_c+I1), s | 8.1 | 14.7 | 13.7 | 21.8 | 8.2 | 22.5 | 9.6 | 9.7 | | | | |
| Green Ext Time (p_c), s | 0.2 | 1.7 | 0.2 | 1.9 | 0.1 | 2.5 | 0.2 | 1.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 40.9 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
10: Escondido Blvd & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative AM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|--|---|---|--|---|--|--|---|---|--|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |   | |  |   | |  |   | |  |   | |
| Traffic Volume (veh/h) | 57 | 332 | 114 | 68 | 537 | 101 | 79 | 269 | 66 | 86 | 383 | 73 |
| Future Volume (veh/h) | 57 | 332 | 114 | 68 | 537 | 101 | 79 | 269 | 66 | 86 | 383 | 73 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 69 | 400 | 137 | 82 | 647 | 122 | 95 | 324 | 80 | 104 | 461 | 88 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 235 | 1024 | 347 | 111 | 952 | 179 | 120 | 878 | 214 | 129 | 881 | 167 |
| Arrive On Green | 0.04 | 0.13 | 0.13 | 0.06 | 0.32 | 0.32 | 0.07 | 0.31 | 0.31 | 0.07 | 0.30 | 0.30 |
| Sat Flow, veh/h | 1774 | 2598 | 880 | 1774 | 2974 | 560 | 1774 | 2824 | 687 | 1774 | 2970 | 563 |
| Grp Volume(v), veh/h | 69 | 271 | 266 | 82 | 385 | 384 | 95 | 201 | 203 | 104 | 274 | 275 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1708 | 1774 | 1770 | 1764 | 1774 | 1770 | 1741 | 1774 | 1770 | 1763 |
| Q Serve(g_s), s | 4.5 | 16.8 | 17.1 | 5.5 | 22.7 | 22.7 | 6.3 | 10.6 | 10.9 | 6.9 | 15.4 | 15.6 |
| Cycle Q Clear(g_c), s | 4.5 | 16.8 | 17.1 | 5.5 | 22.7 | 22.7 | 6.3 | 10.6 | 10.9 | 6.9 | 15.4 | 15.6 |
| Prop In Lane | 1.00 | | 0.52 | 1.00 | | 0.32 | 1.00 | | 0.39 | 1.00 | | 0.32 |
| Lane Grp Cap(c), veh/h | 235 | 698 | 673 | 111 | 566 | 564 | 120 | 550 | 542 | 129 | 525 | 523 |
| V/C Ratio(X) | 0.29 | 0.39 | 0.40 | 0.74 | 0.68 | 0.68 | 0.79 | 0.37 | 0.37 | 0.81 | 0.52 | 0.53 |
| Avail Cap(c_a), veh/h | 235 | 698 | 673 | 205 | 566 | 564 | 220 | 550 | 542 | 220 | 525 | 523 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.93 | 0.93 | 0.93 | 0.45 | 0.45 | 0.45 | 0.99 | 0.99 | 0.99 | 0.81 | 0.81 | 0.81 |
| Uniform Delay (d), s/veh | 51.9 | 38.9 | 39.1 | 55.3 | 35.4 | 35.5 | 55.1 | 32.1 | 32.2 | 54.8 | 35.1 | 35.2 |
| Incr Delay (d2), s/veh | 0.2 | 1.5 | 1.6 | 1.7 | 3.0 | 3.0 | 4.3 | 1.9 | 1.9 | 3.7 | 3.0 | 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(50%),veh/ln | 2.2 | 8.6 | 8.4 | 2.7 | 11.5 | 11.6 | 3.3 | 5.5 | 5.5 | 3.5 | 8.0 | 8.0 |
| LnGrp Delay(d),s/veh | 52.2 | 40.5 | 40.7 | 57.0 | 38.4 | 38.5 | 59.4 | 34.0 | 34.2 | 58.5 | 38.1 | 38.2 |
| LnGrp LOS | D | D | D | E | D | D | E | C | C | E | D | D |
| Approach Vol, veh/h | | 606 | | | 851 | | | 499 | | | 653 | |
| Approach Delay, s/veh | | 41.9 | | | 40.2 | | | 38.9 | | | 41.4 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 12.8 | 43.7 | 11.6 | 51.9 | 14.5 | 42.0 | 20.5 | 43.0 | | | | |
| Change Period (Y+Rc), s | 4.1 | 6.4 | 4.1 | 4.6 | 6.4 | * 6.4 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 14.9 | 35.6 | 13.9 | 36.4 | 14.9 | * 36 | 11.9 | * 38 | | | | |
| Max Q Clear Time (g_c+I1), s | 8.9 | 12.9 | 7.5 | 19.1 | 8.3 | 17.6 | 6.5 | 24.7 | | | | |
| Green Ext Time (p_c), s | 0.1 | 1.6 | 0.0 | 2.0 | 0.2 | 1.9 | 0.1 | 2.7 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 40.7 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | |  |  | | |  | |  |  |  |
| Traffic Volume (veh/h) | 9 | 2 | 24 | 72 | 1 | 73 | 2 | 352 | 55 | 67 | 486 | 3 |
| Future Volume (veh/h) | 9 | 2 | 24 | 72 | 1 | 73 | 2 | 352 | 55 | 67 | 486 | 3 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1900 | 1863 | 1900 | 1863 | 1863 | 1900 | 1900 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 10 | 2 | 27 | 81 | 1 | 82 | 2 | 396 | 62 | 75 | 546 | 3 |
| Adj No. of Lanes | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 1 | 2 | 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 | 65 | 19 | 69 | 206 | 2 | 126 | 44 | 2106 | 326 | 97 | 2894 | 16 |
| Arrive On Green | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.70 | 0.70 | 0.70 | 0.05 | 0.80 | 0.80 |
| Sat Flow, veh/h | 143 | 240 | 862 | 1375 | 19 | 1567 | 2 | 3007 | 465 | 1774 | 3609 | 20 |
| Grp Volume(v), veh/h | 39 | 0 | 0 | 81 | 0 | 83 | 245 | 0 | 215 | 75 | 268 | 281 |
| Grp Sat Flow(s),veh/h/ln | 1245 | 0 | 0 | 1375 | 0 | 1586 | 1860 | 0 | 1613 | 1774 | 1770 | 1859 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.3 | 0.0 | 0.0 | 3.9 | 3.5 | 3.0 | 3.0 |
| Cycle Q Clear(g_c), s | 4.4 | 0.0 | 0.0 | 4.2 | 0.0 | 4.3 | 3.9 | 0.0 | 3.9 | 3.5 | 3.0 | 3.0 |
| Prop In Lane | 0.26 | | 0.69 | 1.00 | | 0.99 | 0.01 | | 0.29 | 1.00 | | 0.01 |
| Lane Grp Cap(c), veh/h | 153 | 0 | 0 | 206 | 0 | 127 | 1346 | 0 | 1130 | 97 | 1419 | 1491 |
| V/C Ratio(X) | 0.25 | 0.00 | 0.00 | 0.39 | 0.00 | 0.65 | 0.18 | 0.00 | 0.19 | 0.77 | 0.19 | 0.19 |
| Avail Cap(c_a), veh/h | 504 | 0 | 0 | 516 | 0 | 485 | 1346 | 0 | 1130 | 313 | 1419 | 1491 |
| 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 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.83 | 0.83 | 0.83 |
| Uniform Delay (d), s/veh | 36.8 | 0.0 | 0.0 | 37.9 | 0.0 | 37.9 | 4.4 | 0.0 | 4.4 | 39.7 | 2.0 | 2.0 |
| Incr Delay (d2), s/veh | 0.3 | 0.0 | 0.0 | 0.5 | 0.0 | 2.1 | 0.3 | 0.0 | 0.4 | 4.1 | 0.2 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.9 | 0.0 | 0.0 | 1.9 | 0.0 | 2.0 | 2.1 | 0.0 | 1.9 | 1.8 | 1.5 | 1.6 |
| LnGrp Delay(d),s/veh | 37.1 | 0.0 | 0.0 | 38.3 | 0.0 | 40.0 | 4.7 | 0.0 | 4.8 | 43.8 | 2.2 | 2.2 |
| LnGrp LOS | D | | | D | | D | A | | A | D | A | A |
| Approach Vol, veh/h | | 39 | | | 164 | | | 460 | | | 624 | |
| Approach Delay, s/veh | | 37.1 | | | 39.2 | | | 4.7 | | | 7.2 | |
| Approach LOS | | D | | | D | | | A | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 8.6 | 64.5 | | 11.8 | | 73.2 | | 11.8 | | | | |
| Change Period (Y+Rc), s | 4.0 | 5.0 | | * 5 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 15.0 | 30.0 | | * 27 | | 49.0 | | 26.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.5 | 5.9 | | 6.4 | | 5.0 | | 6.3 | | | | |
| Green Ext Time (p_c), s | 0.0 | 6.3 | | 0.5 | | 7.1 | | 0.5 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 11.3 | | | | | | | | |
| HCM 2010 LOS | | | | B | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
12: Broadway & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative AM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 97 | 259 | 109 | 72 | 495 | 225 | 131 | 436 | 39 | 187 | 826 | 137 |
| Future Volume (veh/h) | 97 | 259 | 109 | 72 | 495 | 225 | 131 | 436 | 39 | 187 | 826 | 137 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 101 | 270 | 114 | 75 | 516 | 234 | 136 | 454 | 41 | 195 | 860 | 143 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 129 | 672 | 277 | 96 | 607 | 274 | 180 | 980 | 88 | 229 | 989 | 164 |
| Arrive On Green | 0.07 | 0.27 | 0.27 | 0.05 | 0.26 | 0.26 | 0.10 | 0.30 | 0.30 | 0.13 | 0.33 | 0.33 |
| Sat Flow, veh/h | 1774 | 2447 | 1007 | 1774 | 2372 | 1071 | 1774 | 3285 | 296 | 1774 | 3038 | 505 |
| Grp Volume(v), veh/h | 101 | 193 | 191 | 75 | 384 | 366 | 136 | 244 | 251 | 195 | 501 | 502 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1685 | 1774 | 1770 | 1674 | 1774 | 1770 | 1811 | 1774 | 1770 | 1774 |
| Q Serve(g_s), s | 4.1 | 6.6 | 6.8 | 3.1 | 15.2 | 15.3 | 5.5 | 8.3 | 8.3 | 7.9 | 19.6 | 19.6 |
| Cycle Q Clear(g_c), s | 4.1 | 6.6 | 6.8 | 3.1 | 15.2 | 15.3 | 5.5 | 8.3 | 8.3 | 7.9 | 19.6 | 19.6 |
| Prop In Lane | 1.00 | | 0.60 | 1.00 | | 0.64 | 1.00 | | 0.16 | 1.00 | | 0.28 |
| Lane Grp Cap(c), veh/h | 129 | 486 | 463 | 96 | 453 | 429 | 180 | 528 | 540 | 229 | 576 | 577 |
| V/C Ratio(X) | 0.78 | 0.40 | 0.41 | 0.78 | 0.85 | 0.85 | 0.75 | 0.46 | 0.46 | 0.85 | 0.87 | 0.87 |
| Avail Cap(c_a), veh/h | 132 | 486 | 463 | 132 | 480 | 454 | 180 | 528 | 540 | 229 | 576 | 577 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.6 | 21.8 | 21.9 | 34.4 | 26.1 | 26.1 | 32.2 | 21.0 | 21.1 | 31.4 | 23.4 | 23.4 |
| Incr Delay (d2), s/veh | 25.3 | 0.5 | 0.6 | 18.1 | 12.9 | 14.0 | 16.3 | 2.9 | 2.9 | 25.4 | 16.3 | 16.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.9 | 3.2 | 3.3 | 2.0 | 9.0 | 8.7 | 3.5 | 4.4 | 4.5 | 5.5 | 12.2 | 12.2 |
| LnGrp Delay(d),s/veh | 58.9 | 22.3 | 22.5 | 52.6 | 38.9 | 40.1 | 48.5 | 23.9 | 23.9 | 56.9 | 39.7 | 39.7 |
| LnGrp LOS | E | C | C | D | D | D | D | C | C | E | D | D |
| Approach Vol, veh/h | | 485 | | | 825 | | | 631 | | | 1198 | |
| Approach Delay, s/veh | | 30.0 | | | 40.7 | | | 29.2 | | | 42.5 | |
| Approach LOS | | C | | | D | | | C | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 14.0 | 26.5 | 8.5 | 24.7 | 12.0 | 28.5 | 9.9 | 23.4 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 9.5 | 22.0 | 5.5 | 20.0 | 7.5 | 24.0 | 5.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 9.9 | 10.3 | 5.1 | 8.8 | 7.5 | 21.6 | 6.1 | 17.3 | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.6 | 0.0 | 5.2 | 0.0 | 1.4 | 0.0 | 1.6 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 37.4 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |

SEC CCP/Mission TIA
13: Broadway & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative AM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 77 | 284 | 66 | 74 | 565 | 208 | 71 | 263 | 19 | 191 | 616 | 79 |
| Future Volume (veh/h) | 77 | 284 | 66 | 74 | 565 | 208 | 71 | 263 | 19 | 191 | 616 | 79 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 81 | 299 | 69 | 78 | 595 | 219 | 75 | 277 | 20 | 201 | 648 | 83 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 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 | 104 | 428 | 97 | 310 | 673 | 247 | 96 | 974 | 70 | 242 | 1177 | 151 |
| Arrive On Green | 0.06 | 0.15 | 0.15 | 0.17 | 0.27 | 0.27 | 0.05 | 0.29 | 0.29 | 0.14 | 0.37 | 0.37 |
| Sat Flow, veh/h | 1774 | 2866 | 652 | 1774 | 2536 | 932 | 1774 | 3349 | 240 | 1774 | 3157 | 404 |
| Grp Volume(v), veh/h | 81 | 183 | 185 | 78 | 415 | 399 | 75 | 146 | 151 | 201 | 363 | 368 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1748 | 1774 | 1770 | 1698 | 1774 | 1770 | 1820 | 1774 | 1770 | 1791 |
| Q Serve(g_s), s | 3.3 | 7.1 | 7.3 | 2.7 | 16.3 | 16.3 | 3.0 | 4.6 | 4.6 | 8.0 | 11.7 | 11.7 |
| Cycle Q Clear(g_c), s | 3.3 | 7.1 | 7.3 | 2.7 | 16.3 | 16.3 | 3.0 | 4.6 | 4.6 | 8.0 | 11.7 | 11.7 |
| Prop In Lane | 1.00 | | 0.37 | 1.00 | | 0.55 | 1.00 | | 0.13 | 1.00 | | 0.23 |
| Lane Grp Cap(c), veh/h | 104 | 264 | 261 | 310 | 469 | 451 | 96 | 514 | 529 | 242 | 660 | 668 |
| V/C Ratio(X) | 0.78 | 0.69 | 0.71 | 0.25 | 0.88 | 0.89 | 0.78 | 0.28 | 0.29 | 0.83 | 0.55 | 0.55 |
| Avail Cap(c_a), veh/h | 135 | 490 | 484 | 310 | 490 | 470 | 145 | 514 | 529 | 258 | 660 | 668 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.6 | 29.2 | 29.2 | 25.7 | 25.5 | 25.5 | 33.7 | 19.8 | 19.8 | 30.4 | 17.9 | 17.9 |
| Incr Delay (d2), s/veh | 19.3 | 3.2 | 3.5 | 0.4 | 16.8 | 17.6 | 14.2 | 1.4 | 1.4 | 19.1 | 3.3 | 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(50%),veh/ln | 2.2 | 3.7 | 3.8 | 1.4 | 10.1 | 9.9 | 1.9 | 2.4 | 2.5 | 5.2 | 6.2 | 6.3 |
| LnGrp Delay(d),s/veh | 52.8 | 32.4 | 32.8 | 26.2 | 42.2 | 43.1 | 48.0 | 21.2 | 21.2 | 49.5 | 21.1 | 21.1 |
| LnGrp LOS | D | C | C | C | D | D | D | C | C | D | C | C |
| Approach Vol, veh/h | | 449 | | | 892 | | | 372 | | | 932 | |
| Approach Delay, s/veh | | 36.2 | | | 41.2 | | | 26.6 | | | 27.3 | |
| Approach LOS | | D | | | D | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 14.4 | 25.5 | 17.1 | 15.3 | 8.4 | 31.4 | 8.7 | 23.7 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 10.5 | 21.0 | 5.5 | 20.0 | 5.9 | 25.6 | 5.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 10.0 | 6.6 | 4.7 | 9.3 | 5.0 | 13.7 | 5.3 | 18.3 | | | | |
| Green Ext Time (p_c), s | 0.1 | 1.3 | 0.0 | 1.5 | 0.0 | 4.0 | 0.0 | 0.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 33.4 | | | | | | | | | |
| HCM 2010 LOS | | | C | | | | | | | | | |

SEC CCP/Mission TIA
1: Rock Springs Rd & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Mid-Day Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  |  |
| Traffic Volume (veh/h) | 105 | 539 | 88 | 66 | 576 | 151 | 112 | 194 | 85 | 57 | 221 | 61 |
| Future Volume (veh/h) | 105 | 539 | 88 | 66 | 576 | 151 | 112 | 194 | 85 | 57 | 221 | 61 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 109 | 561 | 92 | 69 | 600 | 157 | 117 | 202 | 89 | 59 | 230 | 64 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 137 | 1732 | 283 | 89 | 1505 | 393 | 230 | 608 | 259 | 268 | 468 | 398 |
| Arrive On Green | 0.08 | 0.57 | 0.57 | 0.05 | 0.54 | 0.54 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Sat Flow, veh/h | 1774 | 3046 | 498 | 1774 | 2779 | 726 | 1081 | 2421 | 1029 | 1084 | 1863 | 1583 |
| Grp Volume(v), veh/h | 109 | 325 | 328 | 69 | 382 | 375 | 117 | 146 | 145 | 59 | 230 | 64 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1775 | 1774 | 1770 | 1735 | 1081 | 1770 | 1681 | 1084 | 1863 | 1583 |
| Q Serve(g_s), s | 6.0 | 9.7 | 9.8 | 3.8 | 12.6 | 12.7 | 10.4 | 6.7 | 7.1 | 4.7 | 10.5 | 3.2 |
| Cycle Q Clear(g_c), s | 6.0 | 9.7 | 9.8 | 3.8 | 12.6 | 12.7 | 20.9 | 6.7 | 7.1 | 11.8 | 10.5 | 3.2 |
| Prop In Lane | 1.00 | | 0.28 | 1.00 | | 0.42 | 1.00 | | 0.61 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 137 | 1006 | 1009 | 89 | 958 | 939 | 230 | 445 | 422 | 268 | 468 | 398 |
| V/C Ratio(X) | 0.80 | 0.32 | 0.32 | 0.78 | 0.40 | 0.40 | 0.51 | 0.33 | 0.34 | 0.22 | 0.49 | 0.16 |
| Avail Cap(c_a), veh/h | 284 | 1006 | 1009 | 195 | 958 | 939 | 298 | 557 | 530 | 337 | 587 | 499 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.89 | 0.89 | 0.89 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 45.4 | 11.4 | 11.4 | 46.9 | 13.4 | 13.4 | 40.9 | 30.5 | 30.7 | 35.5 | 32.0 | 29.2 |
| Incr Delay (d2), s/veh | 3.9 | 0.9 | 0.9 | 4.8 | 1.1 | 1.1 | 1.3 | 0.3 | 0.4 | 0.3 | 0.6 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.1 | 4.9 | 5.0 | 2.0 | 6.4 | 6.3 | 3.2 | 3.3 | 3.3 | 1.4 | 5.5 | 1.4 |
| LnGrp Delay(d),s/veh | 49.3 | 12.2 | 12.3 | 51.7 | 14.5 | 14.5 | 42.2 | 30.9 | 31.0 | 35.8 | 32.6 | 29.3 |
| LnGrp LOS | D | B | B | D | B | B | D | C | C | D | C | C |
| Approach Vol, veh/h | | 762 | | | 826 | | | 408 | | | 353 | |
| Approach Delay, s/veh | | 17.6 | | | 17.6 | | | 34.2 | | | 32.5 | |
| Approach LOS | | B | | | B | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 9.0 | 61.4 | | 29.6 | 11.7 | 58.7 | | 29.6 | | | | |
| Change Period (Y+Rc), s | 4.0 | 4.5 | | 4.5 | 4.0 | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | 11.0 | 44.5 | | 31.5 | 16.0 | 39.5 | | 31.5 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.8 | 11.8 | | 13.8 | 8.0 | 14.7 | | 22.9 | | | | |
| Green Ext Time (p_c), s | 0.0 | 13.1 | | 3.0 | 0.1 | 11.6 | | 2.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 22.7 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 54 | 690 | 82 | 139 | 700 | 139 | 113 | 63 | 153 | 141 | 82 | 39 |
| Future Volume (veh/h) | 54 | 690 | 82 | 139 | 700 | 139 | 113 | 63 | 153 | 141 | 82 | 39 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 56 | 719 | 85 | 145 | 729 | 145 | 118 | 66 | 159 | 147 | 85 | 41 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 411 | 994 | 117 | 540 | 1131 | 225 | 234 | 230 | 195 | 178 | 110 | 53 |
| Arrive On Green | 0.23 | 0.31 | 0.31 | 0.61 | 0.77 | 0.77 | 0.04 | 0.04 | 0.04 | 0.10 | 0.09 | 0.09 |
| Sat Flow, veh/h | 1774 | 3189 | 377 | 1774 | 2944 | 585 | 1774 | 1863 | 1583 | 1774 | 1188 | 573 |
| Grp Volume(v), veh/h | 56 | 399 | 405 | 145 | 438 | 436 | 118 | 66 | 159 | 147 | 0 | 126 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1796 | 1774 | 1770 | 1759 | 1774 | 1863 | 1583 | 1774 | 0 | 1762 |
| Q Serve(g_s), s | 3.0 | 24.0 | 24.1 | 4.6 | 13.6 | 13.6 | 7.8 | 4.1 | 12.0 | 9.8 | 0.0 | 8.4 |
| Cycle Q Clear(g_c), s | 3.0 | 24.0 | 24.1 | 4.6 | 13.6 | 13.6 | 7.8 | 4.1 | 12.0 | 9.8 | 0.0 | 8.4 |
| Prop In Lane | 1.00 | | 0.21 | 1.00 | | 0.33 | 1.00 | | 1.00 | 1.00 | | 0.33 |
| Lane Grp Cap(c), veh/h | 411 | 552 | 560 | 540 | 680 | 676 | 234 | 230 | 195 | 178 | 0 | 163 |
| V/C Ratio(X) | 0.14 | 0.72 | 0.72 | 0.27 | 0.64 | 0.64 | 0.51 | 0.29 | 0.81 | 0.82 | 0.00 | 0.78 |
| Avail Cap(c_a), veh/h | 411 | 552 | 560 | 540 | 680 | 676 | 234 | 433 | 368 | 265 | 0 | 442 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.96 | 0.96 | 0.96 | 0.81 | 0.81 | 0.81 | 0.87 | 0.87 | 0.87 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 36.5 | 36.7 | 36.7 | 17.2 | 10.1 | 10.1 | 53.6 | 52.4 | 56.2 | 52.9 | 0.0 | 53.2 |
| Incr Delay (d2), s/veh | 0.2 | 7.7 | 7.6 | 0.3 | 3.8 | 3.8 | 1.8 | 0.7 | 8.4 | 13.8 | 0.0 | 9.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.5 | 12.9 | 13.1 | 2.2 | 7.0 | 7.0 | 4.0 | 2.2 | 5.7 | 5.5 | 0.0 | 4.5 |
| LnGrp Delay(d),s/veh | 36.7 | 44.4 | 44.3 | 17.5 | 13.9 | 13.9 | 55.4 | 53.2 | 64.6 | 66.7 | 0.0 | 62.4 |
| LnGrp LOS | D | D | D | B | B | B | E | D | E | E | | E |
| Approach Vol, veh/h | | 860 | | | 1019 | | | 343 | | | 273 | |
| Approach Delay, s/veh | | 43.9 | | | 14.4 | | | 59.2 | | | 64.7 | |
| Approach LOS | | D | | | B | | | E | | | E | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 41.1 | 42.8 | 19.9 | 16.2 | 32.4 | 51.5 | 16.2 | 19.9 | | | | |
| Change Period (Y+Rc), s | 4.6 | 5.4 | 4.1 | 5.1 | 4.6 | * 5.4 | 4.1 | 5.1 | | | | |
| Max Green Setting (Gmax), s | 17.6 | 37.4 | 15.7 | 30.1 | 9.4 | * 46 | 17.9 | 27.9 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.6 | 26.1 | 9.8 | 10.4 | 5.0 | 15.6 | 11.8 | 14.0 | | | | |
| Green Ext Time (p_c), s | 0.5 | 6.0 | 0.5 | 0.7 | 0.3 | 12.0 | 0.4 | 0.8 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 36.2 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
3: Quince St & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Mid-Day Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |   | |  |   | |  |   | |  |   | |
| Traffic Volume (veh/h) | 29 | 488 | 99 | 77 | 513 | 108 | 77 | 125 | 116 | 47 | 145 | 36 |
| Future Volume (veh/h) | 29 | 488 | 99 | 77 | 513 | 108 | 77 | 125 | 116 | 47 | 145 | 36 |
| 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 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 30 | 508 | 103 | 80 | 534 | 112 | 80 | 130 | 121 | 49 | 151 | 38 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 663 | 2265 | 457 | 644 | 2250 | 470 | 182 | 274 | 235 | 150 | 427 | 105 |
| Arrive On Green | 0.77 | 0.77 | 0.77 | 1.00 | 1.00 | 1.00 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Sat Flow, veh/h | 781 | 2935 | 592 | 807 | 2916 | 609 | 1189 | 1809 | 1550 | 1124 | 2820 | 691 |
| Grp Volume(v), veh/h | 30 | 305 | 306 | 80 | 323 | 323 | 80 | 127 | 124 | 49 | 93 | 96 |
| Grp Sat Flow(s),veh/h/ln | 781 | 1770 | 1758 | 807 | 1770 | 1755 | 1189 | 1770 | 1589 | 1124 | 1770 | 1741 |
| Q Serve(g_s), s | 1.1 | 5.7 | 5.8 | 0.8 | 0.0 | 0.0 | 7.8 | 7.9 | 8.6 | 5.0 | 5.7 | 5.9 |
| Cycle Q Clear(g_c), s | 1.1 | 5.7 | 5.8 | 6.6 | 0.0 | 0.0 | 13.7 | 7.9 | 8.6 | 13.7 | 5.7 | 5.9 |
| Prop In Lane | 1.00 | | 0.34 | 1.00 | | 0.35 | 1.00 | | 0.98 | 1.00 | | 0.40 |
| Lane Grp Cap(c), veh/h | 663 | 1366 | 1357 | 644 | 1366 | 1355 | 182 | 268 | 241 | 150 | 268 | 264 |
| V/C Ratio(X) | 0.05 | 0.22 | 0.23 | 0.12 | 0.24 | 0.24 | 0.44 | 0.47 | 0.51 | 0.33 | 0.35 | 0.36 |
| Avail Cap(c_a), veh/h | 663 | 1366 | 1357 | 644 | 1366 | 1355 | 441 | 655 | 588 | 395 | 655 | 644 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.73 | 0.73 | 0.73 | 1.00 | 1.00 | 1.00 | 0.76 | 0.76 | 0.76 |
| Uniform Delay (d), s/veh | 3.3 | 3.8 | 3.8 | 0.2 | 0.0 | 0.0 | 51.8 | 46.5 | 46.8 | 53.1 | 45.6 | 45.7 |
| Incr Delay (d2), s/veh | 0.1 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 1.2 | 1.0 | 1.3 | 0.7 | 0.4 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.3 | 2.9 | 2.9 | 0.2 | 0.1 | 0.1 | 2.6 | 3.9 | 3.9 | 1.6 | 2.8 | 2.9 |
| LnGrp Delay(d),s/veh | 3.4 | 4.2 | 4.2 | 0.5 | 0.3 | 0.3 | 53.1 | 47.5 | 48.1 | 53.8 | 46.0 | 46.2 |
| LnGrp LOS | A | A | A | A | A | A | D | D | D | D | D | D |
| Approach Vol, veh/h | | 641 | | | 726 | | | 331 | | | 238 | |
| Approach Delay, s/veh | | 4.1 | | | 0.3 | | | 49.1 | | | 47.7 | |
| Approach LOS | | A | | | A | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 97.2 | | 22.8 | | 97.2 | | 22.8 | | | | |
| Change Period (Y+Rc), s | | 4.6 | | 4.6 | | 4.6 | | 4.6 | | | | |
| Max Green Setting (Gmax), s | | 66.4 | | 44.4 | | 66.4 | | 44.4 | | | | |
| Max Q Clear Time (g_c+I1), s | | 7.8 | | 15.7 | | 8.6 | | 15.7 | | | | |
| Green Ext Time (p_c), s | | 8.7 | | 2.5 | | 8.7 | | 2.5 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 15.7 | | | | | | | | |
| HCM 2010 LOS | | | | B | | | | | | | | |

SEC CCP/Mission TIA
4: Centre City Pkwy & El Norte Pkwy

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Mid-Day Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 31 | 522 | 199 | 179 | 500 | 97 | 227 | 282 | 119 | 130 | 293 | 39 |
| Future Volume (veh/h) | 31 | 522 | 199 | 179 | 500 | 97 | 227 | 282 | 119 | 130 | 293 | 39 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 32 | 544 | 207 | 186 | 521 | 101 | 236 | 294 | 124 | 135 | 305 | 41 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 171 | 920 | 412 | 236 | 825 | 159 | 330 | 1470 | 658 | 305 | 1440 | 644 |
| Arrive On Green | 0.05 | 0.26 | 0.26 | 0.07 | 0.28 | 0.28 | 0.10 | 0.42 | 0.42 | 0.09 | 0.41 | 0.41 |
| Sat Flow, veh/h | 3442 | 3539 | 1583 | 3442 | 2960 | 571 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 32 | 544 | 207 | 186 | 311 | 311 | 236 | 294 | 124 | 135 | 305 | 41 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1583 | 1721 | 1770 | 1762 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 1.3 | 19.6 | 16.2 | 7.8 | 22.4 | 22.6 | 9.7 | 7.7 | 7.2 | 5.4 | 8.2 | 2.3 |
| Cycle Q Clear(g_c), s | 1.3 | 19.6 | 16.2 | 7.8 | 22.4 | 22.6 | 9.7 | 7.7 | 7.2 | 5.4 | 8.2 | 2.3 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.32 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 171 | 920 | 412 | 236 | 493 | 491 | 330 | 1470 | 658 | 305 | 1440 | 644 |
| V/C Ratio(X) | 0.19 | 0.59 | 0.50 | 0.79 | 0.63 | 0.63 | 0.71 | 0.20 | 0.19 | 0.44 | 0.21 | 0.06 |
| Avail Cap(c_a), veh/h | 236 | 1274 | 570 | 342 | 691 | 688 | 394 | 1470 | 658 | 307 | 1440 | 644 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 66.5 | 47.2 | 45.9 | 66.9 | 46.0 | 46.1 | 64.0 | 27.2 | 27.0 | 63.0 | 28.1 | 26.3 |
| Incr Delay (d2), s/veh | 0.4 | 1.0 | 1.6 | 4.4 | 2.3 | 2.3 | 3.5 | 0.3 | 0.6 | 0.4 | 0.3 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.6 | 9.7 | 7.3 | 3.8 | 11.3 | 11.3 | 4.8 | 3.8 | 3.3 | 2.6 | 4.0 | 1.0 |
| LnGrp Delay(d),s/veh | 66.9 | 48.2 | 47.6 | 71.3 | 48.3 | 48.4 | 67.5 | 27.5 | 27.7 | 63.4 | 28.4 | 26.5 |
| LnGrp LOS | E | D | D | E | D | D | E | C | C | E | C | C |
| Approach Vol, veh/h | | 783 | | | 808 | | | 654 | | | 481 | |
| Approach Delay, s/veh | | 48.8 | | | 53.6 | | | 42.0 | | | 38.1 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 19.0 | 67.5 | 15.1 | 44.2 | 20.3 | 66.2 | 12.4 | 47.0 | | | | |
| Change Period (Y+Rc), s | 6.1 | 6.9 | 5.1 | 6.3 | 6.3 | 6.9 | 5.1 | 6.3 | | | | |
| Max Green Setting (Gmax), s | 13.0 | 60.6 | 14.5 | 52.5 | 16.7 | 56.7 | 10.0 | 57.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 7.4 | 9.7 | 9.8 | 21.6 | 11.7 | 10.2 | 3.3 | 24.6 | | | | |
| Green Ext Time (p_c), s | 0.1 | 6.1 | 0.1 | 15.7 | 0.2 | 6.1 | 0.0 | 16.1 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 46.7 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 6 | 1 | 20 | 128 | 1 | 110 | 21 | 527 | 54 | 48 | 686 | 2 |
| Future Volume (veh/h) | 6 | 1 | 20 | 128 | 1 | 110 | 21 | 527 | 54 | 48 | 686 | 2 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 7 | 1 | 22 | 144 | 1 | 124 | 24 | 592 | 61 | 54 | 771 | 2 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 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 | 35 | 11 | 238 | 251 | 4 | 437 | 82 | 1159 | 518 | 161 | 1207 | 540 |
| Arrive On Green | 0.02 | 0.16 | 0.16 | 0.14 | 0.28 | 0.28 | 0.05 | 0.33 | 0.33 | 0.09 | 0.34 | 0.34 |
| Sat Flow, veh/h | 1774 | 69 | 1524 | 1774 | 13 | 1573 | 1774 | 3539 | 1583 | 1774 | 3539 | 1583 |
| Grp Volume(v), veh/h | 7 | 0 | 23 | 144 | 0 | 125 | 24 | 592 | 61 | 54 | 771 | 2 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 0 | 1594 | 1774 | 0 | 1585 | 1774 | 1770 | 1583 | 1774 | 1770 | 1583 |
| Q Serve(g_s), s | 0.3 | 0.0 | 0.9 | 5.6 | 0.0 | 4.6 | 1.0 | 9.9 | 2.0 | 2.1 | 13.5 | 0.0 |
| Cycle Q Clear(g_c), s | 0.3 | 0.0 | 0.9 | 5.6 | 0.0 | 4.6 | 1.0 | 9.9 | 2.0 | 2.1 | 13.5 | 0.0 |
| Prop In Lane | 1.00 | | 0.96 | 1.00 | | 0.99 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 35 | 0 | 249 | 251 | 0 | 440 | 82 | 1159 | 518 | 161 | 1207 | 540 |
| V/C Ratio(X) | 0.20 | 0.00 | 0.09 | 0.57 | 0.00 | 0.28 | 0.29 | 0.51 | 0.12 | 0.34 | 0.64 | 0.00 |
| Avail Cap(c_a), veh/h | 265 | 0 | 953 | 265 | 0 | 948 | 217 | 1159 | 518 | 241 | 1207 | 540 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(l) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 35.5 | 0.0 | 26.6 | 29.5 | 0.0 | 20.8 | 34.0 | 20.0 | 17.3 | 31.4 | 20.4 | 8.5 |
| Incr Delay (d2), s/veh | 1.0 | 0.0 | 0.1 | 1.5 | 0.0 | 0.3 | 0.7 | 1.6 | 0.5 | 0.5 | 2.6 | 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(50%),veh/ln | 0.1 | 0.0 | 0.4 | 2.8 | 0.0 | 2.0 | 0.5 | 5.1 | 0.9 | 1.1 | 7.0 | 0.0 |
| LnGrp Delay(d),s/veh | 36.5 | 0.0 | 26.7 | 31.0 | 0.0 | 21.1 | 34.7 | 21.6 | 17.8 | 31.8 | 23.0 | 8.6 |
| LnGrp LOS | D | | C | C | | C | C | C | B | C | C | A |
| Approach Vol, veh/h | | 30 | | | 269 | | | 677 | | | 827 | |
| Approach Delay, s/veh | | 29.0 | | | 26.4 | | | 21.7 | | | 23.6 | |
| 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 | 11.3 | 31.0 | 15.1 | 16.2 | 10.3 | 32.0 | 6.2 | 25.1 | | | | |
| Change Period (Y+Rc), s | 4.6 | 6.9 | * 4.7 | * 4.7 | 6.9 | * 6.9 | * 4.7 | * 4.7 | | | | |
| Max Green Setting (Gmax), s | 10.0 | 24.1 | * 11 | * 44 | 9.0 | * 25 | * 11 | * 44 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.1 | 11.9 | 7.6 | 2.9 | 3.0 | 15.5 | 2.3 | 6.6 | | | | |
| Green Ext Time (p_c), s | 0.0 | 3.8 | 0.1 | 0.8 | 2.2 | 4.0 | 0.0 | 0.8 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 23.4 | | | | | | | | | |
| HCM 2010 LOS | | | C | | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 225 | 588 | 108 | 93 | 533 | 267 | 95 | 462 | 99 | 250 | 651 | 364 |
| Future Volume (veh/h) | 225 | 588 | 108 | 93 | 533 | 267 | 95 | 462 | 99 | 250 | 651 | 364 |
| 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 | | 0.97 | 1.00 | | 0.96 | 1.00 | | 0.98 | 1.00 | | 0.98 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 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 | 1667 | 1863 | 1863 | 1667 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 230 | 600 | 110 | 95 | 544 | 272 | 97 | 471 | 101 | 255 | 664 | 371 |
| Adj No. of Lanes | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 275 | 1197 | 521 | 116 | 896 | 383 | 491 | 876 | 385 | 591 | 920 | 405 |
| Arrive On Green | 0.31 | 0.68 | 0.68 | 0.02 | 0.08 | 0.08 | 0.16 | 0.25 | 0.25 | 0.17 | 0.26 | 0.26 |
| Sat Flow, veh/h | 1774 | 3539 | 1540 | 1587 | 3539 | 1512 | 3079 | 3539 | 1557 | 3442 | 3539 | 1559 |
| Grp Volume(v), veh/h | 230 | 600 | 110 | 95 | 544 | 272 | 97 | 471 | 101 | 255 | 664 | 371 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1540 | 1587 | 1770 | 1512 | 1540 | 1770 | 1557 | 1721 | 1770 | 1559 |
| Q Serve(g_s), s | 14.5 | 10.0 | 2.1 | 7.1 | 17.8 | 21.0 | 3.3 | 13.9 | 4.9 | 8.0 | 20.5 | 27.7 |
| Cycle Q Clear(g_c), s | 14.5 | 10.0 | 2.1 | 7.1 | 17.8 | 21.0 | 3.3 | 13.9 | 4.9 | 8.0 | 20.5 | 27.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 275 | 1197 | 521 | 116 | 896 | 383 | 491 | 876 | 385 | 591 | 920 | 405 |
| V/C Ratio(X) | 0.84 | 0.50 | 0.21 | 0.82 | 0.61 | 0.71 | 0.20 | 0.54 | 0.26 | 0.43 | 0.72 | 0.92 |
| Avail Cap(c_a), veh/h | 333 | 1351 | 588 | 155 | 1032 | 441 | 491 | 876 | 385 | 591 | 920 | 405 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.85 | 0.85 | 0.85 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.89 | 0.89 | 0.89 |
| Uniform Delay (d), s/veh | 40.0 | 14.5 | 5.5 | 57.8 | 49.2 | 50.7 | 43.8 | 39.2 | 22.2 | 44.4 | 40.4 | 43.1 |
| Incr Delay (d2), s/veh | 10.8 | 0.2 | 0.1 | 16.7 | 0.6 | 4.0 | 0.1 | 2.4 | 1.7 | 0.2 | 4.4 | 25.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 7.8 | 4.7 | 0.8 | 3.7 | 8.8 | 9.2 | 1.4 | 7.1 | 2.3 | 3.8 | 10.6 | 14.8 |
| LnGrp Delay(d),s/veh | 50.8 | 14.7 | 5.6 | 74.5 | 49.9 | 54.7 | 43.9 | 41.6 | 23.9 | 44.6 | 44.8 | 68.6 |
| LnGrp LOS | D | B | A | E | D | D | D | D | C | D | D | E |
| Approach Vol, veh/h | | 940 | | | 911 | | | 669 | | | 1290 | |
| Approach Delay, s/veh | | 22.4 | | | 53.9 | | | 39.2 | | | 51.6 | |
| Approach LOS | | C | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 25.1 | 36.1 | 13.3 | 45.5 | 23.6 | 37.6 | 23.5 | 35.3 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.4 | 4.5 | 4.9 | 4.5 | 6.4 | 4.9 | * 4.9 | | | | |
| Max Green Setting (Gmax), s | 12.5 | 29.7 | 11.7 | 45.8 | 11.0 | 31.2 | 22.5 | * 35 | | | | |
| Max Q Clear Time (g_c+I1), s | 10.0 | 15.9 | 9.1 | 12.0 | 5.3 | 29.7 | 16.5 | 23.0 | | | | |
| Green Ext Time (p_c), s | 0.2 | 2.3 | 0.0 | 4.0 | 0.4 | 0.8 | 2.1 | 3.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 42.8 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 132 | 460 | 101 | 68 | 446 | 121 | 152 | 583 | 88 | 137 | 522 | 151 |
| Future Volume (veh/h) | 132 | 460 | 101 | 68 | 446 | 121 | 152 | 583 | 88 | 137 | 522 | 151 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 133 | 465 | 102 | 69 | 451 | 122 | 154 | 589 | 89 | 138 | 527 | 153 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 161 | 563 | 123 | 165 | 544 | 146 | 342 | 959 | 429 | 890 | 1580 | 707 |
| Arrive On Green | 0.03 | 0.06 | 0.06 | 0.03 | 0.06 | 0.06 | 0.10 | 0.27 | 0.27 | 0.52 | 0.89 | 0.89 |
| Sat Flow, veh/h | 1774 | 2891 | 630 | 1774 | 2761 | 741 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 133 | 283 | 284 | 69 | 288 | 285 | 154 | 589 | 89 | 138 | 527 | 153 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1752 | 1774 | 1770 | 1732 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 8.9 | 19.0 | 19.2 | 4.6 | 19.3 | 19.5 | 5.1 | 17.5 | 5.2 | 2.5 | 2.7 | 1.5 |
| Cycle Q Clear(g_c), s | 8.9 | 19.0 | 19.2 | 4.6 | 19.3 | 19.5 | 5.1 | 17.5 | 5.2 | 2.5 | 2.7 | 1.5 |
| Prop In Lane | 1.00 | | 0.36 | 1.00 | | 0.43 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 161 | 344 | 341 | 165 | 348 | 341 | 342 | 959 | 429 | 890 | 1580 | 707 |
| V/C Ratio(X) | 0.83 | 0.82 | 0.83 | 0.42 | 0.83 | 0.84 | 0.45 | 0.61 | 0.21 | 0.16 | 0.33 | 0.22 |
| Avail Cap(c_a), veh/h | 200 | 668 | 661 | 165 | 619 | 606 | 344 | 959 | 429 | 890 | 1580 | 707 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 0.98 | 0.98 | 0.98 | 0.86 | 0.86 | 0.86 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 57.3 | 54.1 | 54.2 | 55.0 | 54.1 | 54.2 | 50.9 | 38.3 | 33.8 | 22.1 | 3.7 | 3.6 |
| Incr Delay (d2), s/veh | 16.8 | 1.9 | 2.0 | 0.5 | 1.7 | 1.8 | 0.3 | 2.8 | 1.0 | 0.0 | 0.6 | 0.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 5.2 | 9.5 | 9.5 | 2.3 | 9.6 | 9.5 | 2.4 | 8.9 | 2.4 | 1.2 | 1.3 | 0.8 |
| LnGrp Delay(d),s/veh | 74.1 | 56.0 | 56.2 | 55.5 | 55.7 | 56.0 | 51.3 | 41.1 | 34.8 | 22.1 | 4.3 | 4.3 |
| LnGrp LOS | E | E | E | E | E | E | D | D | C | C | A | A |
| Approach Vol, veh/h | | 700 | | | 642 | | | 832 | | | 818 | |
| Approach Delay, s/veh | | 59.5 | | | 55.8 | | | 42.3 | | | 7.3 | |
| Approach LOS | | E | | | E | | | D | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 37.5 | 39.0 | 15.6 | 27.8 | 16.4 | 60.1 | 15.4 | 28.1 | | | | |
| Change Period (Y+Rc), s | 6.5 | * 6.5 | 4.5 | 4.5 | 4.5 | 6.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 12.0 | * 33 | 10.2 | 45.3 | 12.0 | 32.5 | 13.5 | 42.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.5 | 19.5 | 6.6 | 21.2 | 7.1 | 4.7 | 10.9 | 21.5 | | | | |
| Green Ext Time (p_c), s | 0.3 | 2.3 | 0.9 | 2.1 | 0.1 | 2.8 | 0.0 | 2.1 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 39.7 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
8: Centre City Pkwy & Valley Pkwy

