

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.
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January 27, 2017
Revised: March 20, 2017
Revised: May 1, 2017
Revised: May 5, 2017



May 5, 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,

A handwritten signature in black ink, appearing to read 'Th Wheat'.

Thomas Wheat, PE, TE
President

Registered Civil Engineer #69467
Registered Traffic Engineer #2565



A handwritten signature in black ink, appearing to read 'Jeff Weckstein'.

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*
- (5) *Horizon Year 2035 Without Project*
- (6) *Horizon Year 2035 With Project*

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.

Horizon Year 2035 Without and With Project Conditions

- The study intersections are projected to operate at an acceptable LOS (LOS D or better) during the AM and PM peak hours for *Horizon Year 2035 Without and Horizon Year 2035 With Project* conditions.
- The study roadway segments are projected to operate at an acceptable LOS (LOS D or better) for *Horizon Year 2035 Without and Horizon Year 2035 With Project* conditions with the exception of Centre City Parkway between SR-78 and Decatur Way and Mission Avenue between Quince Street and Centre City Parkway which are projected to operate at LOS E.

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.

Horizon Year 2035 With 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/SANTEC 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 E.
 - 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, Centre City Parkway/Quince Street, and Centre City Parkway/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)
- Centre City Parkway/Quince Street intersection
 - Signal timing modifications (project applicant)

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

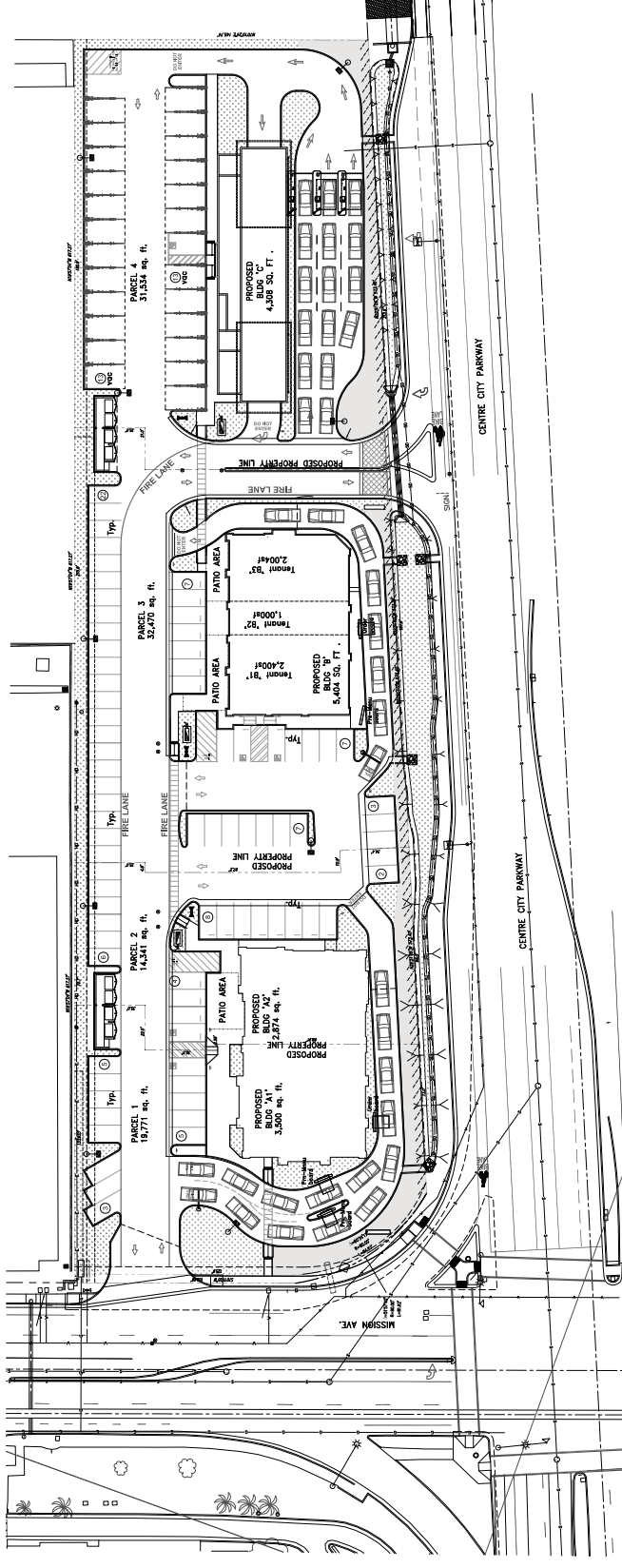
The existing and proposed zoning for the site is CG (General Commercial).