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Mid-Day Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | |  |  |  |  |  | | |  |  |
| Traffic Volume (veh/h) | 0 | 0 | 0 | 229 | 1067 | 225 | 195 | 617 | 0 | 0 | 577 | 101 |
| Future Volume (veh/h) | 0 | 0 | 0 | 229 | 1067 | 225 | 195 | 617 | 0 | 0 | 577 | 101 |
| Number | | | | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | | | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | | | | 1863 | 1863 | 1863 | 1863 | 1863 | 0 | 0 | 1863 | 1863 |
| Adj Flow Rate, veh/h | | | | 236 | 1100 | 232 | 201 | 636 | 0 | 0 | 595 | 104 |
| Adj No. of Lanes | | | | 1 | 3 | 1 | 2 | 2 | 0 | 0 | 2 | 1 |
| Peak Hour Factor | | | | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | | | | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 2 | 2 |
| Cap, veh/h | | | | 494 | 1558 | 441 | 309 | 2128 | 0 | 0 | 1634 | 731 |
| Arrive On Green | | | | 0.28 | 0.28 | 0.28 | 0.09 | 0.60 | 0.00 | 0.00 | 0.46 | 0.46 |
| Sat Flow, veh/h | | | | 1774 | 5588 | 1583 | 3442 | 3632 | 0 | 0 | 3632 | 1583 |
| Grp Volume(v), veh/h | | | | 236 | 1100 | 232 | 201 | 636 | 0 | 0 | 595 | 104 |
| Grp Sat Flow(s),veh/h/ln | | | | 1774 | 1863 | 1583 | 1721 | 1770 | 0 | 0 | 1770 | 1583 |
| Q Serve(g_s), s | | | | 11.1 | 17.7 | 12.4 | 5.6 | 8.7 | 0.0 | 0.0 | 10.9 | 3.8 |
| Cycle Q Clear(g_c), s | | | | 11.1 | 17.7 | 12.4 | 5.6 | 8.7 | 0.0 | 0.0 | 10.9 | 3.8 |
| Prop In Lane | | | | 1.00 | | 1.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | | | | 494 | 1558 | 441 | 309 | 2128 | 0 | 0 | 1634 | 731 |
| V/C Ratio(X) | | | | 0.48 | 0.71 | 0.53 | 0.65 | 0.30 | 0.00 | 0.00 | 0.36 | 0.14 |
| Avail Cap(c_a), veh/h | | | | 761 | 2397 | 679 | 413 | 2128 | 0 | 0 | 1634 | 731 |
| HCM Platoon Ratio | | | | 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 | 0.00 | 0.95 | 0.95 |
| Uniform Delay (d), s/veh | | | | 30.0 | 32.4 | 30.5 | 44.0 | 9.7 | 0.0 | 0.0 | 17.4 | 15.5 |
| Incr Delay (d2), s/veh | | | | 0.5 | 0.4 | 0.7 | 1.7 | 0.4 | 0.0 | 0.0 | 0.6 | 0.4 |
| Initial Q Delay(d3),s/veh | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | | | | 5.5 | 9.1 | 11.1 | 2.8 | 4.3 | 0.0 | 0.0 | 5.4 | 1.7 |
| LnGrp Delay(d),s/veh | | | | 30.5 | 32.8 | 31.2 | 45.7 | 10.1 | 0.0 | 0.0 | 18.0 | 15.9 |
| LnGrp LOS | | | | C | C | C | D | B | | | B | B |
| Approach Vol, veh/h | | | | | 1568 | | | 837 | | | 699 | |
| Approach Delay, s/veh | | | | | 32.2 | | | 18.6 | | | 17.7 | |
| 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 | | 67.0 | | 33.0 | 14.0 | 53.1 | | | | | | |
| Change Period (Y+Rc), s | | 6.9 | | 5.1 | 5.0 | 6.9 | | | | | | |
| Max Green Setting (Gmax), s | | 45.1 | | 42.9 | 12.0 | 28.1 | | | | | | |
| Max Q Clear Time (g_c+I1), s | | 10.7 | | 19.7 | 7.6 | 12.9 | | | | | | |
| Green Ext Time (p_c), s | | 8.5 | | 8.2 | 0.2 | 6.4 | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 25.3 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 141 | 473 | 157 | 113 | 420 | 44 | 188 | 229 | 115 | 90 | 259 | 158 |
| Future Volume (veh/h) | 141 | 473 | 157 | 113 | 420 | 44 | 188 | 229 | 115 | 90 | 259 | 158 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 157 | 526 | 174 | 126 | 467 | 49 | 209 | 254 | 128 | 100 | 288 | 176 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 278 | 788 | 259 | 293 | 1000 | 105 | 237 | 719 | 351 | 125 | 540 | 321 |
| Arrive On Green | 0.05 | 0.10 | 0.10 | 0.17 | 0.31 | 0.31 | 0.13 | 0.31 | 0.31 | 0.07 | 0.25 | 0.25 |
| Sat Flow, veh/h | 1774 | 2618 | 862 | 1774 | 3235 | 338 | 1774 | 2306 | 1127 | 1774 | 2137 | 1271 |
| Grp Volume(v), veh/h | 157 | 355 | 345 | 126 | 255 | 261 | 209 | 193 | 189 | 100 | 237 | 227 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1711 | 1774 | 1770 | 1803 | 1774 | 1770 | 1664 | 1774 | 1770 | 1639 |
| Q Serve(g_s), s | 10.4 | 23.2 | 23.4 | 7.7 | 13.9 | 14.1 | 13.9 | 10.1 | 10.6 | 6.7 | 13.9 | 14.4 |
| Cycle Q Clear(g_c), s | 10.4 | 23.2 | 23.4 | 7.7 | 13.9 | 14.1 | 13.9 | 10.1 | 10.6 | 6.7 | 13.9 | 14.4 |
| Prop In Lane | 1.00 | | 0.50 | 1.00 | | 0.19 | 1.00 | | 0.68 | 1.00 | | 0.78 |
| Lane Grp Cap(c), veh/h | 278 | 532 | 515 | 293 | 547 | 557 | 237 | 552 | 519 | 125 | 447 | 414 |
| V/C Ratio(X) | 0.56 | 0.67 | 0.67 | 0.43 | 0.47 | 0.47 | 0.88 | 0.35 | 0.36 | 0.80 | 0.53 | 0.55 |
| Avail Cap(c_a), veh/h | 278 | 532 | 515 | 293 | 547 | 557 | 353 | 552 | 519 | 191 | 447 | 414 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.75 | 0.75 | 0.75 | 0.94 | 0.94 | 0.94 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 52.9 | 48.2 | 48.3 | 45.0 | 33.4 | 33.5 | 51.0 | 31.9 | 32.1 | 54.9 | 38.7 | 38.9 |
| Incr Delay (d2), s/veh | 1.6 | 6.5 | 6.8 | 0.3 | 2.1 | 2.1 | 10.9 | 1.6 | 1.9 | 6.6 | 4.4 | 5.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 5.2 | 12.4 | 12.1 | 3.8 | 7.1 | 7.3 | 7.5 | 5.2 | 5.1 | 3.5 | 7.3 | 7.1 |
| LnGrp Delay(d),s/veh | 54.5 | 54.7 | 55.1 | 45.3 | 35.6 | 35.6 | 61.9 | 33.5 | 33.9 | 61.6 | 43.1 | 44.0 |
| LnGrp LOS | D | D | E | D | D | D | E | C | C | E | D | D |
| Approach Vol, veh/h | | 857 | | | 642 | | | 591 | | | 564 | |
| Approach Delay, s/veh | | 54.8 | | | 37.5 | | | 43.7 | | | 46.8 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 23.9 | 41.0 | 20.1 | 34.9 | 22.9 | 42.0 | 13.1 | 42.0 | | | | |
| Change Period (Y+Rc), s | 4.1 | 4.9 | 4.1 | 4.6 | 4.1 | 4.9 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 15.9 | 36.1 | 23.9 | 26.4 | 14.9 | 37.1 | 12.9 | * 37 | | | | |
| Max Q Clear Time (g_c+I1), s | 9.7 | 25.4 | 15.9 | 16.4 | 12.4 | 16.1 | 8.7 | 12.6 | | | | |
| Green Ext Time (p_c), s | 0.2 | 2.2 | 0.2 | 1.4 | 0.1 | 1.9 | 0.1 | 1.4 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 46.4 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
10: Escondido Blvd & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Mid-Day Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 93 | 447 | 109 | 143 | 448 | 103 | 88 | 283 | 131 | 78 | 313 | 96 |
| Future Volume (veh/h) | 93 | 447 | 109 | 143 | 448 | 103 | 88 | 283 | 131 | 78 | 313 | 96 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 94 | 452 | 110 | 144 | 453 | 104 | 89 | 286 | 132 | 79 | 316 | 97 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 293 | 740 | 179 | 382 | 893 | 204 | 113 | 715 | 322 | 110 | 751 | 227 |
| Arrive On Green | 0.05 | 0.09 | 0.09 | 0.22 | 0.31 | 0.31 | 0.06 | 0.30 | 0.30 | 0.06 | 0.28 | 0.28 |
| Sat Flow, veh/h | 1774 | 2828 | 683 | 1774 | 2864 | 653 | 1774 | 2375 | 1069 | 1774 | 2681 | 809 |
| Grp Volume(v), veh/h | 94 | 282 | 280 | 144 | 279 | 278 | 89 | 211 | 207 | 79 | 207 | 206 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1742 | 1774 | 1770 | 1748 | 1774 | 1770 | 1674 | 1774 | 1770 | 1720 |
| Q Serve(g_s), s | 6.1 | 18.4 | 18.6 | 8.3 | 15.4 | 15.6 | 5.9 | 11.4 | 11.8 | 5.2 | 11.4 | 11.8 |
| Cycle Q Clear(g_c), s | 6.1 | 18.4 | 18.6 | 8.3 | 15.4 | 15.6 | 5.9 | 11.4 | 11.8 | 5.2 | 11.4 | 11.8 |
| Prop In Lane | 1.00 | | 0.39 | 1.00 | | 0.37 | 1.00 | | 0.64 | 1.00 | | 0.47 |
| Lane Grp Cap(c), veh/h | 293 | 463 | 456 | 382 | 552 | 545 | 113 | 533 | 504 | 110 | 495 | 482 |
| V/C Ratio(X) | 0.32 | 0.61 | 0.62 | 0.38 | 0.51 | 0.51 | 0.78 | 0.40 | 0.41 | 0.72 | 0.42 | 0.43 |
| Avail Cap(c_a), veh/h | 293 | 463 | 456 | 382 | 552 | 545 | 220 | 533 | 504 | 205 | 495 | 482 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.77 | 0.77 | 0.77 | 0.63 | 0.63 | 0.63 | 0.99 | 0.99 | 0.99 | 0.87 | 0.87 | 0.87 |
| Uniform Delay (d), s/veh | 50.2 | 48.9 | 49.0 | 40.2 | 33.7 | 33.8 | 55.3 | 33.3 | 33.4 | 55.3 | 35.2 | 35.3 |
| Incr Delay (d2), s/veh | 0.2 | 4.5 | 4.7 | 0.1 | 2.1 | 2.1 | 4.4 | 2.2 | 2.4 | 2.9 | 2.2 | 2.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.0 | 9.6 | 9.6 | 4.1 | 7.8 | 7.9 | 3.1 | 5.9 | 5.8 | 2.7 | 5.9 | 5.9 |
| LnGrp Delay(d),s/veh | 50.4 | 53.4 | 53.7 | 40.4 | 35.8 | 36.0 | 59.7 | 35.4 | 35.8 | 58.1 | 37.5 | 37.7 |
| LnGrp LOS | D | D | D | D | D | D | E | D | D | E | D | D |
| Approach Vol, veh/h | | 656 | | | 701 | | | 507 | | | 492 | |
| Approach Delay, s/veh | | 53.1 | | | 36.8 | | | 39.9 | | | 40.9 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 11.5 | 42.5 | 29.9 | 36.0 | 14.1 | 40.0 | 23.9 | 42.0 | | | | |
| Change Period (Y+Rc), s | 4.1 | 6.4 | 4.1 | 4.6 | 6.4 | * 6.4 | 4.1 | 4.6 | | | | |
| Max Green Setting (Gmax), s | 13.9 | 34.6 | 20.9 | 31.4 | 14.9 | * 34 | 14.9 | 37.4 | | | | |
| Max Q Clear Time (g_c+I1), s | 7.2 | 13.8 | 10.3 | 20.6 | 7.9 | 13.8 | 8.1 | 17.6 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.6 | 0.2 | 1.7 | 0.2 | 1.5 | 0.2 | 2.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 42.9 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | |  |  | | |  | |  |  | |
| Traffic Volume (veh/h) | 8 | 0 | 7 | 45 | 1 | 31 | 2 | 466 | 47 | 42 | 531 | 2 |
| Future Volume (veh/h) | 8 | 0 | 7 | 45 | 1 | 31 | 2 | 466 | 47 | 42 | 531 | 2 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1900 | 1863 | 1900 | 1863 | 1863 | 1900 | 1900 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 8 | 0 | 7 | 46 | 1 | 32 | 2 | 476 | 48 | 43 | 542 | 2 |
| Adj No. of Lanes | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 93 | 16 | 41 | 172 | 3 | 93 | 42 | 2354 | 236 | 78 | 2997 | 11 |
| Arrive On Green | 0.06 | 0.00 | 0.06 | 0.06 | 0.06 | 0.06 | 0.74 | 0.74 | 0.74 | 0.04 | 0.83 | 0.83 |
| Sat Flow, veh/h | 522 | 259 | 683 | 1403 | 48 | 1542 | 2 | 3180 | 318 | 1774 | 3617 | 13 |
| Grp Volume(v), veh/h | 15 | 0 | 0 | 46 | 0 | 33 | 279 | 0 | 247 | 43 | 265 | 279 |
| Grp Sat Flow(s),veh/h/ln | 1464 | 0 | 0 | 1403 | 0 | 1591 | 1861 | 0 | 1639 | 1774 | 1770 | 1860 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 1.8 | 0.0 | 0.0 | 4.2 | 2.1 | 2.7 | 2.7 |
| Cycle Q Clear(g_c), s | 1.8 | 0.0 | 0.0 | 2.4 | 0.0 | 1.8 | 4.1 | 0.0 | 4.2 | 2.1 | 2.7 | 2.7 |
| Prop In Lane | 0.53 | | 0.47 | 1.00 | | 0.97 | 0.01 | | 0.19 | 1.00 | | 0.01 |
| Lane Grp Cap(c), veh/h | 150 | 0 | 0 | 172 | 0 | 96 | 1418 | 0 | 1213 | 78 | 1466 | 1541 |
| V/C Ratio(X) | 0.10 | 0.00 | 0.00 | 0.27 | 0.00 | 0.34 | 0.20 | 0.00 | 0.20 | 0.55 | 0.18 | 0.18 |
| Avail Cap(c_a), veh/h | 459 | 0 | 0 | 461 | 0 | 424 | 1418 | 0 | 1213 | 237 | 1466 | 1541 |
| 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 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.91 | 0.91 | 0.91 |
| Uniform Delay (d), s/veh | 40.1 | 0.0 | 0.0 | 40.8 | 0.0 | 40.6 | 3.6 | 0.0 | 3.6 | 42.2 | 1.6 | 1.6 |
| Incr Delay (d2), s/veh | 0.1 | 0.0 | 0.0 | 0.3 | 0.0 | 0.8 | 0.3 | 0.0 | 0.4 | 2.0 | 0.2 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.4 | 0.0 | 0.0 | 1.1 | 0.0 | 0.8 | 2.2 | 0.0 | 2.0 | 1.1 | 1.4 | 1.5 |
| LnGrp Delay(d),s/veh | 40.2 | 0.0 | 0.0 | 41.1 | 0.0 | 41.4 | 3.9 | 0.0 | 4.0 | 44.2 | 1.8 | 1.8 |
| LnGrp LOS | D | | | D | | D | A | | A | D | A | A |
| Approach Vol, veh/h | | 15 | | | 79 | | | 526 | | | 587 | |
| Approach Delay, s/veh | | 40.2 | | | 41.2 | | | 3.9 | | | 4.9 | |
| Approach LOS | | D | | | D | | | A | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 8.0 | 71.6 | | 10.4 | | 79.6 | | 10.4 | | | | |
| Change Period (Y+Rc), s | 4.0 | 5.0 | | * 5 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 12.0 | 40.0 | | * 25 | | 56.0 | | 24.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.1 | 6.2 | | 3.8 | | 4.7 | | 4.4 | | | | |
| Green Ext Time (p_c), s | 0.0 | 7.3 | | 0.2 | | 7.7 | | 0.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 7.3 | | | | | | | | |
| HCM 2010 LOS | | | | A | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
12: Broadway & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Mid-Day Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 140 | 365 | 154 | 93 | 304 | 186 | 144 | 517 | 90 | 136 | 556 | 109 |
| Future Volume (veh/h) | 140 | 365 | 154 | 93 | 304 | 186 | 144 | 517 | 90 | 136 | 556 | 109 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 143 | 372 | 157 | 95 | 310 | 190 | 147 | 528 | 92 | 139 | 567 | 111 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 177 | 486 | 202 | 166 | 411 | 246 | 332 | 921 | 160 | 287 | 827 | 161 |
| Arrive On Green | 0.10 | 0.20 | 0.20 | 0.09 | 0.19 | 0.19 | 0.19 | 0.31 | 0.31 | 0.16 | 0.28 | 0.28 |
| Sat Flow, veh/h | 1774 | 2439 | 1014 | 1774 | 2132 | 1276 | 1774 | 3016 | 524 | 1774 | 2954 | 577 |
| Grp Volume(v), veh/h | 143 | 268 | 261 | 95 | 256 | 244 | 147 | 309 | 311 | 139 | 339 | 339 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1684 | 1774 | 1770 | 1638 | 1774 | 1770 | 1770 | 1774 | 1770 | 1761 |
| Q Serve(g_s), s | 5.9 | 10.7 | 11.0 | 3.8 | 10.2 | 10.6 | 5.5 | 11.0 | 11.1 | 5.3 | 12.8 | 12.9 |
| Cycle Q Clear(g_c), s | 5.9 | 10.7 | 11.0 | 3.8 | 10.2 | 10.6 | 5.5 | 11.0 | 11.1 | 5.3 | 12.8 | 12.9 |
| Prop In Lane | 1.00 | | 0.60 | 1.00 | | 0.78 | 1.00 | | 0.30 | 1.00 | | 0.33 |
| Lane Grp Cap(c), veh/h | 177 | 352 | 335 | 166 | 341 | 316 | 332 | 540 | 541 | 287 | 495 | 493 |
| V/C Ratio(X) | 0.81 | 0.76 | 0.78 | 0.57 | 0.75 | 0.77 | 0.44 | 0.57 | 0.58 | 0.48 | 0.68 | 0.69 |
| Avail Cap(c_a), veh/h | 177 | 493 | 469 | 166 | 472 | 437 | 332 | 540 | 541 | 287 | 495 | 493 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.71 | 0.71 | 0.71 | 1.00 | 1.00 | 1.00 | 0.87 | 0.87 | 0.87 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.0 | 28.4 | 28.5 | 32.5 | 28.6 | 28.7 | 27.0 | 21.9 | 22.0 | 28.6 | 24.0 | 24.1 |
| Incr Delay (d2), s/veh | 17.5 | 3.2 | 3.9 | 4.6 | 4.3 | 5.6 | 0.8 | 3.8 | 3.9 | 1.3 | 7.5 | 7.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.8 | 5.5 | 5.4 | 2.1 | 5.4 | 5.3 | 2.8 | 5.9 | 5.9 | 2.7 | 7.2 | 7.3 |
| LnGrp Delay(d),s/veh | 50.5 | 31.6 | 32.4 | 37.1 | 32.9 | 34.3 | 27.8 | 25.7 | 25.8 | 29.9 | 31.5 | 31.7 |
| LnGrp LOS | D | C | C | D | C | C | C | C | C | C | C | C |
| Approach Vol, veh/h | | 672 | | | 595 | | | 767 | | | 817 | |
| Approach Delay, s/veh | | 35.9 | | | 34.2 | | | 26.2 | | | 31.3 | |
| Approach LOS | | D | | | C | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 16.6 | 27.4 | 11.5 | 19.4 | 18.5 | 25.5 | 12.0 | 19.0 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 6.6 | 22.9 | 6.6 | 20.9 | 8.5 | 21.0 | 7.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 7.3 | 13.1 | 5.8 | 13.0 | 7.5 | 14.9 | 7.9 | 12.6 | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.6 | 0.3 | 1.9 | 0.1 | 2.1 | 0.0 | 1.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 31.6 | | | | | | | | | |
| HCM 2010 LOS | | | C | | | | | | | | | |

SEC CCP/Mission TIA
13: Broadway & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Mid-Day Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 120 | 438 | 89 | 54 | 423 | 177 | 115 | 360 | 37 | 197 | 400 | 101 |
| Future Volume (veh/h) | 120 | 438 | 89 | 54 | 423 | 177 | 115 | 360 | 37 | 197 | 400 | 101 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 125 | 456 | 93 | 56 | 441 | 184 | 120 | 375 | 39 | 205 | 417 | 105 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 154 | 589 | 119 | 190 | 542 | 224 | 152 | 907 | 94 | 305 | 1028 | 257 |
| Arrive On Green | 0.09 | 0.20 | 0.20 | 0.11 | 0.22 | 0.22 | 0.09 | 0.28 | 0.28 | 0.23 | 0.49 | 0.49 |
| Sat Flow, veh/h | 1774 | 2933 | 594 | 1774 | 2444 | 1010 | 1774 | 3238 | 335 | 1774 | 2808 | 701 |
| Grp Volume(v), veh/h | 125 | 274 | 275 | 56 | 318 | 307 | 120 | 204 | 210 | 205 | 261 | 261 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1758 | 1774 | 1770 | 1684 | 1774 | 1770 | 1804 | 1774 | 1770 | 1739 |
| Q Serve(g_s), s | 5.2 | 11.0 | 11.1 | 2.2 | 12.8 | 13.0 | 5.0 | 7.0 | 7.1 | 7.9 | 7.1 | 7.2 |
| Cycle Q Clear(g_c), s | 5.2 | 11.0 | 11.1 | 2.2 | 12.8 | 13.0 | 5.0 | 7.0 | 7.1 | 7.9 | 7.1 | 7.2 |
| Prop In Lane | 1.00 | | 0.34 | 1.00 | | 0.60 | 1.00 | | 0.19 | 1.00 | | 0.40 |
| Lane Grp Cap(c), veh/h | 154 | 356 | 353 | 190 | 392 | 373 | 152 | 495 | 505 | 305 | 648 | 637 |
| V/C Ratio(X) | 0.81 | 0.77 | 0.78 | 0.29 | 0.81 | 0.82 | 0.79 | 0.41 | 0.42 | 0.67 | 0.40 | 0.41 |
| Avail Cap(c_a), veh/h | 154 | 491 | 488 | 190 | 472 | 449 | 182 | 495 | 505 | 305 | 648 | 637 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.33 | 1.33 | 1.33 |
| Upstream Filter(I) | 0.77 | 0.77 | 0.77 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.79 | 0.79 | 0.79 |
| Uniform Delay (d), s/veh | 33.7 | 28.3 | 28.4 | 30.9 | 27.7 | 27.8 | 33.6 | 22.0 | 22.0 | 27.0 | 14.0 | 14.0 |
| Incr Delay (d2), s/veh | 21.9 | 3.9 | 4.2 | 0.8 | 8.8 | 9.9 | 17.5 | 2.5 | 2.5 | 4.6 | 1.5 | 1.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.5 | 5.7 | 5.8 | 1.1 | 7.1 | 7.1 | 3.2 | 3.7 | 3.9 | 4.2 | 3.7 | 3.7 |
| LnGrp Delay(d),s/veh | 55.5 | 32.2 | 32.6 | 31.7 | 36.5 | 37.7 | 51.1 | 24.5 | 24.5 | 31.6 | 15.5 | 15.6 |
| LnGrp LOS | E | C | C | C | D | D | D | C | C | C | B | B |
| Approach Vol, veh/h | | 674 | | | 681 | | | 534 | | | 727 | |
| Approach Delay, s/veh | | 36.7 | | | 36.6 | | | 30.5 | | | 20.1 | |
| Approach LOS | | D | | | D | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 17.4 | 25.5 | 12.6 | 19.6 | 10.9 | 32.0 | 11.0 | 21.1 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 9.5 | 21.0 | 5.7 | 20.8 | 7.7 | 22.8 | 6.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 9.9 | 9.1 | 4.2 | 13.1 | 7.0 | 9.2 | 7.2 | 15.0 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.8 | 0.6 | 2.0 | 0.0 | 3.1 | 0.0 | 1.6 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 30.8 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |

SEC CCP/Mission TIA
1: Rock Springs Rd & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative PM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  |  |
| Traffic Volume (veh/h) | 240 | 865 | 110 | 66 | 492 | 197 | 55 | 528 | 56 | 109 | 252 | 62 |
| Future Volume (veh/h) | 240 | 865 | 110 | 66 | 492 | 197 | 55 | 528 | 56 | 109 | 252 | 62 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 247 | 892 | 113 | 68 | 507 | 203 | 57 | 544 | 58 | 112 | 260 | 64 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 275 | 1518 | 192 | 87 | 925 | 368 | 332 | 1170 | 124 | 250 | 675 | 574 |
| Arrive On Green | 0.16 | 0.48 | 0.48 | 0.05 | 0.37 | 0.37 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 |
| Sat Flow, veh/h | 1774 | 3161 | 400 | 1774 | 2473 | 985 | 1052 | 3228 | 343 | 814 | 1863 | 1583 |
| Grp Volume(v), veh/h | 247 | 499 | 506 | 68 | 362 | 348 | 57 | 298 | 304 | 112 | 260 | 64 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1792 | 1774 | 1770 | 1689 | 1052 | 1770 | 1802 | 814 | 1863 | 1583 |
| Q Serve(g_s), s | 16.4 | 24.5 | 24.5 | 4.5 | 19.3 | 19.5 | 5.1 | 15.5 | 15.6 | 14.7 | 12.4 | 3.2 |
| Cycle Q Clear(g_c), s | 16.4 | 24.5 | 24.5 | 4.5 | 19.3 | 19.5 | 17.5 | 15.5 | 15.6 | 30.2 | 12.4 | 3.2 |
| Prop In Lane | 1.00 | | 0.22 | 1.00 | | 0.58 | 1.00 | | 0.19 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 275 | 850 | 860 | 87 | 662 | 632 | 332 | 641 | 653 | 250 | 675 | 574 |
| V/C Ratio(X) | 0.90 | 0.59 | 0.59 | 0.78 | 0.55 | 0.55 | 0.17 | 0.46 | 0.47 | 0.45 | 0.39 | 0.11 |
| Avail Cap(c_a), veh/h | 399 | 850 | 860 | 148 | 662 | 632 | 332 | 641 | 653 | 250 | 675 | 574 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.84 | 0.84 | 0.84 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 49.7 | 22.6 | 22.6 | 56.4 | 29.6 | 29.6 | 34.8 | 29.3 | 29.3 | 40.9 | 28.3 | 25.4 |
| Incr Delay (d2), s/veh | 13.2 | 3.0 | 2.9 | 4.7 | 0.9 | 1.0 | 1.1 | 2.4 | 2.4 | 0.9 | 0.3 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 9.0 | 12.6 | 12.8 | 2.3 | 9.6 | 9.3 | 1.6 | 7.9 | 8.1 | 3.4 | 6.4 | 1.4 |
| LnGrp Delay(d),s/veh | 63.0 | 25.6 | 25.5 | 61.2 | 30.5 | 30.6 | 35.9 | 31.7 | 31.7 | 41.9 | 28.6 | 25.5 |
| LnGrp LOS | E | C | C | E | C | C | D | C | C | D | C | C |
| Approach Vol, veh/h | | 1252 | | | 778 | | | 659 | | | 436 | |
| Approach Delay, s/veh | | 32.9 | | | 33.2 | | | 32.1 | | | 31.6 | |
| Approach LOS | | C | | | C | | | 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 | 9.9 | 62.1 | | 48.0 | 22.6 | 49.4 | | 48.0 | | | | |
| Change Period (Y+Rc), s | 4.0 | 4.5 | | 4.5 | 4.0 | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | 10.0 | 53.5 | | 43.5 | 27.0 | 36.5 | | 43.5 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.5 | 26.5 | | 32.2 | 18.4 | 21.5 | | 19.5 | | | | |
| Green Ext Time (p_c), s | 0.0 | 15.4 | | 4.1 | 0.2 | 10.3 | | 5.4 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 32.6 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |

SEC CCP/Mission TIA
2: Quince St & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative PM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 35 | 964 | 90 | 111 | 688 | 105 | 102 | 45 | 214 | 167 | 51 | 23 |
| Future Volume (veh/h) | 35 | 964 | 90 | 111 | 688 | 105 | 102 | 45 | 214 | 167 | 51 | 23 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 36 | 994 | 93 | 114 | 709 | 108 | 105 | 46 | 221 | 172 | 53 | 24 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 159 | 1231 | 115 | 267 | 1346 | 205 | 131 | 407 | 346 | 199 | 303 | 137 |
| Arrive On Green | 0.09 | 0.38 | 0.38 | 0.15 | 0.44 | 0.44 | 0.02 | 0.07 | 0.07 | 0.11 | 0.25 | 0.25 |
| Sat Flow, veh/h | 1774 | 3272 | 306 | 1774 | 3081 | 469 | 1774 | 1863 | 1583 | 1774 | 1215 | 550 |
| Grp Volume(v), veh/h | 36 | 537 | 550 | 114 | 407 | 410 | 105 | 46 | 221 | 172 | 0 | 77 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1809 | 1774 | 1770 | 1780 | 1774 | 1863 | 1583 | 1774 | 0 | 1766 |
| Q Serve(g_s), s | 2.5 | 36.7 | 36.7 | 7.9 | 22.7 | 22.7 | 8.0 | 3.1 | 13.1 | 12.9 | 0.0 | 4.6 |
| Cycle Q Clear(g_c), s | 2.5 | 36.7 | 36.7 | 7.9 | 22.7 | 22.7 | 8.0 | 3.1 | 13.1 | 12.9 | 0.0 | 4.6 |
| Prop In Lane | 1.00 | | 0.17 | 1.00 | | 0.26 | 1.00 | | 1.00 | 1.00 | | 0.31 |
| Lane Grp Cap(c), veh/h | 159 | 666 | 681 | 267 | 773 | 778 | 131 | 407 | 346 | 199 | 0 | 441 |
| V/C Ratio(X) | 0.23 | 0.81 | 0.81 | 0.43 | 0.53 | 0.53 | 0.80 | 0.11 | 0.64 | 0.86 | 0.00 | 0.17 |
| Avail Cap(c_a), veh/h | 159 | 666 | 681 | 267 | 773 | 778 | 204 | 407 | 346 | 288 | 0 | 441 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.77 | 0.77 | 0.77 | 0.84 | 0.84 | 0.84 | 0.80 | 0.80 | 0.80 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 57.1 | 37.7 | 37.7 | 52.0 | 27.8 | 27.8 | 64.9 | 50.4 | 29.4 | 58.9 | 0.0 | 39.7 |
| Incr Delay (d2), s/veh | 0.7 | 8.0 | 7.8 | 1.1 | 2.2 | 2.2 | 11.2 | 0.4 | 7.0 | 18.0 | 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(50%),veh/ln | 1.3 | 19.4 | 19.8 | 3.9 | 11.5 | 11.6 | 4.3 | 1.7 | 6.4 | 7.3 | 0.0 | 2.4 |
| LnGrp Delay(d),s/veh | 57.7 | 45.7 | 45.6 | 53.1 | 29.9 | 29.9 | 76.1 | 50.8 | 36.4 | 76.9 | 0.0 | 40.6 |
| LnGrp LOS | E | D | D | D | C | C | E | D | D | E | | D |
| Approach Vol, veh/h | | 1123 | | | 931 | | | 372 | | | 249 | |
| Approach Delay, s/veh | | 46.0 | | | 32.8 | | | 49.4 | | | 65.7 | |
| Approach LOS | | D | | | 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 | 24.9 | 56.2 | 15.1 | 38.8 | 16.7 | 64.4 | 19.3 | 34.6 | | | | |
| Change Period (Y+Rc), s | 4.6 | 5.4 | 5.1 | * 5.1 | 4.6 | * 5.4 | 4.1 | 5.1 | | | | |
| Max Green Setting (Gmax), s | 15.8 | 50.8 | 15.5 | * 34 | 8.1 | * 59 | 21.9 | 27.3 | | | | |
| Max Q Clear Time (g_c+I1), s | 9.9 | 38.7 | 10.0 | 6.6 | 4.5 | 24.7 | 14.9 | 15.1 | | | | |
| Green Ext Time (p_c), s | 0.2 | 8.2 | 0.2 | 0.4 | 0.1 | 11.5 | 0.3 | 1.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 43.7 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
3: Quince St & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative PM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 68 | 876 | 185 | 73 | 499 | 97 | 124 | 208 | 168 | 66 | 194 | 23 |
| Future Volume (veh/h) | 68 | 876 | 185 | 73 | 499 | 97 | 124 | 208 | 168 | 66 | 194 | 23 |
| 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 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 86 | 1109 | 234 | 92 | 632 | 123 | 157 | 263 | 213 | 84 | 246 | 29 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 437 | 1981 | 416 | 249 | 2011 | 391 | 259 | 473 | 370 | 167 | 799 | 93 |
| Arrive On Green | 0.68 | 0.68 | 0.68 | 0.46 | 0.46 | 0.46 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Sat Flow, veh/h | 706 | 2913 | 612 | 405 | 2957 | 574 | 1100 | 1892 | 1480 | 914 | 3194 | 373 |
| Grp Volume(v), veh/h | 86 | 671 | 672 | 92 | 378 | 377 | 157 | 245 | 231 | 84 | 135 | 140 |
| Grp Sat Flow(s),veh/h/ln | 706 | 1770 | 1755 | 405 | 1770 | 1761 | 1100 | 1770 | 1602 | 914 | 1770 | 1797 |
| Q Serve(g_s), s | 8.5 | 26.4 | 26.8 | 24.5 | 18.3 | 18.4 | 18.3 | 16.3 | 17.0 | 12.0 | 8.4 | 8.5 |
| Cycle Q Clear(g_c), s | 26.9 | 26.4 | 26.8 | 51.3 | 18.3 | 18.4 | 26.8 | 16.3 | 17.0 | 29.0 | 8.4 | 8.5 |
| Prop In Lane | 1.00 | | 0.35 | 1.00 | | 0.33 | 1.00 | | 0.92 | 1.00 | | 0.21 |
| Lane Grp Cap(c), veh/h | 437 | 1204 | 1193 | 249 | 1204 | 1198 | 259 | 443 | 401 | 167 | 443 | 450 |
| V/C Ratio(X) | 0.20 | 0.56 | 0.56 | 0.37 | 0.31 | 0.31 | 0.61 | 0.55 | 0.58 | 0.50 | 0.31 | 0.31 |
| Avail Cap(c_a), veh/h | 437 | 1204 | 1193 | 249 | 1204 | 1198 | 296 | 502 | 454 | 197 | 502 | 510 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 0.67 | 0.67 | 0.67 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.82 | 0.82 | 0.82 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 0.91 |
| Uniform Delay (d), s/veh | 16.0 | 11.1 | 11.2 | 36.4 | 16.7 | 16.8 | 52.0 | 44.1 | 44.3 | 57.0 | 41.1 | 41.1 |
| Incr Delay (d2), s/veh | 1.0 | 1.9 | 1.9 | 3.5 | 0.6 | 0.6 | 2.2 | 0.8 | 1.0 | 1.6 | 0.3 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.8 | 13.5 | 13.5 | 3.0 | 9.2 | 9.1 | 5.7 | 8.1 | 7.7 | 3.1 | 4.1 | 4.3 |
| LnGrp Delay(d),s/veh | 17.0 | 13.0 | 13.1 | 39.9 | 17.3 | 17.3 | 54.3 | 44.9 | 45.4 | 58.6 | 41.3 | 41.4 |
| LnGrp LOS | B | B | B | D | B | B | D | D | D | E | D | D |
| Approach Vol, veh/h | | 1429 | | | 847 | | | 633 | | | 359 | |
| Approach Delay, s/veh | | 13.3 | | | 19.8 | | | 47.4 | | | 45.4 | |
| Approach LOS | | B | | | B | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 96.5 | | 38.5 | | 96.5 | | 38.5 | | | | |
| Change Period (Y+Rc), s | | * 4.7 | | * 4.7 | | * 4.7 | | * 4.7 | | | | |
| Max Green Setting (Gmax), s | | * 87 | | * 38 | | * 87 | | * 38 | | | | |
| Max Q Clear Time (g_c+I1), s | | 28.9 | | 28.8 | | 53.3 | | 31.0 | | | | |
| Green Ext Time (p_c), s | | 24.1 | | 3.3 | | 19.0 | | 2.8 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 25.1 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
4: Centre City Pkwy & El Norte Pkwy

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative PM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 40 | 937 | 195 | 155 | 658 | 172 | 355 | 635 | 298 | 202 | 240 | 20 |
| Future Volume (veh/h) | 40 | 937 | 195 | 155 | 658 | 172 | 355 | 635 | 298 | 202 | 240 | 20 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 41 | 966 | 201 | 160 | 678 | 177 | 366 | 655 | 307 | 208 | 247 | 21 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 177 | 1223 | 547 | 208 | 986 | 257 | 363 | 1300 | 582 | 271 | 1201 | 537 |
| Arrive On Green | 0.05 | 0.35 | 0.35 | 0.06 | 0.35 | 0.35 | 0.11 | 0.37 | 0.37 | 0.08 | 0.34 | 0.34 |
| Sat Flow, veh/h | 3442 | 3539 | 1583 | 3442 | 2779 | 725 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 41 | 966 | 201 | 160 | 432 | 423 | 366 | 655 | 307 | 208 | 247 | 21 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1583 | 1721 | 1770 | 1735 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 1.9 | 40.5 | 15.7 | 7.6 | 34.3 | 34.4 | 17.4 | 23.7 | 25.1 | 9.8 | 8.2 | 1.5 |
| Cycle Q Clear(g_c), s | 1.9 | 40.5 | 15.7 | 7.6 | 34.3 | 34.4 | 17.4 | 23.7 | 25.1 | 9.8 | 8.2 | 1.5 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.42 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 177 | 1223 | 547 | 208 | 628 | 615 | 363 | 1300 | 582 | 271 | 1201 | 537 |
| V/C Ratio(X) | 0.23 | 0.79 | 0.37 | 0.77 | 0.69 | 0.69 | 1.01 | 0.50 | 0.53 | 0.77 | 0.21 | 0.04 |
| Avail Cap(c_a), veh/h | 209 | 1223 | 547 | 213 | 628 | 615 | 363 | 1300 | 582 | 313 | 1201 | 537 |
| 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 | 0.89 | 0.89 | 0.89 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 75.1 | 48.6 | 40.5 | 76.4 | 45.4 | 45.4 | 73.8 | 40.5 | 41.0 | 74.5 | 38.7 | 36.5 |
| Incr Delay (d2), s/veh | 0.5 | 5.2 | 1.9 | 13.7 | 6.0 | 6.2 | 46.6 | 1.2 | 3.0 | 7.8 | 0.4 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.9 | 20.7 | 7.2 | 4.0 | 17.8 | 17.5 | 10.6 | 11.8 | 11.4 | 4.9 | 4.1 | 0.7 |
| LnGrp Delay(d),s/veh | 75.6 | 53.9 | 42.4 | 90.1 | 51.5 | 51.6 | 120.4 | 41.8 | 44.0 | 82.3 | 39.1 | 36.6 |
| LnGrp LOS | E | D | D | F | D | D | F | D | D | F | D | D |
| Approach Vol, veh/h | | 1208 | | | 1015 | | | 1328 | | | 476 | |
| Approach Delay, s/veh | | 52.7 | | | 57.6 | | | 64.0 | | | 57.9 | |
| Approach LOS | | D | | | E | | | E | | | E | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 19.1 | 67.5 | 15.1 | 63.3 | 23.7 | 62.9 | 13.6 | 64.8 | | | | |
| Change Period (Y+Rc), s | 6.1 | 6.9 | 5.1 | 6.3 | 6.3 | 6.9 | 5.1 | 6.3 | | | | |
| Max Green Setting (Gmax), s | 15.0 | 58.6 | 10.2 | 56.8 | 17.4 | 56.0 | 10.0 | 57.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 11.8 | 27.1 | 9.6 | 42.5 | 19.4 | 10.2 | 3.9 | 36.4 | | | | |
| Green Ext Time (p_c), s | 0.1 | 10.2 | 0.0 | 12.3 | 0.0 | 11.2 | 0.0 | 17.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 58.3 | | | | | | | | | |
| HCM 2010 LOS | | | E | | | | | | | | | |

SEC CCP/Mission TIA
5: Centre City Pkwy & Decatur Way

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative PM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 16 | 1 | 12 | 109 | 1 | 208 | 13 | 1049 | 128 | 41 | 645 | 3 |
| Future Volume (veh/h) | 16 | 1 | 12 | 109 | 1 | 208 | 13 | 1049 | 128 | 41 | 645 | 3 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 17 | 1 | 13 | 115 | 1 | 219 | 14 | 1104 | 135 | 43 | 679 | 3 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 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 | 68 | 13 | 166 | 143 | 1 | 242 | 264 | 1733 | 775 | 290 | 1785 | 799 |
| Arrive On Green | 0.04 | 0.11 | 0.11 | 0.08 | 0.15 | 0.15 | 0.15 | 0.49 | 0.49 | 0.16 | 0.50 | 0.50 |
| Sat Flow, veh/h | 1774 | 114 | 1486 | 1774 | 7 | 1577 | 1774 | 3539 | 1583 | 1774 | 3539 | 1583 |
| Grp Volume(v), veh/h | 17 | 0 | 14 | 115 | 0 | 220 | 14 | 1104 | 135 | 43 | 679 | 3 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 0 | 1600 | 1774 | 0 | 1584 | 1774 | 1770 | 1583 | 1774 | 1770 | 1583 |
| Q Serve(g_s), s | 1.3 | 0.0 | 1.1 | 8.6 | 0.0 | 18.4 | 0.9 | 31.2 | 4.3 | 2.8 | 15.9 | 0.1 |
| Cycle Q Clear(g_c), s | 1.3 | 0.0 | 1.1 | 8.6 | 0.0 | 18.4 | 0.9 | 31.2 | 4.3 | 2.8 | 15.9 | 0.1 |
| Prop In Lane | 1.00 | | 0.93 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 68 | 0 | 179 | 143 | 0 | 243 | 264 | 1733 | 775 | 290 | 1785 | 799 |
| V/C Ratio(X) | 0.25 | 0.00 | 0.08 | 0.81 | 0.00 | 0.90 | 0.05 | 0.64 | 0.17 | 0.15 | 0.38 | 0.00 |
| Avail Cap(c_a), veh/h | 162 | 0 | 193 | 254 | 0 | 273 | 264 | 1733 | 775 | 290 | 1785 | 799 |
| 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 | 0.59 | 0.59 | 0.59 | 0.93 | 0.93 | 0.93 |
| Uniform Delay (d), s/veh | 63.0 | 0.0 | 53.7 | 61.0 | 0.0 | 56.2 | 49.3 | 25.6 | 8.7 | 48.4 | 20.5 | 9.3 |
| Incr Delay (d2), s/veh | 0.7 | 0.0 | 0.1 | 4.0 | 0.0 | 28.3 | 0.0 | 1.1 | 0.3 | 0.1 | 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(50%),veh/ln | 0.6 | 0.0 | 0.5 | 4.4 | 0.0 | 10.0 | 0.4 | 15.4 | 2.0 | 1.4 | 7.9 | 0.0 |
| LnGrp Delay(d),s/veh | 63.7 | 0.0 | 53.9 | 65.1 | 0.0 | 84.4 | 49.3 | 26.6 | 9.0 | 48.5 | 21.1 | 9.3 |
| LnGrp LOS | E | | D | E | | F | D | C | A | D | C | A |
| Approach Vol, veh/h | | 31 | | | 335 | | | 1253 | | | 725 | |
| Approach Delay, s/veh | | 59.3 | | | 77.8 | | | 25.0 | | | 22.7 | |
| Approach LOS | | E | | | E | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 26.7 | 73.0 | 15.6 | 19.8 | 24.7 | 75.0 | 9.9 | 25.4 | | | | |
| Change Period (Y+Rc), s | 4.6 | 6.9 | * 4.7 | * 4.7 | 4.6 | 6.9 | * 4.7 | * 4.7 | | | | |
| Max Green Setting (Gmax), s | 12.4 | 66.1 | * 19 | * 16 | 10.4 | 68.1 | * 12 | * 23 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.8 | 33.2 | 10.6 | 3.1 | 2.9 | 17.9 | 3.3 | 20.4 | | | | |
| Green Ext Time (p_c), s | 0.0 | 12.3 | 0.1 | 1.0 | 0.0 | 6.5 | 0.0 | 0.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 32.3 | | | | | | | | | |
| HCM 2010 LOS | | | C | | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 281 | 908 | 150 | 86 | 438 | 327 | 129 | 918 | 96 | 205 | 585 | 254 |
| Future Volume (veh/h) | 281 | 908 | 150 | 86 | 438 | 327 | 129 | 918 | 96 | 205 | 585 | 254 |
| 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 | | 0.96 | 1.00 | | 0.95 | 1.00 | | 0.98 | 1.00 | | 0.98 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 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 | 1667 | 1863 | 1863 | 1667 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 287 | 927 | 153 | 88 | 447 | 334 | 132 | 937 | 98 | 209 | 597 | 259 |
| Adj No. of Lanes | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 314 | 1088 | 469 | 193 | 892 | 381 | 249 | 1085 | 478 | 273 | 1080 | 474 |
| Arrive On Green | 0.06 | 0.10 | 0.10 | 0.04 | 0.08 | 0.08 | 0.11 | 0.41 | 0.41 | 0.03 | 0.10 | 0.10 |
| Sat Flow, veh/h | 1774 | 3539 | 1527 | 1587 | 3539 | 1511 | 3079 | 3539 | 1559 | 3442 | 3539 | 1554 |
| Grp Volume(v), veh/h | 287 | 927 | 153 | 88 | 447 | 334 | 132 | 937 | 98 | 209 | 597 | 259 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1527 | 1587 | 1770 | 1511 | 1540 | 1770 | 1559 | 1721 | 1770 | 1554 |
| Q Serve(g_s), s | 21.7 | 34.8 | 12.6 | 7.3 | 16.3 | 29.5 | 5.5 | 32.7 | 5.5 | 8.1 | 21.7 | 21.4 |
| Cycle Q Clear(g_c), s | 21.7 | 34.8 | 12.6 | 7.3 | 16.3 | 29.5 | 5.5 | 32.7 | 5.5 | 8.1 | 21.7 | 21.4 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 314 | 1088 | 469 | 193 | 892 | 381 | 249 | 1085 | 478 | 273 | 1080 | 474 |
| V/C Ratio(X) | 0.91 | 0.85 | 0.33 | 0.46 | 0.50 | 0.88 | 0.53 | 0.86 | 0.21 | 0.76 | 0.55 | 0.55 |
| Avail Cap(c_a), veh/h | 361 | 1298 | 560 | 193 | 918 | 392 | 251 | 1085 | 478 | 275 | 1080 | 474 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 1.33 | 1.33 | 1.33 | 0.33 | 0.33 | 0.33 |
| Upstream Filter(I) | 0.58 | 0.58 | 0.58 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.96 | 0.96 | 0.96 |
| Uniform Delay (d), s/veh | 62.5 | 57.6 | 47.7 | 60.4 | 53.8 | 59.8 | 57.8 | 37.4 | 29.3 | 64.5 | 51.9 | 51.8 |
| Incr Delay (d2), s/veh | 15.6 | 2.8 | 0.2 | 0.6 | 0.3 | 19.0 | 1.0 | 9.1 | 1.0 | 10.4 | 2.0 | 4.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 12.0 | 17.5 | 5.3 | 3.3 | 8.1 | 14.4 | 2.4 | 17.2 | 2.5 | 4.3 | 10.9 | 9.8 |
| LnGrp Delay(d),s/veh | 78.1 | 60.4 | 47.8 | 61.1 | 54.1 | 78.8 | 58.8 | 46.5 | 30.3 | 74.9 | 53.9 | 56.1 |
| LnGrp LOS | E | E | D | E | D | E | E | D | C | E | D | E |
| Approach Vol, veh/h | | 1367 | | | 869 | | | 1167 | | | 1065 | |
| Approach Delay, s/veh | | 62.7 | | | 64.3 | | | 46.5 | | | 58.5 | |
| Approach LOS | | E | | | E | | | 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 | 15.2 | 47.8 | 20.9 | 46.4 | 15.4 | 47.6 | 28.4 | 38.9 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.4 | 4.5 | 4.9 | 4.5 | 6.4 | 4.5 | 4.9 | | | | |
| Max Green Setting (Gmax), s | 10.8 | 41.4 | 13.0 | 49.5 | 11.0 | 41.2 | 27.5 | 35.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 10.1 | 34.7 | 9.3 | 36.8 | 7.5 | 23.7 | 23.7 | 31.5 | | | | |
| Green Ext Time (p_c), s | 0.1 | 3.1 | 0.2 | 4.7 | 0.2 | 3.7 | 0.2 | 1.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 57.8 | | | | | | | | | |
| HCM 2010 LOS | | | E | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|--|---|---|--|---|---|--|---|--|--|--|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | |
| Lane Configurations |  |   | |  |   | |   |   |  |   |   |   |  |
| Traffic Volume (veh/h) | 177 | 790 | 98 | 83 | 379 | 125 | 191 | 890 | 188 | 165 | 580 | 83 | |
| Future Volume (veh/h) | 177 | 790 | 98 | 83 | 379 | 125 | 191 | 890 | 188 | 165 | 580 | 83 | |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 | |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 | |
| Adj Flow Rate, veh/h | 188 | 840 | 104 | 88 | 403 | 133 | 203 | 947 | 200 | 176 | 617 | 88 | |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 | |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| Cap, veh/h | 214 | 949 | 117 | 127 | 656 | 214 | 306 | 1088 | 487 | 547 | 1389 | 621 | |
| Arrive On Green | 0.04 | 0.10 | 0.10 | 0.14 | 0.50 | 0.50 | 0.09 | 0.31 | 0.31 | 0.32 | 0.78 | 0.78 | |
| Sat Flow, veh/h | 1774 | 3171 | 393 | 1774 | 2625 | 857 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 | |
| Grp Volume(v), veh/h | 188 | 469 | 475 | 88 | 270 | 266 | 203 | 947 | 200 | 176 | 617 | 88 | |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1793 | 1774 | 1770 | 1712 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 | |
| Q Serve(g_s), s | 14.2 | 35.3 | 35.3 | 6.4 | 14.9 | 15.2 | 7.7 | 34.2 | 13.5 | 5.2 | 7.8 | 1.8 | |
| Cycle Q Clear(g_c), s | 14.2 | 35.3 | 35.3 | 6.4 | 14.9 | 15.2 | 7.7 | 34.2 | 13.5 | 5.2 | 7.8 | 1.8 | |
| Prop In Lane | 1.00 | | 0.22 | 1.00 | | 0.50 | 1.00 | | 1.00 | 1.00 | | 1.00 | |
| Lane Grp Cap(c), veh/h | 214 | 530 | 537 | 127 | 442 | 428 | 306 | 1088 | 487 | 547 | 1389 | 621 | |
| V/C Ratio(X) | 0.88 | 0.89 | 0.89 | 0.70 | 0.61 | 0.62 | 0.66 | 0.87 | 0.41 | 0.32 | 0.44 | 0.14 | |
| Avail Cap(c_a), veh/h | 256 | 634 | 643 | 172 | 551 | 532 | 337 | 1088 | 487 | 547 | 1389 | 621 | |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | |
| Upstream Filter(I) | 0.81 | 0.81 | 0.81 | 0.89 | 0.89 | 0.89 | 0.86 | 0.86 | 0.86 | 1.00 | 1.00 | 1.00 | |
| Uniform Delay (d), s/veh | 63.8 | 58.5 | 58.5 | 56.5 | 29.0 | 29.1 | 59.6 | 44.2 | 37.1 | 40.5 | 9.7 | 9.0 | |
| Incr Delay (d2), s/veh | 18.7 | 9.4 | 9.3 | 2.9 | 0.5 | 0.5 | 2.7 | 8.4 | 2.2 | 0.1 | 1.0 | 0.5 | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| %ile BackOfQ(50%),veh/ln | 8.1 | 18.7 | 19.0 | 3.2 | 7.2 | 7.2 | 3.8 | 18.0 | 6.2 | 2.5 | 3.9 | 0.8 | |
| LnGrp Delay(d),s/veh | 82.5 | 67.9 | 67.8 | 59.3 | 29.5 | 29.6 | 62.2 | 52.6 | 39.3 | 40.6 | 10.7 | 9.5 | |
| LnGrp LOS | F | E | E | E | C | C | E | D | D | D | B | A | |
| Approach Vol, veh/h | | 1132 | | | 624 | | | 1350 | | | 881 | | |
| Approach Delay, s/veh | | 70.3 | | | 33.8 | | | 52.1 | | | 16.6 | | |
| Approach LOS | | E | | | C | | | D | | | B | | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | |
| Phs Duration (G+Y+Rc), s | 28.0 | 48.0 | 14.1 | 44.9 | 16.5 | 59.5 | 20.8 | 38.2 | | | | | |
| Change Period (Y+Rc), s | 6.5 | * 6.5 | 4.5 | 4.5 | 4.5 | 6.5 | 4.5 | 4.5 | | | | | |
| Max Green Setting (Gmax), s | 12.0 | * 42 | 13.1 | 48.4 | 13.2 | 40.3 | 19.5 | 42.0 | | | | | |
| Max Q Clear Time (g_c+I1), s | 7.2 | 36.2 | 8.4 | 37.3 | 9.7 | 9.8 | 16.2 | 17.2 | | | | | |
| Green Ext Time (p_c), s | 0.3 | 2.4 | 1.1 | 3.1 | 0.1 | 3.3 | 0.1 | 2.1 | | | | | |
| Intersection Summary | | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 46.5 | | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | | |
| Notes | | | | | | | | | | | | | |

SEC CCP/Mission TIA
8: Centre City Pkwy & Valley Pkwy

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative PM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | |  |  |  |  |  | | |  |  |
| Traffic Volume (veh/h) | 0 | 0 | 0 | 209 | 968 | 255 | 174 | 1039 | 0 | 0 | 639 | 122 |
| Future Volume (veh/h) | 0 | 0 | 0 | 209 | 968 | 255 | 174 | 1039 | 0 | 0 | 639 | 122 |
| Number | | | | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | | | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | | | | 1863 | 1863 | 1863 | 1863 | 1863 | 0 | 0 | 1863 | 1863 |
| Adj Flow Rate, veh/h | | | | 213 | 988 | 260 | 178 | 1060 | 0 | 0 | 652 | 124 |
| Adj No. of Lanes | | | | 1 | 3 | 1 | 2 | 2 | 0 | 0 | 2 | 1 |
| Peak Hour Factor | | | | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Percent Heavy Veh, % | | | | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 2 | 2 |
| Cap, veh/h | | | | 426 | 1343 | 381 | 910 | 2352 | 0 | 0 | 1220 | 546 |
| Arrive On Green | | | | 0.24 | 0.24 | 0.24 | 0.26 | 0.66 | 0.00 | 0.00 | 0.34 | 0.34 |
| Sat Flow, veh/h | | | | 1774 | 5588 | 1583 | 3442 | 3632 | 0 | 0 | 3632 | 1583 |
| Grp Volume(v), veh/h | | | | 213 | 988 | 260 | 178 | 1060 | 0 | 0 | 652 | 124 |
| Grp Sat Flow(s),veh/h/ln | | | | 1774 | 1863 | 1583 | 1721 | 1770 | 0 | 0 | 1770 | 1583 |
| Q Serve(g_s), s | | | | 13.0 | 20.4 | 18.7 | 5.0 | 17.9 | 0.0 | 0.0 | 18.5 | 7.0 |
| Cycle Q Clear(g_c), s | | | | 13.0 | 20.4 | 18.7 | 5.0 | 17.9 | 0.0 | 0.0 | 18.5 | 7.0 |
| Prop In Lane | | | | 1.00 | | 1.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | | | | 426 | 1343 | 381 | 910 | 2352 | 0 | 0 | 1220 | 546 |
| V/C Ratio(X) | | | | 0.50 | 0.74 | 0.68 | 0.20 | 0.45 | 0.00 | 0.00 | 0.53 | 0.23 |
| Avail Cap(c_a), veh/h | | | | 695 | 2191 | 621 | 910 | 2352 | 0 | 0 | 1220 | 546 |
| HCM Platoon Ratio | | | | 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 | 0.00 | 0.86 | 0.86 |
| Uniform Delay (d), s/veh | | | | 41.0 | 43.8 | 43.2 | 35.7 | 10.0 | 0.0 | 0.0 | 32.9 | 29.1 |
| Incr Delay (d2), s/veh | | | | 0.7 | 0.6 | 1.6 | 0.1 | 0.6 | 0.0 | 0.0 | 1.4 | 0.8 |
| Initial Q Delay(d3),s/veh | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | | | | 6.4 | 10.6 | 16.0 | 2.4 | 8.9 | 0.0 | 0.0 | 9.3 | 3.2 |
| LnGrp Delay(d),s/veh | | | | 41.7 | 44.4 | 44.8 | 35.7 | 10.7 | 0.0 | 0.0 | 34.3 | 29.9 |
| LnGrp LOS | | | | D | D | D | D | B | | | C | C |
| Approach Vol, veh/h | | | | | 1461 | | | 1238 | | | 776 | |
| Approach Delay, s/veh | | | | | 44.1 | | | 14.3 | | | 33.6 | |
| Approach LOS | | | | | D | | | B | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | 5 | 6 | | | | | | |
| Phs Duration (G+Y+Rc), s | | 90.0 | | 35.0 | 40.0 | 50.0 | | | | | | |
| Change Period (Y+Rc), s | | 6.9 | | 5.0 | 6.9 | * 6.9 | | | | | | |
| Max Green Setting (Gmax), s | | 64.1 | | 49.0 | 15.9 | * 43 | | | | | | |
| Max Q Clear Time (g_c+I1), s | | 19.9 | | 22.4 | 7.0 | 20.5 | | | | | | |
| Green Ext Time (p_c), s | | 8.2 | | 7.6 | 4.4 | 3.9 | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 31.1 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 156 | 790 | 150 | 124 | 463 | 67 | 223 | 403 | 188 | 98 | 241 | 149 |
| Future Volume (veh/h) | 156 | 790 | 150 | 124 | 463 | 67 | 223 | 403 | 188 | 98 | 241 | 149 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 161 | 814 | 155 | 128 | 477 | 69 | 230 | 415 | 194 | 101 | 248 | 154 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 185 | 1245 | 237 | 152 | 1245 | 179 | 255 | 681 | 315 | 125 | 468 | 281 |
| Arrive On Green | 0.10 | 0.42 | 0.42 | 0.09 | 0.40 | 0.40 | 0.14 | 0.29 | 0.29 | 0.07 | 0.22 | 0.22 |
| Sat Flow, veh/h | 1774 | 2968 | 565 | 1774 | 3106 | 447 | 1774 | 2353 | 1088 | 1774 | 2130 | 1277 |
| Grp Volume(v), veh/h | 161 | 485 | 484 | 128 | 271 | 275 | 230 | 311 | 298 | 101 | 205 | 197 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1763 | 1774 | 1770 | 1784 | 1774 | 1770 | 1671 | 1774 | 1770 | 1637 |
| Q Serve(g_s), s | 12.1 | 29.6 | 29.6 | 9.6 | 14.6 | 14.8 | 17.2 | 20.5 | 20.8 | 7.6 | 13.8 | 14.4 |
| Cycle Q Clear(g_c), s | 12.1 | 29.6 | 29.6 | 9.6 | 14.6 | 14.8 | 17.2 | 20.5 | 20.8 | 7.6 | 13.8 | 14.4 |
| Prop In Lane | 1.00 | | 0.32 | 1.00 | | 0.25 | 1.00 | | 0.65 | 1.00 | | 0.78 |
| Lane Grp Cap(c), veh/h | 185 | 742 | 740 | 152 | 709 | 715 | 255 | 513 | 484 | 125 | 389 | 360 |
| V/C Ratio(X) | 0.87 | 0.65 | 0.65 | 0.84 | 0.38 | 0.38 | 0.90 | 0.61 | 0.62 | 0.81 | 0.53 | 0.55 |
| Avail Cap(c_a), veh/h | 235 | 742 | 740 | 222 | 709 | 715 | 353 | 513 | 484 | 183 | 389 | 360 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.48 | 0.48 | 0.48 | 0.74 | 0.74 | 0.74 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 59.5 | 31.3 | 31.3 | 60.8 | 28.6 | 28.7 | 56.9 | 41.3 | 41.5 | 61.9 | 46.5 | 46.7 |
| Incr Delay (d2), s/veh | 20.1 | 4.5 | 4.5 | 6.2 | 0.8 | 0.8 | 13.2 | 3.9 | 4.3 | 9.8 | 5.0 | 5.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.9 | 15.3 | 15.3 | 5.0 | 7.3 | 7.4 | 9.4 | 10.6 | 10.2 | 4.1 | 7.3 | 7.1 |
| LnGrp Delay(d),s/veh | 79.6 | 35.8 | 35.8 | 67.0 | 29.4 | 29.4 | 70.0 | 45.2 | 45.8 | 71.7 | 51.5 | 52.6 |
| LnGrp LOS | E | D | D | E | C | C | E | D | D | E | D | D |
| Approach Vol, veh/h | | 1130 | | | 674 | | | 839 | | | 503 | |
| Approach Delay, s/veh | | 42.0 | | | 36.5 | | | 52.2 | | | 56.0 | |
| Approach LOS | | D | | | D | | | D | | | E | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 15.7 | 61.5 | 23.5 | 34.3 | 18.2 | 59.0 | 14.1 | 43.7 | | | | |
| Change Period (Y+Rc), s | 4.1 | 4.9 | 4.1 | 4.6 | 4.1 | 4.9 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 16.9 | 47.4 | 26.9 | 26.1 | 17.9 | 46.4 | 13.9 | * 39 | | | | |
| Max Q Clear Time (g_c+I1), s | 11.6 | 31.6 | 19.2 | 16.4 | 14.1 | 16.8 | 9.6 | 22.8 | | | | |
| Green Ext Time (p_c), s | 0.1 | 5.8 | 0.2 | 1.2 | 0.1 | 7.1 | 0.1 | 2.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 45.8 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
10: Escondido Blvd & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative PM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 128 | 804 | 144 | 134 | 408 | 116 | 116 | 437 | 152 | 111 | 280 | 45 |
| Future Volume (veh/h) | 128 | 804 | 144 | 134 | 408 | 116 | 116 | 437 | 152 | 111 | 280 | 45 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 133 | 838 | 150 | 140 | 425 | 121 | 121 | 455 | 158 | 116 | 292 | 47 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 288 | 1098 | 197 | 291 | 1002 | 283 | 147 | 644 | 222 | 140 | 698 | 111 |
| Arrive On Green | 0.33 | 0.73 | 0.73 | 0.16 | 0.37 | 0.37 | 0.08 | 0.25 | 0.25 | 0.08 | 0.23 | 0.23 |
| Sat Flow, veh/h | 1774 | 3000 | 537 | 1774 | 2727 | 769 | 1774 | 2585 | 890 | 1774 | 3060 | 487 |
| Grp Volume(v), veh/h | 133 | 494 | 494 | 140 | 274 | 272 | 121 | 310 | 303 | 116 | 167 | 172 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1768 | 1774 | 1770 | 1727 | 1774 | 1770 | 1706 | 1774 | 1770 | 1777 |
| Q Serve(g_s), s | 8.0 | 22.9 | 22.9 | 9.7 | 15.7 | 15.9 | 9.1 | 21.6 | 21.9 | 8.7 | 10.9 | 11.1 |
| Cycle Q Clear(g_c), s | 8.0 | 22.9 | 22.9 | 9.7 | 15.7 | 15.9 | 9.1 | 21.6 | 21.9 | 8.7 | 10.9 | 11.1 |
| Prop In Lane | 1.00 | | 0.30 | 1.00 | | 0.45 | 1.00 | | 0.52 | 1.00 | | 0.27 |
| Lane Grp Cap(c), veh/h | 288 | 648 | 647 | 291 | 650 | 635 | 147 | 441 | 425 | 140 | 404 | 405 |
| V/C Ratio(X) | 0.46 | 0.76 | 0.76 | 0.48 | 0.42 | 0.43 | 0.82 | 0.70 | 0.71 | 0.83 | 0.41 | 0.42 |
| Avail Cap(c_a), veh/h | 288 | 648 | 647 | 291 | 650 | 635 | 222 | 441 | 425 | 217 | 404 | 405 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.59 | 0.59 | 0.59 | 0.53 | 0.53 | 0.53 | 0.96 | 0.96 | 0.96 | 0.83 | 0.83 | 0.83 |
| Uniform Delay (d), s/veh | 40.9 | 14.5 | 14.5 | 51.2 | 32.0 | 32.1 | 61.0 | 46.1 | 46.3 | 61.3 | 44.4 | 44.5 |
| Incr Delay (d2), s/veh | 0.3 | 5.1 | 5.1 | 0.2 | 1.1 | 1.1 | 8.2 | 8.7 | 9.3 | 7.0 | 2.6 | 2.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.9 | 11.8 | 11.7 | 4.8 | 7.8 | 7.8 | 4.8 | 11.6 | 11.4 | 4.6 | 5.6 | 5.8 |
| LnGrp Delay(d),s/veh | 41.1 | 19.6 | 19.6 | 51.5 | 33.0 | 33.2 | 69.1 | 54.8 | 55.6 | 68.3 | 47.0 | 47.2 |
| LnGrp LOS | D | B | B | D | C | C | E | D | E | E | D | D |
| Approach Vol, veh/h | | 1121 | | | 686 | | | 734 | | | 455 | |
| Approach Delay, s/veh | | 22.2 | | | 36.8 | | | 57.5 | | | 52.5 | |
| Approach LOS | | C | | | D | | | E | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 14.7 | 40.0 | 26.2 | 54.0 | 17.6 | 37.2 | 26.0 | 54.2 | | | | |
| Change Period (Y+Rc), s | 4.1 | 6.4 | 4.1 | 4.6 | 6.4 | * 6.4 | 4.1 | 4.6 | | | | |
| Max Green Setting (Gmax), s | 16.5 | 31.2 | 18.7 | 49.4 | 16.9 | * 31 | 18.5 | 49.6 | | | | |
| Max Q Clear Time (g_c+I1), s | 10.7 | 23.9 | 11.7 | 24.9 | 11.1 | 13.1 | 10.0 | 17.9 | | | | |
| Green Ext Time (p_c), s | 0.1 | 1.7 | 0.2 | 4.2 | 0.2 | 1.1 | 0.3 | 2.1 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 38.8 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
11: Escondido Blvd & Woodward

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative PM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | |  | | |  |  | |  | |  |  | |
| Traffic Volume (veh/h) | 5 | 1 | 11 | 71 | 0 | 94 | 1 | 625 | 87 | 75 | 485 | 12 |
| Future Volume (veh/h) | 5 | 1 | 11 | 71 | 0 | 94 | 1 | 625 | 87 | 75 | 485 | 12 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1900 | 1863 | 1900 | 1900 | 1863 | 1863 | 1900 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 5 | 1 | 11 | 73 | 0 | 97 | 1 | 644 | 90 | 77 | 500 | 12 |
| Adj No. of Lanes | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 57 | 24 | 67 | 180 | 0 | 131 | 35 | 2226 | 310 | 99 | 2905 | 70 |
| Arrive On Green | 0.08 | 0.08 | 0.08 | 0.08 | 0.00 | 0.08 | 0.73 | 0.73 | 0.73 | 0.06 | 0.82 | 0.82 |
| Sat Flow, veh/h | 156 | 286 | 810 | 1345 | 0 | 1583 | 0 | 3056 | 426 | 1774 | 3533 | 85 |
| Grp Volume(v), veh/h | 17 | 0 | 0 | 73 | 0 | 97 | 393 | 0 | 342 | 77 | 250 | 262 |
| Grp Sat Flow(s),veh/h/ln | 1251 | 0 | 0 | 1345 | 0 | 1583 | 1862 | 0 | 1620 | 1774 | 1770 | 1848 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 6.3 | 0.0 | 0.0 | 7.6 | 4.5 | 3.1 | 3.1 |
| Cycle Q Clear(g_c), s | 5.6 | 0.0 | 0.0 | 5.6 | 0.0 | 6.3 | 7.6 | 0.0 | 7.6 | 4.5 | 3.1 | 3.1 |
| Prop In Lane | 0.29 | | 0.65 | 1.00 | | 1.00 | 0.00 | | 0.26 | 1.00 | | 0.05 |
| Lane Grp Cap(c), veh/h | 148 | 0 | 0 | 180 | 0 | 131 | 1391 | 0 | 1180 | 99 | 1455 | 1519 |
| V/C Ratio(X) | 0.12 | 0.00 | 0.00 | 0.41 | 0.00 | 0.74 | 0.28 | 0.00 | 0.29 | 0.78 | 0.17 | 0.17 |
| Avail Cap(c_a), veh/h | 402 | 0 | 0 | 410 | 0 | 392 | 1391 | 0 | 1180 | 287 | 1455 | 1519 |
| 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 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.87 | 0.87 | 0.87 |
| Uniform Delay (d), s/veh | 44.7 | 0.0 | 0.0 | 46.8 | 0.0 | 47.1 | 4.9 | 0.0 | 4.9 | 48.9 | 1.9 | 1.9 |
| Incr Delay (d2), s/veh | 0.1 | 0.0 | 0.0 | 0.6 | 0.0 | 3.1 | 0.5 | 0.0 | 0.6 | 4.3 | 0.2 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.5 | 0.0 | 0.0 | 2.1 | 0.0 | 2.9 | 4.0 | 0.0 | 3.5 | 2.3 | 1.6 | 1.6 |
| LnGrp Delay(d),s/veh | 44.8 | 0.0 | 0.0 | 47.3 | 0.0 | 50.2 | 5.4 | 0.0 | 5.5 | 53.2 | 2.2 | 2.1 |
| LnGrp LOS | D | | | D | | D | A | | A | D | A | A |
| Approach Vol, veh/h | | 17 | | | 170 | | | 735 | | | 589 | |
| Approach Delay, s/veh | | 44.8 | | | 49.0 | | | 5.5 | | | 8.8 | |
| Approach LOS | | D | | | D | | | A | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 9.9 | 81.5 | | 13.7 | | 91.3 | | 13.7 | | | | |
| Change Period (Y+Rc), s | 4.0 | 5.0 | | * 5 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 17.0 | 48.0 | | * 27 | | 69.0 | | 26.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.5 | 9.6 | | 7.6 | | 5.1 | | 8.3 | | | | |
| Green Ext Time (p_c), s | 0.1 | 9.3 | | 0.4 | | 9.8 | | 0.4 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 12.1 | | | | | | | | |
| HCM 2010 LOS | | | | B | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
12: Broadway & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative PM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 207 | 686 | 185 | 102 | 413 | 199 | 149 | 728 | 124 | 241 | 694 | 92 |
| Future Volume (veh/h) | 207 | 686 | 185 | 102 | 413 | 199 | 149 | 728 | 124 | 241 | 694 | 92 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 218 | 722 | 195 | 107 | 435 | 209 | 157 | 766 | 131 | 254 | 731 | 97 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 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 | 256 | 778 | 210 | 132 | 494 | 235 | 231 | 854 | 146 | 286 | 985 | 131 |
| Arrive On Green | 0.14 | 0.28 | 0.28 | 0.07 | 0.21 | 0.21 | 0.04 | 0.09 | 0.09 | 0.16 | 0.31 | 0.31 |
| Sat Flow, veh/h | 1774 | 2757 | 744 | 1774 | 2328 | 1108 | 1774 | 3024 | 517 | 1774 | 3142 | 417 |
| Grp Volume(v), veh/h | 218 | 463 | 454 | 107 | 330 | 314 | 157 | 448 | 449 | 254 | 412 | 416 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1731 | 1774 | 1770 | 1667 | 1774 | 1770 | 1771 | 1774 | 1770 | 1789 |
| Q Serve(g_s), s | 10.8 | 22.9 | 22.9 | 5.3 | 16.2 | 16.5 | 7.9 | 22.6 | 22.6 | 12.6 | 18.7 | 18.7 |
| Cycle Q Clear(g_c), s | 10.8 | 22.9 | 22.9 | 5.3 | 16.2 | 16.5 | 7.9 | 22.6 | 22.6 | 12.6 | 18.7 | 18.7 |
| Prop In Lane | 1.00 | | 0.43 | 1.00 | | 0.66 | 1.00 | | 0.29 | 1.00 | | 0.23 |
| Lane Grp Cap(c), veh/h | 256 | 499 | 488 | 132 | 375 | 354 | 231 | 500 | 500 | 286 | 554 | 561 |
| V/C Ratio(X) | 0.85 | 0.93 | 0.93 | 0.81 | 0.88 | 0.89 | 0.68 | 0.90 | 0.90 | 0.89 | 0.74 | 0.74 |
| Avail Cap(c_a), veh/h | 256 | 507 | 496 | 132 | 393 | 370 | 231 | 500 | 500 | 286 | 554 | 561 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.62 | 0.62 | 0.62 | 1.00 | 1.00 | 1.00 | 0.68 | 0.68 | 0.68 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 37.6 | 31.4 | 31.4 | 41.0 | 34.3 | 34.4 | 41.2 | 39.5 | 39.5 | 37.0 | 27.6 | 27.7 |
| Incr Delay (d2), s/veh | 15.5 | 16.5 | 16.8 | 30.2 | 19.1 | 21.6 | 5.4 | 15.8 | 15.9 | 27.0 | 8.7 | 8.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.4 | 13.5 | 13.2 | 3.7 | 10.0 | 9.7 | 4.2 | 13.3 | 13.3 | 8.3 | 10.5 | 10.6 |
| LnGrp Delay(d),s/veh | 53.0 | 48.0 | 48.3 | 71.2 | 53.4 | 56.0 | 46.6 | 55.4 | 55.4 | 63.9 | 36.3 | 36.3 |
| LnGrp LOS | D | D | D | E | D | E | D | E | E | E | D | D |
| Approach Vol, veh/h | | 1135 | | | 751 | | | 1054 | | | 1082 | |
| Approach Delay, s/veh | | 49.1 | | | 57.1 | | | 54.1 | | | 42.8 | |
| Approach LOS | | D | | | E | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 19.0 | 29.9 | 11.2 | 29.9 | 16.2 | 32.7 | 17.5 | 23.6 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 14.5 | 25.0 | 6.7 | 25.8 | 11.3 | 28.2 | 12.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 14.6 | 24.6 | 7.3 | 24.9 | 9.9 | 20.7 | 12.8 | 18.5 | | | | |
| Green Ext Time (p_c), s | 0.0 | 0.3 | 0.0 | 0.5 | 0.9 | 3.0 | 0.0 | 0.6 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 50.2 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |

SEC CCP/Mission TIA
13: Broadway & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative PM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 211 | 723 | 70 | 65 | 382 | 216 | 145 | 503 | 49 | 256 | 462 | 116 |
| Future Volume (veh/h) | 211 | 723 | 70 | 65 | 382 | 216 | 145 | 503 | 49 | 256 | 462 | 116 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 220 | 753 | 73 | 68 | 398 | 225 | 151 | 524 | 51 | 267 | 481 | 121 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 271 | 1018 | 99 | 87 | 458 | 256 | 185 | 761 | 74 | 364 | 939 | 235 |
| Arrive On Green | 0.15 | 0.31 | 0.31 | 0.05 | 0.21 | 0.21 | 0.10 | 0.23 | 0.23 | 0.41 | 0.67 | 0.67 |
| Sat Flow, veh/h | 1774 | 3261 | 316 | 1774 | 2192 | 1224 | 1774 | 3260 | 316 | 1774 | 2807 | 702 |
| Grp Volume(v), veh/h | 220 | 409 | 417 | 68 | 320 | 303 | 151 | 284 | 291 | 267 | 302 | 300 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1807 | 1774 | 1770 | 1647 | 1774 | 1770 | 1807 | 1774 | 1770 | 1739 |
| Q Serve(g_s), s | 10.8 | 18.6 | 18.6 | 3.4 | 15.7 | 16.0 | 7.5 | 13.2 | 13.3 | 11.4 | 7.7 | 7.8 |
| Cycle Q Clear(g_c), s | 10.8 | 18.6 | 18.6 | 3.4 | 15.7 | 16.0 | 7.5 | 13.2 | 13.3 | 11.4 | 7.7 | 7.8 |
| Prop In Lane | 1.00 | | 0.17 | 1.00 | | 0.74 | 1.00 | | 0.18 | 1.00 | | 0.40 |
| Lane Grp Cap(c), veh/h | 271 | 552 | 564 | 87 | 370 | 344 | 185 | 413 | 422 | 364 | 592 | 582 |
| V/C Ratio(X) | 0.81 | 0.74 | 0.74 | 0.78 | 0.87 | 0.88 | 0.82 | 0.69 | 0.69 | 0.73 | 0.51 | 0.52 |
| Avail Cap(c_a), veh/h | 286 | 554 | 566 | 124 | 393 | 366 | 246 | 413 | 422 | 364 | 592 | 582 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 0.56 | 0.56 | 0.56 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.58 | 0.58 | 0.58 |
| Uniform Delay (d), s/veh | 36.9 | 27.7 | 27.7 | 42.3 | 34.4 | 34.5 | 39.5 | 31.5 | 31.5 | 24.4 | 11.2 | 11.2 |
| Incr Delay (d2), s/veh | 9.3 | 2.9 | 2.9 | 17.9 | 17.4 | 20.3 | 14.5 | 9.0 | 9.0 | 4.4 | 1.8 | 1.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.0 | 9.5 | 9.7 | 2.1 | 9.4 | 9.3 | 4.4 | 7.4 | 7.7 | 5.9 | 4.0 | 4.0 |
| LnGrp Delay(d),s/veh | 46.2 | 30.6 | 30.6 | 60.2 | 51.8 | 54.9 | 54.0 | 40.5 | 40.5 | 28.8 | 13.0 | 13.1 |
| LnGrp LOS | D | C | C | E | D | D | D | D | D | C | B | B |
| Approach Vol, veh/h | | 1046 | | | 691 | | | 726 | | | 869 | |
| Approach Delay, s/veh | | 33.9 | | | 54.0 | | | 43.3 | | | 17.9 | |
| Approach LOS | | C | | | D | | | D | | | B | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 23.0 | 25.5 | 8.9 | 32.6 | 13.9 | 34.6 | 18.2 | 23.3 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 16.5 | 21.0 | 6.3 | 28.2 | 12.5 | 25.0 | 14.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 13.4 | 15.3 | 5.4 | 20.6 | 9.5 | 9.8 | 12.8 | 18.0 | | | | |
| Green Ext Time (p_c), s | 0.4 | 1.7 | 0.0 | 3.4 | 0.1 | 4.0 | 1.0 | 0.8 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 35.9 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |

APPENDIX I

Existing Plus Cumulative Plus Project HCM Analysis Sheets

SEC CCP/Mission TIA
1: Rock Springs Rd & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project AM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  |  |
| Traffic Volume (veh/h) | 77 | 320 | 31 | 50 | 975 | 124 | 44 | 207 | 25 | 178 | 384 | 200 |
| Future Volume (veh/h) | 77 | 320 | 31 | 50 | 975 | 124 | 44 | 207 | 25 | 178 | 384 | 200 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 82 | 340 | 33 | 53 | 1037 | 132 | 47 | 220 | 27 | 189 | 409 | 213 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 105 | 1737 | 168 | 68 | 1617 | 206 | 153 | 951 | 115 | 350 | 557 | 474 |
| Arrive On Green | 0.06 | 0.53 | 0.53 | 0.04 | 0.51 | 0.51 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 |
| Sat Flow, veh/h | 1774 | 3262 | 315 | 1774 | 3160 | 402 | 799 | 3179 | 386 | 1128 | 1863 | 1583 |
| Grp Volume(v), veh/h | 82 | 183 | 190 | 53 | 580 | 589 | 47 | 121 | 126 | 189 | 409 | 213 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1807 | 1774 | 1770 | 1792 | 799 | 1770 | 1795 | 1128 | 1863 | 1583 |
| Q Serve(g_s), s | 4.6 | 5.4 | 5.5 | 3.0 | 23.8 | 23.9 | 5.6 | 5.2 | 5.3 | 15.2 | 19.7 | 10.9 |
| Cycle Q Clear(g_c), s | 4.6 | 5.4 | 5.5 | 3.0 | 23.8 | 23.9 | 25.3 | 5.2 | 5.3 | 20.4 | 19.7 | 10.9 |
| Prop In Lane | 1.00 | | 0.17 | 1.00 | | 0.22 | 1.00 | | 0.21 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 105 | 942 | 962 | 68 | 906 | 917 | 153 | 529 | 537 | 350 | 557 | 474 |
| V/C Ratio(X) | 0.78 | 0.19 | 0.20 | 0.78 | 0.64 | 0.64 | 0.31 | 0.23 | 0.23 | 0.54 | 0.73 | 0.45 |
| Avail Cap(c_a), veh/h | 177 | 942 | 962 | 106 | 906 | 917 | 183 | 595 | 603 | 392 | 626 | 532 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.78 | 0.78 | 0.78 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 46.4 | 12.2 | 12.2 | 47.7 | 17.7 | 17.7 | 42.8 | 26.4 | 26.4 | 34.1 | 31.5 | 28.4 |
| Incr Delay (d2), s/veh | 4.7 | 0.5 | 0.5 | 5.6 | 2.7 | 2.7 | 0.8 | 0.2 | 0.2 | 1.0 | 3.6 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.4 | 2.8 | 2.9 | 1.6 | 12.3 | 12.5 | 1.3 | 2.6 | 2.6 | 4.8 | 10.7 | 4.8 |
| LnGrp Delay(d),s/veh | 51.1 | 12.6 | 12.7 | 53.3 | 20.5 | 20.5 | 43.7 | 26.5 | 26.6 | 35.1 | 35.1 | 28.9 |
| LnGrp LOS | D | B | B | D | C | C | D | C | C | D | D | C |
| Approach Vol, veh/h | | 455 | | | 1222 | | | 294 | | | 811 | |
| Approach Delay, s/veh | | 19.6 | | | 21.9 | | | 29.3 | | | 33.4 | |
| Approach LOS | | B | | | C | | | 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 | 7.8 | 57.8 | | 34.4 | 9.9 | 55.7 | | 34.4 | | | | |
| Change Period (Y+Rc), s | 4.0 | 4.5 | | 4.5 | 4.0 | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | 6.0 | 47.4 | | 33.6 | 10.0 | 43.4 | | 33.6 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.0 | 7.5 | | 22.4 | 6.6 | 25.9 | | 27.3 | | | | |
| Green Ext Time (p_c), s | 0.0 | 23.8 | | 3.7 | 0.0 | 13.2 | | 2.6 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 25.7 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|-------|------|-------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 23 | 440 | 77 | 212 | 1193 | 71 | 143 | 23 | 116 | 55 | 27 | 30 |
| Future Volume (veh/h) | 23 | 440 | 77 | 212 | 1193 | 71 | 143 | 23 | 116 | 55 | 27 | 30 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 23 | 449 | 79 | 216 | 1217 | 72 | 146 | 23 | 118 | 56 | 28 | 31 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 463 | 833 | 146 | 691 | 1375 | 81 | 175 | 219 | 186 | 100 | 54 | 60 |
| Arrive On Green | 0.26 | 0.28 | 0.28 | 0.78 | 0.81 | 0.81 | 0.10 | 0.12 | 0.12 | 0.06 | 0.07 | 0.07 |
| Sat Flow, veh/h | 1774 | 3013 | 527 | 1774 | 3396 | 201 | 1774 | 1863 | 1583 | 1774 | 809 | 896 |
| Grp Volume(v), veh/h | 23 | 263 | 265 | 216 | 634 | 655 | 146 | 23 | 118 | 56 | 0 | 59 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1770 | 1774 | 1770 | 1827 | 1774 | 1863 | 1583 | 1774 | 0 | 1705 |
| Q Serve(g_s), s | 1.2 | 15.1 | 15.3 | 4.3 | 28.7 | 28.9 | 9.7 | 1.3 | 4.0 | 3.7 | 0.0 | 4.0 |
| Cycle Q Clear(g_c), s | 1.2 | 15.1 | 15.3 | 4.3 | 28.7 | 28.9 | 9.7 | 1.3 | 4.0 | 3.7 | 0.0 | 4.0 |
| Prop In Lane | 1.00 | | 0.30 | 1.00 | | 0.11 | 1.00 | | 1.00 | 1.00 | | 0.53 |
| Lane Grp Cap(c), veh/h | 463 | 490 | 490 | 691 | 717 | 740 | 175 | 219 | 186 | 100 | 0 | 114 |
| V/C Ratio(X) | 0.05 | 0.54 | 0.54 | 0.31 | 0.88 | 0.89 | 0.83 | 0.11 | 0.63 | 0.56 | 0.00 | 0.52 |
| Avail Cap(c_a), veh/h | 463 | 490 | 490 | 691 | 717 | 740 | 205 | 545 | 463 | 135 | 0 | 430 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.95 | 0.95 | 0.95 | 0.53 | 0.53 | 0.53 | 0.93 | 0.93 | 0.93 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.2 | 36.9 | 36.9 | 8.6 | 9.5 | 9.5 | 53.1 | 47.3 | 11.0 | 55.2 | 0.0 | 54.1 |
| Incr Delay (d2), s/veh | 0.1 | 4.0 | 4.0 | 0.2 | 8.7 | 8.6 | 21.3 | 0.2 | 4.0 | 5.8 | 0.0 | 4.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.6 | 7.9 | 8.0 | 2.1 | 14.7 | 15.2 | 5.8 | 0.7 | 1.9 | 2.0 | 0.0 | 2.0 |
| LnGrp Delay(d),s/veh | 33.2 | 40.8 | 41.0 | 8.7 | 18.2 | 18.1 | 74.4 | 47.6 | 15.0 | 61.0 | 0.0 | 58.5 |
| LnGrp LOS | C | D | D | A | B | B | E | D | B | E | | E |
| Approach Vol, veh/h | | 551 | | | 1505 | | | 287 | | | 115 | |
| Approach Delay, s/veh | | 40.6 | | | 16.8 | | | 47.8 | | | 59.7 | |
| Approach LOS | | D | | | B | | | D | | | E | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 51.3 | 38.6 | 17.0 | 13.1 | 35.9 | 54.0 | 10.9 | 19.2 | | | | |
| Change Period (Y+Rc), s | 4.6 | 5.4 | 5.1 | * 5.1 | 4.6 | * 5.4 | 4.1 | 5.1 | | | | |
| Max Green Setting (Gmax), s | 23.4 | 33.2 | 13.9 | * 30 | 8.5 | * 49 | 9.1 | 35.1 | | | | |
| Max Q Clear Time (g_c+10), s | 10.3 | 17.3 | 11.7 | 6.0 | 3.2 | 30.9 | 5.7 | 6.0 | | | | |
| Green Ext Time (p_c), s | 0.8 | 4.9 | 0.3 | 0.3 | 0.4 | 12.7 | 0.0 | 1.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 27.8 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
3: Quince St & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project AM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 24 | 356 | 141 | 85 | 720 | 86 | 109 | 144 | 69 | 42 | 158 | 61 |
| Future Volume (veh/h) | 24 | 356 | 141 | 85 | 720 | 86 | 109 | 144 | 69 | 42 | 158 | 61 |
| 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 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 28 | 409 | 162 | 98 | 828 | 99 | 125 | 166 | 79 | 48 | 182 | 70 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 488 | 1772 | 694 | 609 | 2270 | 271 | 225 | 498 | 227 | 227 | 532 | 198 |
| Arrive On Green | 0.71 | 0.71 | 0.71 | 1.00 | 1.00 | 1.00 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 |
| Sat Flow, veh/h | 601 | 2487 | 974 | 838 | 3184 | 381 | 1123 | 2365 | 1077 | 1130 | 2528 | 939 |
| Grp Volume(v), veh/h | 28 | 290 | 281 | 98 | 460 | 467 | 125 | 122 | 123 | 48 | 125 | 127 |
| Grp Sat Flow(s),veh/h/ln | 601 | 1770 | 1691 | 838 | 1770 | 1796 | 1123 | 1770 | 1673 | 1130 | 1770 | 1697 |
| Q Serve(g_s), s | 1.7 | 6.7 | 6.9 | 1.4 | 0.0 | 0.0 | 12.8 | 7.0 | 7.5 | 4.5 | 7.2 | 7.6 |
| Cycle Q Clear(g_c), s | 1.7 | 6.7 | 6.9 | 8.2 | 0.0 | 0.0 | 20.5 | 7.0 | 7.5 | 12.0 | 7.2 | 7.6 |
| Prop In Lane | 1.00 | | 0.58 | 1.00 | | 0.21 | 1.00 | | 0.64 | 1.00 | | 0.55 |
| Lane Grp Cap(c), veh/h | 488 | 1261 | 1205 | 609 | 1261 | 1280 | 225 | 373 | 352 | 227 | 373 | 357 |
| V/C Ratio(X) | 0.06 | 0.23 | 0.23 | 0.16 | 0.36 | 0.36 | 0.56 | 0.33 | 0.35 | 0.21 | 0.34 | 0.35 |
| Avail Cap(c_a), veh/h | 488 | 1261 | 1205 | 609 | 1261 | 1280 | 395 | 640 | 605 | 398 | 640 | 614 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.74 | 0.74 | 0.74 | 1.00 | 1.00 | 1.00 | 0.71 | 0.71 | 0.71 |
| Uniform Delay (d), s/veh | 5.2 | 5.9 | 5.9 | 0.3 | 0.0 | 0.0 | 49.1 | 40.2 | 40.4 | 45.5 | 40.2 | 40.4 |
| Incr Delay (d2), s/veh | 0.2 | 0.4 | 0.5 | 0.4 | 0.6 | 0.6 | 1.6 | 0.4 | 0.4 | 0.2 | 0.3 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.3 | 3.4 | 3.4 | 0.4 | 0.2 | 0.2 | 4.1 | 3.5 | 3.5 | 1.4 | 3.5 | 3.6 |
| LnGrp Delay(d),s/veh | 5.4 | 6.3 | 6.4 | 0.8 | 0.6 | 0.6 | 50.7 | 40.5 | 40.8 | 45.7 | 40.5 | 40.7 |
| LnGrp LOS | A | A | A | A | A | A | D | D | D | D | D | D |
| Approach Vol, veh/h | | 599 | | | 1025 | | | 370 | | | 300 | |
| Approach Delay, s/veh | | 6.3 | | | 0.6 | | | 44.1 | | | 41.4 | |
| Approach LOS | | A | | | A | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 90.1 | | 29.9 | | 90.1 | | 29.9 | | | | |
| Change Period (Y+Rc), s | | 4.6 | | 4.6 | | 4.6 | | 4.6 | | | | |
| Max Green Setting (Gmax), s | | 67.4 | | 43.4 | | 67.4 | | 43.4 | | | | |
| Max Q Clear Time (g_c+1), s | | 8.9 | | 22.5 | | 10.2 | | 14.0 | | | | |
| Green Ext Time (p_c), s | | 11.6 | | 2.8 | | 11.6 | | 3.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 14.5 | | | | | | | | |
| HCM 2010 LOS | | | | B | | | | | | | | |

SEC CCP/Mission TIA
4: Centre City Pkwy & El Norte Pkwy

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project AM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↖↗ | ↑↑ | ↖ | ↖↗ | ↑↑ | | ↖↗ | ↑↑ | ↖ | ↖↗ | ↑↑ | ↖ |
| Traffic Volume (veh/h) | 9 | 674 | 269 | 286 | 752 | 164 | 170 | 257 | 84 | 262 | 1082 | 60 |
| Future Volume (veh/h) | 9 | 674 | 269 | 286 | 752 | 164 | 170 | 257 | 84 | 262 | 1082 | 60 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 10 | 733 | 292 | 311 | 817 | 178 | 185 | 279 | 91 | 285 | 1176 | 65 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 77 | 995 | 445 | 349 | 1042 | 227 | 292 | 1325 | 593 | 327 | 1357 | 607 |
| Arrive On Green | 0.02 | 0.28 | 0.28 | 0.10 | 0.36 | 0.36 | 0.17 | 0.75 | 0.75 | 0.10 | 0.38 | 0.38 |
| Sat Flow, veh/h | 3442 | 3539 | 1583 | 3442 | 2891 | 630 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 10 | 733 | 292 | 311 | 500 | 495 | 185 | 279 | 91 | 285 | 1176 | 65 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1583 | 1721 | 1770 | 1752 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 0.5 | 31.0 | 26.8 | 14.7 | 41.6 | 41.6 | 8.3 | 3.9 | 2.7 | 13.5 | 50.6 | 4.4 |
| Cycle Q Clear(g_c), s | 0.5 | 31.0 | 26.8 | 14.7 | 41.6 | 41.6 | 8.3 | 3.9 | 2.7 | 13.5 | 50.6 | 4.4 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.36 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 77 | 995 | 445 | 349 | 638 | 631 | 292 | 1325 | 593 | 327 | 1357 | 607 |
| V/C Ratio(X) | 0.13 | 0.74 | 0.66 | 0.89 | 0.78 | 0.78 | 0.63 | 0.21 | 0.15 | 0.87 | 0.87 | 0.11 |
| Avail Cap(c_a), veh/h | 209 | 1094 | 489 | 353 | 638 | 631 | 292 | 1325 | 593 | 405 | 1357 | 607 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.98 | 0.98 | 0.98 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 79.1 | 53.8 | 52.3 | 73.2 | 47.0 | 47.0 | 66.1 | 13.5 | 13.3 | 73.7 | 47.0 | 32.7 |
| Incr Delay (d2), s/veh | 0.3 | 2.9 | 3.7 | 22.5 | 7.0 | 7.0 | 3.4 | 0.4 | 0.5 | 13.7 | 7.6 | 0.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.2 | 15.6 | 12.2 | 8.1 | 21.5 | 21.3 | 4.1 | 1.9 | 1.2 | 7.0 | 26.1 | 2.0 |
| LnGrp Delay(d),s/veh | 79.4 | 56.6 | 56.0 | 95.8 | 54.0 | 54.1 | 69.5 | 13.8 | 13.8 | 87.3 | 54.6 | 33.1 |
| LnGrp LOS | E | E | E | F | D | D | E | B | B | F | D | C |
| Approach Vol, veh/h | | 1035 | | | 1306 | | | 555 | | | 1526 | |
| Approach Delay, s/veh | | 56.7 | | | 64.0 | | | 32.4 | | | 59.8 | |
| Approach LOS | | E | | | E | | | C | | | 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 | 31.8 | 68.7 | 21.8 | 52.7 | 20.3 | 70.2 | 8.8 | 65.8 | | | | |
| Change Period (Y+Rc), s | 6.1 | 6.9 | 5.1 | 6.3 | 6.3 | 6.9 | 5.1 | 6.3 | | | | |
| Max Green Setting (Gmax), s | 19.4 | 53.3 | 16.9 | 51.0 | 14.0 | 58.5 | 10.0 | 57.9 | | | | |
| Max Q Clear Time (g_c+I), s | 11.5 | 5.9 | 16.7 | 33.0 | 10.3 | 52.6 | 2.5 | 43.6 | | | | |
| Green Ext Time (p_c), s | 0.2 | 19.5 | 0.0 | 13.4 | 0.1 | 4.6 | 0.0 | 12.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | | 56.9 | | | | | | | |
| HCM 2010 LOS | | | | | E | | | | | | | |

SEC CCP/Mission TIA
5: Centre City Pkwy & Decatur Way

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project AM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|-------|-------|------|-------|-------|-------|------|------|------|------|
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↑↑ | ↗ | ↖ | ↑↑ | ↗ |
| Traffic Volume (veh/h) | 4 | 0 | 10 | 314 | 8 | 84 | 32 | 429 | 39 | 67 | 1625 | 14 |
| Future Volume (veh/h) | 4 | 0 | 10 | 314 | 8 | 84 | 32 | 429 | 39 | 67 | 1625 | 14 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 4 | 0 | 11 | 338 | 9 | 90 | 34 | 461 | 42 | 72 | 1747 | 15 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 1 | 1 | 2 | 1 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 129 | 0 | 115 | 358 | 29 | 294 | 108 | 1914 | 856 | 104 | 1855 | 830 |
| Arrive On Green | 0.07 | 0.00 | 0.07 | 0.20 | 0.20 | 0.20 | 0.06 | 0.54 | 0.54 | 0.12 | 1.00 | 1.00 |
| Sat Flow, veh/h | 1774 | 0 | 1583 | 1774 | 146 | 1459 | 1774 | 3539 | 1583 | 1774 | 3539 | 1583 |
| Grp Volume(v), veh/h | 4 | 0 | 11 | 338 | 0 | 99 | 34 | 461 | 42 | 72 | 1747 | 15 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 0 | 1583 | 1774 | 0 | 1605 | 1774 | 1770 | 1583 | 1774 | 1770 | 1583 |
| Q Serve(g_s), s | 0.3 | 0.0 | 1.1 | 31.0 | 0.0 | 8.7 | 3.0 | 11.3 | 2.1 | 6.4 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 0.3 | 0.0 | 1.1 | 31.0 | 0.0 | 8.7 | 3.0 | 11.3 | 2.1 | 6.4 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.91 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 129 | 0 | 115 | 358 | 0 | 323 | 108 | 1914 | 856 | 104 | 1855 | 830 |
| V/C Ratio(X) | 0.03 | 0.00 | 0.10 | 0.94 | 0.00 | 0.31 | 0.31 | 0.24 | 0.05 | 0.70 | 0.94 | 0.02 |
| Avail Cap(c_a), veh/h | 129 | 0 | 115 | 394 | 0 | 356 | 108 | 1914 | 856 | 141 | 1855 | 830 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.50 | 0.50 | 0.50 |
| Uniform Delay (d), s/veh | 71.1 | 0.0 | 71.5 | 64.9 | 0.0 | 56.1 | 74.2 | 20.0 | 17.9 | 71.5 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.1 | 0.0 | 0.3 | 29.7 | 0.0 | 0.4 | 0.6 | 0.3 | 0.1 | 2.0 | 6.3 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.2 | 0.0 | 0.5 | 18.2 | 0.0 | 3.9 | 1.5 | 5.6 | 0.9 | 3.2 | 1.6 | 0.0 |
| LnGrp Delay(d),s/veh | 71.2 | 0.0 | 71.8 | 94.7 | 0.0 | 56.5 | 74.8 | 20.3 | 18.0 | 73.4 | 6.3 | 0.0 |
| LnGrp LOS | E | | E | F | | E | E | C | B | E | A | A |
| Approach Vol, veh/h | | 15 | | 437 | | | | 537 | | | 1834 | |
| Approach Delay, s/veh | | 71.6 | | 86.0 | | | | 23.6 | | | 8.9 | |
| Approach LOS | | E | | F | | | | C | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 34.2 | 96.1 | 38.0 | 16.6 | 17.0 | 93.4 | 16.7 | 37.9 | | | | |
| Change Period (Y+Rc), s | 4.6 | 6.9 | * 4.7 | * 4.7 | 6.9 | * 6.9 | * 4.7 | * 4.7 | | | | |
| Max Green Setting (Gmax), s | 10.5 | 82.4 | * 37 | * 12 | 9.0 | * 87 | * 12 | * 37 | | | | |
| Max Q Clear Time (g_c+10), s | 10.5 | 13.3 | 33.0 | 3.1 | 5.0 | 2.0 | 2.3 | 10.7 | | | | |
| Green Ext Time (p_c), s | 0.0 | 4.2 | 0.3 | 0.3 | 0.1 | 33.6 | 0.0 | 0.5 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 23.9 | | | | | | | | | |
| HCM 2010 LOS | | | C | | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
6: Centre City Pkwy & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project AM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------------|------|------|------|------|------|------|------|-------|------|------|------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 125 | 398 | 87 | 104 | 701 | 241 | 226 | 593 | 74 | 211 | 872 | 543 |
| Future Volume (veh/h) | 125 | 398 | 87 | 104 | 701 | 241 | 226 | 593 | 74 | 211 | 872 | 543 |
| 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 | | 0.98 | 1.00 | | 0.98 | 1.00 | | 0.99 | 1.00 | | 0.98 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 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 | 1667 | 1863 | 1863 | 1667 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 130 | 415 | 91 | 108 | 730 | 251 | 235 | 618 | 77 | 220 | 908 | 566 |
| Adj No. of Lanes | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 164 | 960 | 421 | 126 | 901 | 394 | 460 | 1674 | 514 | 520 | 1171 | 516 |
| Arrive On Green | 0.19 | 0.54 | 0.54 | 0.03 | 0.08 | 0.08 | 0.20 | 0.44 | 0.44 | 0.15 | 0.33 | 0.33 |
| Sat Flow, veh/h | 1774 | 3539 | 1550 | 1587 | 3539 | 1547 | 3079 | 5085 | 1560 | 3442 | 3539 | 1559 |
| Grp Volume(v), veh/h | 130 | 415 | 91 | 108 | 730 | 251 | 235 | 618 | 77 | 220 | 908 | 566 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1550 | 1587 | 1770 | 1547 | 1540 | 1695 | 1560 | 1721 | 1770 | 1559 |
| Q Serve(g_s), s | 8.4 | 8.4 | 2.5 | 8.1 | 24.3 | 18.8 | 8.2 | 9.8 | 2.7 | 7.0 | 27.7 | 39.7 |
| Cycle Q Clear(g_c), s | 8.4 | 8.4 | 2.5 | 8.1 | 24.3 | 18.8 | 8.2 | 9.8 | 2.7 | 7.0 | 27.7 | 39.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 164 | 960 | 421 | 126 | 901 | 394 | 460 | 1674 | 514 | 520 | 1171 | 516 |
| V/C Ratio(X) | 0.79 | 0.43 | 0.22 | 0.86 | 0.81 | 0.64 | 0.51 | 0.37 | 0.15 | 0.42 | 0.78 | 1.10 |
| Avail Cap(c_a), veh/h | 200 | 1165 | 510 | 126 | 1047 | 458 | 460 | 1674 | 514 | 520 | 1171 | 516 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 1.33 | 1.33 | 1.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 47.8 | 21.9 | 9.8 | 57.8 | 52.1 | 49.6 | 44.2 | 25.4 | 13.2 | 46.2 | 36.1 | 40.2 |
| Incr Delay (d2), s/veh | 12.6 | 0.2 | 0.2 | 39.8 | 4.0 | 1.9 | 0.4 | 0.6 | 0.6 | 0.2 | 5.1 | 68.8 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 7.7 | 4.1 | 1.1 | 5.0 | 12.4 | 8.3 | 3.5 | 4.7 | 1.2 | 3.3 | 14.3 | 26.9 |
| LnGrp Delay(d),s/veh | 60.3 | 22.1 | 10.0 | 97.6 | 56.1 | 51.5 | 44.6 | 26.0 | 13.8 | 46.4 | 41.2 | 108.9 |
| LnGrp LOS | E | C | B | F | E | D | D | C | B | D | D | F |
| Approach Vol, veh/h | | 636 | | | 1089 | | | 930 | | | 1694 | |
| Approach Delay, s/veh | | 28.2 | | | 59.2 | | | 29.7 | | | 64.5 | |
| Approach LOS | | C | | | E | | | C | | | 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 | 32.6 | 45.9 | 14.0 | 37.5 | 22.4 | 46.1 | 16.0 | 35.5 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.4 | 4.5 | 4.9 | 4.5 | 6.4 | 4.9 | * 4.9 | | | | |
| Max Green Setting (Gmax), s | 39.5 | 9.5 | 39.5 | 11.0 | 39.7 | 13.5 | * 36 | | | | | |
| Max Q Clear Time (g_c+1.9), s | 11.8 | 10.1 | 10.4 | 10.2 | 41.7 | 10.4 | 26.3 | | | | | |
| Green Ext Time (p_c), s | 0.3 | 3.8 | 0.0 | 2.6 | 0.1 | 0.0 | 0.9 | 3.3 | | | | |

Intersection Summary

| | |
|---------------------|------|
| HCM 2010 Ctrl Delay | 50.4 |
| HCM 2010 LOS | D |

Notes

SEC CCP/Mission TIA
7: Centre City Pkwy & Washington Ave

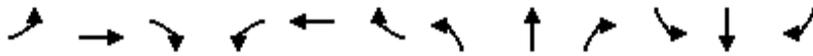
HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project AM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|-------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 89 | 296 | 79 | 70 | 600 | 111 | 170 | 673 | 56 | 124 | 891 | 167 |
| Future Volume (veh/h) | 89 | 296 | 79 | 70 | 600 | 111 | 170 | 673 | 56 | 124 | 891 | 167 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 96 | 318 | 85 | 75 | 645 | 119 | 183 | 724 | 60 | 133 | 958 | 180 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 128 | 400 | 105 | 318 | 751 | 138 | 343 | 1047 | 468 | 679 | 1451 | 649 |
| Arrive On Green | 0.02 | 0.05 | 0.05 | 0.06 | 0.08 | 0.08 | 0.03 | 0.10 | 0.10 | 0.39 | 0.82 | 0.82 |
| Sat Flow, veh/h | 1774 | 2773 | 730 | 1774 | 2985 | 550 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 96 | 201 | 202 | 75 | 382 | 382 | 183 | 724 | 60 | 133 | 958 | 180 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1734 | 1774 | 1770 | 1766 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 6.5 | 13.5 | 13.8 | 4.8 | 25.6 | 25.6 | 6.3 | 23.8 | 4.2 | 3.0 | 12.8 | 3.2 |
| Cycle Q Clear(g_c), s | 6.5 | 13.5 | 13.8 | 4.8 | 25.6 | 25.6 | 6.3 | 23.8 | 4.2 | 3.0 | 12.8 | 3.2 |
| Prop In Lane | 1.00 | | 0.42 | 1.00 | | 0.31 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 128 | 255 | 250 | 318 | 445 | 444 | 343 | 1047 | 468 | 679 | 1451 | 649 |
| V/C Ratio(X) | 0.75 | 0.79 | 0.81 | 0.24 | 0.86 | 0.86 | 0.53 | 0.69 | 0.13 | 0.20 | 0.66 | 0.28 |
| Avail Cap(c_a), veh/h | 140 | 612 | 600 | 318 | 627 | 625 | 359 | 1047 | 468 | 679 | 1451 | 649 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 0.98 | 0.98 | 0.98 | 0.72 | 0.72 | 0.72 | 0.94 | 0.94 | 0.94 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 57.5 | 55.3 | 55.5 | 48.6 | 52.9 | 52.9 | 55.3 | 48.8 | 40.0 | 30.1 | 7.5 | 6.7 |
| Incr Delay (d2), s/veh | 15.4 | 2.0 | 2.3 | 0.1 | 4.6 | 4.7 | 0.6 | 3.5 | 0.5 | 0.1 | 2.4 | 1.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.7 | 6.8 | 6.8 | 2.4 | 13.1 | 13.1 | 3.0 | 12.2 | 1.9 | 1.4 | 6.3 | 1.5 |
| LnGrp Delay(d),s/veh | 73.0 | 57.3 | 57.8 | 48.7 | 57.5 | 57.6 | 55.8 | 52.4 | 40.5 | 30.1 | 9.9 | 7.7 |
| LnGrp LOS | E | E | E | D | E | E | E | D | D | C | A | A |
| Approach Vol, veh/h | | 499 | | | 839 | | | 967 | | | 1271 | |
| Approach Delay, s/veh | | 60.5 | | | 56.8 | | | 52.3 | | | 11.7 | |
| Approach LOS | | E | | | E | | | D | | | B | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 30.2 | 42.0 | 26.0 | 21.8 | 16.5 | 55.7 | 13.1 | 34.7 | | | | |
| Change Period (Y+Rc), s | 6.5 | * 6.5 | 4.5 | 4.5 | 4.5 | 6.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 12.5 | * 36 | 10.5 | 41.5 | 12.5 | 35.5 | 9.5 | 42.5 | | | | |
| Max Q Clear Time (g_c+1), s | 11.0 | 25.8 | 6.8 | 15.8 | 8.3 | 14.8 | 8.5 | 27.6 | | | | |
| Green Ext Time (p_c), s | 1.5 | 2.5 | 1.2 | 1.5 | 0.1 | 5.1 | 0.0 | 2.6 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 40.1 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
8: Centre City Pkwy & Valley Pkwy

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project AM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|-----|------|-----|---------|---------|---------|---------|---------|------|------|---------|---------|
| Lane Configurations | | | | ↙ ↘ ↗ ↘ | ↙ ↘ ↗ ↘ | ↙ ↘ ↗ ↘ | ↙ ↘ ↗ ↘ | ↙ ↘ ↗ ↘ | | | ↙ ↘ ↗ ↘ | ↙ ↘ ↗ ↘ |
| Traffic Volume (veh/h) | 0 | 0 | 0 | 334 | 1285 | 227 | 182 | 667 | 0 | 0 | 907 | 130 |
| Future Volume (veh/h) | 0 | 0 | 0 | 334 | 1285 | 227 | 182 | 667 | 0 | 0 | 907 | 130 |
| Number | | | | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | | | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | | | | 1863 | 1863 | 1863 | 1863 | 1863 | 0 | 0 | 1863 | 1863 |
| Adj Flow Rate, veh/h | | | | 355 | 1367 | 241 | 194 | 710 | 0 | 0 | 965 | 138 |
| Adj No. of Lanes | | | | 1 | 3 | 1 | 2 | 2 | 0 | 0 | 2 | 1 |
| Peak Hour Factor | | | | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | | | | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 2 | 2 |
| Cap, veh/h | | | | 560 | 1763 | 500 | 492 | 2069 | 0 | 0 | 1360 | 608 |
| Arrive On Green | | | | 0.32 | 0.32 | 0.32 | 0.14 | 0.58 | 0.00 | 0.00 | 0.38 | 0.38 |
| Sat Flow, veh/h | | | | 1774 | 5588 | 1583 | 3442 | 3632 | 0 | 0 | 3632 | 1583 |
| Grp Volume(v), veh/h | | | | 355 | 1367 | 241 | 194 | 710 | 0 | 0 | 965 | 138 |
| Grp Sat Flow(s),veh/h/ln | | | | 1774 | 1863 | 1583 | 1721 | 1770 | 0 | 0 | 1770 | 1583 |
| Q Serve(g_s), s | | | | 20.5 | 26.6 | 14.7 | 6.1 | 12.5 | 0.0 | 0.0 | 27.7 | 7.1 |
| Cycle Q Clear(g_c), s | | | | 20.5 | 26.6 | 14.7 | 6.1 | 12.5 | 0.0 | 0.0 | 27.7 | 7.1 |
| Prop In Lane | | | | 1.00 | | 1.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | | | | 560 | 1763 | 500 | 492 | 2069 | 0 | 0 | 1360 | 608 |
| V/C Ratio(X) | | | | 0.63 | 0.78 | 0.48 | 0.39 | 0.34 | 0.00 | 0.00 | 0.71 | 0.23 |
| Avail Cap(c_a), veh/h | | | | 679 | 2138 | 606 | 492 | 2069 | 0 | 0 | 1360 | 608 |
| HCM Platoon Ratio | | | | 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 | 0.00 | 0.60 | 0.60 |
| Uniform Delay (d), s/veh | | | | 35.1 | 37.2 | 33.2 | 46.7 | 13.0 | 0.0 | 0.0 | 31.3 | 24.9 |
| Incr Delay (d2), s/veh | | | | 1.1 | 1.4 | 0.5 | 0.4 | 0.5 | 0.0 | 0.0 | 1.9 | 0.5 |
| Initial Q Delay(d3),s/veh | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | | | | 10.2 | 13.9 | 13.5 | 2.9 | 6.2 | 0.0 | 0.0 | 13.9 | 3.2 |
| LnGrp Delay(d),s/veh | | | | 36.2 | 38.6 | 33.7 | 47.1 | 13.4 | 0.0 | 0.0 | 33.2 | 25.4 |
| LnGrp LOS | | | | D | D | C | D | B | | | C | C |
| Approach Vol, veh/h | | | | | 1963 | | | 904 | | | 1103 | |
| Approach Delay, s/veh | | | | | 37.6 | | | 20.6 | | | 32.2 | |
| Approach LOS | | | | | D | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | 5 | 6 | | | | | | |
| Phs Duration (G+Y+Rc), s | | 77.0 | | 43.0 | 24.0 | 53.0 | | | | | | |
| Change Period (Y+Rc), s | | 6.9 | | 5.1 | 6.9 | * 6.9 | | | | | | |
| Max Green Setting (Gmax), s | | 62.1 | | 45.9 | 11.0 | * 46 | | | | | | |
| Max Q Clear Time (g_c+I1), s | | 14.5 | | 28.6 | 8.1 | 29.7 | | | | | | |
| Green Ext Time (p_c), s | | 5.0 | | 9.3 | 1.0 | 5.5 | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 32.2 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
9: Escondido Blvd & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project AM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|-------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 100 | 323 | 164 | 92 | 625 | 39 | 157 | 175 | 79 | 102 | 360 | 211 |
| Future Volume (veh/h) | 100 | 323 | 164 | 92 | 625 | 39 | 157 | 175 | 79 | 102 | 360 | 211 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 112 | 363 | 184 | 103 | 702 | 44 | 176 | 197 | 89 | 115 | 404 | 237 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 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 | 246 | 650 | 324 | 305 | 1074 | 67 | 204 | 749 | 326 | 143 | 607 | 352 |
| Arrive On Green | 0.18 | 0.38 | 0.38 | 0.17 | 0.32 | 0.32 | 0.12 | 0.31 | 0.31 | 0.08 | 0.28 | 0.28 |
| Sat Flow, veh/h | 1774 | 2289 | 1142 | 1774 | 3383 | 212 | 1774 | 2402 | 1046 | 1774 | 2159 | 1252 |
| Grp Volume(v), veh/h | 112 | 279 | 268 | 103 | 367 | 379 | 176 | 143 | 143 | 115 | 330 | 311 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1661 | 1774 | 1770 | 1825 | 1774 | 1770 | 1678 | 1774 | 1770 | 1642 |
| Q Serve(g_s), s | 6.7 | 14.9 | 15.3 | 6.1 | 21.4 | 21.5 | 11.7 | 7.3 | 7.7 | 7.6 | 19.8 | 20.1 |
| Cycle Q Clear(g_c), s | 6.7 | 14.9 | 15.3 | 6.1 | 21.4 | 21.5 | 11.7 | 7.3 | 7.7 | 7.6 | 19.8 | 20.1 |
| Prop In Lane | 1.00 | | 0.69 | 1.00 | | 0.12 | 1.00 | | 0.62 | 1.00 | | 0.76 |
| Lane Grp Cap(c), veh/h | 246 | 503 | 472 | 305 | 562 | 580 | 204 | 552 | 523 | 143 | 497 | 461 |
| V/C Ratio(X) | 0.45 | 0.56 | 0.57 | 0.34 | 0.65 | 0.65 | 0.86 | 0.26 | 0.27 | 0.81 | 0.66 | 0.67 |
| Avail Cap(c_a), veh/h | 246 | 503 | 472 | 305 | 562 | 580 | 339 | 552 | 523 | 235 | 497 | 461 |
| HCM Platoon Ratio | 1.33 | 1.33 | 1.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.48 | 0.48 | 0.48 | 0.94 | 0.94 | 0.94 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 44.9 | 31.4 | 31.5 | 43.7 | 35.3 | 35.3 | 52.2 | 30.9 | 31.1 | 54.3 | 38.1 | 38.2 |
| Incr Delay (d2), s/veh | 0.5 | 4.4 | 4.9 | 0.1 | 2.8 | 2.8 | 5.5 | 1.1 | 1.2 | 4.0 | 6.8 | 7.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.4 | 7.9 | 7.6 | 3.0 | 10.9 | 11.3 | 6.0 | 3.7 | 3.7 | 3.9 | 10.6 | 10.1 |
| LnGrp Delay(d),s/veh | 45.4 | 35.7 | 36.4 | 43.8 | 38.1 | 38.0 | 57.7 | 32.0 | 32.3 | 58.3 | 45.0 | 45.9 |
| LnGrp LOS | D | D | D | D | D | D | E | C | C | E | D | D |
| Approach Vol, veh/h | | 659 | | | 849 | | | 462 | | | 756 | |
| Approach Delay, s/veh | | 37.6 | | | 38.8 | | | 41.9 | | | 47.4 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 34.8 | 39.0 | 17.9 | 38.3 | 20.8 | 43.0 | 14.2 | 42.0 | | | | |
| Change Period (Y+Rc), s | 4.1 | 4.9 | 4.1 | 4.6 | 4.1 | 4.9 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 14.9 | 34.1 | 22.9 | 30.4 | 10.9 | 38.1 | 15.9 | * 37 | | | | |
| Max Q Clear Time (g_c+1), s | 10.1 | 17.3 | 13.7 | 22.1 | 8.7 | 23.5 | 9.6 | 9.7 | | | | |
| Green Ext Time (p_c), s | 0.2 | 2.0 | 0.2 | 1.9 | 0.1 | 2.6 | 0.2 | 1.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 41.4 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
10: Escondido Blvd & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project AM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|-------|------|-------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 57 | 332 | 114 | 68 | 561 | 101 | 101 | 269 | 66 | 107 | 403 | 73 |
| Future Volume (veh/h) | 57 | 332 | 114 | 68 | 561 | 101 | 101 | 269 | 66 | 107 | 403 | 73 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 69 | 400 | 137 | 82 | 676 | 122 | 122 | 324 | 80 | 129 | 486 | 88 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 205 | 981 | 332 | 111 | 959 | 173 | 150 | 883 | 215 | 155 | 889 | 160 |
| Arrive On Green | 0.04 | 0.12 | 0.12 | 0.06 | 0.32 | 0.32 | 0.08 | 0.31 | 0.31 | 0.09 | 0.30 | 0.30 |
| Sat Flow, veh/h | 1774 | 2598 | 880 | 1774 | 2997 | 540 | 1774 | 2824 | 687 | 1774 | 2997 | 540 |
| Grp Volume(v), veh/h | 69 | 271 | 266 | 82 | 399 | 399 | 122 | 201 | 203 | 129 | 286 | 288 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1708 | 1774 | 1770 | 1767 | 1774 | 1770 | 1741 | 1774 | 1770 | 1767 |
| Q Serve(g_s), s | 4.5 | 16.9 | 17.2 | 5.5 | 23.7 | 23.8 | 8.1 | 10.6 | 10.9 | 8.6 | 16.3 | 16.4 |
| Cycle Q Clear(g_c), s | 4.5 | 16.9 | 17.2 | 5.5 | 23.7 | 23.8 | 8.1 | 10.6 | 10.9 | 8.6 | 16.3 | 16.4 |
| Prop In Lane | 1.00 | | 0.52 | 1.00 | | 0.31 | 1.00 | | 0.39 | 1.00 | | 0.31 |
| Lane Grp Cap(c), veh/h | 205 | 668 | 645 | 111 | 566 | 566 | 150 | 553 | 544 | 155 | 525 | 524 |
| V/C Ratio(X) | 0.34 | 0.41 | 0.41 | 0.74 | 0.70 | 0.71 | 0.82 | 0.36 | 0.37 | 0.83 | 0.54 | 0.55 |
| Avail Cap(c_a), veh/h | 205 | 668 | 645 | 205 | 566 | 566 | 220 | 553 | 544 | 220 | 525 | 524 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.94 | 0.94 | 0.94 | 0.43 | 0.43 | 0.43 | 0.99 | 0.99 | 0.99 | 0.81 | 0.81 | 0.81 |
| Uniform Delay (d), s/veh | 53.2 | 40.1 | 40.2 | 55.3 | 35.8 | 35.8 | 54.0 | 32.0 | 32.1 | 53.9 | 35.4 | 35.5 |
| Incr Delay (d2), s/veh | 0.3 | 1.7 | 1.8 | 1.6 | 3.2 | 3.2 | 8.6 | 1.8 | 1.9 | 9.7 | 3.3 | 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(50%),veh/ln | 2.3 | 8.6 | 8.5 | 2.7 | 12.1 | 12.1 | 4.3 | 5.4 | 5.5 | 4.6 | 8.4 | 8.5 |
| LnGrp Delay(d),s/veh | 53.6 | 41.8 | 42.1 | 56.9 | 39.0 | 39.1 | 62.6 | 33.8 | 34.0 | 63.6 | 38.7 | 38.8 |
| LnGrp LOS | D | D | D | E | D | D | E | C | C | E | D | D |
| Approach Vol, veh/h | | 606 | | | 880 | | | 526 | | | 703 | |
| Approach Delay, s/veh | | 43.3 | | | 40.7 | | | 40.6 | | | 43.3 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 14.6 | 43.9 | 11.6 | 49.9 | 16.5 | 42.0 | 18.5 | 43.0 | | | | |
| Change Period (Y+Rc), s | 4.1 | 6.4 | 4.1 | 4.6 | 6.4 | * 6.4 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 14.9 | 35.6 | 13.9 | 36.4 | 14.9 | * 36 | 11.9 | * 38 | | | | |
| Max Q Clear Time (g_c+10), s | 10.6 | 12.9 | 7.5 | 19.2 | 10.1 | 18.4 | 6.5 | 25.8 | | | | |
| Green Ext Time (p_c), s | 0.1 | 1.6 | 0.0 | 2.0 | 0.2 | 2.0 | 0.1 | 2.7 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 41.9 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↔ | | ↔ | ↔ | | | ↔ | | ↔ | ↔ | |
| Traffic Volume (veh/h) | 13 | 2 | 24 | 72 | 1 | 77 | 2 | 367 | 55 | 70 | 499 | 6 |
| Future Volume (veh/h) | 13 | 2 | 24 | 72 | 1 | 77 | 2 | 367 | 55 | 70 | 499 | 6 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1900 | 1863 | 1900 | 1863 | 1863 | 1900 | 1900 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 15 | 2 | 27 | 81 | 1 | 87 | 2 | 412 | 62 | 79 | 561 | 7 |
| Adj No. of Lanes | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 1 | 2 | 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 | 72 | 22 | 59 | 209 | 2 | 132 | 44 | 2098 | 312 | 102 | 2857 | 36 |
| Arrive On Green | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.69 | 0.69 | 0.69 | 0.06 | 0.80 | 0.80 |
| Sat Flow, veh/h | 183 | 258 | 700 | 1375 | 18 | 1568 | 2 | 3024 | 450 | 1774 | 3580 | 45 |
| Grp Volume(v), veh/h | 44 | 0 | 0 | 81 | 0 | 88 | 253 | 0 | 223 | 79 | 277 | 291 |
| Grp Sat Flow(s),veh/h/ln | 141 | 0 | 0 | 1375 | 0 | 1586 | 1860 | 0 | 1616 | 1774 | 1770 | 1855 |
| Q Serve(g_s), s | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 4.6 | 0.0 | 0.0 | 4.2 | 3.7 | 3.2 | 3.2 |
| Cycle Q Clear(g_c), s | 4.6 | 0.0 | 0.0 | 4.4 | 0.0 | 4.6 | 4.1 | 0.0 | 4.2 | 3.7 | 3.2 | 3.2 |
| Prop In Lane | 0.34 | | 0.61 | 1.00 | | 0.99 | 0.01 | | 0.28 | 1.00 | | 0.02 |
| Lane Grp Cap(c), veh/h | 153 | 0 | 0 | 209 | 0 | 134 | 1333 | 0 | 1121 | 102 | 1412 | 1480 |
| V/C Ratio(X) | 0.29 | 0.00 | 0.00 | 0.39 | 0.00 | 0.66 | 0.19 | 0.00 | 0.20 | 0.77 | 0.20 | 0.20 |
| Avail Cap(c_a), veh/h | 491 | 0 | 0 | 514 | 0 | 485 | 1333 | 0 | 1121 | 313 | 1412 | 1480 |
| 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 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.82 | 0.82 | 0.82 |
| Uniform Delay (d), s/veh | 36.6 | 0.0 | 0.0 | 37.6 | 0.0 | 37.7 | 4.6 | 0.0 | 4.6 | 39.5 | 2.1 | 2.1 |
| Incr Delay (d2), s/veh | 0.4 | 0.0 | 0.0 | 0.4 | 0.0 | 2.1 | 0.3 | 0.0 | 0.4 | 3.8 | 0.3 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.0 | 0.0 | 0.0 | 1.9 | 0.0 | 2.1 | 2.2 | 0.0 | 2.0 | 1.9 | 1.6 | 1.7 |
| LnGrp Delay(d),s/veh | 37.0 | 0.0 | 0.0 | 38.1 | 0.0 | 39.8 | 4.9 | 0.0 | 5.0 | 43.3 | 2.3 | 2.3 |
| LnGrp LOS | D | | | D | | D | A | | A | D | A | A |
| Approach Vol, veh/h | | 44 | | | 169 | | | 476 | | | 647 | |
| Approach Delay, s/veh | | 37.0 | | | 39.0 | | | 5.0 | | | 7.3 | |
| Approach LOS | | D | | | D | | | A | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 8.9 | 64.0 | | 12.2 | | 72.8 | | 12.2 | | | | |
| Change Period (Y+Rc), s | 4.0 | 5.0 | | * 5 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 15.0 | 30.0 | | * 27 | | 49.0 | | 26.0 | | | | |
| Max Q Clear Time (g_c+1), s | 15.0 | 6.2 | | 6.6 | | 5.2 | | 6.6 | | | | |
| Green Ext Time (p_c), s | 0.0 | 6.6 | | 0.6 | | 7.4 | | 0.6 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 11.5 | | | | | | | | |
| HCM 2010 LOS | | | | B | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
12: Broadway & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project AM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 104 | 269 | 109 | 72 | 506 | 225 | 131 | 436 | 39 | 187 | 826 | 144 |
| Future Volume (veh/h) | 104 | 269 | 109 | 72 | 506 | 225 | 131 | 436 | 39 | 187 | 826 | 144 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 108 | 280 | 114 | 75 | 527 | 234 | 136 | 454 | 41 | 195 | 860 | 150 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 132 | 684 | 272 | 96 | 612 | 271 | 180 | 977 | 88 | 228 | 978 | 171 |
| Arrive On Green | 0.07 | 0.28 | 0.28 | 0.05 | 0.26 | 0.26 | 0.10 | 0.30 | 0.30 | 0.13 | 0.32 | 0.32 |
| Sat Flow, veh/h | 1774 | 2475 | 984 | 1774 | 2389 | 1057 | 1774 | 3285 | 296 | 1774 | 3014 | 526 |
| Grp Volume(v), veh/h | 108 | 198 | 196 | 75 | 390 | 371 | 136 | 244 | 251 | 195 | 505 | 505 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1689 | 1774 | 1770 | 1676 | 1774 | 1770 | 1811 | 1774 | 1770 | 1770 |
| Q Serve(g_s), s | 4.4 | 6.8 | 7.0 | 3.1 | 15.5 | 15.6 | 5.5 | 8.3 | 8.4 | 8.0 | 19.9 | 19.9 |
| Cycle Q Clear(g_c), s | 4.4 | 6.8 | 7.0 | 3.1 | 15.5 | 15.6 | 5.5 | 8.3 | 8.4 | 8.0 | 19.9 | 19.9 |
| Prop In Lane | 1.00 | | 0.58 | 1.00 | | 0.63 | 1.00 | | 0.16 | 1.00 | | 0.30 |
| Lane Grp Cap(c), veh/h | 132 | 489 | 467 | 96 | 453 | 429 | 180 | 527 | 539 | 228 | 574 | 575 |
| V/C Ratio(X) | 0.82 | 0.41 | 0.42 | 0.78 | 0.86 | 0.86 | 0.76 | 0.46 | 0.47 | 0.86 | 0.88 | 0.88 |
| Avail Cap(c_a), veh/h | 132 | 489 | 467 | 132 | 479 | 453 | 180 | 527 | 539 | 228 | 574 | 575 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.7 | 21.8 | 21.9 | 34.5 | 26.2 | 26.3 | 32.3 | 21.2 | 21.2 | 31.5 | 23.6 | 23.6 |
| Incr Delay (d2), s/veh | 31.7 | 0.5 | 0.6 | 18.3 | 14.2 | 15.3 | 16.6 | 2.9 | 2.9 | 25.9 | 17.3 | 17.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.3 | 3.4 | 3.3 | 2.0 | 9.4 | 9.0 | 3.5 | 4.5 | 4.6 | 5.5 | 12.4 | 12.4 |
| LnGrp Delay(d),s/veh | 65.4 | 22.3 | 22.5 | 52.8 | 40.4 | 41.6 | 48.9 | 24.1 | 24.1 | 57.4 | 40.9 | 40.9 |
| LnGrp LOS | E | C | C | D | D | D | D | C | C | E | D | D |
| Approach Vol, veh/h | | 502 | | | 836 | | | 631 | | | 1205 | |
| Approach Delay, s/veh | | 31.7 | | | 42.0 | | | 29.4 | | | 43.6 | |
| Approach LOS | | C | | | D | | | C | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 14.0 | 26.5 | 8.5 | 24.9 | 12.0 | 28.5 | 10.0 | 23.4 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 22.0 | 5.5 | 20.0 | 7.5 | 24.0 | 5.5 | 20.0 | | | | | |
| Max Q Clear Time (g_c+maxG), s | 10.4 | 5.1 | 9.0 | 7.5 | 21.9 | 6.4 | 17.6 | | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.6 | 0.0 | 5.2 | 0.0 | 1.2 | 0.0 | 1.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 38.5 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |

SEC CCP/Mission TIA
13: Broadway & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project AM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↗ | |
| Traffic Volume (veh/h) | 77 | 294 | 73 | 74 | 576 | 208 | 78 | 263 | 19 | 191 | 616 | 79 |
| Future Volume (veh/h) | 77 | 294 | 73 | 74 | 576 | 208 | 78 | 263 | 19 | 191 | 616 | 79 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 81 | 309 | 77 | 78 | 606 | 219 | 82 | 277 | 20 | 201 | 648 | 83 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 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 | 104 | 437 | 107 | 302 | 680 | 245 | 105 | 971 | 70 | 242 | 1159 | 148 |
| Arrive On Green | 0.06 | 0.15 | 0.15 | 0.17 | 0.27 | 0.27 | 0.06 | 0.29 | 0.29 | 0.14 | 0.37 | 0.37 |
| Sat Flow, veh/h | 1774 | 2818 | 692 | 1774 | 2550 | 920 | 1774 | 3349 | 240 | 1774 | 3157 | 404 |
| Grp Volume(v), veh/h | 81 | 192 | 194 | 78 | 420 | 405 | 82 | 146 | 151 | 201 | 363 | 368 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1741 | 1774 | 1770 | 1700 | 1774 | 1770 | 1820 | 1774 | 1770 | 1791 |
| Q Serve(g_s), s | 3.3 | 7.5 | 7.7 | 2.8 | 16.5 | 16.6 | 3.3 | 4.6 | 4.7 | 8.0 | 11.8 | 11.9 |
| Cycle Q Clear(g_c), s | 3.3 | 7.5 | 7.7 | 2.8 | 16.5 | 16.6 | 3.3 | 4.6 | 4.7 | 8.0 | 11.8 | 11.9 |
| Prop In Lane | 1.00 | | 0.40 | 1.00 | | 0.54 | 1.00 | | 0.13 | 1.00 | | 0.23 |
| Lane Grp Cap(c), veh/h | 104 | 274 | 270 | 302 | 472 | 454 | 105 | 513 | 528 | 242 | 649 | 657 |
| V/C Ratio(X) | 0.78 | 0.70 | 0.72 | 0.26 | 0.89 | 0.89 | 0.78 | 0.28 | 0.29 | 0.83 | 0.56 | 0.56 |
| Avail Cap(c_a), veh/h | 135 | 489 | 481 | 302 | 489 | 470 | 145 | 513 | 528 | 257 | 649 | 657 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.6 | 29.0 | 29.1 | 26.1 | 25.5 | 25.6 | 33.6 | 19.9 | 19.9 | 30.5 | 18.3 | 18.3 |
| Incr Delay (d2), s/veh | 19.4 | 3.2 | 3.6 | 0.4 | 17.8 | 18.6 | 16.7 | 1.4 | 1.4 | 19.2 | 3.4 | 3.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.2 | 3.9 | 3.9 | 1.4 | 10.4 | 10.1 | 2.1 | 2.5 | 2.6 | 5.2 | 6.4 | 6.5 |
| LnGrp Delay(d),s/veh | 53.0 | 32.3 | 32.7 | 26.5 | 43.3 | 44.1 | 50.3 | 21.3 | 21.3 | 49.7 | 21.7 | 21.7 |
| LnGrp LOS | D | C | C | C | D | D | D | C | C | D | C | C |
| Approach Vol, veh/h | | 467 | | | 903 | | | 379 | | | 932 | |
| Approach Delay, s/veh | | 36.0 | | | 42.2 | | | 27.6 | | | 27.7 | |
| Approach LOS | | D | | | D | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 14.4 | 25.5 | 16.8 | 15.7 | 8.8 | 31.1 | 8.7 | 23.8 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 10.5 | 21.0 | 5.5 | 20.0 | 5.9 | 25.6 | 5.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+M), s | 10.5 | 6.7 | 4.8 | 9.7 | 5.3 | 13.9 | 5.3 | 18.6 | | | | |
| Green Ext Time (p_c), s | 0.1 | 1.3 | 0.0 | 1.6 | 0.0 | 4.0 | 0.0 | 0.7 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 34.0 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |

Intersection

Int Delay, s/veh 0.6

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | | ↑ | ↑↑ | ↑ | | ↑↑ |
| Traffic Vol, veh/h | 0 | 94 | 797 | 84 | 0 | 1065 |
| Future Vol, veh/h | 0 | 94 | 797 | 84 | 0 | 1065 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | 75 | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 102 | 866 | 91 | 0 | 1158 |

| Major/Minor | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|---------|
| Conflicting Flow All | - | 433 | 0 0 |
| Stage 1 | - | - | - - |
| Stage 2 | - | - | - - |
| Critical Hdwy | - | 6.94 | - - |
| Critical Hdwy Stg 1 | - | - | - - |
| Critical Hdwy Stg 2 | - | - | - - |
| Follow-up Hdwy | - | 3.32 | - - |
| Pot Cap-1 Maneuver | 0 | 571 | - - 0 - |
| Stage 1 | 0 | - | - - 0 - |
| Stage 2 | 0 | - | - - 0 - |
| Platoon blocked, % | | | - - |
| Mov Cap-1 Maneuver | - | 571 | - - - - |
| Mov Cap-2 Maneuver | - | - | - - - - |
| Stage 1 | - | - | - - - - |
| Stage 2 | - | - | - - - - |

| Approach | WB | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 12.7 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT |
|-----------------------|-----|----------|-----|
| Capacity (veh/h) | - | - 571 | - |
| HCM Lane V/C Ratio | - | - 0.179 | - |
| HCM Control Delay (s) | - | - 12.7 | - |
| HCM Lane LOS | - | - B | - |
| HCM 95th %tile Q(veh) | - | - 0.6 | - |

Intersection

Int Delay, s/veh 0.6

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | | | ↑↑ | | ↑ |
| Traffic Vol, veh/h | 616 | 98 | 0 | 1042 | 0 | 89 |
| Future Vol, veh/h | 616 | 98 | 0 | 1042 | 0 | 89 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 670 | 107 | 0 | 1133 | 0 | 97 |

| Major/Minor | Major1 | Major2 | Minor1 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 388 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | - | - | 6.94 |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | - | - | 3.32 |
| Pot Cap-1 Maneuver | - | 0 | 611 |
| Stage 1 | - | 0 | - |
| Stage 2 | - | 0 | - |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | - | - | 611 |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|----|
| HCM Control Delay, s | 0 | 0 | 12 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|-----------------------|-------|-----|-----|-----|
| Capacity (veh/h) | 611 | - | - | - |
| HCM Lane V/C Ratio | 0.158 | - | - | - |
| HCM Control Delay (s) | 12 | - | - | - |
| HCM Lane LOS | B | - | - | - |
| HCM 95th %tile Q(veh) | 0.6 | - | - | - |

SEC CCP/Mission TIA
1: Rock Springs Rd & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project Mid-Day Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  |  |
| Traffic Volume (veh/h) | 105 | 548 | 88 | 69 | 584 | 158 | 112 | 194 | 89 | 64 | 221 | 61 |
| Future Volume (veh/h) | 105 | 548 | 88 | 69 | 584 | 158 | 112 | 194 | 89 | 64 | 221 | 61 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 109 | 571 | 92 | 72 | 608 | 165 | 117 | 202 | 93 | 67 | 230 | 64 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 137 | 1730 | 278 | 93 | 1491 | 404 | 230 | 600 | 266 | 266 | 469 | 398 |
| Arrive On Green | 0.08 | 0.57 | 0.57 | 0.05 | 0.54 | 0.54 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Sat Flow, veh/h | 1774 | 3055 | 491 | 1774 | 2755 | 746 | 1081 | 2386 | 1059 | 1080 | 1863 | 1583 |
| Grp Volume(v), veh/h | 109 | 330 | 333 | 72 | 390 | 383 | 117 | 148 | 147 | 67 | 230 | 64 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1776 | 1774 | 1770 | 1731 | 1081 | 1770 | 1676 | 1080 | 1863 | 1583 |
| Q Serve(g_s), s | 6.0 | 9.9 | 10.0 | 4.0 | 13.0 | 13.0 | 10.4 | 6.8 | 7.2 | 5.4 | 10.5 | 3.2 |
| Cycle Q Clear(g_c), s | 6.0 | 9.9 | 10.0 | 4.0 | 13.0 | 13.0 | 20.9 | 6.8 | 7.2 | 12.6 | 10.5 | 3.2 |
| Prop In Lane | 1.00 | | 0.28 | 1.00 | | 0.43 | 1.00 | | 0.63 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 137 | 1002 | 1006 | 93 | 958 | 937 | 230 | 445 | 422 | 266 | 469 | 398 |
| V/C Ratio(X) | 0.80 | 0.33 | 0.33 | 0.78 | 0.41 | 0.41 | 0.51 | 0.33 | 0.35 | 0.25 | 0.49 | 0.16 |
| Avail Cap(c_a), veh/h | 284 | 1002 | 1006 | 195 | 958 | 937 | 299 | 557 | 528 | 334 | 587 | 499 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.88 | 0.88 | 0.88 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 45.4 | 11.6 | 11.6 | 46.8 | 13.5 | 13.5 | 40.9 | 30.6 | 30.7 | 35.9 | 32.0 | 29.2 |
| Incr Delay (d2), s/veh | 3.9 | 0.9 | 0.9 | 4.6 | 1.1 | 1.2 | 1.3 | 0.3 | 0.4 | 0.4 | 0.6 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.1 | 5.1 | 5.1 | 2.1 | 6.6 | 6.5 | 3.2 | 3.4 | 3.4 | 1.6 | 5.5 | 1.4 |
| LnGrp Delay(d),s/veh | 49.3 | 12.4 | 12.5 | 51.4 | 14.6 | 14.7 | 42.2 | 30.9 | 31.1 | 36.3 | 32.5 | 29.3 |
| LnGrp LOS | D | B | B | D | B | B | D | C | C | D | C | C |
| Approach Vol, veh/h | | 772 | | | 845 | | | 412 | | | 361 | |
| Approach Delay, s/veh | | 17.7 | | | 17.8 | | | 34.2 | | | 32.7 | |
| Approach LOS | | B | | | B | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 9.2 | 61.1 | | 29.7 | 11.7 | 58.6 | | 29.7 | | | | |
| Change Period (Y+Rc), s | 4.0 | 4.5 | | 4.5 | 4.0 | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | 11.0 | 44.5 | | 31.5 | 16.0 | 39.5 | | 31.5 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.0 | 12.0 | | 14.6 | 8.0 | 15.0 | | 22.9 | | | | |
| Green Ext Time (p_c), s | 0.0 | 13.4 | | 3.0 | 0.1 | 11.8 | | 2.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 22.8 | | | | | | | | | |
| HCM 2010 LOS | | | C | | | | | | | | | |

SEC CCP/Mission TIA
2: Quince St & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project Mid-Day Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|-------|------|------|------|------|------|------|
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↑ | ↗ | ↖ | ↗ | |
| Traffic Volume (veh/h) | 54 | 714 | 82 | 142 | 721 | 139 | 113 | 63 | 157 | 141 | 82 | 39 |
| Future Volume (veh/h) | 54 | 714 | 82 | 142 | 721 | 139 | 113 | 63 | 157 | 141 | 82 | 39 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 56 | 744 | 85 | 148 | 751 | 145 | 118 | 66 | 164 | 147 | 85 | 41 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 408 | 998 | 114 | 536 | 1137 | 220 | 237 | 236 | 200 | 177 | 110 | 53 |
| Arrive On Green | 0.23 | 0.31 | 0.31 | 0.60 | 0.77 | 0.77 | 0.04 | 0.04 | 0.04 | 0.10 | 0.09 | 0.09 |
| Sat Flow, veh/h | 1774 | 3202 | 366 | 1774 | 2960 | 571 | 1774 | 1863 | 1583 | 1774 | 1188 | 573 |
| Grp Volume(v), veh/h | 56 | 411 | 418 | 148 | 449 | 447 | 118 | 66 | 164 | 147 | 0 | 126 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1798 | 1774 | 1770 | 1762 | 1774 | 1863 | 1583 | 1774 | 0 | 1762 |
| Q Serve(g_s), s | 3.0 | 25.0 | 25.0 | 4.8 | 14.3 | 14.3 | 7.8 | 4.1 | 12.3 | 9.8 | 0.0 | 8.4 |
| Cycle Q Clear(g_c), s | 3.0 | 25.0 | 25.0 | 4.8 | 14.3 | 14.3 | 7.8 | 4.1 | 12.3 | 9.8 | 0.0 | 8.4 |
| Prop In Lane | 1.00 | | 0.20 | 1.00 | | 0.32 | 1.00 | | 1.00 | 1.00 | | 0.33 |
| Lane Grp Cap(c), veh/h | 408 | 552 | 560 | 536 | 680 | 677 | 237 | 236 | 200 | 177 | 0 | 163 |
| V/C Ratio(X) | 0.14 | 0.75 | 0.75 | 0.28 | 0.66 | 0.66 | 0.50 | 0.28 | 0.82 | 0.83 | 0.00 | 0.78 |
| Avail Cap(c_a), veh/h | 408 | 552 | 560 | 536 | 680 | 677 | 237 | 433 | 368 | 265 | 0 | 442 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.96 | 0.96 | 0.96 | 0.79 | 0.79 | 0.79 | 0.87 | 0.87 | 0.87 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 36.8 | 37.0 | 37.0 | 17.5 | 10.2 | 10.2 | 53.4 | 52.2 | 56.1 | 53.0 | 0.0 | 53.2 |
| Incr Delay (d2), s/veh | 0.2 | 8.5 | 8.4 | 0.3 | 3.9 | 4.0 | 1.7 | 0.7 | 8.3 | 14.6 | 0.0 | 9.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.5 | 13.5 | 13.7 | 2.3 | 7.5 | 7.5 | 3.9 | 2.2 | 5.9 | 5.5 | 0.0 | 4.5 |
| LnGrp Delay(d),s/veh | 36.9 | 45.5 | 45.4 | 17.8 | 14.2 | 14.2 | 55.1 | 52.9 | 64.5 | 67.6 | 0.0 | 62.4 |
| LnGrp LOS | D | D | D | B | B | B | E | D | E | E | | E |
| Approach Vol, veh/h | | 885 | | | 1044 | | | 348 | | | 273 | |
| Approach Delay, s/veh | | 45.0 | | | 14.7 | | | 59.1 | | | 65.2 | |
| Approach LOS | | D | | | B | | | E | | | E | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 40.9 | 42.8 | 20.2 | 16.2 | 32.2 | 51.5 | 16.0 | 20.3 | | | | |
| Change Period (Y+Rc), s | 4.6 | 5.4 | 4.1 | 5.1 | 4.6 | * 5.4 | 4.1 | 5.1 | | | | |
| Max Green Setting (Gmax), s | 17.6 | 37.4 | 15.7 | 30.1 | 9.4 | * 46 | 17.9 | 27.9 | | | | |
| Max Q Clear Time (g_c+1), s | 10.8 | 27.0 | 9.8 | 10.4 | 5.0 | 16.3 | 11.8 | 14.3 | | | | |
| Green Ext Time (p_c), s | 0.5 | 5.8 | 0.5 | 0.7 | 0.3 | 12.2 | 0.3 | 0.8 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 36.7 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
3: Quince St & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project Mid-Day Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 29 | 499 | 93 | 85 | 523 | 108 | 77 | 125 | 125 | 47 | 145 | 36 |
| Future Volume (veh/h) | 29 | 499 | 93 | 85 | 523 | 108 | 77 | 125 | 125 | 47 | 145 | 36 |
| 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 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 30 | 520 | 97 | 89 | 545 | 112 | 80 | 130 | 130 | 49 | 151 | 38 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 654 | 2288 | 425 | 637 | 2247 | 460 | 187 | 276 | 247 | 149 | 439 | 108 |
| Arrive On Green | 0.77 | 0.77 | 0.77 | 1.00 | 1.00 | 1.00 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| Sat Flow, veh/h | 773 | 2981 | 554 | 803 | 2927 | 599 | 1189 | 1770 | 1583 | 1115 | 2820 | 691 |
| Grp Volume(v), veh/h | 30 | 308 | 309 | 89 | 329 | 328 | 80 | 130 | 130 | 49 | 93 | 96 |
| Grp Sat Flow(s),veh/h/ln | 773 | 1770 | 1765 | 803 | 1770 | 1757 | 1189 | 1770 | 1583 | 1115 | 1770 | 1741 |
| Q Serve(g_s), s | 1.1 | 5.9 | 5.9 | 1.0 | 0.0 | 0.0 | 7.7 | 8.0 | 9.1 | 5.1 | 5.6 | 5.9 |
| Cycle Q Clear(g_c), s | 1.1 | 5.9 | 5.9 | 6.9 | 0.0 | 0.0 | 13.6 | 8.0 | 9.1 | 14.1 | 5.6 | 5.9 |
| Prop In Lane | 1.00 | | 0.31 | 1.00 | | 0.34 | 1.00 | | 1.00 | 1.00 | | 0.40 |
| Lane Grp Cap(c), veh/h | 654 | 1358 | 1355 | 637 | 1358 | 1349 | 187 | 276 | 247 | 149 | 276 | 271 |
| V/C Ratio(X) | 0.05 | 0.23 | 0.23 | 0.14 | 0.24 | 0.24 | 0.43 | 0.47 | 0.53 | 0.33 | 0.34 | 0.35 |
| Avail Cap(c_a), veh/h | 654 | 1358 | 1355 | 637 | 1358 | 1349 | 442 | 655 | 586 | 388 | 655 | 644 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.72 | 0.72 | 0.72 | 1.00 | 1.00 | 1.00 | 0.75 | 0.75 | 0.75 |
| Uniform Delay (d), s/veh | 3.4 | 3.9 | 3.9 | 0.2 | 0.0 | 0.0 | 51.3 | 46.2 | 46.6 | 53.1 | 45.1 | 45.3 |
| Incr Delay (d2), s/veh | 0.1 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 1.2 | 0.9 | 1.3 | 0.7 | 0.4 | 0.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.3 | 3.0 | 3.0 | 0.3 | 0.1 | 0.1 | 2.6 | 4.0 | 4.1 | 1.6 | 2.8 | 2.9 |
| LnGrp Delay(d),s/veh | 3.5 | 4.3 | 4.3 | 0.6 | 0.3 | 0.3 | 52.5 | 47.1 | 47.9 | 53.8 | 45.5 | 45.7 |
| LnGrp LOS | A | A | A | A | A | A | D | D | D | D | D | D |
| Approach Vol, veh/h | | 647 | | | 746 | | | 340 | | | 238 | |
| Approach Delay, s/veh | | 4.3 | | | 0.3 | | | 48.7 | | | 47.3 | |
| Approach LOS | | A | | | A | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 96.7 | | 23.3 | | 96.7 | | 23.3 | | | | |
| Change Period (Y+Rc), s | | 4.6 | | 4.6 | | 4.6 | | 4.6 | | | | |
| Max Green Setting (Gmax), s | | 66.4 | | 44.4 | | 66.4 | | 44.4 | | | | |
| Max Q Clear Time (g_c+I1), s | | 7.9 | | 15.6 | | 8.9 | | 16.1 | | | | |
| Green Ext Time (p_c), s | | 8.9 | | 2.6 | | 8.9 | | 2.5 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 15.6 | | | | | | | | |
| HCM 2010 LOS | | | | B | | | | | | | | |

SEC CCP/Mission TIA
4: Centre City Pkwy & El Norte Pkwy

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project Mid-Day Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↔↔ | ↑↑ | ↗ | ↔↔ | ↑↑ | | ↔↔ | ↑↑ | ↗ | ↔↔ | ↑↑ | ↗ |
| Traffic Volume (veh/h) | 31 | 522 | 208 | 183 | 500 | 97 | 235 | 287 | 122 | 130 | 298 | 39 |
| Future Volume (veh/h) | 31 | 522 | 208 | 183 | 500 | 97 | 235 | 287 | 122 | 130 | 298 | 39 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 32 | 544 | 217 | 191 | 521 | 101 | 245 | 299 | 127 | 135 | 310 | 41 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 171 | 919 | 411 | 238 | 827 | 160 | 330 | 1469 | 657 | 305 | 1439 | 644 |
| Arrive On Green | 0.05 | 0.26 | 0.26 | 0.07 | 0.28 | 0.28 | 0.10 | 0.42 | 0.42 | 0.09 | 0.41 | 0.41 |
| Sat Flow, veh/h | 3442 | 3539 | 1583 | 3442 | 2960 | 571 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 32 | 544 | 217 | 191 | 311 | 311 | 245 | 299 | 127 | 135 | 310 | 41 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1583 | 1721 | 1770 | 1762 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 1.3 | 19.6 | 17.2 | 8.0 | 22.4 | 22.6 | 10.1 | 7.9 | 7.4 | 5.4 | 8.3 | 2.3 |
| Cycle Q Clear(g_c), s | 1.3 | 19.6 | 17.2 | 8.0 | 22.4 | 22.6 | 10.1 | 7.9 | 7.4 | 5.4 | 8.3 | 2.3 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.32 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 171 | 919 | 411 | 238 | 494 | 492 | 330 | 1469 | 657 | 305 | 1439 | 644 |
| V/C Ratio(X) | 0.19 | 0.59 | 0.53 | 0.80 | 0.63 | 0.63 | 0.74 | 0.20 | 0.19 | 0.44 | 0.22 | 0.06 |
| Avail Cap(c_a), veh/h | 236 | 1273 | 569 | 342 | 691 | 688 | 394 | 1469 | 657 | 306 | 1439 | 644 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 66.5 | 47.3 | 46.3 | 66.9 | 46.0 | 46.1 | 64.2 | 27.3 | 27.1 | 63.1 | 28.2 | 26.4 |
| Incr Delay (d2), s/veh | 0.4 | 1.0 | 1.8 | 5.4 | 2.3 | 2.3 | 4.6 | 0.3 | 0.7 | 0.4 | 0.3 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.6 | 9.7 | 7.7 | 4.0 | 11.3 | 11.3 | 5.0 | 3.9 | 3.4 | 2.6 | 4.1 | 1.0 |
| LnGrp Delay(d),s/veh | 66.9 | 48.3 | 48.1 | 72.3 | 48.2 | 48.4 | 68.8 | 27.6 | 27.8 | 63.5 | 28.5 | 26.6 |
| LnGrp LOS | E | D | D | E | D | D | E | C | C | E | C | C |
| Approach Vol, veh/h | | 793 | | | 813 | | | 671 | | | 486 | |
| Approach Delay, s/veh | | 49.0 | | | 53.9 | | | 42.7 | | | 38.1 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 19.0 | 67.5 | 15.2 | 44.2 | 20.3 | 66.2 | 12.4 | 47.1 | | | | |
| Change Period (Y+Rc), s | 6.1 | 6.9 | 5.1 | 6.3 | 6.3 | 6.9 | 5.1 | 6.3 | | | | |
| Max Green Setting (Gmax), s | 13.0 | 60.6 | 14.5 | 52.5 | 16.7 | 56.7 | 10.0 | 57.0 | | | | |
| Max Q Clear Time (g_c+1), s | 4.5 | 9.9 | 10.0 | 21.6 | 12.1 | 10.3 | 3.3 | 24.6 | | | | |
| Green Ext Time (p_c), s | 0.1 | 6.3 | 0.1 | 15.8 | 0.2 | 6.2 | 0.0 | 16.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 47.0 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |

SEC CCP/Mission TIA
5: Centre City Pkwy & Decatur Way

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project Mid-Day Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|-------|-------|------|-------|-------|-------|------|------|------|------|
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↑↑ | ↗ | ↖ | ↑↑ | ↗ |
| Traffic Volume (veh/h) | 6 | 1 | 22 | 128 | 1 | 110 | 23 | 544 | 54 | 48 | 704 | 2 |
| Future Volume (veh/h) | 6 | 1 | 22 | 128 | 1 | 110 | 23 | 544 | 54 | 48 | 704 | 2 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 7 | 1 | 25 | 144 | 1 | 124 | 26 | 611 | 61 | 54 | 791 | 2 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 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 | 35 | 10 | 240 | 251 | 4 | 437 | 82 | 1159 | 518 | 161 | 1206 | 540 |
| Arrive On Green | 0.02 | 0.16 | 0.16 | 0.14 | 0.28 | 0.28 | 0.05 | 0.33 | 0.33 | 0.09 | 0.34 | 0.34 |
| Sat Flow, veh/h | 1774 | 61 | 1531 | 1774 | 13 | 1573 | 1774 | 3539 | 1583 | 1774 | 3539 | 1583 |
| Grp Volume(v), veh/h | 7 | 0 | 26 | 144 | 0 | 125 | 26 | 611 | 61 | 54 | 791 | 2 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 0 | 1593 | 1774 | 0 | 1585 | 1774 | 1770 | 1583 | 1774 | 1770 | 1583 |
| Q Serve(g_s), s | 0.3 | 0.0 | 1.0 | 5.6 | 0.0 | 4.6 | 1.0 | 10.3 | 2.0 | 2.1 | 14.0 | 0.0 |
| Cycle Q Clear(g_c), s | 0.3 | 0.0 | 1.0 | 5.6 | 0.0 | 4.6 | 1.0 | 10.3 | 2.0 | 2.1 | 14.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.96 | 1.00 | | 0.99 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 35 | 0 | 249 | 251 | 0 | 441 | 82 | 1159 | 518 | 161 | 1206 | 540 |
| V/C Ratio(X) | 0.20 | 0.00 | 0.10 | 0.57 | 0.00 | 0.28 | 0.32 | 0.53 | 0.12 | 0.34 | 0.66 | 0.00 |
| Avail Cap(c_a), veh/h | 265 | 0 | 951 | 265 | 0 | 947 | 217 | 1159 | 518 | 241 | 1206 | 540 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 35.5 | 0.0 | 26.6 | 29.5 | 0.0 | 20.8 | 34.0 | 20.1 | 17.3 | 31.4 | 20.6 | 8.6 |
| Incr Delay (d2), s/veh | 1.0 | 0.0 | 0.1 | 1.5 | 0.0 | 0.3 | 0.8 | 1.7 | 0.5 | 0.5 | 2.8 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.1 | 0.0 | 0.5 | 2.8 | 0.0 | 2.0 | 0.5 | 5.3 | 0.9 | 1.1 | 7.3 | 0.0 |
| LnGrp Delay(d),s/veh | 36.5 | 0.0 | 26.8 | 31.1 | 0.0 | 21.1 | 34.8 | 21.9 | 17.8 | 31.8 | 23.4 | 8.6 |
| LnGrp LOS | D | | C | C | | C | C | C | B | C | C | A |
| Approach Vol, veh/h | | 33 | | | 269 | | | 698 | | | 847 | |
| Approach Delay, s/veh | | 28.8 | | | 26.4 | | | 22.0 | | | 23.9 | |
| 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 | 11.3 | 31.0 | 15.1 | 16.2 | 10.3 | 32.0 | 6.2 | 25.2 | | | | |
| Change Period (Y+Rc), s | 4.6 | 6.9 | * 4.7 | * 4.7 | 6.9 | * 6.9 | * 4.7 | * 4.7 | | | | |
| Max Green Setting (Gmax), s | 10.0 | 24.1 | * 11 | * 44 | 9.0 | * 25 | * 11 | * 44 | | | | |
| Max Q Clear Time (g_c+14), s | 14.0 | 12.3 | 7.6 | 3.0 | 3.0 | 16.0 | 2.3 | 6.6 | | | | |
| Green Ext Time (p_c), s | 0.0 | 3.8 | 0.1 | 0.8 | 2.1 | 4.0 | 0.0 | 0.8 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 23.6 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
6: Centre City Pkwy & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project Mid-Day Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|-------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 225 | 615 | 108 | 126 | 533 | 267 | 155 | 497 | 99 | 288 | 651 | 364 |
| Future Volume (veh/h) | 225 | 615 | 108 | 126 | 533 | 267 | 155 | 497 | 99 | 288 | 651 | 364 |
| 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 | | 0.97 | 1.00 | | 0.96 | 1.00 | | 0.98 | 1.00 | | 0.98 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 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 | 1667 | 1863 | 1863 | 1667 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 230 | 628 | 110 | 129 | 544 | 272 | 158 | 507 | 101 | 294 | 664 | 371 |
| Adj No. of Lanes | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 2 | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 276 | 1118 | 486 | 153 | 896 | 383 | 489 | 1259 | 385 | 590 | 920 | 405 |
| Arrive On Green | 0.31 | 0.63 | 0.63 | 0.03 | 0.08 | 0.08 | 0.16 | 0.25 | 0.25 | 0.17 | 0.26 | 0.26 |
| Sat Flow, veh/h | 1774 | 3539 | 1538 | 1587 | 3539 | 1512 | 3079 | 5085 | 1557 | 3442 | 3539 | 1559 |
| Grp Volume(v), veh/h | 230 | 628 | 110 | 129 | 544 | 272 | 158 | 507 | 101 | 294 | 664 | 371 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1538 | 1587 | 1770 | 1512 | 1540 | 1695 | 1557 | 1721 | 1770 | 1559 |
| Q Serve(g_s), s | 14.5 | 12.2 | 2.4 | 9.7 | 17.8 | 21.0 | 5.5 | 10.0 | 4.7 | 9.3 | 20.5 | 27.7 |
| Cycle Q Clear(g_c), s | 14.5 | 12.2 | 2.4 | 9.7 | 17.8 | 21.0 | 5.5 | 10.0 | 4.7 | 9.3 | 20.5 | 27.7 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 276 | 1118 | 486 | 153 | 896 | 383 | 489 | 1259 | 385 | 590 | 920 | 405 |
| V/C Ratio(X) | 0.83 | 0.56 | 0.23 | 0.84 | 0.61 | 0.71 | 0.32 | 0.40 | 0.26 | 0.50 | 0.72 | 0.92 |
| Avail Cap(c_a), veh/h | 333 | 1351 | 587 | 155 | 1032 | 441 | 489 | 1259 | 385 | 590 | 920 | 405 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.84 | 0.84 | 0.84 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 39.9 | 17.4 | 6.7 | 57.2 | 49.2 | 50.7 | 44.8 | 37.7 | 20.5 | 45.1 | 40.4 | 43.1 |
| Incr Delay (d2), s/veh | 10.5 | 0.3 | 0.1 | 30.9 | 0.6 | 4.0 | 0.1 | 1.0 | 1.7 | 0.2 | 4.9 | 27.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 7.8 | 5.8 | 1.0 | 5.6 | 8.8 | 9.2 | 2.3 | 4.8 | 2.2 | 4.4 | 10.7 | 15.1 |
| LnGrp Delay(d),s/veh | 50.4 | 17.6 | 6.9 | 88.1 | 49.9 | 54.7 | 44.9 | 38.7 | 22.2 | 45.3 | 45.3 | 70.8 |
| LnGrp LOS | D | B | A | F | D | D | D | D | C | D | D | E |
| Approach Vol, veh/h | | 968 | | | 945 | | | 766 | | | 1329 | |
| Approach Delay, s/veh | | 24.2 | | | 56.5 | | | 37.8 | | | 52.4 | |
| Approach LOS | | C | | | E | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 35.1 | 36.1 | 16.0 | 42.8 | 23.6 | 37.6 | 23.6 | 35.3 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.4 | 4.5 | 4.9 | 4.5 | 6.4 | 4.9 | * 4.9 | | | | |
| Max Green Setting (Gmax), s | 12.5 | 29.7 | 11.7 | 45.8 | 11.0 | 31.2 | 22.5 | * 35 | | | | |
| Max Q Clear Time (g_c+M), s | 12.5 | 12.0 | 11.7 | 14.2 | 7.5 | 29.7 | 16.5 | 23.0 | | | | |
| Green Ext Time (p_c), s | 0.1 | 2.8 | 0.0 | 4.2 | 0.4 | 0.8 | 2.2 | 3.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 43.8 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
7: Centre City Pkwy & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project Mid-Day Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|-------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 156 | 460 | 101 | 68 | 446 | 167 | 152 | 598 | 88 | 137 | 535 | 172 |
| Future Volume (veh/h) | 156 | 460 | 101 | 68 | 446 | 167 | 152 | 598 | 88 | 137 | 535 | 172 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 158 | 465 | 102 | 69 | 451 | 169 | 154 | 604 | 89 | 138 | 540 | 174 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 186 | 563 | 123 | 218 | 537 | 200 | 342 | 959 | 429 | 786 | 1474 | 660 |
| Arrive On Green | 0.03 | 0.06 | 0.06 | 0.04 | 0.07 | 0.07 | 0.10 | 0.27 | 0.27 | 0.46 | 0.83 | 0.83 |
| Sat Flow, veh/h | 1774 | 2891 | 630 | 1774 | 2527 | 939 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 158 | 283 | 284 | 69 | 315 | 305 | 154 | 604 | 89 | 138 | 540 | 174 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1752 | 1774 | 1770 | 1697 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 10.6 | 19.0 | 19.2 | 4.5 | 21.1 | 21.3 | 5.1 | 18.0 | 5.2 | 2.8 | 4.4 | 2.8 |
| Cycle Q Clear(g_c), s | 10.6 | 19.0 | 19.2 | 4.5 | 21.1 | 21.3 | 5.1 | 18.0 | 5.2 | 2.8 | 4.4 | 2.8 |
| Prop In Lane | 1.00 | | 0.36 | 1.00 | | 0.55 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 186 | 344 | 341 | 218 | 376 | 361 | 342 | 959 | 429 | 786 | 1474 | 660 |
| V/C Ratio(X) | 0.85 | 0.82 | 0.83 | 0.32 | 0.84 | 0.85 | 0.45 | 0.63 | 0.21 | 0.18 | 0.37 | 0.26 |
| Avail Cap(c_a), veh/h | 200 | 668 | 661 | 218 | 619 | 594 | 344 | 959 | 429 | 786 | 1474 | 660 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 0.98 | 0.98 | 0.98 | 0.83 | 0.83 | 0.83 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 57.0 | 54.1 | 54.2 | 52.7 | 53.7 | 53.9 | 50.9 | 38.5 | 33.8 | 25.9 | 6.2 | 6.1 |
| Incr Delay (d2), s/veh | 24.3 | 1.9 | 2.0 | 0.3 | 1.9 | 2.4 | 0.3 | 3.0 | 1.0 | 0.0 | 0.7 | 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(50%),veh/ln | 6.5 | 9.5 | 9.5 | 2.2 | 10.5 | 10.3 | 2.4 | 9.2 | 2.4 | 1.3 | 2.2 | 1.3 |
| LnGrp Delay(d),s/veh | 81.2 | 56.0 | 56.2 | 52.9 | 55.6 | 56.2 | 51.3 | 41.4 | 34.8 | 26.0 | 6.9 | 7.1 |
| LnGrp LOS | F | E | E | D | E | E | D | D | C | C | A | A |
| Approach Vol, veh/h | | 725 | | | 689 | | | 847 | | | 852 | |
| Approach Delay, s/veh | | 61.6 | | | 55.6 | | | 42.5 | | | 10.0 | |
| Approach LOS | | E | | | E | | | D | | | B | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 33.9 | 39.0 | 19.2 | 27.8 | 16.4 | 56.5 | 17.1 | 30.0 | | | | |
| Change Period (Y+Rc), s | 6.5 | * 6.5 | 4.5 | 4.5 | 4.5 | 6.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 12.0 | * 33 | 10.2 | 45.3 | 12.0 | 32.5 | 13.5 | 42.0 | | | | |
| Max Q Clear Time (g_c+1), s | 11.8 | 20.0 | 6.5 | 21.2 | 7.1 | 6.4 | 12.6 | 23.3 | | | | |
| Green Ext Time (p_c), s | 0.3 | 2.3 | 1.0 | 2.1 | 0.1 | 2.9 | 0.0 | 2.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 41.0 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
8: Centre City Pkwy & Valley Pkwy

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project Mid-Day Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|-----|------|-----|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | ↖ | ↖↖↖ | ↖ | ↖↖ | ↖↖ | | | ↖↖ | ↖ |
| Traffic Volume (veh/h) | 0 | 0 | 0 | 229 | 1067 | 225 | 195 | 632 | 0 | 0 | 584 | 108 |
| Future Volume (veh/h) | 0 | 0 | 0 | 229 | 1067 | 225 | 195 | 632 | 0 | 0 | 584 | 108 |
| Number | | | | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | | | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | | | | 1863 | 1863 | 1863 | 1863 | 1863 | 0 | 0 | 1863 | 1863 |
| Adj Flow Rate, veh/h | | | | 236 | 1100 | 232 | 201 | 652 | 0 | 0 | 602 | 111 |
| Adj No. of Lanes | | | | 1 | 3 | 1 | 2 | 2 | 0 | 0 | 2 | 1 |
| Peak Hour Factor | | | | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | | | | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 2 | 2 |
| Cap, veh/h | | | | 494 | 1558 | 441 | 309 | 2128 | 0 | 0 | 1634 | 731 |
| Arrive On Green | | | | 0.28 | 0.28 | 0.28 | 0.09 | 0.60 | 0.00 | 0.00 | 0.46 | 0.46 |
| Sat Flow, veh/h | | | | 1774 | 5588 | 1583 | 3442 | 3632 | 0 | 0 | 3632 | 1583 |
| Grp Volume(v), veh/h | | | | 236 | 1100 | 232 | 201 | 652 | 0 | 0 | 602 | 111 |
| Grp Sat Flow(s),veh/h/ln | | | | 1774 | 1863 | 1583 | 1721 | 1770 | 0 | 0 | 1770 | 1583 |
| Q Serve(g_s), s | | | | 11.1 | 17.7 | 12.4 | 5.6 | 9.0 | 0.0 | 0.0 | 11.0 | 4.1 |
| Cycle Q Clear(g_c), s | | | | 11.1 | 17.7 | 12.4 | 5.6 | 9.0 | 0.0 | 0.0 | 11.0 | 4.1 |
| Prop In Lane | | | | 1.00 | | 1.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | | | | 494 | 1558 | 441 | 309 | 2128 | 0 | 0 | 1634 | 731 |
| V/C Ratio(X) | | | | 0.48 | 0.71 | 0.53 | 0.65 | 0.31 | 0.00 | 0.00 | 0.37 | 0.15 |
| Avail Cap(c_a), veh/h | | | | 761 | 2397 | 679 | 413 | 2128 | 0 | 0 | 1634 | 731 |
| HCM Platoon Ratio | | | | 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 | 0.00 | 0.94 | 0.94 |
| Uniform Delay (d), s/veh | | | | 30.0 | 32.4 | 30.5 | 44.0 | 9.7 | 0.0 | 0.0 | 17.5 | 15.6 |
| Incr Delay (d2), s/veh | | | | 0.5 | 0.4 | 0.7 | 1.7 | 0.4 | 0.0 | 0.0 | 0.6 | 0.4 |
| Initial Q Delay(d3),s/veh | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | | | | 5.5 | 9.1 | 11.1 | 2.8 | 4.5 | 0.0 | 0.0 | 5.5 | 1.8 |
| LnGrp Delay(d),s/veh | | | | 30.5 | 32.8 | 31.2 | 45.7 | 10.1 | 0.0 | 0.0 | 18.1 | 16.0 |
| LnGrp LOS | | | | C | C | C | D | B | | | B | B |
| Approach Vol, veh/h | | | | | 1568 | | | 853 | | | 713 | |
| Approach Delay, s/veh | | | | | 32.2 | | | 18.5 | | | 17.7 | |
| 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 | | 67.0 | | 33.0 | 14.0 | 53.1 | | | | | | |
| Change Period (Y+Rc), s | | 6.9 | | 5.1 | 5.0 | 6.9 | | | | | | |
| Max Green Setting (Gmax), s | | 45.1 | | 42.9 | 12.0 | 28.1 | | | | | | |
| Max Q Clear Time (g_c+I1), s | | 11.0 | | 19.7 | 7.6 | 13.0 | | | | | | |
| Green Ext Time (p_c), s | | 8.7 | | 8.2 | 0.2 | 6.5 | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 25.2 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
 9: Escondido Blvd & Mission Ave

HCM 2010 Signalized Intersection Summary
 Existing Plus Cumulative Plus Project Mid-Day Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------------|------|------|------|------|------|------|------|-------|------|------|------|------|
| Lane Configurations | ↔ | ↔ | | ↔ | ↔ | | ↔ | ↔ | | ↔ | ↔ | |
| Traffic Volume (veh/h) | 148 | 496 | 198 | 113 | 445 | 44 | 188 | 229 | 115 | 90 | 259 | 165 |
| Future Volume (veh/h) | 148 | 496 | 198 | 113 | 445 | 44 | 188 | 229 | 115 | 90 | 259 | 165 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 164 | 551 | 220 | 126 | 494 | 49 | 209 | 254 | 128 | 100 | 288 | 183 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 278 | 744 | 296 | 293 | 1006 | 99 | 237 | 719 | 351 | 125 | 532 | 328 |
| Arrive On Green | 0.05 | 0.10 | 0.10 | 0.17 | 0.31 | 0.31 | 0.13 | 0.31 | 0.31 | 0.07 | 0.25 | 0.25 |
| Sat Flow, veh/h | 1774 | 2474 | 985 | 1774 | 3254 | 322 | 1774 | 2306 | 1127 | 1774 | 2103 | 1300 |
| Grp Volume(v), veh/h | 164 | 394 | 377 | 126 | 268 | 275 | 209 | 193 | 189 | 100 | 241 | 230 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1689 | 1774 | 1770 | 1806 | 1774 | 1770 | 1664 | 1774 | 1770 | 1633 |
| Q Serve(g_s), s | 10.8 | 26.0 | 26.1 | 7.7 | 14.8 | 14.9 | 13.9 | 10.1 | 10.6 | 6.7 | 14.1 | 14.7 |
| Cycle Q Clear(g_c), s | 10.8 | 26.0 | 26.1 | 7.7 | 14.8 | 14.9 | 13.9 | 10.1 | 10.6 | 6.7 | 14.1 | 14.7 |
| Prop In Lane | 1.00 | | 0.58 | 1.00 | | 0.18 | 1.00 | | 0.68 | 1.00 | | 0.80 |
| Lane Grp Cap(c), veh/h | 278 | 532 | 508 | 293 | 547 | 558 | 237 | 552 | 519 | 125 | 447 | 413 |
| V/C Ratio(X) | 0.59 | 0.74 | 0.74 | 0.43 | 0.49 | 0.49 | 0.88 | 0.35 | 0.36 | 0.80 | 0.54 | 0.56 |
| Avail Cap(c_a), veh/h | 278 | 532 | 508 | 293 | 547 | 558 | 353 | 552 | 519 | 191 | 447 | 413 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.74 | 0.74 | 0.74 | 0.93 | 0.93 | 0.93 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 53.1 | 49.5 | 49.5 | 45.0 | 33.7 | 33.8 | 51.0 | 31.9 | 32.1 | 54.9 | 38.8 | 39.0 |
| Incr Delay (d2), s/veh | 2.2 | 8.9 | 9.4 | 0.3 | 2.3 | 2.3 | 10.8 | 1.6 | 1.8 | 6.6 | 4.6 | 5.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 5.5 | 14.0 | 13.5 | 3.8 | 7.6 | 7.8 | 7.5 | 5.2 | 5.1 | 3.5 | 7.5 | 7.3 |
| LnGrp Delay(d),s/veh | 55.3 | 58.4 | 59.0 | 45.3 | 36.0 | 36.1 | 61.8 | 33.5 | 33.9 | 61.6 | 43.4 | 44.3 |
| LnGrp LOS | E | E | E | D | D | D | E | C | C | E | D | D |
| Approach Vol, veh/h | | 935 | | | 669 | | | 591 | | | 571 | |
| Approach Delay, s/veh | | 58.1 | | | 37.8 | | | 43.7 | | | 47.0 | |
| Approach LOS | | E | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 33.9 | 41.0 | 20.1 | 34.9 | 22.9 | 42.0 | 13.1 | 42.0 | | | | |
| Change Period (Y+Rc), s | 4.1 | 4.9 | 4.1 | 4.6 | 4.1 | 4.9 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 15.9 | 36.1 | 23.9 | 26.4 | 14.9 | 37.1 | 12.9 | * 37 | | | | |
| Max Q Clear Time (g_c+1.7), s | 19.7 | 28.1 | 15.9 | 16.7 | 12.8 | 16.9 | 8.7 | 12.6 | | | | |
| Green Ext Time (p_c), s | 0.2 | 2.1 | 0.2 | 1.5 | 0.1 | 1.9 | 0.1 | 1.4 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 47.8 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
10: Escondido Blvd & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project Mid-Day Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|-------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 93 | 447 | 109 | 143 | 472 | 103 | 110 | 283 | 131 | 99 | 333 | 96 |
| Future Volume (veh/h) | 93 | 447 | 109 | 143 | 472 | 103 | 110 | 283 | 131 | 99 | 333 | 96 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 94 | 452 | 110 | 144 | 477 | 104 | 111 | 286 | 132 | 100 | 336 | 97 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 269 | 740 | 179 | 357 | 902 | 196 | 138 | 729 | 328 | 124 | 762 | 217 |
| Arrive On Green | 0.05 | 0.09 | 0.09 | 0.20 | 0.31 | 0.31 | 0.08 | 0.31 | 0.31 | 0.07 | 0.28 | 0.28 |
| Sat Flow, veh/h | 1774 | 2828 | 683 | 1774 | 2894 | 627 | 1774 | 2375 | 1069 | 1774 | 2722 | 774 |
| Grp Volume(v), veh/h | 94 | 282 | 280 | 144 | 291 | 290 | 111 | 211 | 207 | 100 | 217 | 216 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1742 | 1774 | 1770 | 1752 | 1774 | 1770 | 1674 | 1774 | 1770 | 1726 |
| Q Serve(g_s), s | 6.1 | 18.4 | 18.6 | 8.5 | 16.2 | 16.4 | 7.4 | 11.3 | 11.7 | 6.7 | 12.1 | 12.4 |
| Cycle Q Clear(g_c), s | 6.1 | 18.4 | 18.6 | 8.5 | 16.2 | 16.4 | 7.4 | 11.3 | 11.7 | 6.7 | 12.1 | 12.4 |
| Prop In Lane | 1.00 | | 0.39 | 1.00 | | 0.36 | 1.00 | | 0.64 | 1.00 | | 0.45 |
| Lane Grp Cap(c), veh/h | 269 | 463 | 456 | 357 | 552 | 546 | 138 | 543 | 514 | 124 | 495 | 483 |
| V/C Ratio(X) | 0.35 | 0.61 | 0.62 | 0.40 | 0.53 | 0.53 | 0.81 | 0.39 | 0.40 | 0.81 | 0.44 | 0.45 |
| Avail Cap(c_a), veh/h | 269 | 463 | 456 | 357 | 552 | 546 | 220 | 543 | 514 | 205 | 495 | 483 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.78 | 0.78 | 0.78 | 0.61 | 0.61 | 0.61 | 0.99 | 0.99 | 0.99 | 0.86 | 0.86 | 0.86 |
| Uniform Delay (d), s/veh | 51.3 | 48.9 | 49.0 | 41.6 | 34.0 | 34.1 | 54.4 | 32.7 | 32.9 | 55.0 | 35.4 | 35.6 |
| Incr Delay (d2), s/veh | 0.2 | 4.6 | 4.8 | 0.2 | 2.2 | 2.3 | 4.4 | 2.1 | 2.3 | 4.0 | 2.4 | 2.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.0 | 9.6 | 9.6 | 4.2 | 8.2 | 8.2 | 3.8 | 5.8 | 5.7 | 3.4 | 6.2 | 6.2 |
| LnGrp Delay(d),s/veh | 51.5 | 53.5 | 53.8 | 41.8 | 36.2 | 36.3 | 58.9 | 34.8 | 35.2 | 59.0 | 37.9 | 38.1 |
| LnGrp LOS | D | D | D | D | D | D | E | C | D | E | D | D |
| Approach Vol, veh/h | | 656 | | | 725 | | | 529 | | | 533 | |
| Approach Delay, s/veh | | 53.3 | | | 37.4 | | | 40.0 | | | 41.9 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 12.5 | 43.2 | 28.3 | 36.0 | 15.7 | 40.0 | 22.3 | 42.0 | | | | |
| Change Period (Y+Rc), s | 4.1 | 6.4 | 4.1 | 4.6 | 6.4 | * 6.4 | 4.1 | 4.6 | | | | |
| Max Green Setting (Gmax), s | 13.9 | 34.6 | 20.9 | 31.4 | 14.9 | * 34 | 14.9 | 37.4 | | | | |
| Max Q Clear Time (g_c+1), s | 10.7 | 13.7 | 10.5 | 20.6 | 9.4 | 14.4 | 8.1 | 18.4 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.6 | 0.2 | 1.7 | 0.2 | 1.5 | 0.2 | 2.1 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 43.2 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
11: Escondido Blvd & Woodward

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project Mid-Day Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | ↕ | ↕ | | | ↕ | | ↕ | ↕ | |
| Traffic Volume (veh/h) | 12 | 0 | 7 | 45 | 1 | 35 | 2 | 478 | 47 | 45 | 544 | 5 |
| Future Volume (veh/h) | 12 | 0 | 7 | 45 | 1 | 35 | 2 | 478 | 47 | 45 | 544 | 5 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1900 | 1863 | 1900 | 1863 | 1863 | 1900 | 1900 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 12 | 0 | 7 | 46 | 1 | 36 | 2 | 488 | 48 | 46 | 555 | 5 |
| Adj No. of Lanes | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 101 | 13 | 29 | 175 | 3 | 95 | 42 | 2351 | 230 | 81 | 2974 | 27 |
| Arrive On Green | 0.06 | 0.00 | 0.06 | 0.06 | 0.06 | 0.06 | 0.74 | 0.74 | 0.74 | 0.05 | 0.83 | 0.83 |
| Sat Flow, veh/h | 578 | 218 | 464 | 1403 | 43 | 1547 | 2 | 3188 | 311 | 1774 | 3594 | 32 |
| Grp Volume(v), veh/h | 19 | 0 | 0 | 46 | 0 | 37 | 285 | 0 | 253 | 46 | 273 | 287 |
| Grp Sat Flow(s),veh/h/ln | 1261 | 0 | 0 | 1403 | 0 | 1590 | 1861 | 0 | 1640 | 1774 | 1770 | 1857 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 2.0 | 0.0 | 0.0 | 4.3 | 2.3 | 2.8 | 2.8 |
| Cycle Q Clear(g_c), s | 2.0 | 0.0 | 0.0 | 2.3 | 0.0 | 2.0 | 4.3 | 0.0 | 4.3 | 2.3 | 2.8 | 2.8 |
| Prop In Lane | 0.63 | | 0.37 | 1.00 | | 0.97 | 0.01 | | 0.19 | 1.00 | | 0.02 |
| Lane Grp Cap(c), veh/h | 143 | 0 | 0 | 175 | 0 | 98 | 1412 | 0 | 1209 | 81 | 1464 | 1537 |
| V/C Ratio(X) | 0.13 | 0.00 | 0.00 | 0.26 | 0.00 | 0.38 | 0.20 | 0.00 | 0.21 | 0.57 | 0.19 | 0.19 |
| Avail Cap(c_a), veh/h | 446 | 0 | 0 | 462 | 0 | 424 | 1412 | 0 | 1209 | 237 | 1464 | 1537 |
| 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 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.90 | 0.90 | 0.90 |
| Uniform Delay (d), s/veh | 40.1 | 0.0 | 0.0 | 40.7 | 0.0 | 40.6 | 3.7 | 0.0 | 3.7 | 42.1 | 1.6 | 1.6 |
| Incr Delay (d2), s/veh | 0.2 | 0.0 | 0.0 | 0.3 | 0.0 | 0.9 | 0.3 | 0.0 | 0.4 | 2.1 | 0.3 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.5 | 0.0 | 0.0 | 1.1 | 0.0 | 0.9 | 2.3 | 0.0 | 2.0 | 1.2 | 1.5 | 1.5 |
| LnGrp Delay(d),s/veh | 40.2 | 0.0 | 0.0 | 41.0 | 0.0 | 41.5 | 4.0 | 0.0 | 4.1 | 44.2 | 1.8 | 1.8 |
| LnGrp LOS | D | | | D | | D | A | | A | D | A | A |
| Approach Vol, veh/h | | 19 | | | 83 | | | 538 | | | 606 | |
| Approach Delay, s/veh | | 40.2 | | | 41.2 | | | 4.0 | | | 5.0 | |
| Approach LOS | | D | | | D | | | A | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 8.1 | 71.4 | | 10.5 | | 79.5 | | 10.5 | | | | |
| Change Period (Y+Rc), s | 4.0 | 5.0 | | * 5 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax) | 12.0 | 40.0 | | * 25 | | 56.0 | | 24.0 | | | | |
| Max Q Clear Time (g_c+1) | 11.3 | 6.3 | | 4.0 | | 4.8 | | 4.3 | | | | |
| Green Ext Time (p_c), s | 0.0 | 7.6 | | 0.2 | | 8.0 | | 0.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 7.5 | | | | | | | | |
| HCM 2010 LOS | | | | A | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
12: Broadway & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project Mid-Day Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 147 | 375 | 154 | 93 | 315 | 186 | 144 | 517 | 90 | 136 | 556 | 116 |
| Future Volume (veh/h) | 147 | 375 | 154 | 93 | 315 | 186 | 144 | 517 | 90 | 136 | 556 | 116 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 150 | 383 | 157 | 95 | 321 | 190 | 147 | 528 | 92 | 139 | 567 | 118 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 177 | 497 | 201 | 166 | 423 | 245 | 327 | 921 | 160 | 282 | 818 | 170 |
| Arrive On Green | 0.10 | 0.20 | 0.20 | 0.09 | 0.20 | 0.20 | 0.18 | 0.31 | 0.31 | 0.16 | 0.28 | 0.28 |
| Sat Flow, veh/h | 1774 | 2461 | 995 | 1774 | 2161 | 1251 | 1774 | 3016 | 524 | 1774 | 2920 | 606 |
| Grp Volume(v), veh/h | 150 | 274 | 266 | 95 | 262 | 249 | 147 | 309 | 311 | 139 | 343 | 342 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1687 | 1774 | 1770 | 1642 | 1774 | 1770 | 1770 | 1774 | 1770 | 1756 |
| Q Serve(g_s), s | 6.2 | 11.0 | 11.2 | 3.8 | 10.5 | 10.8 | 5.5 | 11.0 | 11.1 | 5.4 | 13.0 | 13.1 |
| Cycle Q Clear(g_c), s | 6.2 | 11.0 | 11.2 | 3.8 | 10.5 | 10.8 | 5.5 | 11.0 | 11.1 | 5.4 | 13.0 | 13.1 |
| Prop In Lane | 1.00 | | 0.59 | 1.00 | | 0.76 | 1.00 | | 0.30 | 1.00 | | 0.35 |
| Lane Grp Cap(c), veh/h | 177 | 357 | 341 | 166 | 346 | 321 | 327 | 540 | 541 | 282 | 495 | 492 |
| V/C Ratio(X) | 0.85 | 0.77 | 0.78 | 0.57 | 0.76 | 0.78 | 0.45 | 0.57 | 0.58 | 0.49 | 0.69 | 0.70 |
| Avail Cap(c_a), veh/h | 177 | 493 | 470 | 166 | 472 | 438 | 327 | 540 | 541 | 282 | 495 | 492 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.64 | 0.64 | 0.64 | 1.00 | 1.00 | 1.00 | 0.87 | 0.87 | 0.87 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.2 | 28.3 | 28.4 | 32.5 | 28.5 | 28.6 | 27.2 | 21.9 | 22.0 | 28.8 | 24.1 | 24.1 |
| Incr Delay (d2), s/veh | 20.7 | 3.1 | 3.7 | 4.6 | 4.6 | 6.0 | 0.8 | 3.8 | 3.9 | 1.3 | 7.7 | 7.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 4.1 | 5.6 | 5.5 | 2.1 | 5.5 | 5.5 | 2.8 | 5.9 | 5.9 | 2.7 | 7.4 | 7.4 |
| LnGrp Delay(d),s/veh | 53.9 | 31.4 | 32.1 | 37.2 | 33.1 | 34.6 | 28.1 | 25.7 | 25.8 | 30.1 | 31.9 | 32.1 |
| LnGrp LOS | D | C | C | D | C | C | C | C | C | C | C | C |
| Approach Vol, veh/h | | 690 | | | 606 | | | 767 | | | 824 | |
| Approach Delay, s/veh | | 36.5 | | | 34.3 | | | 26.2 | | | 31.6 | |
| Approach LOS | | D | | | C | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 16.4 | 27.4 | 11.5 | 19.6 | 18.3 | 25.5 | 12.0 | 19.2 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 22.9 | 6.6 | 20.9 | 8.5 | 21.0 | 7.5 | 20.0 | | | | | |
| Max Q Clear Time (g_c+1), s | 13.1 | 5.8 | 13.2 | 7.5 | 15.1 | 8.2 | 12.8 | | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.6 | 0.3 | 1.9 | 0.1 | 2.1 | 0.0 | 1.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 31.9 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |

SEC CCP/Mission TIA
13: Broadway & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project Mid-Day Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 120 | 448 | 96 | 54 | 434 | 177 | 122 | 360 | 37 | 197 | 400 | 101 |
| Future Volume (veh/h) | 120 | 448 | 96 | 54 | 434 | 177 | 122 | 360 | 37 | 197 | 400 | 101 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 125 | 467 | 100 | 56 | 452 | 184 | 127 | 375 | 39 | 205 | 417 | 105 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 154 | 599 | 127 | 186 | 552 | 223 | 160 | 907 | 94 | 300 | 1008 | 252 |
| Arrive On Green | 0.09 | 0.21 | 0.21 | 0.10 | 0.22 | 0.22 | 0.09 | 0.28 | 0.28 | 0.17 | 0.36 | 0.36 |
| Sat Flow, veh/h | 1774 | 2905 | 618 | 1774 | 2463 | 994 | 1774 | 3238 | 335 | 1774 | 2808 | 701 |
| Grp Volume(v), veh/h | 125 | 283 | 284 | 56 | 324 | 312 | 127 | 204 | 210 | 205 | 261 | 261 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1754 | 1774 | 1770 | 1687 | 1774 | 1770 | 1804 | 1774 | 1770 | 1739 |
| Q Serve(g_s), s | 5.2 | 11.4 | 11.5 | 2.2 | 13.0 | 13.2 | 5.3 | 7.0 | 7.1 | 8.1 | 8.3 | 8.5 |
| Cycle Q Clear(g_c), s | 5.2 | 11.4 | 11.5 | 2.2 | 13.0 | 13.2 | 5.3 | 7.0 | 7.1 | 8.1 | 8.3 | 8.5 |
| Prop In Lane | 1.00 | | 0.35 | 1.00 | | 0.59 | 1.00 | | 0.19 | 1.00 | | 0.40 |
| Lane Grp Cap(c), veh/h | 154 | 365 | 361 | 186 | 397 | 378 | 160 | 495 | 505 | 300 | 635 | 624 |
| V/C Ratio(X) | 0.81 | 0.78 | 0.79 | 0.30 | 0.82 | 0.83 | 0.79 | 0.41 | 0.42 | 0.68 | 0.41 | 0.42 |
| Avail Cap(c_a), veh/h | 154 | 491 | 486 | 186 | 472 | 450 | 182 | 495 | 505 | 300 | 635 | 624 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.75 | 0.75 | 0.75 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.79 | 0.79 | 0.79 |
| Uniform Delay (d), s/veh | 33.7 | 28.1 | 28.2 | 31.0 | 27.6 | 27.7 | 33.4 | 22.0 | 22.0 | 29.3 | 18.1 | 18.1 |
| Incr Delay (d2), s/veh | 21.6 | 4.2 | 4.5 | 0.9 | 9.2 | 10.3 | 19.0 | 2.5 | 2.5 | 4.9 | 1.5 | 1.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.5 | 5.9 | 6.0 | 1.1 | 7.4 | 7.2 | 3.4 | 3.7 | 3.9 | 4.4 | 4.3 | 4.3 |
| LnGrp Delay(d),s/veh | 55.3 | 32.4 | 32.8 | 31.9 | 36.8 | 38.0 | 52.4 | 24.5 | 24.5 | 34.2 | 19.6 | 19.7 |
| LnGrp LOS | E | C | C | C | D | D | D | C | C | C | B | B |
| Approach Vol, veh/h | | 692 | | | 692 | | | 541 | | | 727 | |
| Approach Delay, s/veh | | 36.7 | | | 37.0 | | | 31.1 | | | 23.8 | |
| Approach LOS | | D | | | D | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 7.2 | 25.5 | 12.4 | 20.0 | 11.3 | 31.4 | 11.0 | 21.3 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 5 | 21.0 | 5.7 | 20.8 | 7.7 | 22.8 | 6.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+M), s | 10 | 9.1 | 4.2 | 13.5 | 7.3 | 10.5 | 7.2 | 15.2 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.8 | 0.6 | 2.0 | 0.0 | 3.0 | 0.0 | 1.6 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 32.1 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |

Intersection

Int Delay, s/veh 0.6

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | | ↑ | ↑↑ | ↑ | | ↑↑ |
| Traffic Vol, veh/h | 0 | 94 | 656 | 84 | 0 | 887 |
| Future Vol, veh/h | 0 | 94 | 656 | 84 | 0 | 887 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | 75 | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 102 | 713 | 91 | 0 | 964 |

| Major/Minor | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|---------|
| Conflicting Flow All | - | 357 | 0 0 |
| Stage 1 | - | - | - - |
| Stage 2 | - | - | - - |
| Critical Hdwy | - | 6.94 | - - |
| Critical Hdwy Stg 1 | - | - | - - |
| Critical Hdwy Stg 2 | - | - | - - |
| Follow-up Hdwy | - | 3.32 | - - |
| Pot Cap-1 Maneuver | 0 | 639 | - - 0 - |
| Stage 1 | 0 | - | - - 0 - |
| Stage 2 | 0 | - | - - 0 - |
| Platoon blocked, % | | | - - |
| Mov Cap-1 Maneuver | - | 639 | - - - - |
| Mov Cap-2 Maneuver | - | - | - - - - |
| Stage 1 | - | - | - - - - |
| Stage 2 | - | - | - - - - |

| Approach | WB | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 11.7 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT |
|-----------------------|-----|----------|-----|
| Capacity (veh/h) | - | - 639 | - |
| HCM Lane V/C Ratio | - | - 0.16 | - |
| HCM Control Delay (s) | - | - 11.7 | - |
| HCM Lane LOS | - | - B | - |
| HCM 95th %tile Q(veh) | - | - 0.6 | - |

Intersection

Int Delay, s/veh 0.6

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | | | ↑↑ | | ↑ |
| Traffic Vol, veh/h | 933 | 98 | 0 | 927 | 0 | 89 |
| Future Vol, veh/h | 933 | 98 | 0 | 927 | 0 | 89 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1014 | 107 | 0 | 1008 | 0 | 97 |

| Major/Minor | Major1 | Major2 | Minor1 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 560 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | - | - | 6.94 |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | - | - | 3.32 |
| Pot Cap-1 Maneuver | - | 0 | 472 |
| Stage 1 | - | 0 | - |
| Stage 2 | - | 0 | - |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | - | - | 472 |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

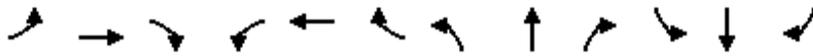
| Approach | EB | WB | NB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 14.6 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|-----------------------|-------|-----|-----|-----|
| Capacity (veh/h) | 472 | - | - | - |
| HCM Lane V/C Ratio | 0.205 | - | - | - |
| HCM Control Delay (s) | 14.6 | - | - | - |
| HCM Lane LOS | B | - | - | - |
| HCM 95th %tile Q(veh) | 0.8 | - | - | - |

SEC CCP/Mission TIA
1: Rock Springs Rd & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project PM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  |  |
| Traffic Volume (veh/h) | 240 | 873 | 110 | 69 | 499 | 203 | 55 | 528 | 59 | 115 | 252 | 62 |
| Future Volume (veh/h) | 240 | 873 | 110 | 69 | 499 | 203 | 55 | 528 | 59 | 115 | 252 | 62 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 247 | 900 | 113 | 71 | 514 | 209 | 57 | 544 | 61 | 119 | 260 | 64 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 275 | 1513 | 190 | 91 | 920 | 372 | 332 | 1164 | 130 | 248 | 675 | 574 |
| Arrive On Green | 0.16 | 0.48 | 0.48 | 0.05 | 0.37 | 0.37 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 |
| Sat Flow, veh/h | 1774 | 3165 | 397 | 1774 | 2461 | 996 | 1052 | 3210 | 359 | 812 | 1863 | 1583 |
| Grp Volume(v), veh/h | 247 | 503 | 510 | 71 | 369 | 354 | 57 | 299 | 306 | 119 | 260 | 64 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1793 | 1774 | 1770 | 1687 | 1052 | 1770 | 1799 | 812 | 1863 | 1583 |
| Q Serve(g_s), s | 16.4 | 24.9 | 24.9 | 4.7 | 19.8 | 20.0 | 5.1 | 15.6 | 15.7 | 15.8 | 12.4 | 3.2 |
| Cycle Q Clear(g_c), s | 16.4 | 24.9 | 24.9 | 4.7 | 19.8 | 20.0 | 17.5 | 15.6 | 15.7 | 31.5 | 12.4 | 3.2 |
| Prop In Lane | 1.00 | | 0.22 | 1.00 | | 0.59 | 1.00 | | 0.20 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 275 | 846 | 857 | 91 | 662 | 631 | 332 | 641 | 652 | 248 | 675 | 574 |
| V/C Ratio(X) | 0.90 | 0.59 | 0.59 | 0.78 | 0.56 | 0.56 | 0.17 | 0.47 | 0.47 | 0.48 | 0.39 | 0.11 |
| Avail Cap(c_a), veh/h | 399 | 846 | 857 | 148 | 662 | 631 | 332 | 641 | 652 | 248 | 675 | 574 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.83 | 0.83 | 0.83 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 49.7 | 22.8 | 22.8 | 56.3 | 29.7 | 29.8 | 34.8 | 29.3 | 29.4 | 41.5 | 28.3 | 25.4 |
| Incr Delay (d2), s/veh | 13.2 | 3.1 | 3.0 | 4.6 | 1.0 | 1.1 | 1.1 | 2.4 | 2.4 | 1.1 | 0.3 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 9.0 | 12.9 | 13.0 | 2.4 | 9.8 | 9.4 | 1.6 | 8.0 | 8.2 | 3.6 | 6.4 | 1.4 |
| LnGrp Delay(d),s/veh | 63.0 | 25.9 | 25.9 | 60.8 | 30.7 | 30.8 | 35.9 | 31.8 | 31.8 | 42.5 | 28.6 | 25.5 |
| LnGrp LOS | E | C | C | E | C | C | D | C | C | D | C | C |
| Approach Vol, veh/h | | 1260 | | | 794 | | | 662 | | | 443 | |
| Approach Delay, s/veh | | 33.2 | | | 33.4 | | | 32.1 | | | 31.9 | |
| Approach LOS | | C | | | C | | | 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 | 10.1 | 61.9 | | 48.0 | 22.6 | 49.4 | | 48.0 | | | | |
| Change Period (Y+Rc), s | 4.0 | 4.5 | | 4.5 | 4.0 | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | 10.0 | 53.5 | | 43.5 | 27.0 | 36.5 | | 43.5 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.7 | 26.9 | | 33.5 | 18.4 | 22.0 | | 19.5 | | | | |
| Green Ext Time (p_c), s | 0.0 | 15.4 | | 3.8 | 0.2 | 10.2 | | 5.5 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 32.8 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|-------|------|-------|------|------|------|------|------|------|
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↑ | ↗ | ↖ | ↗ | |
| Traffic Volume (veh/h) | 35 | 984 | 90 | 114 | 707 | 105 | 102 | 45 | 217 | 167 | 51 | 23 |
| Future Volume (veh/h) | 35 | 984 | 90 | 114 | 707 | 105 | 102 | 45 | 217 | 167 | 51 | 23 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 36 | 1014 | 93 | 118 | 729 | 108 | 105 | 46 | 224 | 172 | 53 | 24 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 159 | 1234 | 113 | 267 | 1352 | 200 | 131 | 407 | 346 | 199 | 303 | 137 |
| Arrive On Green | 0.09 | 0.38 | 0.38 | 0.15 | 0.44 | 0.44 | 0.02 | 0.07 | 0.07 | 0.11 | 0.25 | 0.25 |
| Sat Flow, veh/h | 1774 | 3279 | 301 | 1774 | 3093 | 458 | 1774 | 1863 | 1583 | 1774 | 1215 | 550 |
| Grp Volume(v), veh/h | 36 | 547 | 560 | 118 | 417 | 420 | 105 | 46 | 224 | 172 | 0 | 77 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1810 | 1774 | 1770 | 1782 | 1774 | 1863 | 1583 | 1774 | 0 | 1766 |
| Q Serve(g_s), s | 2.5 | 37.7 | 37.7 | 8.2 | 23.4 | 23.4 | 8.0 | 3.1 | 13.3 | 12.9 | 0.0 | 4.6 |
| Cycle Q Clear(g_c), s | 2.5 | 37.7 | 37.7 | 8.2 | 23.4 | 23.4 | 8.0 | 3.1 | 13.3 | 12.9 | 0.0 | 4.6 |
| Prop In Lane | 1.00 | | 0.17 | 1.00 | | 0.26 | 1.00 | | 1.00 | 1.00 | | 0.31 |
| Lane Grp Cap(c), veh/h | 159 | 666 | 681 | 267 | 773 | 779 | 131 | 407 | 346 | 199 | 0 | 441 |
| V/C Ratio(X) | 0.23 | 0.82 | 0.82 | 0.44 | 0.54 | 0.54 | 0.80 | 0.11 | 0.65 | 0.86 | 0.00 | 0.17 |
| Avail Cap(c_a), veh/h | 159 | 666 | 681 | 267 | 773 | 779 | 204 | 407 | 346 | 288 | 0 | 441 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.76 | 0.76 | 0.76 | 0.80 | 0.80 | 0.80 | 0.78 | 0.78 | 0.78 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 57.1 | 38.0 | 38.0 | 52.2 | 28.0 | 28.0 | 64.9 | 50.4 | 29.4 | 58.9 | 0.0 | 39.7 |
| Incr Delay (d2), s/veh | 0.7 | 8.6 | 8.4 | 1.1 | 2.2 | 2.1 | 11.0 | 0.4 | 7.2 | 18.0 | 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(50%),veh/ln | 1.3 | 20.0 | 20.4 | 4.1 | 11.9 | 12.0 | 4.3 | 1.7 | 6.5 | 7.3 | 0.0 | 2.4 |
| LnGrp Delay(d),s/veh | 57.7 | 46.6 | 46.4 | 53.3 | 30.1 | 30.1 | 75.9 | 50.8 | 36.6 | 76.9 | 0.0 | 40.6 |
| LnGrp LOS | E | D | D | D | C | C | E | D | D | E | | D |
| Approach Vol, veh/h | | 1143 | | | 955 | | | 375 | | | 249 | |
| Approach Delay, s/veh | | 46.9 | | | 33.0 | | | 49.3 | | | 65.7 | |
| Approach LOS | | D | | | 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 | 34.9 | 56.2 | 15.1 | 38.8 | 16.7 | 64.4 | 19.3 | 34.6 | | | | |
| Change Period (Y+Rc), s | 4.6 | 5.4 | 5.1 | * 5.1 | 4.6 | * 5.4 | 4.1 | 5.1 | | | | |
| Max Green Setting (Gmax), s | 15.8 | 50.8 | 15.5 | * 34 | 8.1 | * 59 | 21.9 | 27.3 | | | | |
| Max Q Clear Time (g_c+10), s | 11.0 | 39.7 | 10.0 | 6.6 | 4.5 | 25.4 | 14.9 | 15.3 | | | | |
| Green Ext Time (p_c), s | 0.2 | 7.8 | 0.2 | 0.4 | 0.1 | 11.8 | 0.3 | 1.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 44.1 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
3: Quince St & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project PM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|-------|------|-------|------|-------|------|-------|------|------|------|------|
| Lane Configurations | ↔ | ↕ | | ↔ | ↕ | | ↔ | ↕ | | ↔ | ↕ | |
| Traffic Volume (veh/h) | 68 | 885 | 185 | 80 | 508 | 97 | 124 | 208 | 176 | 66 | 194 | 23 |
| Future Volume (veh/h) | 68 | 885 | 185 | 80 | 508 | 97 | 124 | 208 | 176 | 66 | 194 | 23 |
| 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 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 86 | 1120 | 234 | 101 | 643 | 123 | 157 | 263 | 223 | 84 | 246 | 29 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 429 | 1976 | 411 | 243 | 2008 | 384 | 263 | 469 | 384 | 166 | 809 | 94 |
| Arrive On Green | 0.68 | 0.68 | 0.68 | 0.45 | 0.45 | 0.45 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Sat Flow, veh/h | 699 | 2919 | 607 | 401 | 2966 | 567 | 1100 | 1850 | 1515 | 906 | 3194 | 373 |
| Grp Volume(v), veh/h | 86 | 677 | 677 | 101 | 383 | 383 | 157 | 251 | 235 | 84 | 135 | 140 |
| Grp Sat Flow(s),veh/h/ln | 699 | 1770 | 1756 | 401 | 1770 | 1763 | 1100 | 1770 | 1595 | 906 | 1770 | 1797 |
| Q Serve(g_s), s | 8.7 | 27.0 | 27.4 | 27.9 | 18.7 | 18.7 | 18.2 | 16.7 | 17.4 | 12.1 | 8.3 | 8.5 |
| Cycle Q Clear(g_c), s | 27.5 | 27.0 | 27.4 | 55.3 | 18.7 | 18.7 | 26.7 | 16.7 | 17.4 | 29.5 | 8.3 | 8.5 |
| Prop In Lane | 1.00 | | 0.35 | 1.00 | | 0.32 | 1.00 | | 0.95 | 1.00 | | 0.21 |
| Lane Grp Cap(c), veh/h | 429 | 1198 | 1189 | 243 | 1198 | 1194 | 263 | 448 | 404 | 166 | 448 | 455 |
| V/C Ratio(X) | 0.20 | 0.56 | 0.57 | 0.41 | 0.32 | 0.32 | 0.60 | 0.56 | 0.58 | 0.51 | 0.30 | 0.31 |
| Avail Cap(c_a), veh/h | 429 | 1198 | 1189 | 243 | 1198 | 1194 | 296 | 502 | 453 | 194 | 502 | 510 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 0.67 | 0.67 | 0.67 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.80 | 0.80 | 0.80 | 1.00 | 1.00 | 1.00 | 0.90 | 0.90 | 0.90 |
| Uniform Delay (d), s/veh | 16.4 | 11.4 | 11.5 | 38.2 | 17.0 | 17.0 | 51.6 | 43.9 | 44.1 | 57.0 | 40.8 | 40.8 |
| Incr Delay (d2), s/veh | 1.0 | 1.9 | 2.0 | 4.1 | 0.6 | 0.6 | 2.1 | 0.8 | 1.2 | 1.6 | 0.2 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8 | 13.6 | 13.8 | 3.4 | 9.4 | 9.3 | 5.7 | 8.3 | 7.8 | 3.1 | 4.1 | 4.3 |
| LnGrp Delay(d),s/veh | 17.5 | 13.3 | 13.4 | 42.4 | 17.6 | 17.6 | 53.8 | 44.7 | 45.3 | 58.6 | 41.0 | 41.1 |
| LnGrp LOS | B | B | B | D | B | B | D | D | D | E | D | D |
| Approach Vol, veh/h | | 1440 | | | 867 | | | 643 | | | 359 | |
| Approach Delay, s/veh | | 13.6 | | | 20.5 | | | 47.1 | | | 45.2 | |
| Approach LOS | | B | | | C | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 96.1 | | 38.9 | | 96.1 | | 38.9 | | | | |
| Change Period (Y+Rc), s | | * 4.7 | | * 4.7 | | * 4.7 | | * 4.7 | | | | |
| Max Green Setting (Gmax), s | | * 87 | | * 38 | | * 87 | | * 38 | | | | |
| Max Q Clear Time (g_c+I1), s | | 29.5 | | 28.7 | | 57.3 | | 31.5 | | | | |
| Green Ext Time (p_c), s | | 24.9 | | 3.4 | | 18.1 | | 2.7 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 25.3 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
 4: Centre City Pkwy & El Norte Pkwy

HCM 2010 Signalized Intersection Summary
 Existing Plus Cumulative Plus Project PM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Lane Configurations | ↖↗ | ↕ | ↗ | ↖↗ | ↕ | | ↖↗ | ↕ | ↗ | ↖↗ | ↕ | ↗ |
| Traffic Volume (veh/h) | 40 | 937 | 203 | 158 | 658 | 172 | 362 | 639 | 301 | 202 | 245 | 30 |
| Future Volume (veh/h) | 40 | 937 | 203 | 158 | 658 | 172 | 362 | 639 | 301 | 202 | 245 | 30 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 41 | 966 | 209 | 163 | 678 | 177 | 373 | 659 | 310 | 208 | 253 | 31 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 177 | 1223 | 547 | 208 | 986 | 257 | 363 | 1300 | 582 | 271 | 1201 | 537 |
| Arrive On Green | 0.05 | 0.35 | 0.35 | 0.06 | 0.35 | 0.35 | 0.11 | 0.37 | 0.37 | 0.08 | 0.34 | 0.34 |
| Sat Flow, veh/h | 3442 | 3539 | 1583 | 3442 | 2779 | 725 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 41 | 966 | 209 | 163 | 432 | 423 | 373 | 659 | 310 | 208 | 253 | 31 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1583 | 1721 | 1770 | 1735 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 1.9 | 40.5 | 16.4 | 7.7 | 34.3 | 34.4 | 17.4 | 23.9 | 25.4 | 9.8 | 8.4 | 2.2 |
| Cycle Q Clear(g_c), s | 1.9 | 40.5 | 16.4 | 7.7 | 34.3 | 34.4 | 17.4 | 23.9 | 25.4 | 9.8 | 8.4 | 2.2 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.42 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 177 | 1223 | 547 | 208 | 628 | 615 | 363 | 1300 | 582 | 271 | 1201 | 537 |
| V/C Ratio(X) | 0.23 | 0.79 | 0.38 | 0.78 | 0.69 | 0.69 | 1.03 | 0.51 | 0.53 | 0.77 | 0.21 | 0.06 |
| Avail Cap(c_a), veh/h | 209 | 1223 | 547 | 213 | 628 | 615 | 363 | 1300 | 582 | 313 | 1201 | 537 |
| 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 | 0.88 | 0.88 | 0.88 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 75.1 | 48.6 | 40.7 | 76.4 | 45.4 | 45.4 | 73.8 | 40.6 | 41.1 | 74.5 | 38.8 | 36.7 |
| Incr Delay (d2), s/veh | 0.5 | 5.2 | 2.0 | 15.3 | 6.0 | 6.2 | 51.6 | 1.2 | 3.1 | 7.8 | 0.4 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.9 | 20.7 | 7.5 | 4.1 | 17.8 | 17.5 | 10.9 | 11.9 | 11.6 | 4.9 | 4.2 | 1.0 |
| LnGrp Delay(d),s/veh | 75.6 | 53.9 | 42.7 | 91.7 | 51.5 | 51.6 | 125.4 | 41.8 | 44.1 | 82.3 | 39.2 | 36.9 |
| LnGrp LOS | E | D | D | F | D | D | F | D | D | F | D | D |
| Approach Vol, veh/h | | 1216 | | | 1018 | | | 1342 | | | 492 | |
| Approach Delay, s/veh | | 52.7 | | | 58.0 | | | 65.6 | | | 57.3 | |
| Approach LOS | | D | | | E | | | E | | | E | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 19.1 | 67.5 | 15.1 | 63.3 | 23.7 | 62.9 | 13.6 | 64.8 | | | | |
| Change Period (Y+Rc), s | 6.1 | 6.9 | 5.1 | 6.3 | 6.3 | 6.9 | 5.1 | 6.3 | | | | |
| Max Green Setting (Gmax), s | 15.0 | 58.6 | 10.2 | 56.8 | 17.4 | 56.0 | 10.0 | 57.0 | | | | |
| Max Q Clear Time (g_c+I), s | 11.8 | 27.4 | 9.7 | 42.5 | 19.4 | 10.4 | 3.9 | 36.4 | | | | |
| Green Ext Time (p_c), s | 0.1 | 10.4 | 0.0 | 12.3 | 0.0 | 11.4 | 0.0 | 17.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | | 58.8 | | | | | | | |
| HCM 2010 LOS | | | | | E | | | | | | | |

SEC CCP/Mission TIA
5: Centre City Pkwy & Decatur Way

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project PM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|-------|-------|------|------|-------|-------|------|------|------|------|
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↑↑ | ↗ | ↖ | ↑↑ | ↗ |
| Traffic Volume (veh/h) | 16 | 1 | 14 | 109 | 1 | 208 | 14 | 1064 | 128 | 41 | 660 | 3 |
| Future Volume (veh/h) | 16 | 1 | 14 | 109 | 1 | 208 | 14 | 1064 | 128 | 41 | 660 | 3 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 17 | 1 | 15 | 115 | 1 | 219 | 15 | 1120 | 135 | 43 | 695 | 3 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 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 | 68 | 11 | 167 | 143 | 1 | 242 | 264 | 1733 | 775 | 290 | 1785 | 799 |
| Arrive On Green | 0.04 | 0.11 | 0.11 | 0.08 | 0.15 | 0.15 | 0.15 | 0.49 | 0.49 | 0.16 | 0.50 | 0.50 |
| Sat Flow, veh/h | 1774 | 100 | 1498 | 1774 | 7 | 1577 | 1774 | 3539 | 1583 | 1774 | 3539 | 1583 |
| Grp Volume(v), veh/h | 17 | 0 | 16 | 115 | 0 | 220 | 15 | 1120 | 135 | 43 | 695 | 3 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 0 | 1598 | 1774 | 0 | 1584 | 1774 | 1770 | 1583 | 1774 | 1770 | 1583 |
| Q Serve(g_s), s | 1.3 | 0.0 | 1.2 | 8.6 | 0.0 | 18.4 | 1.0 | 31.9 | 4.3 | 2.8 | 16.3 | 0.1 |
| Cycle Q Clear(g_c), s | 1.3 | 0.0 | 1.2 | 8.6 | 0.0 | 18.4 | 1.0 | 31.9 | 4.3 | 2.8 | 16.3 | 0.1 |
| Prop In Lane | 1.00 | | 0.94 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 68 | 0 | 178 | 143 | 0 | 243 | 264 | 1733 | 775 | 290 | 1785 | 799 |
| V/C Ratio(X) | 0.25 | 0.00 | 0.09 | 0.81 | 0.00 | 0.90 | 0.06 | 0.65 | 0.17 | 0.15 | 0.39 | 0.00 |
| Avail Cap(c_a), veh/h | 162 | 0 | 193 | 254 | 0 | 273 | 264 | 1733 | 775 | 290 | 1785 | 799 |
| 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 | 0.92 | 0.92 | 0.92 |
| Uniform Delay (d), s/veh | 63.0 | 0.0 | 53.8 | 61.0 | 0.0 | 56.2 | 49.3 | 25.7 | 8.7 | 48.4 | 20.6 | 9.3 |
| Incr Delay (d2), s/veh | 0.7 | 0.0 | 0.2 | 4.0 | 0.0 | 28.3 | 0.0 | 1.9 | 0.5 | 0.1 | 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(50%),veh/ln | 0.6 | 0.0 | 0.5 | 4.4 | 0.0 | 10.0 | 0.5 | 16.0 | 2.0 | 1.4 | 8.2 | 0.0 |
| LnGrp Delay(d),s/veh | 63.7 | 0.0 | 54.0 | 65.1 | 0.0 | 84.4 | 49.4 | 27.6 | 9.2 | 48.5 | 21.2 | 9.3 |
| LnGrp LOS | E | | D | E | | F | D | C | A | D | C | A |
| Approach Vol, veh/h | | 33 | | | 335 | | | 1270 | | | 741 | |
| Approach Delay, s/veh | | 59.0 | | | 77.8 | | | 25.9 | | | 22.8 | |
| Approach LOS | | E | | | E | | | C | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 36.7 | 73.0 | 15.6 | 19.8 | 24.7 | 75.0 | 9.9 | 25.4 | | | | |
| Change Period (Y+Rc), s | 4.6 | 6.9 | * 4.7 | * 4.7 | 4.6 | 6.9 | * 4.7 | * 4.7 | | | | |
| Max Green Setting (Gmax), s | 12.4 | 66.1 | * 19 | * 16 | 10.4 | 68.1 | * 12 | * 23 | | | | |
| Max Q Clear Time (g_c+1), s | 11.8 | 33.9 | 10.6 | 3.2 | 3.0 | 18.3 | 3.3 | 20.4 | | | | |
| Green Ext Time (p_c), s | 0.0 | 12.4 | 0.1 | 1.0 | 0.0 | 6.7 | 0.0 | 0.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 32.7 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
6: Centre City Pkwy & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project PM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 281 | 931 | 150 | 113 | 438 | 327 | 182 | 949 | 96 | 237 | 585 | 254 |
| Future Volume (veh/h) | 281 | 931 | 150 | 113 | 438 | 327 | 182 | 949 | 96 | 237 | 585 | 254 |
| 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 | | 0.96 | 1.00 | | 0.95 | 1.00 | | 0.98 | 1.00 | | 0.98 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 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 | 1667 | 1863 | 1863 | 1667 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 287 | 950 | 153 | 115 | 447 | 334 | 186 | 968 | 98 | 242 | 597 | 259 |
| Adj No. of Lanes | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 2 | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 314 | 1109 | 479 | 183 | 892 | 381 | 251 | 1559 | 478 | 275 | 1080 | 474 |
| Arrive On Green | 0.06 | 0.10 | 0.10 | 0.04 | 0.08 | 0.08 | 0.16 | 0.61 | 0.61 | 0.03 | 0.10 | 0.10 |
| Sat Flow, veh/h | 1774 | 3539 | 1527 | 1587 | 3539 | 1511 | 3079 | 5085 | 1559 | 3442 | 3539 | 1554 |
| Grp Volume(v), veh/h | 287 | 950 | 153 | 115 | 447 | 334 | 186 | 968 | 98 | 242 | 597 | 259 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1527 | 1587 | 1770 | 1511 | 1540 | 1695 | 1559 | 1721 | 1770 | 1554 |
| Q Serve(g_s), s | 21.7 | 35.6 | 12.5 | 9.6 | 16.3 | 29.5 | 7.8 | 16.0 | 3.8 | 9.5 | 21.7 | 21.4 |
| Cycle Q Clear(g_c), s | 21.7 | 35.6 | 12.5 | 9.6 | 16.3 | 29.5 | 7.8 | 16.0 | 3.8 | 9.5 | 21.7 | 21.4 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 314 | 1109 | 479 | 183 | 892 | 381 | 251 | 1559 | 478 | 275 | 1080 | 474 |
| V/C Ratio(X) | 0.91 | 0.86 | 0.32 | 0.63 | 0.50 | 0.88 | 0.74 | 0.62 | 0.21 | 0.88 | 0.55 | 0.55 |
| Avail Cap(c_a), veh/h | 361 | 1298 | 560 | 183 | 918 | 392 | 251 | 1559 | 478 | 275 | 1080 | 474 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 |
| Upstream Filter(I) | 0.56 | 0.56 | 0.56 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 62.5 | 57.5 | 47.2 | 62.1 | 53.8 | 59.8 | 55.1 | 21.2 | 18.8 | 65.1 | 51.9 | 51.8 |
| Incr Delay (d2), s/veh | 15.2 | 2.9 | 0.2 | 5.0 | 0.3 | 19.0 | 9.9 | 1.9 | 1.0 | 25.2 | 2.0 | 4.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 12.0 | 17.9 | 5.3 | 4.5 | 8.1 | 14.4 | 3.6 | 7.7 | 1.7 | 5.5 | 11.0 | 9.8 |
| LnGrp Delay(d),s/veh | 77.7 | 60.4 | 47.3 | 67.1 | 54.1 | 78.8 | 65.1 | 23.1 | 19.8 | 90.3 | 54.0 | 56.3 |
| LnGrp LOS | E | E | D | E | D | E | E | C | B | F | D | E |
| Approach Vol, veh/h | | 1390 | | | 896 | | | 1252 | | | 1098 | |
| Approach Delay, s/veh | | 62.5 | | | 65.0 | | | 29.1 | | | 62.5 | |
| Approach LOS | | E | | | E | | | C | | | 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 | 15.3 | 47.8 | 20.1 | 47.2 | 15.5 | 47.6 | 28.4 | 38.9 | | | | |
| Change Period (Y+Rc), s | 4.5 | 6.4 | 4.5 | 4.9 | 4.5 | 6.4 | 4.5 | 4.9 | | | | |
| Max Green Setting (Gmax), s | 10.8 | 41.4 | 13.0 | 49.5 | 11.0 | 41.2 | 27.5 | 35.0 | | | | |
| Max Q Clear Time (g_c+III), s | 15.5 | 18.0 | 11.6 | 37.6 | 9.8 | 23.7 | 23.7 | 31.5 | | | | |
| Green Ext Time (p_c), s | 0.0 | 6.1 | 0.1 | 4.7 | 0.1 | 3.7 | 0.2 | 1.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 54.0 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |

SEC CCP/Mission TIA
7: Centre City Pkwy & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project PM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|-------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↗ | ↖ | ↗ | ↗ | ↖ |
| Traffic Volume (veh/h) | 197 | 790 | 98 | 83 | 379 | 163 | 191 | 902 | 188 | 165 | 592 | 102 |
| Future Volume (veh/h) | 197 | 790 | 98 | 83 | 379 | 163 | 191 | 902 | 188 | 165 | 592 | 102 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 210 | 840 | 104 | 88 | 403 | 173 | 203 | 960 | 200 | 176 | 630 | 109 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 236 | 949 | 117 | 127 | 576 | 244 | 306 | 1088 | 487 | 547 | 1389 | 621 |
| Arrive On Green | 0.04 | 0.10 | 0.10 | 0.14 | 0.48 | 0.48 | 0.09 | 0.31 | 0.31 | 0.32 | 0.78 | 0.78 |
| Sat Flow, veh/h | 1774 | 3171 | 393 | 1774 | 2423 | 1028 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 210 | 469 | 475 | 88 | 293 | 283 | 203 | 960 | 200 | 176 | 630 | 109 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1793 | 1774 | 1770 | 1681 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 15.9 | 35.3 | 35.3 | 6.4 | 17.5 | 18.0 | 7.7 | 34.8 | 13.5 | 5.2 | 8.0 | 2.3 |
| Cycle Q Clear(g_c), s | 15.9 | 35.3 | 35.3 | 6.4 | 17.5 | 18.0 | 7.7 | 34.8 | 13.5 | 5.2 | 8.0 | 2.3 |
| Prop In Lane | 1.00 | | 0.22 | 1.00 | | 0.61 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 236 | 530 | 537 | 127 | 421 | 400 | 306 | 1088 | 487 | 547 | 1389 | 621 |
| V/C Ratio(X) | 0.89 | 0.89 | 0.89 | 0.70 | 0.70 | 0.71 | 0.66 | 0.88 | 0.41 | 0.32 | 0.45 | 0.18 |
| Avail Cap(c_a), veh/h | 256 | 634 | 643 | 172 | 551 | 523 | 337 | 1088 | 487 | 547 | 1389 | 621 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 0.81 | 0.81 | 0.81 | 0.87 | 0.87 | 0.87 | 0.86 | 0.86 | 0.86 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 63.6 | 58.5 | 58.5 | 56.5 | 31.6 | 31.7 | 59.6 | 44.4 | 37.1 | 40.5 | 9.7 | 9.1 |
| Incr Delay (d2), s/veh | 22.9 | 9.3 | 9.2 | 2.8 | 1.2 | 1.5 | 2.7 | 9.1 | 2.2 | 0.1 | 1.1 | 0.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 9.3 | 18.7 | 18.9 | 3.2 | 8.7 | 8.4 | 3.8 | 18.3 | 6.2 | 2.5 | 4.0 | 1.1 |
| LnGrp Delay(d),s/veh | 86.5 | 67.9 | 67.8 | 59.3 | 32.8 | 33.2 | 62.2 | 53.5 | 39.3 | 40.6 | 10.8 | 9.7 |
| LnGrp LOS | F | E | E | E | C | C | E | D | D | D | B | A |
| Approach Vol, veh/h | | 1154 | | | 664 | | | 1363 | | | 915 | |
| Approach Delay, s/veh | | 71.2 | | | 36.5 | | | 52.7 | | | 16.4 | |
| Approach LOS | | E | | | D | | | D | | | B | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 38.0 | 48.0 | 14.1 | 44.9 | 16.5 | 59.5 | 22.4 | 36.6 | | | | |
| Change Period (Y+Rc), s | 6.5 | * 6.5 | 4.5 | 4.5 | 4.5 | 6.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 12.0 | * 42 | 13.1 | 48.4 | 13.2 | 40.3 | 19.5 | 42.0 | | | | |
| Max Q Clear Time (g_c+1), s | 17.5 | 36.8 | 8.4 | 37.3 | 9.7 | 10.0 | 17.9 | 20.0 | | | | |
| Green Ext Time (p_c), s | 0.3 | 2.2 | 1.1 | 3.1 | 0.1 | 3.4 | 0.1 | 2.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 47.2 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
8: Centre City Pkwy & Valley Pkwy

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project PM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|-----|------|-----|---------|---------|---------|---------|---------|------|------|---------|---------|
| Lane Configurations | | | | ↖ ↗ ↘ ↙ | ↖ ↗ ↘ ↙ | ↖ ↗ ↘ ↙ | ↖ ↗ ↘ ↙ | ↖ ↗ ↘ ↙ | | | ↖ ↗ ↘ ↙ | ↖ ↗ ↘ ↙ |
| Traffic Volume (veh/h) | 0 | 0 | 0 | 209 | 968 | 255 | 174 | 1051 | 0 | 0 | 645 | 128 |
| Future Volume (veh/h) | 0 | 0 | 0 | 209 | 968 | 255 | 174 | 1051 | 0 | 0 | 645 | 128 |
| Number | | | | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | | | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | | | | 1863 | 1863 | 1863 | 1863 | 1863 | 0 | 0 | 1863 | 1863 |
| Adj Flow Rate, veh/h | | | | 213 | 988 | 260 | 178 | 1072 | 0 | 0 | 658 | 131 |
| Adj No. of Lanes | | | | 1 | 3 | 1 | 2 | 2 | 0 | 0 | 2 | 1 |
| Peak Hour Factor | | | | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Percent Heavy Veh, % | | | | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 2 | 2 |
| Cap, veh/h | | | | 426 | 1343 | 381 | 910 | 2352 | 0 | 0 | 1220 | 546 |
| Arrive On Green | | | | 0.24 | 0.24 | 0.24 | 0.26 | 0.66 | 0.00 | 0.00 | 0.34 | 0.34 |
| Sat Flow, veh/h | | | | 1774 | 5588 | 1583 | 3442 | 3632 | 0 | 0 | 3632 | 1583 |
| Grp Volume(v), veh/h | | | | 213 | 988 | 260 | 178 | 1072 | 0 | 0 | 658 | 131 |
| Grp Sat Flow(s),veh/h/ln | | | | 1774 | 1863 | 1583 | 1721 | 1770 | 0 | 0 | 1770 | 1583 |
| Q Serve(g_s), s | | | | 13.0 | 20.4 | 18.7 | 5.0 | 18.2 | 0.0 | 0.0 | 18.7 | 7.4 |
| Cycle Q Clear(g_c), s | | | | 13.0 | 20.4 | 18.7 | 5.0 | 18.2 | 0.0 | 0.0 | 18.7 | 7.4 |
| Prop In Lane | | | | 1.00 | | 1.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | | | | 426 | 1343 | 381 | 910 | 2352 | 0 | 0 | 1220 | 546 |
| V/C Ratio(X) | | | | 0.50 | 0.74 | 0.68 | 0.20 | 0.46 | 0.00 | 0.00 | 0.54 | 0.24 |
| Avail Cap(c_a), veh/h | | | | 695 | 2191 | 621 | 910 | 2352 | 0 | 0 | 1220 | 546 |
| HCM Platoon Ratio | | | | 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 | 0.00 | 0.86 | 0.86 |
| Uniform Delay (d), s/veh | | | | 41.0 | 43.8 | 43.2 | 35.7 | 10.1 | 0.0 | 0.0 | 33.0 | 29.3 |
| Incr Delay (d2), s/veh | | | | 0.7 | 0.6 | 1.6 | 0.1 | 0.6 | 0.0 | 0.0 | 1.5 | 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 |
| %ile BackOfQ(50%),veh/ln | | | | 6.4 | 10.6 | 16.0 | 2.4 | 9.0 | 0.0 | 0.0 | 9.4 | 3.4 |
| LnGrp Delay(d),s/veh | | | | 41.7 | 44.4 | 44.8 | 35.7 | 10.7 | 0.0 | 0.0 | 34.4 | 30.1 |
| LnGrp LOS | | | | D | D | D | D | B | | | C | C |
| Approach Vol, veh/h | | | | | 1461 | | | 1250 | | | 789 | |
| Approach Delay, s/veh | | | | | 44.1 | | | 14.3 | | | 33.7 | |
| Approach LOS | | | | | D | | | B | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | 5 | 6 | | | | | | |
| Phs Duration (G+Y+Rc), s | | 90.0 | | 35.0 | 40.0 | 50.0 | | | | | | |
| Change Period (Y+Rc), s | | 6.9 | | 5.0 | 6.9 | * 6.9 | | | | | | |
| Max Green Setting (Gmax), s | | 64.1 | | 49.0 | 15.9 | * 43 | | | | | | |
| Max Q Clear Time (g_c+I1), s | | 20.2 | | 22.4 | 7.0 | 20.7 | | | | | | |
| Green Ext Time (p_c), s | | 8.3 | | 7.6 | 4.4 | 4.0 | | | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 31.1 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
9: Escondido Blvd & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project PM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|-------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 162 | 811 | 187 | 124 | 484 | 67 | 223 | 403 | 188 | 98 | 241 | 155 |
| Future Volume (veh/h) | 162 | 811 | 187 | 124 | 484 | 67 | 223 | 403 | 188 | 98 | 241 | 155 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 167 | 836 | 193 | 128 | 499 | 69 | 230 | 415 | 194 | 101 | 248 | 160 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 191 | 1199 | 277 | 152 | 1242 | 171 | 255 | 681 | 315 | 125 | 461 | 287 |
| Arrive On Green | 0.11 | 0.42 | 0.42 | 0.09 | 0.40 | 0.40 | 0.14 | 0.29 | 0.29 | 0.07 | 0.22 | 0.22 |
| Sat Flow, veh/h | 1774 | 2857 | 659 | 1774 | 3126 | 431 | 1774 | 2353 | 1088 | 1774 | 2097 | 1305 |
| Grp Volume(v), veh/h | 167 | 518 | 511 | 128 | 282 | 286 | 230 | 311 | 298 | 101 | 208 | 200 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1746 | 1774 | 1770 | 1787 | 1774 | 1770 | 1671 | 1774 | 1770 | 1632 |
| Q Serve(g_s), s | 12.5 | 32.4 | 32.4 | 9.6 | 15.4 | 15.5 | 17.2 | 20.5 | 20.8 | 7.6 | 14.0 | 14.7 |
| Cycle Q Clear(g_c), s | 12.5 | 32.4 | 32.4 | 9.6 | 15.4 | 15.5 | 17.2 | 20.5 | 20.8 | 7.6 | 14.0 | 14.7 |
| Prop In Lane | 1.00 | | 0.38 | 1.00 | | 0.24 | 1.00 | | 0.65 | 1.00 | | 0.80 |
| Lane Grp Cap(c), veh/h | 191 | 742 | 733 | 152 | 703 | 710 | 255 | 513 | 484 | 125 | 389 | 359 |
| V/C Ratio(X) | 0.87 | 0.70 | 0.70 | 0.84 | 0.40 | 0.40 | 0.90 | 0.61 | 0.62 | 0.81 | 0.53 | 0.56 |
| Avail Cap(c_a), veh/h | 235 | 742 | 733 | 222 | 703 | 710 | 353 | 513 | 484 | 183 | 389 | 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 | 1.00 | 0.47 | 0.47 | 0.47 | 0.73 | 0.73 | 0.73 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 59.3 | 32.1 | 32.2 | 60.8 | 29.1 | 29.2 | 56.9 | 41.3 | 41.5 | 61.9 | 46.6 | 46.8 |
| Incr Delay (d2), s/veh | 21.8 | 5.4 | 5.4 | 6.1 | 0.8 | 0.8 | 13.0 | 3.8 | 4.2 | 9.8 | 5.2 | 6.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 7.3 | 16.9 | 16.7 | 5.0 | 7.7 | 7.8 | 9.4 | 10.6 | 10.2 | 4.1 | 7.4 | 7.2 |
| LnGrp Delay(d),s/veh | 81.1 | 37.5 | 37.6 | 66.9 | 30.0 | 30.0 | 69.8 | 45.2 | 45.7 | 71.7 | 51.7 | 53.0 |
| LnGrp LOS | F | D | D | E | C | C | E | D | D | E | D | D |
| Approach Vol, veh/h | | 1196 | | | 696 | | | 839 | | | 509 | |
| Approach Delay, s/veh | | 43.6 | | | 36.8 | | | 52.1 | | | 56.2 | |
| Approach LOS | | D | | | D | | | D | | | E | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 15.7 | 61.5 | 23.5 | 34.3 | 18.7 | 58.6 | 14.1 | 43.7 | | | | |
| Change Period (Y+Rc), s | 4.1 | 4.9 | 4.1 | 4.6 | 4.1 | 4.9 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 10.9 | 47.4 | 26.9 | 26.1 | 17.9 | 46.4 | 13.9 | * 39 | | | | |
| Max Q Clear Time (g_c+M), s | 10.6 | 34.4 | 19.2 | 16.7 | 14.5 | 17.5 | 9.6 | 22.8 | | | | |
| Green Ext Time (p_c), s | 0.1 | 5.7 | 0.2 | 1.2 | 0.1 | 7.6 | 0.1 | 2.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 46.3 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
10: Escondido Blvd & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project PM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|-------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 128 | 804 | 144 | 134 | 428 | 116 | 134 | 437 | 152 | 130 | 298 | 45 |
| Future Volume (veh/h) | 128 | 804 | 144 | 134 | 428 | 116 | 134 | 437 | 152 | 130 | 298 | 45 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 133 | 838 | 150 | 140 | 446 | 121 | 140 | 455 | 158 | 135 | 310 | 47 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 269 | 1098 | 197 | 272 | 1014 | 273 | 166 | 644 | 222 | 159 | 704 | 106 |
| Arrive On Green | 0.30 | 0.73 | 0.73 | 0.15 | 0.37 | 0.37 | 0.09 | 0.25 | 0.25 | 0.09 | 0.23 | 0.23 |
| Sat Flow, veh/h | 1774 | 3000 | 537 | 1774 | 2759 | 743 | 1774 | 2585 | 890 | 1774 | 3087 | 463 |
| Grp Volume(v), veh/h | 133 | 494 | 494 | 140 | 285 | 282 | 140 | 310 | 303 | 135 | 176 | 181 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1768 | 1774 | 1770 | 1732 | 1774 | 1770 | 1706 | 1774 | 1770 | 1781 |
| Q Serve(g_s), s | 8.3 | 22.9 | 22.9 | 9.8 | 16.4 | 16.6 | 10.5 | 21.6 | 21.9 | 10.1 | 11.5 | 11.8 |
| Cycle Q Clear(g_c), s | 8.3 | 22.9 | 22.9 | 9.8 | 16.4 | 16.6 | 10.5 | 21.6 | 21.9 | 10.1 | 11.5 | 11.8 |
| Prop In Lane | 1.00 | | 0.30 | 1.00 | | 0.43 | 1.00 | | 0.52 | 1.00 | | 0.26 |
| Lane Grp Cap(c), veh/h | 269 | 648 | 647 | 272 | 650 | 636 | 166 | 441 | 425 | 159 | 404 | 406 |
| V/C Ratio(X) | 0.49 | 0.76 | 0.76 | 0.52 | 0.44 | 0.44 | 0.84 | 0.70 | 0.71 | 0.85 | 0.44 | 0.44 |
| Avail Cap(c_a), veh/h | 269 | 648 | 647 | 272 | 650 | 636 | 222 | 441 | 425 | 217 | 404 | 406 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.59 | 0.59 | 0.59 | 0.51 | 0.51 | 0.51 | 0.95 | 0.95 | 0.95 | 0.83 | 0.83 | 0.83 |
| Uniform Delay (d), s/veh | 42.8 | 14.5 | 14.5 | 52.6 | 32.2 | 32.3 | 60.2 | 46.2 | 46.3 | 60.5 | 44.7 | 44.8 |
| Incr Delay (d2), s/veh | 0.3 | 5.1 | 5.1 | 0.4 | 1.1 | 1.1 | 14.7 | 8.7 | 9.3 | 13.4 | 2.8 | 2.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.0 | 11.8 | 11.7 | 4.9 | 8.2 | 8.1 | 5.8 | 11.6 | 11.4 | 5.5 | 6.0 | 6.1 |
| LnGrp Delay(d),s/veh | 43.1 | 19.6 | 19.6 | 53.0 | 33.3 | 33.4 | 75.0 | 54.9 | 55.6 | 74.0 | 47.5 | 47.7 |
| LnGrp LOS | D | B | B | D | C | C | E | D | E | E | D | D |
| Approach Vol, veh/h | | 1121 | | | 707 | | | 753 | | | 492 | |
| Approach Delay, s/veh | | 22.4 | | | 37.2 | | | 58.9 | | | 54.8 | |
| Approach LOS | | C | | | D | | | E | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 36.2 | 40.0 | 24.8 | 54.0 | 19.0 | 37.2 | 24.6 | 54.2 | | | | |
| Change Period (Y+Rc), s | 4.1 | 6.4 | 4.1 | 4.6 | 6.4 | * 6.4 | 4.1 | 4.6 | | | | |
| Max Green Setting (Gmax), s | 10.5 | 31.2 | 18.7 | 49.4 | 16.9 | * 31 | 18.5 | 49.6 | | | | |
| Max Q Clear Time (g_c+M2), s | 11.2 | 23.9 | 11.8 | 24.9 | 12.5 | 13.8 | 10.3 | 18.6 | | | | |
| Green Ext Time (p_c), s | 0.1 | 1.7 | 0.2 | 4.2 | 0.2 | 1.2 | 0.3 | 2.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 39.9 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
11: Escondido Blvd & Woodward

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project PM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | ↕ | | ↕↔ | | ↕ | ↕↔ | |
| Traffic Volume (veh/h) | 8 | 1 | 11 | 71 | 0 | 97 | 1 | 637 | 87 | 78 | 497 | 15 |
| Future Volume (veh/h) | 8 | 1 | 11 | 71 | 0 | 97 | 1 | 637 | 87 | 78 | 497 | 15 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1900 | 1863 | 1900 | 1900 | 1863 | 1863 | 1900 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 8 | 1 | 11 | 73 | 0 | 100 | 1 | 657 | 90 | 80 | 512 | 15 |
| Adj No. of Lanes | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 69 | 22 | 53 | 189 | 0 | 134 | 35 | 2220 | 303 | 103 | 2880 | 84 |
| Arrive On Green | 0.08 | 0.08 | 0.08 | 0.08 | 0.00 | 0.08 | 0.72 | 0.72 | 0.72 | 0.06 | 0.82 | 0.82 |
| Sat Flow, veh/h | 250 | 263 | 626 | 1426 | 0 | 1583 | 0 | 3064 | 419 | 1774 | 3511 | 103 |
| Grp Volume(v), veh/h | 20 | 0 | 0 | 73 | 0 | 100 | 399 | 0 | 349 | 80 | 258 | 269 |
| Grp Sat Flow(s),veh/h/ln | 139 | 0 | 0 | 1426 | 0 | 1583 | 1862 | 0 | 1621 | 1774 | 1770 | 1845 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.5 | 0.0 | 0.0 | 7.9 | 4.7 | 3.2 | 3.2 |
| Cycle Q Clear(g_c), s | 5.1 | 0.0 | 0.0 | 5.1 | 0.0 | 6.5 | 7.9 | 0.0 | 7.9 | 4.7 | 3.2 | 3.2 |
| Prop In Lane | 0.40 | | 0.55 | 1.00 | | 1.00 | 0.00 | | 0.26 | 1.00 | | 0.06 |
| Lane Grp Cap(c), veh/h | 144 | 0 | 0 | 189 | 0 | 134 | 1383 | 0 | 1174 | 103 | 1452 | 1513 |
| V/C Ratio(X) | 0.14 | 0.00 | 0.00 | 0.39 | 0.00 | 0.75 | 0.29 | 0.00 | 0.30 | 0.78 | 0.18 | 0.18 |
| Avail Cap(c_a), veh/h | 390 | 0 | 0 | 417 | 0 | 392 | 1383 | 0 | 1174 | 287 | 1452 | 1513 |
| 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 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.87 | 0.87 | 0.87 |
| Uniform Delay (d), s/veh | 44.6 | 0.0 | 0.0 | 46.3 | 0.0 | 47.0 | 5.1 | 0.0 | 5.1 | 48.8 | 2.0 | 2.0 |
| Incr Delay (d2), s/veh | 0.2 | 0.0 | 0.0 | 0.5 | 0.0 | 3.1 | 0.5 | 0.0 | 0.6 | 4.1 | 0.2 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.5 | 0.0 | 0.0 | 2.1 | 0.0 | 3.0 | 4.2 | 0.0 | 3.7 | 2.4 | 1.6 | 1.7 |
| LnGrp Delay(d),s/veh | 44.7 | 0.0 | 0.0 | 46.8 | 0.0 | 50.1 | 5.6 | 0.0 | 5.7 | 52.9 | 2.2 | 2.2 |
| LnGrp LOS | D | | | D | | D | A | | A | D | A | A |
| Approach Vol, veh/h | | 20 | | | 173 | | | 748 | | | 607 | |
| Approach Delay, s/veh | | 44.7 | | | 48.7 | | | 5.7 | | | 8.9 | |
| Approach LOS | | D | | | D | | | A | | | A | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 10.1 | 81.1 | | 13.9 | | 91.1 | | 13.9 | | | | |
| Change Period (Y+Rc), s | 4.0 | 5.0 | | * 5 | | 5.0 | | 5.0 | | | | |
| Max Green Setting (Gmax), s | 48.0 | | | * 27 | | 69.0 | | 26.0 | | | | |
| Max Q Clear Time (g_c+I), s | 9.9 | | | 7.1 | | 5.2 | | 8.5 | | | | |
| Green Ext Time (p_c), s | 0.1 | 9.6 | | 0.4 | | 10.2 | | 0.4 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 12.2 | | | | | | | | |
| HCM 2010 LOS | | | | B | | | | | | | | |
| Notes | | | | | | | | | | | | |

SEC CCP/Mission TIA
12: Broadway & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project PM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 213 | 695 | 185 | 102 | 422 | 199 | 149 | 728 | 124 | 241 | 694 | 98 |
| Future Volume (veh/h) | 213 | 695 | 185 | 102 | 422 | 199 | 149 | 728 | 124 | 241 | 694 | 98 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 224 | 732 | 195 | 107 | 444 | 209 | 157 | 766 | 131 | 254 | 731 | 103 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 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 | 256 | 784 | 209 | 132 | 501 | 234 | 228 | 849 | 145 | 286 | 976 | 138 |
| Arrive On Green | 0.14 | 0.28 | 0.28 | 0.07 | 0.21 | 0.21 | 0.04 | 0.09 | 0.09 | 0.16 | 0.31 | 0.31 |
| Sat Flow, veh/h | 1774 | 2766 | 737 | 1774 | 2345 | 1094 | 1774 | 3024 | 517 | 1774 | 3116 | 439 |
| Grp Volume(v), veh/h | 224 | 468 | 459 | 107 | 334 | 319 | 157 | 448 | 449 | 254 | 415 | 419 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1733 | 1774 | 1770 | 1670 | 1774 | 1770 | 1771 | 1774 | 1770 | 1785 |
| Q Serve(g_s), s | 11.1 | 23.2 | 23.2 | 5.3 | 16.5 | 16.7 | 7.9 | 22.6 | 22.6 | 12.6 | 18.9 | 19.0 |
| Cycle Q Clear(g_c), s | 11.1 | 23.2 | 23.2 | 5.3 | 16.5 | 16.7 | 7.9 | 22.6 | 22.6 | 12.6 | 18.9 | 19.0 |
| Prop In Lane | 1.00 | | 0.43 | 1.00 | | 0.66 | 1.00 | | 0.29 | 1.00 | | 0.25 |
| Lane Grp Cap(c), veh/h | 256 | 502 | 491 | 132 | 378 | 357 | 228 | 497 | 497 | 286 | 554 | 559 |
| V/C Ratio(X) | 0.88 | 0.93 | 0.93 | 0.81 | 0.88 | 0.89 | 0.69 | 0.90 | 0.90 | 0.89 | 0.75 | 0.75 |
| Avail Cap(c_a), veh/h | 256 | 507 | 497 | 132 | 393 | 371 | 228 | 497 | 497 | 286 | 554 | 559 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.55 | 0.55 | 0.55 | 1.00 | 1.00 | 1.00 | 0.67 | 0.67 | 0.67 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 37.7 | 31.4 | 31.4 | 41.0 | 34.3 | 34.4 | 41.3 | 39.6 | 39.6 | 37.0 | 27.7 | 27.7 |
| Incr Delay (d2), s/veh | 16.9 | 15.9 | 16.2 | 30.2 | 19.9 | 22.4 | 5.8 | 16.4 | 16.4 | 27.0 | 8.9 | 8.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.7 | 13.5 | 13.3 | 3.7 | 10.2 | 9.9 | 4.2 | 13.3 | 13.4 | 8.3 | 10.6 | 10.7 |
| LnGrp Delay(d),s/veh | 54.6 | 47.4 | 47.6 | 71.2 | 54.2 | 56.8 | 47.1 | 56.0 | 56.0 | 63.9 | 36.7 | 36.6 |
| LnGrp LOS | D | D | D | E | D | E | D | E | E | E | D | D |
| Approach Vol, veh/h | | 1151 | | | 760 | | | 1054 | | | 1088 | |
| Approach Delay, s/veh | | 48.9 | | | 57.7 | | | 54.7 | | | 43.0 | |
| Approach LOS | | D | | | E | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 19.0 | 29.8 | 11.2 | 30.0 | 16.1 | 32.7 | 17.5 | 23.7 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 14.5 | 25.0 | 6.7 | 25.8 | 11.3 | 28.2 | 12.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+M), s | 14.6 | 24.6 | 7.3 | 25.2 | 9.9 | 21.0 | 13.1 | 18.7 | | | | |
| Green Ext Time (p_c), s | 0.0 | 0.3 | 0.0 | 0.3 | 0.9 | 2.9 | 0.0 | 0.5 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 50.5 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |

SEC CCP/Mission TIA
13: Broadway & Washington Ave

HCM 2010 Signalized Intersection Summary
Existing Plus Cumulative Plus Project PM Peak Hour

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 211 | 732 | 76 | 65 | 391 | 216 | 151 | 503 | 49 | 256 | 462 | 116 |
| Future Volume (veh/h) | 211 | 732 | 76 | 65 | 391 | 216 | 151 | 503 | 49 | 256 | 462 | 116 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 220 | 762 | 79 | 68 | 407 | 225 | 157 | 524 | 51 | 267 | 481 | 121 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 270 | 1015 | 105 | 87 | 465 | 254 | 191 | 761 | 74 | 362 | 926 | 231 |
| Arrive On Green | 0.15 | 0.31 | 0.31 | 0.05 | 0.21 | 0.21 | 0.11 | 0.23 | 0.23 | 0.41 | 0.66 | 0.66 |
| Sat Flow, veh/h | 1774 | 3238 | 336 | 1774 | 2211 | 1208 | 1774 | 3260 | 316 | 1774 | 2807 | 702 |
| Grp Volume(v), veh/h | 220 | 416 | 425 | 68 | 325 | 307 | 157 | 284 | 291 | 267 | 302 | 300 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1804 | 1774 | 1770 | 1649 | 1774 | 1770 | 1807 | 1774 | 1770 | 1739 |
| Q Serve(g_s), s | 10.8 | 19.0 | 19.0 | 3.4 | 16.0 | 16.3 | 7.8 | 13.2 | 13.3 | 11.5 | 7.9 | 8.1 |
| Cycle Q Clear(g_c), s | 10.8 | 19.0 | 19.0 | 3.4 | 16.0 | 16.3 | 7.8 | 13.2 | 13.3 | 11.5 | 7.9 | 8.1 |
| Prop In Lane | 1.00 | | 0.19 | 1.00 | | 0.73 | 1.00 | | 0.18 | 1.00 | | 0.40 |
| Lane Grp Cap(c), veh/h | 270 | 555 | 565 | 87 | 373 | 347 | 191 | 413 | 422 | 362 | 584 | 574 |
| V/C Ratio(X) | 0.82 | 0.75 | 0.75 | 0.78 | 0.87 | 0.88 | 0.82 | 0.69 | 0.69 | 0.74 | 0.52 | 0.52 |
| Avail Cap(c_a), veh/h | 286 | 555 | 565 | 124 | 393 | 367 | 231 | 413 | 422 | 362 | 584 | 574 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 0.55 | 0.55 | 0.55 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.57 | 0.57 | 0.57 |
| Uniform Delay (d), s/veh | 36.9 | 27.7 | 27.7 | 42.3 | 34.4 | 34.5 | 39.3 | 31.5 | 31.5 | 24.6 | 11.6 | 11.6 |
| Incr Delay (d2), s/veh | 9.2 | 3.2 | 3.1 | 17.9 | 18.2 | 21.1 | 17.9 | 9.0 | 9.0 | 4.5 | 1.9 | 1.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.0 | 9.7 | 9.9 | 2.1 | 9.6 | 9.5 | 4.8 | 7.4 | 7.7 | 5.9 | 4.0 | 4.0 |
| LnGrp Delay(d),s/veh | 46.2 | 30.9 | 30.9 | 60.2 | 52.6 | 55.5 | 57.2 | 40.5 | 40.5 | 29.1 | 13.5 | 13.6 |
| LnGrp LOS | D | C | C | E | D | E | E | D | D | C | B | B |
| Approach Vol, veh/h | | 1061 | | | 700 | | | 732 | | | 869 | |
| Approach Delay, s/veh | | 34.0 | | | 54.6 | | | 44.1 | | | 18.3 | |
| Approach LOS | | C | | | D | | | D | | | B | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 22.9 | 25.5 | 8.9 | 32.7 | 14.2 | 34.2 | 18.2 | 23.4 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 16.5 | 21.0 | 6.3 | 28.2 | 11.7 | 25.8 | 14.5 | 20.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 13.5 | 15.3 | 5.4 | 21.0 | 9.8 | 10.1 | 12.8 | 18.3 | | | | |
| Green Ext Time (p_c), s | 1.1 | 1.7 | 0.0 | 3.3 | 0.1 | 4.0 | 0.9 | 0.7 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 36.4 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |

Intersection

Int Delay, s/veh 0.9

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | | ↗ | ↕↕ | ↗ | | ↕↕ |
| Traffic Vol, veh/h | 0 | 120 | 1110 | 103 | 0 | 853 |
| Future Vol, veh/h | 0 | 120 | 1110 | 103 | 0 | 853 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | 75 | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 130 | 1207 | 112 | 0 | 927 |

| Major/Minor | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|---------|
| Conflicting Flow All | - | 603 | 0 0 |
| Stage 1 | - | - | - - |
| Stage 2 | - | - | - - |
| Critical Hdwy | - | 6.94 | - - |
| Critical Hdwy Stg 1 | - | - | - - |
| Critical Hdwy Stg 2 | - | - | - - |
| Follow-up Hdwy | - | 3.32 | - - |
| Pot Cap-1 Maneuver | 0 | 442 | - - 0 - |
| Stage 1 | 0 | - | - - 0 - |
| Stage 2 | 0 | - | - - 0 - |
| Platoon blocked, % | | | - - - |
| Mov Cap-1 Maneuver | - | 442 | - - - - |
| Mov Cap-2 Maneuver | - | - | - - - - |
| Stage 1 | - | - | - - - - |
| Stage 2 | - | - | - - - - |

| Approach | WB | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 16.5 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBT |
|-----------------------|-----|----------|-----|
| Capacity (veh/h) | - | - 442 | - |
| HCM Lane V/C Ratio | - | - 0.295 | - |
| HCM Control Delay (s) | - | - 16.5 | - |
| HCM Lane LOS | - | - C | - |
| HCM 95th %tile Q(veh) | - | - 1.2 | - |

Intersection

Int Delay, s/veh 0.9

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑↑ | | | ↑↑ | | ↑ |
| Traffic Vol, veh/h | 1170 | 116 | 0 | 879 | 0 | 114 |
| Future Vol, veh/h | 1170 | 116 | 0 | 879 | 0 | 114 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | - | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1272 | 126 | 0 | 955 | 0 | 124 |

| Major/Minor | Major1 | Major2 | Minor1 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 699 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | - | - | 6.94 |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | - | - | 3.32 |
| Pot Cap-1 Maneuver | - | 0 | 382 |
| Stage 1 | - | 0 | - |
| Stage 2 | - | 0 | - |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | - | - | 382 |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

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

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBT |
|-----------------------|-------|-----|-----|-----|
| Capacity (veh/h) | 382 | - | - | - |
| HCM Lane V/C Ratio | 0.324 | - | - | - |
| HCM Control Delay (s) | 18.9 | - | - | - |
| HCM Lane LOS | C | - | - | - |
| HCM 95th %tile Q(veh) | 1.4 | - | - | - |

APPENDIX J

Existing Plus Cumulative Plus Project Plus Improvements HCM Analysis Sheets

HCM 2010 Signalized Intersection Summary
 2: Quince St & Mission Ave

04/29/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 23 | 440 | 77 | 212 | 1193 | 71 | 143 | 23 | 116 | 55 | 27 | 30 |
| Future Volume (veh/h) | 23 | 440 | 77 | 212 | 1193 | 71 | 143 | 23 | 116 | 55 | 27 | 30 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 23 | 449 | 79 | 216 | 1217 | 72 | 146 | 23 | 118 | 56 | 28 | 31 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 450 | 839 | 147 | 690 | 1404 | 83 | 174 | 217 | 185 | 100 | 54 | 60 |
| Arrive On Green | 0.25 | 0.28 | 0.28 | 0.78 | 0.83 | 0.83 | 0.10 | 0.12 | 0.12 | 0.06 | 0.07 | 0.07 |
| Sat Flow, veh/h | 1774 | 3013 | 527 | 1774 | 3396 | 201 | 1774 | 1863 | 1583 | 1774 | 809 | 896 |
| Grp Volume(v), veh/h | 23 | 263 | 265 | 216 | 634 | 655 | 146 | 23 | 118 | 56 | 0 | 59 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1770 | 1774 | 1770 | 1827 | 1774 | 1863 | 1583 | 1774 | 0 | 1705 |
| Q Serve(g_s), s | 1.2 | 15.1 | 15.3 | 4.3 | 26.2 | 26.4 | 9.7 | 1.3 | 4.0 | 3.7 | 0.0 | 4.0 |
| Cycle Q Clear(g_c), s | 1.2 | 15.1 | 15.3 | 4.3 | 26.2 | 26.4 | 9.7 | 1.3 | 4.0 | 3.7 | 0.0 | 4.0 |
| Prop In Lane | 1.00 | | 0.30 | 1.00 | | 0.11 | 1.00 | | 1.00 | 1.00 | | 0.53 |
| Lane Grp Cap(c), veh/h | 450 | 493 | 493 | 690 | 731 | 755 | 174 | 217 | 185 | 100 | 0 | 114 |
| V/C Ratio(X) | 0.05 | 0.53 | 0.54 | 0.31 | 0.87 | 0.87 | 0.84 | 0.11 | 0.64 | 0.56 | 0.00 | 0.52 |
| Avail Cap(c_a), veh/h | 450 | 493 | 493 | 690 | 731 | 755 | 191 | 526 | 447 | 137 | 0 | 430 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.95 | 0.95 | 0.95 | 0.55 | 0.55 | 0.55 | 0.93 | 0.93 | 0.93 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.9 | 36.7 | 36.8 | 8.6 | 8.4 | 8.4 | 53.2 | 47.4 | 11.1 | 55.2 | 0.0 | 54.1 |
| Incr Delay (d2), s/veh | 0.1 | 3.9 | 4.0 | 0.2 | 7.7 | 7.6 | 24.7 | 0.2 | 4.1 | 5.8 | 0.0 | 4.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.6 | 7.9 | 8.0 | 2.1 | 13.5 | 14.0 | 5.9 | 0.7 | 1.9 | 2.0 | 0.0 | 2.0 |
| LnGrp Delay(d),s/veh | 33.9 | 40.6 | 40.7 | 8.8 | 16.1 | 16.0 | 77.9 | 47.6 | 15.2 | 61.0 | 0.0 | 58.5 |
| LnGrp LOS | C | D | D | A | B | B | E | D | B | E | | E |
| Approach Vol, veh/h | | 551 | | | 1505 | | | 287 | | | | 115 |
| Approach Delay, s/veh | | 40.4 | | | 15.0 | | | 49.7 | | | | 59.7 |
| Approach LOS | | D | | | B | | | D | | | | E |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 51.2 | 38.8 | 16.9 | 13.1 | 35.0 | 55.0 | 10.9 | 19.1 | | | | |
| Change Period (Y+Rc), s | 4.6 | 5.4 | 5.1 | * 5.1 | 4.6 | * 5.4 | 4.1 | 5.1 | | | | |
| Max Green Setting (Gmax), s | 24.2 | 33.4 | 12.9 | * 30 | 8.5 | * 50 | 9.3 | 33.9 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.3 | 17.3 | 11.7 | 6.0 | 3.2 | 28.4 | 5.7 | 6.0 | | | | |
| Green Ext Time (p_c), s | 0.8 | 4.9 | 0.1 | 0.3 | 0.4 | 14.7 | 0.0 | 1.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 26.8 | | | | | | | | |
| HCM 2010 LOS | | | | C | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary

6: Centre City Pkwy & Mission Ave

04/29/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 125 | 398 | 87 | 104 | 701 | 241 | 226 | 593 | 74 | 211 | 872 | 543 |
| Future Volume (veh/h) | 125 | 398 | 87 | 104 | 701 | 241 | 226 | 593 | 74 | 211 | 872 | 543 |
| 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 | | 0.97 | 1.00 | | 0.98 | 1.00 | | 0.99 | 1.00 | | 0.99 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 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 | 1667 | 1863 | 1863 | 1667 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 130 | 415 | 91 | 108 | 730 | 251 | 235 | 618 | 77 | 220 | 908 | 566 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 3 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 255 | 599 | 261 | 437 | 851 | 372 | 286 | 1721 | 528 | 558 | 1499 | 661 |
| Arrive On Green | 0.10 | 0.23 | 0.23 | 0.28 | 0.48 | 0.48 | 0.03 | 0.11 | 0.11 | 0.16 | 0.42 | 0.42 |
| Sat Flow, veh/h | 3442 | 3539 | 1542 | 3079 | 3539 | 1546 | 3079 | 5085 | 1561 | 3442 | 3539 | 1560 |
| Grp Volume(v), veh/h | 130 | 415 | 91 | 108 | 730 | 251 | 235 | 618 | 77 | 220 | 908 | 566 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1542 | 1540 | 1770 | 1546 | 1540 | 1695 | 1561 | 1721 | 1770 | 1560 |
| Q Serve(g_s), s | 4.3 | 12.9 | 4.7 | 3.2 | 21.9 | 9.9 | 9.1 | 13.5 | 5.3 | 6.9 | 23.9 | 39.4 |
| Cycle Q Clear(g_c), s | 4.3 | 12.9 | 4.7 | 3.2 | 21.9 | 9.9 | 9.1 | 13.5 | 5.3 | 6.9 | 23.9 | 39.4 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 255 | 599 | 261 | 437 | 851 | 372 | 286 | 1721 | 528 | 558 | 1499 | 661 |
| V/C Ratio(X) | 0.51 | 0.69 | 0.35 | 0.25 | 0.86 | 0.68 | 0.82 | 0.36 | 0.15 | 0.39 | 0.61 | 0.86 |
| Avail Cap(c_a), veh/h | 258 | 1091 | 475 | 437 | 1091 | 477 | 316 | 1721 | 528 | 558 | 1499 | 661 |
| HCM Platoon Ratio | 1.33 | 1.33 | 1.33 | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 52.0 | 43.6 | 25.8 | 38.0 | 29.3 | 12.1 | 57.2 | 41.3 | 37.6 | 45.0 | 26.8 | 31.3 |
| Incr Delay (d2), s/veh | 0.6 | 1.0 | 0.6 | 0.1 | 5.2 | 2.0 | 13.1 | 0.6 | 0.6 | 0.2 | 1.8 | 13.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.1 | 6.4 | 2.0 | 1.4 | 11.2 | 4.3 | 4.4 | 6.4 | 2.4 | 3.3 | 12.0 | 19.3 |
| LnGrp Delay(d),s/veh | 52.6 | 44.7 | 26.4 | 38.2 | 34.6 | 14.1 | 70.3 | 41.8 | 38.2 | 45.2 | 28.7 | 44.8 |
| LnGrp LOS | D | D | C | D | C | B | E | D | D | D | C | D |
| Approach Vol, veh/h | | 636 | | | 1089 | | | 930 | | | 1694 | |
| Approach Delay, s/veh | | 43.7 | | | 30.2 | | | 48.7 | | | 36.2 | |
| Approach LOS | | D | | | 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 | 25.9 | 47.0 | 21.9 | 25.2 | 15.7 | 57.2 | 13.4 | 33.7 | | | | |
| Change Period (Y+Rc), s | 6.4 | * 6.4 | 4.9 | * 4.9 | 4.5 | 6.4 | 4.5 | 4.9 | | | | |
| Max Green Setting (Gmax), s | 13.1 | * 41 | 9.0 | * 37 | 12.3 | 41.4 | 9.0 | 37.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 8.9 | 15.5 | 5.2 | 14.9 | 11.1 | 41.4 | 6.3 | 23.9 | | | | |
| Green Ext Time (p_c), s | 1.4 | 3.7 | 1.8 | 2.4 | 0.1 | 0.0 | 0.0 | 3.8 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 38.5 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary
 9: Escondido Blvd & Mission Ave

04/29/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  |  |
| Traffic Volume (veh/h) | 100 | 323 | 164 | 92 | 625 | 39 | 157 | 175 | 79 | 102 | 360 | 211 |
| Future Volume (veh/h) | 100 | 323 | 164 | 92 | 625 | 39 | 157 | 175 | 79 | 102 | 360 | 211 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 112 | 363 | 184 | 103 | 702 | 44 | 176 | 197 | 89 | 115 | 404 | 237 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 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 | 301 | 931 | 464 | 127 | 1023 | 64 | 223 | 705 | 307 | 143 | 536 | 311 |
| Arrive On Green | 0.34 | 0.81 | 0.81 | 0.07 | 0.30 | 0.30 | 0.13 | 0.29 | 0.29 | 0.08 | 0.25 | 0.25 |
| Sat Flow, veh/h | 1774 | 2289 | 1142 | 1774 | 3383 | 212 | 1774 | 2402 | 1046 | 1774 | 2159 | 1252 |
| Grp Volume(v), veh/h | 112 | 279 | 268 | 103 | 367 | 379 | 176 | 143 | 143 | 115 | 330 | 311 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1661 | 1774 | 1770 | 1825 | 1774 | 1770 | 1678 | 1774 | 1770 | 1642 |
| Q Serve(g_s), s | 5.7 | 5.2 | 5.3 | 6.9 | 21.9 | 21.9 | 11.6 | 7.5 | 7.9 | 7.6 | 20.7 | 21.1 |
| Cycle Q Clear(g_c), s | 5.7 | 5.2 | 5.3 | 6.9 | 21.9 | 21.9 | 11.6 | 7.5 | 7.9 | 7.6 | 20.7 | 21.1 |
| Prop In Lane | 1.00 | | 0.69 | 1.00 | | 0.12 | 1.00 | | 0.62 | 1.00 | | 0.76 |
| Lane Grp Cap(c), veh/h | 301 | 720 | 676 | 127 | 535 | 552 | 223 | 519 | 492 | 143 | 439 | 408 |
| V/C Ratio(X) | 0.37 | 0.39 | 0.40 | 0.81 | 0.69 | 0.69 | 0.79 | 0.28 | 0.29 | 0.81 | 0.75 | 0.76 |
| Avail Cap(c_a), veh/h | 301 | 720 | 676 | 203 | 535 | 552 | 309 | 519 | 492 | 229 | 439 | 408 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.48 | 0.48 | 0.48 | 0.94 | 0.94 | 0.94 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 34.8 | 7.1 | 7.1 | 54.9 | 36.8 | 36.8 | 50.9 | 32.6 | 32.8 | 54.2 | 41.7 | 41.8 |
| Incr Delay (d2), s/veh | 0.3 | 1.6 | 1.7 | 2.7 | 3.4 | 3.3 | 5.6 | 1.2 | 1.4 | 4.2 | 11.3 | 12.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.8 | 2.6 | 2.7 | 3.5 | 11.2 | 11.6 | 6.0 | 3.8 | 3.8 | 3.9 | 11.5 | 11.0 |
| LnGrp Delay(d),s/veh | 35.1 | 8.7 | 8.9 | 57.5 | 40.3 | 40.2 | 56.5 | 33.8 | 34.1 | 58.4 | 52.9 | 54.5 |
| LnGrp LOS | D | A | A | E | D | D | E | C | C | E | D | D |
| Approach Vol, veh/h | | 659 | | | 849 | | | 462 | | | 756 | |
| Approach Delay, s/veh | | 13.3 | | | 42.3 | | | 42.6 | | | 54.4 | |
| Approach LOS | | B | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 12.7 | 53.7 | 19.2 | 34.4 | 25.2 | 41.2 | 13.8 | 39.8 | | | | |
| Change Period (Y+Rc), s | 4.1 | 4.9 | 4.1 | 4.6 | 4.9 | * 4.9 | 4.1 | 4.6 | | | | |
| Max Green Setting (Gmax), s | 13.7 | 37.9 | 20.9 | 29.8 | 15.3 | * 36 | 15.5 | 35.2 | | | | |
| Max Q Clear Time (g_c+I1), s | 8.9 | 7.3 | 13.6 | 23.1 | 7.7 | 23.9 | 9.6 | 9.9 | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.3 | 0.3 | 1.5 | 1.5 | 2.4 | 0.2 | 1.0 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 38.7 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary
 7: Centre City Pkwy & Washington Ave

05/03/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|--|---|---|--|---|---|--|---|--|--|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |   | |  |   | |   |   |  |   |   |  |
| Traffic Volume (veh/h) | 89 | 296 | 79 | 70 | 600 | 111 | 170 | 673 | 56 | 124 | 891 | 167 |
| Future Volume (veh/h) | 89 | 296 | 79 | 70 | 600 | 111 | 170 | 673 | 56 | 124 | 891 | 167 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 96 | 318 | 85 | 75 | 645 | 119 | 183 | 724 | 60 | 133 | 958 | 180 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 128 | 400 | 105 | 318 | 751 | 138 | 343 | 1047 | 468 | 679 | 1451 | 649 |
| Arrive On Green | 0.02 | 0.05 | 0.05 | 0.06 | 0.08 | 0.08 | 0.03 | 0.10 | 0.10 | 0.07 | 0.14 | 0.14 |
| Sat Flow, veh/h | 1774 | 2773 | 730 | 1774 | 2985 | 550 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 96 | 201 | 202 | 75 | 382 | 382 | 183 | 724 | 60 | 133 | 958 | 180 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1734 | 1774 | 1770 | 1766 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 6.5 | 13.5 | 13.8 | 4.8 | 25.6 | 25.6 | 6.3 | 23.8 | 4.2 | 4.4 | 30.8 | 12.3 |
| Cycle Q Clear(g_c), s | 6.5 | 13.5 | 13.8 | 4.8 | 25.6 | 25.6 | 6.3 | 23.8 | 4.2 | 4.4 | 30.8 | 12.3 |
| Prop In Lane | 1.00 | | 0.42 | 1.00 | | 0.31 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 128 | 255 | 250 | 318 | 445 | 444 | 343 | 1047 | 468 | 679 | 1451 | 649 |
| V/C Ratio(X) | 0.75 | 0.79 | 0.81 | 0.24 | 0.86 | 0.86 | 0.53 | 0.69 | 0.13 | 0.20 | 0.66 | 0.28 |
| Avail Cap(c_a), veh/h | 140 | 612 | 600 | 318 | 627 | 625 | 359 | 1047 | 468 | 679 | 1451 | 649 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 |
| Upstream Filter(I) | 0.98 | 0.98 | 0.98 | 0.72 | 0.72 | 0.72 | 0.94 | 0.94 | 0.94 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 57.5 | 55.3 | 55.5 | 48.6 | 52.9 | 52.9 | 55.3 | 48.8 | 40.0 | 47.1 | 44.0 | 35.9 |
| Incr Delay (d2), s/veh | 15.4 | 2.0 | 2.3 | 0.1 | 4.6 | 4.7 | 0.6 | 3.5 | 0.5 | 0.1 | 2.4 | 1.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.7 | 6.8 | 6.8 | 2.4 | 13.1 | 13.1 | 3.0 | 12.2 | 1.9 | 2.1 | 15.6 | 5.6 |
| LnGrp Delay(d),s/veh | 73.0 | 57.3 | 57.8 | 48.7 | 57.5 | 57.6 | 55.8 | 52.4 | 40.5 | 47.1 | 46.3 | 37.0 |
| LnGrp LOS | E | E | E | D | E | E | E | D | D | D | D | D |
| Approach Vol, veh/h | | 499 | | | 839 | | | 967 | | | 1271 | |
| Approach Delay, s/veh | | 60.5 | | | 56.8 | | | 52.3 | | | 45.1 | |
| Approach LOS | | E | | | E | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 30.2 | 42.0 | 26.0 | 21.8 | 16.5 | 55.7 | 13.1 | 34.7 | | | | |
| Change Period (Y+Rc), s | 6.5 | * 6.5 | 4.5 | 4.5 | 4.5 | 6.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 12.5 | * 36 | 10.5 | 41.5 | 12.5 | 35.5 | 9.5 | 42.5 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.4 | 25.8 | 6.8 | 15.8 | 8.3 | 32.8 | 8.5 | 27.6 | | | | |
| Green Ext Time (p_c), s | 1.1 | 2.5 | 1.2 | 1.5 | 0.1 | 1.4 | 0.0 | 2.6 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 51.9 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary

2: Quince St & Mission Ave

04/29/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 54 | 714 | 82 | 142 | 721 | 139 | 113 | 63 | 157 | 141 | 82 | 39 |
| Future Volume (veh/h) | 54 | 714 | 82 | 142 | 721 | 139 | 113 | 63 | 157 | 141 | 82 | 39 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 56 | 744 | 85 | 148 | 751 | 145 | 118 | 66 | 164 | 147 | 85 | 41 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 396 | 1025 | 117 | 522 | 1157 | 223 | 237 | 235 | 200 | 177 | 110 | 53 |
| Arrive On Green | 0.22 | 0.32 | 0.32 | 0.59 | 0.78 | 0.78 | 0.04 | 0.04 | 0.04 | 0.10 | 0.09 | 0.09 |
| Sat Flow, veh/h | 1774 | 3202 | 366 | 1774 | 2960 | 571 | 1774 | 1863 | 1583 | 1774 | 1188 | 573 |
| Grp Volume(v), veh/h | 56 | 411 | 418 | 148 | 449 | 447 | 118 | 66 | 164 | 147 | 0 | 126 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1798 | 1774 | 1770 | 1762 | 1774 | 1863 | 1583 | 1774 | 0 | 1762 |
| Q Serve(g_s), s | 3.0 | 24.7 | 24.7 | 4.9 | 13.5 | 13.5 | 7.8 | 4.1 | 12.3 | 9.8 | 0.0 | 8.4 |
| Cycle Q Clear(g_c), s | 3.0 | 24.7 | 24.7 | 4.9 | 13.5 | 13.5 | 7.8 | 4.1 | 12.3 | 9.8 | 0.0 | 8.4 |
| Prop In Lane | 1.00 | | 0.20 | 1.00 | | 0.32 | 1.00 | | 1.00 | 1.00 | | 0.33 |
| Lane Grp Cap(c), veh/h | 396 | 566 | 575 | 522 | 692 | 689 | 237 | 235 | 200 | 177 | 0 | 163 |
| V/C Ratio(X) | 0.14 | 0.73 | 0.73 | 0.28 | 0.65 | 0.65 | 0.50 | 0.28 | 0.82 | 0.83 | 0.00 | 0.78 |
| Avail Cap(c_a), veh/h | 396 | 566 | 575 | 522 | 692 | 689 | 237 | 421 | 358 | 265 | 0 | 442 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.96 | 0.96 | 0.96 | 0.81 | 0.81 | 0.81 | 0.87 | 0.87 | 0.87 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 37.4 | 36.1 | 36.1 | 18.4 | 9.5 | 9.5 | 53.4 | 52.2 | 56.1 | 53.0 | 0.0 | 53.2 |
| Incr Delay (d2), s/veh | 0.2 | 7.6 | 7.5 | 0.3 | 3.8 | 3.8 | 1.7 | 0.7 | 8.4 | 14.6 | 0.0 | 9.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.5 | 13.2 | 13.5 | 2.4 | 7.0 | 6.9 | 3.9 | 2.2 | 5.9 | 5.5 | 0.0 | 4.5 |
| LnGrp Delay(d),s/veh | 37.6 | 43.7 | 43.6 | 18.7 | 13.3 | 13.3 | 55.1 | 52.9 | 64.6 | 67.6 | 0.0 | 62.4 |
| LnGrp LOS | D | D | D | B | B | B | E | D | E | E | | E |
| Approach Vol, veh/h | | 885 | | | 1044 | | | 348 | | | | 273 |
| Approach Delay, s/veh | | 43.3 | | | 14.1 | | | 59.1 | | | | 65.2 |
| Approach LOS | | D | | | B | | | E | | | | E |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 39.9 | 43.8 | 20.1 | 16.2 | 31.4 | 52.3 | 16.0 | 20.3 | | | | |
| Change Period (Y+Rc), s | 4.6 | 5.4 | 4.1 | 5.1 | 4.6 | * 5.4 | 4.1 | 5.1 | | | | |
| Max Green Setting (Gmax), s | 17.4 | 38.4 | 14.9 | 30.1 | 9.4 | * 47 | 17.9 | 27.1 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.9 | 26.7 | 9.8 | 10.4 | 5.0 | 15.5 | 11.8 | 14.3 | | | | |
| Green Ext Time (p_c), s | 0.5 | 6.3 | 0.4 | 0.7 | 0.3 | 12.5 | 0.3 | 0.8 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | | 35.8 | | | | | | | | |
| HCM 2010 LOS | | | | D | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary
6: Centre City Pkwy & Mission Ave

04/29/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 225 | 615 | 108 | 126 | 533 | 267 | 155 | 497 | 99 | 288 | 651 | 364 |
| Future Volume (veh/h) | 225 | 615 | 108 | 126 | 533 | 267 | 155 | 497 | 99 | 288 | 651 | 364 |
| 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 | | 0.97 | 1.00 | | 0.95 | 1.00 | | 0.98 | 1.00 | | 0.99 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 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 | 1667 | 1863 | 1863 | 1667 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 230 | 628 | 110 | 129 | 544 | 272 | 158 | 507 | 101 | 294 | 664 | 371 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 3 | 1 | 2 | 2 | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 284 | 848 | 366 | 228 | 830 | 353 | 281 | 1339 | 410 | 808 | 1496 | 660 |
| Arrive On Green | 0.17 | 0.48 | 0.48 | 0.15 | 0.47 | 0.47 | 0.03 | 0.09 | 0.09 | 0.23 | 0.42 | 0.42 |
| Sat Flow, veh/h | 3442 | 3539 | 1530 | 3079 | 3539 | 1508 | 3079 | 5085 | 1558 | 3442 | 3539 | 1561 |
| Grp Volume(v), veh/h | 230 | 628 | 110 | 129 | 544 | 272 | 158 | 507 | 101 | 294 | 664 | 371 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1530 | 1540 | 1770 | 1508 | 1540 | 1695 | 1558 | 1721 | 1770 | 1561 |
| Q Serve(g_s), s | 7.7 | 17.2 | 4.1 | 4.7 | 14.1 | 10.3 | 6.1 | 11.3 | 7.3 | 8.6 | 16.0 | 21.6 |
| Cycle Q Clear(g_c), s | 7.7 | 17.2 | 4.1 | 4.7 | 14.1 | 10.3 | 6.1 | 11.3 | 7.3 | 8.6 | 16.0 | 21.6 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 284 | 848 | 366 | 228 | 830 | 353 | 281 | 1339 | 410 | 808 | 1496 | 660 |
| V/C Ratio(X) | 0.81 | 0.74 | 0.30 | 0.57 | 0.66 | 0.77 | 0.56 | 0.38 | 0.25 | 0.36 | 0.44 | 0.56 |
| Avail Cap(c_a), veh/h | 416 | 1183 | 511 | 269 | 1065 | 454 | 295 | 1339 | 410 | 808 | 1496 | 660 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.85 | 0.85 | 0.85 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 49.2 | 28.2 | 15.2 | 49.3 | 28.2 | 9.5 | 55.8 | 45.5 | 43.7 | 38.4 | 24.6 | 26.2 |
| Incr Delay (d2), s/veh | 3.9 | 1.1 | 0.3 | 0.8 | 0.7 | 5.3 | 1.2 | 0.8 | 1.4 | 0.1 | 1.0 | 3.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.8 | 8.3 | 1.7 | 2.0 | 6.9 | 4.6 | 2.6 | 5.4 | 3.3 | 4.1 | 8.0 | 9.9 |
| LnGrp Delay(d),s/veh | 53.1 | 29.3 | 15.5 | 50.2 | 28.9 | 14.8 | 57.0 | 46.3 | 45.1 | 38.5 | 25.6 | 29.7 |
| LnGrp LOS | D | C | B | D | C | B | E | D | D | D | C | C |
| Approach Vol, veh/h | | 968 | | | 945 | | | 766 | | | 1329 | |
| Approach Delay, s/veh | | 33.4 | | | 27.7 | | | 48.4 | | | 29.6 | |
| Approach LOS | | C | | | C | | | D | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 34.6 | 38.0 | 13.8 | 33.7 | 15.4 | 57.1 | 14.4 | 33.0 | | | | |
| Change Period (Y+Rc), s | 6.4 | * 6.4 | 4.9 | * 4.9 | 4.5 | 6.4 | 4.5 | 4.9 | | | | |
| Max Green Setting (Gmax), s | 17.5 | * 32 | 10.5 | * 40 | 11.5 | 37.6 | 14.5 | 36.1 | | | | |
| Max Q Clear Time (g_c+I1), s | 10.6 | 13.3 | 6.7 | 19.2 | 8.1 | 23.6 | 9.7 | 16.1 | | | | |
| Green Ext Time (p_c), s | 3.1 | 2.9 | 1.6 | 3.7 | 0.1 | 4.6 | 0.2 | 3.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 33.7 | | | | | | | | | |
| HCM 2010 LOS | | | C | | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary
 9: Escondido Blvd & Mission Ave

04/29/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |   | |  |   | |  |   | |  |   | |
| Traffic Volume (veh/h) | 148 | 496 | 198 | 113 | 445 | 44 | 188 | 229 | 115 | 90 | 259 | 165 |
| Future Volume (veh/h) | 148 | 496 | 198 | 113 | 445 | 44 | 188 | 229 | 115 | 90 | 259 | 165 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 164 | 551 | 220 | 126 | 494 | 49 | 209 | 254 | 128 | 100 | 288 | 183 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 278 | 744 | 296 | 293 | 1006 | 99 | 237 | 719 | 351 | 125 | 532 | 328 |
| Arrive On Green | 0.21 | 0.40 | 0.40 | 0.17 | 0.31 | 0.31 | 0.13 | 0.31 | 0.31 | 0.07 | 0.25 | 0.25 |
| Sat Flow, veh/h | 1774 | 2474 | 985 | 1774 | 3254 | 322 | 1774 | 2306 | 1127 | 1774 | 2103 | 1300 |
| Grp Volume(v), veh/h | 164 | 394 | 377 | 126 | 268 | 275 | 209 | 193 | 189 | 100 | 241 | 230 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1689 | 1774 | 1770 | 1806 | 1774 | 1770 | 1664 | 1774 | 1770 | 1633 |
| Q Serve(g_s), s | 10.0 | 22.7 | 22.9 | 7.7 | 14.8 | 14.9 | 13.9 | 10.1 | 10.6 | 6.7 | 14.1 | 14.7 |
| Cycle Q Clear(g_c), s | 10.0 | 22.7 | 22.9 | 7.7 | 14.8 | 14.9 | 13.9 | 10.1 | 10.6 | 6.7 | 14.1 | 14.7 |
| Prop In Lane | 1.00 | | 0.58 | 1.00 | | 0.18 | 1.00 | | 0.68 | 1.00 | | 0.80 |
| Lane Grp Cap(c), veh/h | 278 | 532 | 508 | 293 | 547 | 558 | 237 | 552 | 519 | 125 | 447 | 413 |
| V/C Ratio(X) | 0.59 | 0.74 | 0.74 | 0.43 | 0.49 | 0.49 | 0.88 | 0.35 | 0.36 | 0.80 | 0.54 | 0.56 |
| Avail Cap(c_a), veh/h | 278 | 532 | 508 | 293 | 547 | 558 | 353 | 552 | 519 | 191 | 447 | 413 |
| HCM Platoon Ratio | 1.33 | 1.33 | 1.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 0.74 | 0.74 | 0.74 | 0.93 | 0.93 | 0.93 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 44.0 | 32.0 | 32.0 | 45.0 | 33.7 | 33.8 | 51.0 | 31.9 | 32.1 | 54.9 | 38.8 | 39.0 |
| Incr Delay (d2), s/veh | 2.2 | 8.9 | 9.4 | 0.3 | 2.3 | 2.3 | 10.8 | 1.6 | 1.8 | 6.6 | 4.6 | 5.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 5.1 | 12.4 | 12.0 | 3.8 | 7.6 | 7.8 | 7.5 | 5.2 | 5.1 | 3.5 | 7.5 | 7.3 |
| LnGrp Delay(d),s/veh | 46.2 | 40.9 | 41.5 | 45.3 | 36.0 | 36.1 | 61.8 | 33.5 | 33.9 | 61.6 | 43.4 | 44.3 |
| LnGrp LOS | D | D | D | D | D | D | E | C | C | E | D | D |
| Approach Vol, veh/h | | 935 | | | 669 | | | 591 | | | 571 | |
| Approach Delay, s/veh | | 42.1 | | | 37.8 | | | 43.7 | | | 47.0 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 23.9 | 41.0 | 20.1 | 34.9 | 22.9 | 42.0 | 13.1 | 42.0 | | | | |
| Change Period (Y+Rc), s | 4.1 | 4.9 | 4.1 | 4.6 | 4.1 | 4.9 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 15.9 | 36.1 | 23.9 | 26.4 | 14.9 | 37.1 | 12.9 | * 37 | | | | |
| Max Q Clear Time (g_c+I1), s | 9.7 | 24.9 | 15.9 | 16.7 | 12.0 | 16.9 | 8.7 | 12.6 | | | | |
| Green Ext Time (p_c), s | 0.2 | 2.5 | 0.2 | 1.5 | 0.1 | 1.9 | 0.1 | 1.4 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 42.4 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary
 7: Centre City Pkwy & Washington Ave

05/03/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 156 | 460 | 101 | 68 | 446 | 167 | 152 | 598 | 88 | 137 | 535 | 172 |
| Future Volume (veh/h) | 156 | 460 | 101 | 68 | 446 | 167 | 152 | 598 | 88 | 137 | 535 | 172 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 158 | 465 | 102 | 69 | 451 | 169 | 154 | 604 | 89 | 138 | 540 | 174 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 186 | 563 | 123 | 218 | 537 | 200 | 342 | 959 | 429 | 786 | 1474 | 660 |
| Arrive On Green | 0.03 | 0.06 | 0.06 | 0.04 | 0.07 | 0.07 | 0.10 | 0.27 | 0.27 | 0.23 | 0.42 | 0.42 |
| Sat Flow, veh/h | 1774 | 2891 | 630 | 1774 | 2527 | 939 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 158 | 283 | 284 | 69 | 315 | 305 | 154 | 604 | 89 | 138 | 540 | 174 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1752 | 1774 | 1770 | 1697 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 10.6 | 19.0 | 19.2 | 4.5 | 21.1 | 21.3 | 5.1 | 18.0 | 5.2 | 3.9 | 12.6 | 8.6 |
| Cycle Q Clear(g_c), s | 10.6 | 19.0 | 19.2 | 4.5 | 21.1 | 21.3 | 5.1 | 18.0 | 5.2 | 3.9 | 12.6 | 8.6 |
| Prop In Lane | 1.00 | | 0.36 | 1.00 | | 0.55 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 186 | 344 | 341 | 218 | 376 | 361 | 342 | 959 | 429 | 786 | 1474 | 660 |
| V/C Ratio(X) | 0.85 | 0.82 | 0.83 | 0.32 | 0.84 | 0.85 | 0.45 | 0.63 | 0.21 | 0.18 | 0.37 | 0.26 |
| Avail Cap(c_a), veh/h | 200 | 668 | 661 | 218 | 619 | 594 | 344 | 959 | 429 | 786 | 1474 | 660 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.98 | 0.98 | 0.98 | 0.83 | 0.83 | 0.83 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 57.0 | 54.1 | 54.2 | 52.7 | 53.7 | 53.9 | 50.9 | 38.5 | 33.8 | 37.2 | 24.1 | 22.9 |
| Incr Delay (d2), s/veh | 24.3 | 1.9 | 2.0 | 0.3 | 1.9 | 2.4 | 0.3 | 3.0 | 1.0 | 0.0 | 0.7 | 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(50%),veh/ln | 6.5 | 9.5 | 9.5 | 2.2 | 10.5 | 10.3 | 2.4 | 9.2 | 2.4 | 1.8 | 6.3 | 3.9 |
| LnGrp Delay(d),s/veh | 81.2 | 56.0 | 56.2 | 52.9 | 55.6 | 56.2 | 51.3 | 41.4 | 34.8 | 37.2 | 24.8 | 23.9 |
| LnGrp LOS | F | E | E | D | E | E | D | D | C | D | C | C |
| Approach Vol, veh/h | | 725 | | | 689 | | | 847 | | | 852 | |
| Approach Delay, s/veh | | 61.6 | | | 55.6 | | | 42.5 | | | 26.6 | |
| Approach LOS | | E | | | E | | | D | | | C | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 33.9 | 39.0 | 19.2 | 27.8 | 16.4 | 56.5 | 17.1 | 30.0 | | | | |
| Change Period (Y+Rc), s | 6.5 | * 6.5 | 4.5 | 4.5 | 4.5 | 6.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 12.0 | * 33 | 10.2 | 45.3 | 12.0 | 32.5 | 13.5 | 42.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.9 | 20.0 | 6.5 | 21.2 | 7.1 | 14.6 | 12.6 | 23.3 | | | | |
| Green Ext Time (p_c), s | 0.3 | 2.3 | 1.0 | 2.1 | 0.1 | 2.7 | 0.0 | 2.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 45.5 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary

2: Quince St & Mission Ave

04/29/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|--|---|---|--|---|--|---|---|---|--|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |   | |  |   | |  |  |  |  |   |  |
| Traffic Volume (veh/h) | 35 | 984 | 90 | 114 | 707 | 105 | 102 | 45 | 217 | 167 | 51 | 23 |
| Future Volume (veh/h) | 35 | 984 | 90 | 114 | 707 | 105 | 102 | 45 | 217 | 167 | 51 | 23 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 36 | 1014 | 93 | 118 | 729 | 108 | 105 | 46 | 224 | 172 | 53 | 24 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 173 | 1229 | 113 | 265 | 1320 | 195 | 131 | 413 | 351 | 199 | 307 | 139 |
| Arrive On Green | 0.10 | 0.37 | 0.37 | 0.30 | 0.85 | 0.85 | 0.02 | 0.07 | 0.07 | 0.11 | 0.25 | 0.25 |
| Sat Flow, veh/h | 1774 | 3279 | 301 | 1774 | 3093 | 458 | 1774 | 1863 | 1583 | 1774 | 1215 | 550 |
| Grp Volume(v), veh/h | 36 | 547 | 560 | 118 | 417 | 420 | 105 | 46 | 224 | 172 | 0 | 77 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1810 | 1774 | 1770 | 1782 | 1774 | 1863 | 1583 | 1774 | 0 | 1766 |
| Q Serve(g_s), s | 2.5 | 37.8 | 37.8 | 7.3 | 8.8 | 8.8 | 8.0 | 3.1 | 13.3 | 12.9 | 0.0 | 4.6 |
| Cycle Q Clear(g_c), s | 2.5 | 37.8 | 37.8 | 7.3 | 8.8 | 8.8 | 8.0 | 3.1 | 13.3 | 12.9 | 0.0 | 4.6 |
| Prop In Lane | 1.00 | | 0.17 | 1.00 | | 0.26 | 1.00 | | 1.00 | 1.00 | | 0.31 |
| Lane Grp Cap(c), veh/h | 173 | 663 | 678 | 265 | 755 | 760 | 131 | 413 | 351 | 199 | 0 | 446 |
| V/C Ratio(X) | 0.21 | 0.82 | 0.83 | 0.45 | 0.55 | 0.55 | 0.80 | 0.11 | 0.64 | 0.86 | 0.00 | 0.17 |
| Avail Cap(c_a), veh/h | 173 | 663 | 678 | 265 | 755 | 760 | 206 | 413 | 351 | 296 | 0 | 446 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 0.33 | 0.33 | 0.33 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.76 | 0.76 | 0.76 | 0.89 | 0.89 | 0.89 | 0.79 | 0.79 | 0.79 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 56.1 | 38.2 | 38.2 | 42.9 | 6.3 | 6.3 | 64.9 | 50.2 | 29.4 | 58.9 | 0.0 | 39.4 |
| Incr Delay (d2), s/veh | 0.5 | 8.8 | 8.6 | 1.3 | 2.6 | 2.6 | 10.7 | 0.4 | 6.9 | 17.0 | 0.0 | 0.8 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.3 | 20.0 | 20.4 | 3.7 | 4.6 | 4.6 | 4.3 | 1.7 | 6.5 | 7.2 | 0.0 | 2.3 |
| LnGrp Delay(d),s/veh | 56.7 | 46.9 | 46.8 | 44.1 | 8.9 | 8.9 | 75.6 | 50.6 | 36.3 | 75.9 | 0.0 | 40.3 |
| LnGrp LOS | E | D | D | D | A | A | E | D | D | E | | D |
| Approach Vol, veh/h | | 1143 | | | 955 | | | 375 | | | 249 | |
| Approach Delay, s/veh | | 47.2 | | | 13.2 | | | 49.0 | | | 64.9 | |
| Approach LOS | | D | | | B | | | D | | | E | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 24.7 | 56.0 | 15.1 | 39.2 | 17.7 | 63.0 | 19.3 | 35.0 | | | | |
| Change Period (Y+Rc), s | 4.6 | 5.4 | 5.1 | * 5.1 | 4.6 | * 5.4 | 4.1 | 5.1 | | | | |
| Max Green Setting (Gmax), s | 15.4 | 50.6 | 15.7 | * 34 | 8.9 | * 58 | 22.5 | 27.3 | | | | |
| Max Q Clear Time (g_c+I1), s | 9.3 | 39.8 | 10.0 | 6.6 | 4.5 | 10.8 | 14.9 | 15.3 | | | | |
| Green Ext Time (p_c), s | 0.2 | 7.6 | 0.2 | 0.4 | 0.2 | 13.1 | 0.3 | 1.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 37.1 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary
 6: Centre City Pkwy & Mission Ave

04/29/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 281 | 931 | 150 | 113 | 438 | 327 | 182 | 949 | 96 | 237 | 585 | 254 |
| Future Volume (veh/h) | 281 | 931 | 150 | 113 | 438 | 327 | 182 | 949 | 96 | 237 | 585 | 254 |
| 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 | | 0.96 | 1.00 | | 0.96 | 1.00 | | 0.98 | 1.00 | | 0.98 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 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 | 1667 | 1863 | 1863 | 1667 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 287 | 950 | 153 | 115 | 447 | 334 | 186 | 968 | 98 | 242 | 597 | 259 |
| Adj No. of Lanes | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 3 | 1 | 2 | 2 | 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, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 330 | 1026 | 442 | 203 | 930 | 397 | 251 | 1416 | 434 | 410 | 1169 | 514 |
| Arrive On Green | 0.19 | 0.58 | 0.58 | 0.11 | 0.44 | 0.44 | 0.11 | 0.37 | 0.37 | 0.04 | 0.11 | 0.11 |
| Sat Flow, veh/h | 3442 | 3539 | 1524 | 3079 | 3539 | 1513 | 3079 | 5085 | 1558 | 3442 | 3539 | 1555 |
| Grp Volume(v), veh/h | 287 | 950 | 153 | 115 | 447 | 334 | 186 | 968 | 98 | 242 | 597 | 259 |
| Grp Sat Flow(s),veh/h/ln | 1721 | 1770 | 1524 | 1540 | 1770 | 1513 | 1540 | 1695 | 1558 | 1721 | 1770 | 1555 |
| Q Serve(g_s), s | 10.9 | 32.9 | 4.8 | 4.8 | 12.1 | 16.4 | 7.9 | 21.7 | 5.8 | 9.3 | 21.5 | 21.2 |
| Cycle Q Clear(g_c), s | 10.9 | 32.9 | 4.8 | 4.8 | 12.1 | 16.4 | 7.9 | 21.7 | 5.8 | 9.3 | 21.5 | 21.2 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 330 | 1026 | 442 | 203 | 930 | 397 | 251 | 1416 | 434 | 410 | 1169 | 514 |
| V/C Ratio(X) | 0.87 | 0.93 | 0.35 | 0.57 | 0.48 | 0.84 | 0.74 | 0.68 | 0.23 | 0.59 | 0.51 | 0.50 |
| Avail Cap(c_a), veh/h | 344 | 1182 | 509 | 240 | 1104 | 472 | 331 | 1416 | 434 | 548 | 1169 | 514 |
| HCM Platoon Ratio | 2.00 | 2.00 | 2.00 | 1.67 | 1.67 | 1.67 | 1.33 | 1.33 | 1.33 | 0.33 | 0.33 | 0.33 |
| Upstream Filter(I) | 0.56 | 0.56 | 0.56 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 53.7 | 27.0 | 9.9 | 58.3 | 31.3 | 13.5 | 58.8 | 37.5 | 32.5 | 61.6 | 49.8 | 49.7 |
| Incr Delay (d2), s/veh | 11.7 | 6.8 | 0.2 | 0.9 | 0.3 | 10.6 | 3.9 | 2.7 | 1.2 | 0.5 | 1.6 | 3.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 5.7 | 16.7 | 2.0 | 2.0 | 5.9 | 7.8 | 3.5 | 10.4 | 2.6 | 4.5 | 10.8 | 9.7 |
| LnGrp Delay(d),s/veh | 65.4 | 33.8 | 10.1 | 59.2 | 31.6 | 24.1 | 62.7 | 40.2 | 33.7 | 62.1 | 51.4 | 53.2 |
| LnGrp LOS | E | C | B | E | C | C | E | D | C | E | D | D |
| Approach Vol, veh/h | | 1390 | | | 896 | | | 1252 | | | 1098 | |
| Approach Delay, s/veh | | 37.7 | | | 32.3 | | | 43.0 | | | 54.2 | |
| Approach LOS | | D | | | 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 | 22.5 | 44.0 | 13.8 | 44.0 | 15.5 | 51.0 | 17.5 | 40.4 | | | | |
| Change Period (Y+Rc), s | 6.4 | * 6.4 | 4.9 | * 4.9 | 4.5 | 6.4 | 4.5 | 4.9 | | | | |
| Max Green Setting (Gmax), s | 21.5 | * 38 | 10.5 | * 45 | 14.5 | 44.6 | 13.5 | 42.1 | | | | |
| Max Q Clear Time (g_c+I1), s | 11.3 | 23.7 | 6.8 | 34.9 | 9.9 | 23.5 | 12.9 | 18.4 | | | | |
| Green Ext Time (p_c), s | 3.3 | 5.0 | 1.4 | 4.3 | 0.1 | 4.4 | 0.0 | 3.6 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 42.0 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary
 9: Escondido Blvd & Mission Ave

04/29/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  | |  |  | |
| Traffic Volume (veh/h) | 162 | 811 | 187 | 124 | 484 | 67 | 223 | 403 | 188 | 98 | 241 | 155 |
| Future Volume (veh/h) | 162 | 811 | 187 | 124 | 484 | 67 | 223 | 403 | 188 | 98 | 241 | 155 |
| Number | 5 | 2 | 12 | 1 | 6 | 16 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 |
| Adj Flow Rate, veh/h | 167 | 836 | 193 | 128 | 499 | 69 | 230 | 415 | 194 | 101 | 248 | 160 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 192 | 1200 | 277 | 152 | 1243 | 171 | 255 | 652 | 301 | 146 | 460 | 286 |
| Arrive On Green | 0.11 | 0.42 | 0.42 | 0.09 | 0.40 | 0.40 | 0.14 | 0.28 | 0.28 | 0.08 | 0.22 | 0.22 |
| Sat Flow, veh/h | 1774 | 2857 | 659 | 1774 | 3126 | 431 | 1774 | 2353 | 1088 | 1774 | 2097 | 1305 |
| Grp Volume(v), veh/h | 167 | 518 | 511 | 128 | 282 | 286 | 230 | 311 | 298 | 101 | 208 | 200 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1746 | 1774 | 1770 | 1787 | 1774 | 1770 | 1671 | 1774 | 1770 | 1632 |
| Q Serve(g_s), s | 12.5 | 32.4 | 32.4 | 9.6 | 15.4 | 15.5 | 17.2 | 20.8 | 21.2 | 7.5 | 14.0 | 14.7 |
| Cycle Q Clear(g_c), s | 12.5 | 32.4 | 32.4 | 9.6 | 15.4 | 15.5 | 17.2 | 20.8 | 21.2 | 7.5 | 14.0 | 14.7 |
| Prop In Lane | 1.00 | | 0.38 | 1.00 | | 0.24 | 1.00 | | 0.65 | 1.00 | | 0.80 |
| Lane Grp Cap(c), veh/h | 192 | 744 | 734 | 152 | 704 | 710 | 255 | 490 | 463 | 146 | 388 | 358 |
| V/C Ratio(X) | 0.87 | 0.70 | 0.70 | 0.84 | 0.40 | 0.40 | 0.90 | 0.63 | 0.64 | 0.69 | 0.54 | 0.56 |
| Avail Cap(c_a), veh/h | 285 | 744 | 734 | 209 | 704 | 710 | 353 | 490 | 463 | 251 | 388 | 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 | 0.47 | 0.47 | 0.47 | 0.73 | 0.73 | 0.73 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 59.3 | 32.1 | 32.1 | 60.8 | 29.1 | 29.2 | 56.9 | 42.8 | 42.9 | 60.3 | 46.6 | 46.9 |
| Incr Delay (d2), s/veh | 12.3 | 5.3 | 5.4 | 7.8 | 0.8 | 0.8 | 13.0 | 4.5 | 4.9 | 2.2 | 5.2 | 6.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.8 | 16.9 | 16.7 | 5.1 | 7.7 | 7.8 | 9.4 | 10.8 | 10.4 | 3.8 | 7.4 | 7.2 |
| LnGrp Delay(d),s/veh | 71.6 | 37.4 | 37.5 | 68.6 | 29.9 | 30.0 | 69.8 | 47.3 | 47.9 | 62.5 | 51.8 | 53.1 |
| LnGrp LOS | E | D | D | E | C | C | E | D | D | E | D | D |
| Approach Vol, veh/h | | 1196 | | | 696 | | | 839 | | | 509 | |
| Approach Delay, s/veh | | 42.2 | | | 37.1 | | | 53.7 | | | 54.4 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 15.7 | 61.6 | 23.5 | 34.2 | 18.7 | 58.6 | 15.7 | 42.0 | | | | |
| Change Period (Y+Rc), s | 4.1 | 4.9 | 4.1 | 4.6 | 4.1 | 4.9 | 4.6 | * 4.6 | | | | |
| Max Green Setting (Gmax), s | 15.9 | 44.9 | 26.9 | 29.6 | 21.7 | 39.1 | 19.1 | * 37 | | | | |
| Max Q Clear Time (g_c+I1), s | 11.6 | 34.4 | 19.2 | 16.7 | 14.5 | 17.5 | 9.5 | 23.2 | | | | |
| Green Ext Time (p_c), s | 0.1 | 5.0 | 0.2 | 1.4 | 0.1 | 7.0 | 1.2 | 2.1 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 46.0 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

HCM 2010 Signalized Intersection Summary
 7: Centre City Pkwy & Washington Ave

05/03/2017

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 197 | 790 | 98 | 83 | 379 | 163 | 191 | 902 | 188 | 165 | 592 | 102 |
| Future Volume (veh/h) | 197 | 790 | 98 | 83 | 379 | 163 | 191 | 902 | 188 | 165 | 592 | 102 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 210 | 840 | 104 | 88 | 403 | 173 | 203 | 960 | 200 | 176 | 630 | 109 |
| Adj No. of Lanes | 1 | 2 | 0 | 1 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 1 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 236 | 949 | 117 | 127 | 576 | 244 | 306 | 1088 | 487 | 547 | 1389 | 621 |
| Arrive On Green | 0.04 | 0.10 | 0.10 | 0.14 | 0.48 | 0.48 | 0.09 | 0.31 | 0.31 | 0.32 | 0.78 | 0.78 |
| Sat Flow, veh/h | 1774 | 3171 | 393 | 1774 | 2423 | 1028 | 3442 | 3539 | 1583 | 3442 | 3539 | 1583 |
| Grp Volume(v), veh/h | 210 | 469 | 475 | 88 | 293 | 283 | 203 | 960 | 200 | 176 | 630 | 109 |
| Grp Sat Flow(s),veh/h/ln | 1774 | 1770 | 1793 | 1774 | 1770 | 1681 | 1721 | 1770 | 1583 | 1721 | 1770 | 1583 |
| Q Serve(g_s), s | 15.9 | 35.3 | 35.3 | 6.4 | 17.5 | 18.0 | 7.7 | 34.8 | 13.5 | 5.2 | 8.0 | 2.3 |
| Cycle Q Clear(g_c), s | 15.9 | 35.3 | 35.3 | 6.4 | 17.5 | 18.0 | 7.7 | 34.8 | 13.5 | 5.2 | 8.0 | 2.3 |
| Prop In Lane | 1.00 | | 0.22 | 1.00 | | 0.61 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 236 | 530 | 537 | 127 | 421 | 400 | 306 | 1088 | 487 | 547 | 1389 | 621 |
| V/C Ratio(X) | 0.89 | 0.89 | 0.89 | 0.70 | 0.70 | 0.71 | 0.66 | 0.88 | 0.41 | 0.32 | 0.45 | 0.18 |
| Avail Cap(c_a), veh/h | 256 | 634 | 643 | 172 | 551 | 523 | 337 | 1088 | 487 | 547 | 1389 | 621 |
| HCM Platoon Ratio | 0.33 | 0.33 | 0.33 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Upstream Filter(I) | 0.81 | 0.81 | 0.81 | 0.87 | 0.87 | 0.87 | 0.86 | 0.86 | 0.86 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 63.6 | 58.5 | 58.5 | 56.5 | 31.6 | 31.7 | 59.6 | 44.4 | 37.1 | 40.5 | 9.7 | 9.1 |
| Incr Delay (d2), s/veh | 22.9 | 9.3 | 9.2 | 2.8 | 1.2 | 1.5 | 2.7 | 9.1 | 2.2 | 0.1 | 1.1 | 0.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 9.3 | 18.7 | 18.9 | 3.2 | 8.7 | 8.4 | 3.8 | 18.3 | 6.2 | 2.5 | 4.0 | 1.1 |
| LnGrp Delay(d),s/veh | 86.5 | 67.9 | 67.8 | 59.3 | 32.8 | 33.2 | 62.2 | 53.5 | 39.3 | 40.6 | 10.8 | 9.7 |
| LnGrp LOS | F | E | E | E | C | C | E | D | D | D | B | A |
| Approach Vol, veh/h | | 1154 | | | 664 | | | 1363 | | | 915 | |
| Approach Delay, s/veh | | 71.2 | | | 36.5 | | | 52.7 | | | 16.4 | |
| Approach LOS | | E | | | D | | | D | | | B | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 28.0 | 48.0 | 14.1 | 44.9 | 16.5 | 59.5 | 22.4 | 36.6 | | | | |
| Change Period (Y+Rc), s | 6.5 | * 6.5 | 4.5 | 4.5 | 4.5 | 6.5 | 4.5 | 4.5 | | | | |
| Max Green Setting (Gmax), s | 12.0 | * 42 | 13.1 | 48.4 | 13.2 | 40.3 | 19.5 | 42.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 7.2 | 36.8 | 8.4 | 37.3 | 9.7 | 10.0 | 17.9 | 20.0 | | | | |
| Green Ext Time (p_c), s | 0.3 | 2.2 | 1.1 | 3.1 | 0.1 | 3.4 | 0.1 | 2.3 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 47.2 | | | | | | | | | |
| HCM 2010 LOS | | | D | | | | | | | | | |
| Notes | | | | | | | | | | | | |

APPENDIX K
Queue Analysis Output Sheets

Queues

4: Centre City Pkwy & El Norte Pkwy

04/29/2017



| Lane Group | EBL | EBT | EBR | WBL | WBT | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|-------|------|------|------|------|------|------|------|
| Lane Group Flow (vph) | 10 | 733 | 292 | 311 | 995 | 185 | 279 | 91 | 285 | 1176 | 65 |
| v/c Ratio | 0.05 | 0.76 | 0.50 | 0.90 | 0.78 | 0.64 | 0.21 | 0.14 | 0.80 | 0.85 | 0.09 |
| Control Delay | 73.7 | 60.0 | 17.3 | 101.8 | 50.5 | 88.9 | 34.3 | 2.6 | 88.7 | 53.3 | 0.3 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 73.7 | 60.0 | 17.3 | 101.8 | 50.5 | 88.9 | 34.3 | 2.6 | 88.7 | 53.3 | 0.3 |
| Queue Length 50th (ft) | 5 | 381 | 75 | 174 | 456 | 108 | 77 | 1 | 157 | 615 | 0 |
| Queue Length 95th (ft) | 16 | 439 | 165 | #260 | 597 | 144 | 122 | 16 | 209 | #785 | 0 |
| Internal Link Dist (ft) | | 626 | | | 387 | | 1496 | | | 507 | |
| Turn Bay Length (ft) | 150 | | | 100 | | 250 | | 200 | 225 | | 225 |
| Base Capacity (vph) | 208 | 1093 | 629 | 351 | 1286 | 291 | 1322 | 673 | 403 | 1386 | 699 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.05 | 0.67 | 0.46 | 0.89 | 0.77 | 0.64 | 0.21 | 0.14 | 0.71 | 0.85 | 0.09 |

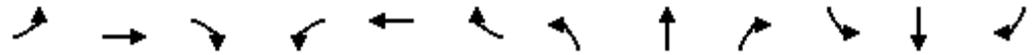
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

6: Centre City Pkwy & Mission Ave

04/29/2017



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph) | 130 | 415 | 91 | 108 | 730 | 251 | 235 | 618 | 77 | 220 | 908 | 566 |
| v/c Ratio | 0.51 | 0.66 | 0.22 | 0.22 | 0.79 | 0.47 | 0.73 | 0.32 | 0.11 | 0.59 | 0.66 | 0.76 |
| Control Delay | 61.9 | 34.2 | 1.5 | 35.9 | 35.3 | 10.3 | 62.3 | 34.4 | 8.4 | 57.9 | 34.1 | 27.9 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 61.9 | 34.2 | 1.5 | 35.9 | 35.3 | 10.3 | 62.3 | 34.4 | 8.4 | 57.9 | 34.1 | 27.9 |
| Queue Length 50th (ft) | 29 | 133 | 1 | 41 | 307 | 73 | 100 | 152 | 13 | 85 | 308 | 245 |
| Queue Length 95th (ft) | 81 | 82 | 1 | m72 | 380 | m122 | #151 | 191 | m39 | 127 | 402 | #462 |
| Internal Link Dist (ft) | | 505 | | | 173 | | | 217 | | | 944 | |
| Turn Bay Length (ft) | 250 | | 75 | 100 | | 125 | 250 | | 150 | 300 | | 150 |
| Base Capacity (vph) | 257 | 1091 | 599 | 485 | 1091 | 595 | 332 | 1958 | 699 | 374 | 1375 | 740 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.51 | 0.38 | 0.15 | 0.22 | 0.67 | 0.42 | 0.71 | 0.32 | 0.11 | 0.59 | 0.66 | 0.76 |

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

7: Centre City Pkwy & Washington Ave

04/29/2017



| Lane Group | EBL | EBT | WBL | WBT | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph) | 96 | 403 | 75 | 764 | 183 | 724 | 60 | 133 | 958 | 180 |
| v/c Ratio | 0.70 | 0.39 | 0.39 | 0.73 | 0.53 | 0.58 | 0.09 | 0.37 | 0.76 | 0.27 |
| Control Delay | 82.4 | 34.9 | 65.5 | 46.7 | 46.1 | 29.5 | 4.2 | 45.2 | 31.5 | 5.8 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 82.4 | 34.9 | 65.5 | 46.7 | 46.1 | 29.5 | 4.2 | 45.2 | 31.5 | 5.8 |
| Queue Length 50th (ft) | 74 | 110 | 60 | 302 | 71 | 275 | 5 | 54 | 401 | 56 |
| Queue Length 95th (ft) | #157 | 156 | m97 | 365 | 110 | 354 | 22 | m85 | #513 | 76 |
| Internal Link Dist (ft) | | 596 | | 568 | | 1927 | | | 940 | |
| Turn Bay Length (ft) | 250 | | 165 | | 350 | | 250 | 325 | | 375 |
| Base Capacity (vph) | 140 | 1205 | 193 | 1237 | 357 | 1245 | 657 | 357 | 1256 | 678 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.69 | 0.33 | 0.39 | 0.62 | 0.51 | 0.58 | 0.09 | 0.37 | 0.76 | 0.27 |

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

4: Centre City Pkwy & El Norte Pkwy

04/29/2017



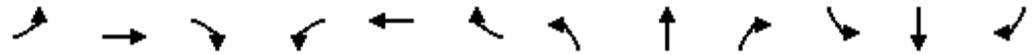
| Lane Group | EBL | EBT | EBR | WBL | WBT | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph) | 32 | 544 | 217 | 191 | 622 | 245 | 299 | 127 | 135 | 310 | 41 |
| v/c Ratio | 0.13 | 0.71 | 0.42 | 0.65 | 0.64 | 0.67 | 0.20 | 0.17 | 0.43 | 0.21 | 0.06 |
| Control Delay | 65.8 | 56.4 | 7.9 | 74.0 | 47.9 | 71.4 | 26.6 | 4.9 | 66.7 | 28.4 | 0.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 65.8 | 56.4 | 7.9 | 74.0 | 47.9 | 71.4 | 26.6 | 4.9 | 66.7 | 28.4 | 0.2 |
| Queue Length 50th (ft) | 14 | 244 | 0 | 88 | 275 | 113 | 88 | 0 | 61 | 94 | 0 |
| Queue Length 95th (ft) | 34 | 314 | 67 | 139 | 343 | 172 | 139 | 43 | 104 | 151 | 0 |
| Internal Link Dist (ft) | | 626 | | | 387 | | 1496 | | | 507 | |
| Turn Bay Length (ft) | 150 | | | 100 | | 250 | | 200 | 225 | | 225 |
| Base Capacity (vph) | 243 | 1320 | 726 | 353 | 1407 | 407 | 1523 | 753 | 316 | 1467 | 712 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.13 | 0.41 | 0.30 | 0.54 | 0.44 | 0.60 | 0.20 | 0.17 | 0.43 | 0.21 | 0.06 |

Intersection Summary

Queues

6: Centre City Pkwy & Mission Ave

04/29/2017



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph) | 230 | 628 | 110 | 129 | 544 | 272 | 158 | 507 | 101 | 294 | 664 | 371 |
| v/c Ratio | 0.66 | 0.75 | 0.22 | 0.38 | 0.62 | 0.49 | 0.54 | 0.30 | 0.16 | 0.59 | 0.49 | 0.46 |
| Control Delay | 54.4 | 30.3 | 1.2 | 39.8 | 30.0 | 7.5 | 67.7 | 30.5 | 5.6 | 53.2 | 31.1 | 7.4 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 54.4 | 30.3 | 1.2 | 39.8 | 30.0 | 7.5 | 67.7 | 30.5 | 5.6 | 53.2 | 31.1 | 7.4 |
| Queue Length 50th (ft) | 64 | 242 | 1 | 44 | 134 | 19 | 61 | 82 | 1 | 111 | 216 | 24 |
| Queue Length 95th (ft) | 112 | 124 | 3 | 82 | 211 | 47 | m95 | 155 | m27 | 157 | 291 | 109 |
| Internal Link Dist (ft) | | 505 | | | 173 | | | 213 | | | 951 | |
| Turn Bay Length (ft) | 250 | | 75 | 125 | | 125 | 250 | | 150 | 300 | | 150 |
| Base Capacity (vph) | 414 | 1182 | 629 | 355 | 1064 | 628 | 302 | 1711 | 631 | 500 | 1368 | 802 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.56 | 0.53 | 0.17 | 0.36 | 0.51 | 0.43 | 0.52 | 0.30 | 0.16 | 0.59 | 0.49 | 0.46 |

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues

7: Centre City Pkwy & Washington Ave

04/29/2017



| Lane Group | EBL | EBT | WBL | WBT | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph) | 158 | 567 | 69 | 620 | 154 | 604 | 89 | 138 | 540 | 174 |
| v/c Ratio | 0.84 | 0.71 | 0.33 | 0.81 | 0.44 | 0.41 | 0.12 | 0.40 | 0.37 | 0.23 |
| Control Delay | 88.4 | 50.4 | 56.3 | 51.9 | 55.1 | 27.1 | 0.3 | 38.7 | 19.4 | 4.0 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 88.4 | 50.4 | 56.3 | 51.9 | 55.1 | 27.1 | 0.3 | 38.7 | 19.4 | 4.0 |
| Queue Length 50th (ft) | 124 | 217 | 52 | 227 | 58 | 172 | 0 | 40 | 88 | 1 |
| Queue Length 95th (ft) | #235 | 268 | m101 | 278 | 93 | 247 | 1 | 64 | 161 | 38 |
| Internal Link Dist (ft) | | 596 | | 568 | | 1927 | | | 946 | |
| Turn Bay Length (ft) | 250 | | 165 | | 350 | | 250 | 325 | | 375 |
| Base Capacity (vph) | 199 | 1315 | 208 | 1220 | 347 | 1463 | 745 | 343 | 1458 | 754 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.79 | 0.43 | 0.33 | 0.51 | 0.44 | 0.41 | 0.12 | 0.40 | 0.37 | 0.23 |

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

4: Centre City Pkwy & El Norte Pkwy

04/29/2017



| Lane Group | EBL | EBT | EBR | WBL | WBT | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|-------|------|------|------|------|------|
| Lane Group Flow (vph) | 41 | 966 | 209 | 163 | 855 | 373 | 659 | 310 | 208 | 253 | 31 |
| v/c Ratio | 0.20 | 0.79 | 0.33 | 0.77 | 0.68 | 1.03 | 0.52 | 0.46 | 0.71 | 0.21 | 0.05 |
| Control Delay | 76.2 | 54.5 | 13.0 | 99.3 | 47.2 | 125.0 | 43.3 | 21.3 | 87.4 | 39.4 | 0.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 76.2 | 54.5 | 13.0 | 99.3 | 47.2 | 125.0 | 43.3 | 21.3 | 87.4 | 39.4 | 0.2 |
| Queue Length 50th (ft) | 22 | 496 | 43 | 91 | 413 | ~221 | 294 | 122 | 114 | 102 | 0 |
| Queue Length 95th (ft) | 44 | 584 | 111 | #148 | 493 | #331 | 361 | 217 | 161 | 140 | 0 |
| Internal Link Dist (ft) | | 626 | | | 387 | | 1496 | | | 507 | |
| Turn Bay Length (ft) | 150 | | | 100 | | 250 | | 200 | 225 | | 225 |
| Base Capacity (vph) | 208 | 1219 | 643 | 212 | 1260 | 362 | 1276 | 672 | 312 | 1201 | 600 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.20 | 0.79 | 0.33 | 0.77 | 0.68 | 1.03 | 0.52 | 0.46 | 0.67 | 0.21 | 0.05 |

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

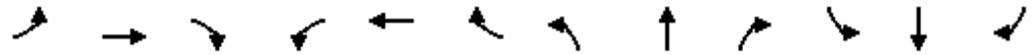
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

6: Centre City Pkwy & Mission Ave

04/29/2017



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph) | 287 | 950 | 153 | 115 | 447 | 334 | 186 | 968 | 98 | 242 | 597 | 259 |
| v/c Ratio | 0.86 | 0.87 | 0.26 | 0.53 | 0.44 | 0.50 | 0.65 | 0.62 | 0.17 | 0.44 | 0.45 | 0.36 |
| Control Delay | 75.1 | 30.9 | 1.8 | 60.1 | 34.0 | 7.1 | 88.4 | 30.4 | 2.9 | 58.2 | 37.6 | 14.0 |
| Queue Delay | 0.0 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 75.1 | 32.1 | 1.8 | 60.1 | 34.0 | 7.1 | 88.4 | 30.4 | 2.9 | 58.2 | 37.6 | 14.0 |
| Queue Length 50th (ft) | 114 | 405 | 6 | 53 | 111 | 33 | 82 | 139 | 0 | 100 | 213 | 29 |
| Queue Length 95th (ft) | m#167 | 428 | m7 | m78 | 137 | 53 | m119 | 234 | m15 | 143 | 312 | 145 |
| Internal Link Dist (ft) | | 505 | | | 173 | | | 213 | | | 925 | |
| Turn Bay Length (ft) | 250 | | 75 | 125 | | 125 | 250 | | 150 | 300 | | 150 |
| Base Capacity (vph) | 343 | 1182 | 611 | 238 | 1103 | 699 | 329 | 1569 | 578 | 546 | 1324 | 723 |
| Starvation Cap Reductn | 0 | 83 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.84 | 0.86 | 0.25 | 0.48 | 0.41 | 0.48 | 0.57 | 0.62 | 0.17 | 0.44 | 0.45 | 0.36 |

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

7: Centre City Pkwy & Washington Ave

04/29/2017



| Lane Group | EBL | EBT | WBL | WBT | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|------|------|------|------|------|------|------|------|
| Lane Group Flow (vph) | 210 | 944 | 88 | 576 | 203 | 960 | 200 | 176 | 630 | 109 |
| v/c Ratio | 0.88 | 0.87 | 0.59 | 0.63 | 0.63 | 0.74 | 0.29 | 0.58 | 0.49 | 0.17 |
| Control Delay | 87.5 | 56.3 | 53.4 | 28.4 | 68.2 | 42.3 | 8.7 | 74.5 | 48.9 | 20.4 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 87.5 | 56.3 | 53.4 | 28.4 | 68.2 | 42.3 | 8.7 | 74.5 | 48.9 | 20.4 |
| Queue Length 50th (ft) | 184 | 415 | 49 | 85 | 90 | 384 | 18 | 63 | 204 | 15 |
| Queue Length 95th (ft) | #316 | 478 | m104 | 80 | 132 | #520 | 81 | 113 | 352 | 75 |
| Internal Link Dist (ft) | | 596 | | 568 | | 1927 | | | 946 | |
| Turn Bay Length (ft) | 250 | | 165 | | 350 | | 250 | 325 | | 375 |
| Base Capacity (vph) | 255 | 1254 | 171 | 1087 | 338 | 1301 | 688 | 305 | 1284 | 651 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.82 | 0.75 | 0.51 | 0.53 | 0.60 | 0.74 | 0.29 | 0.58 | 0.49 | 0.17 |

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.