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

1"=30'-0"



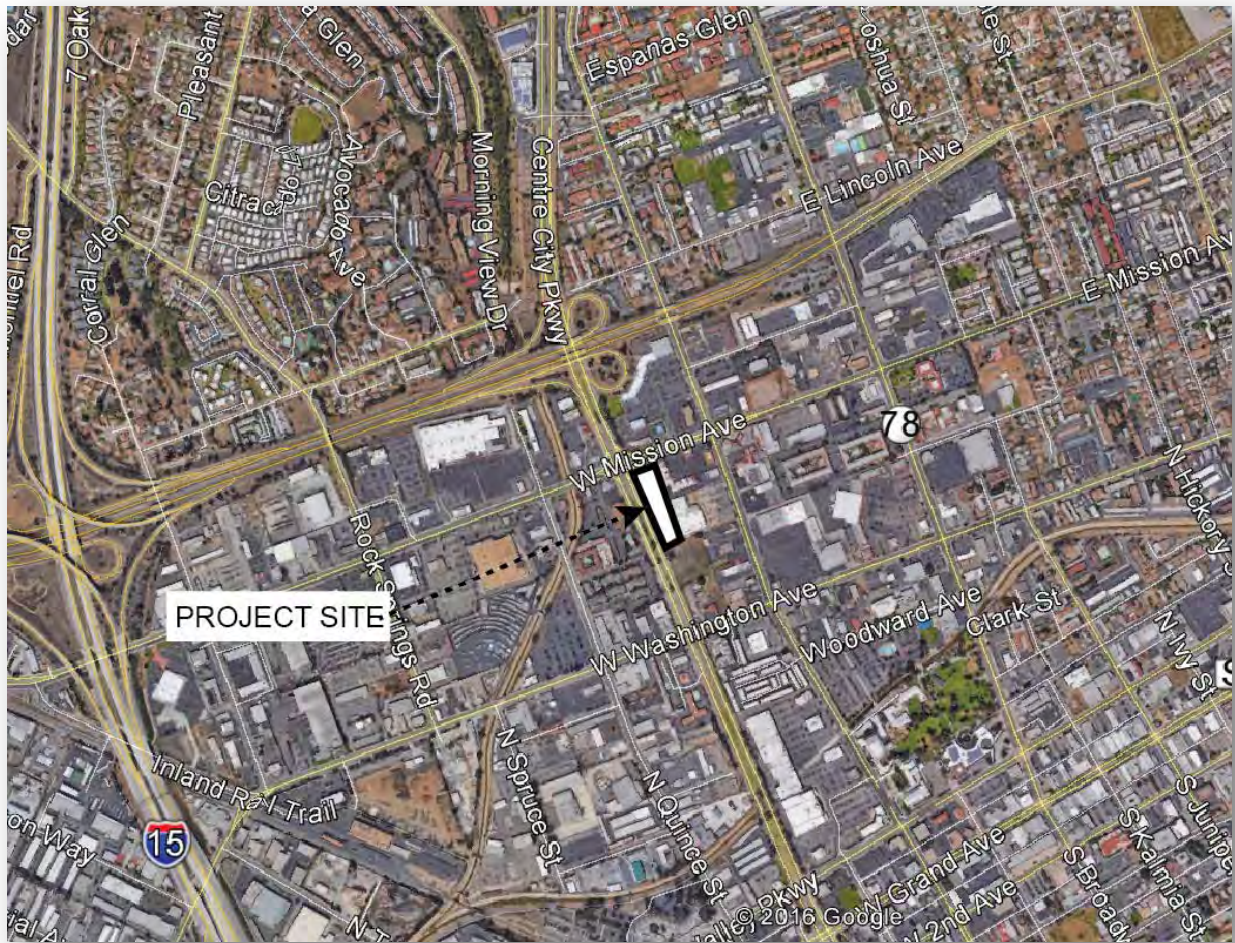
Exhibit 1: Proposed Project Site Plan

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.

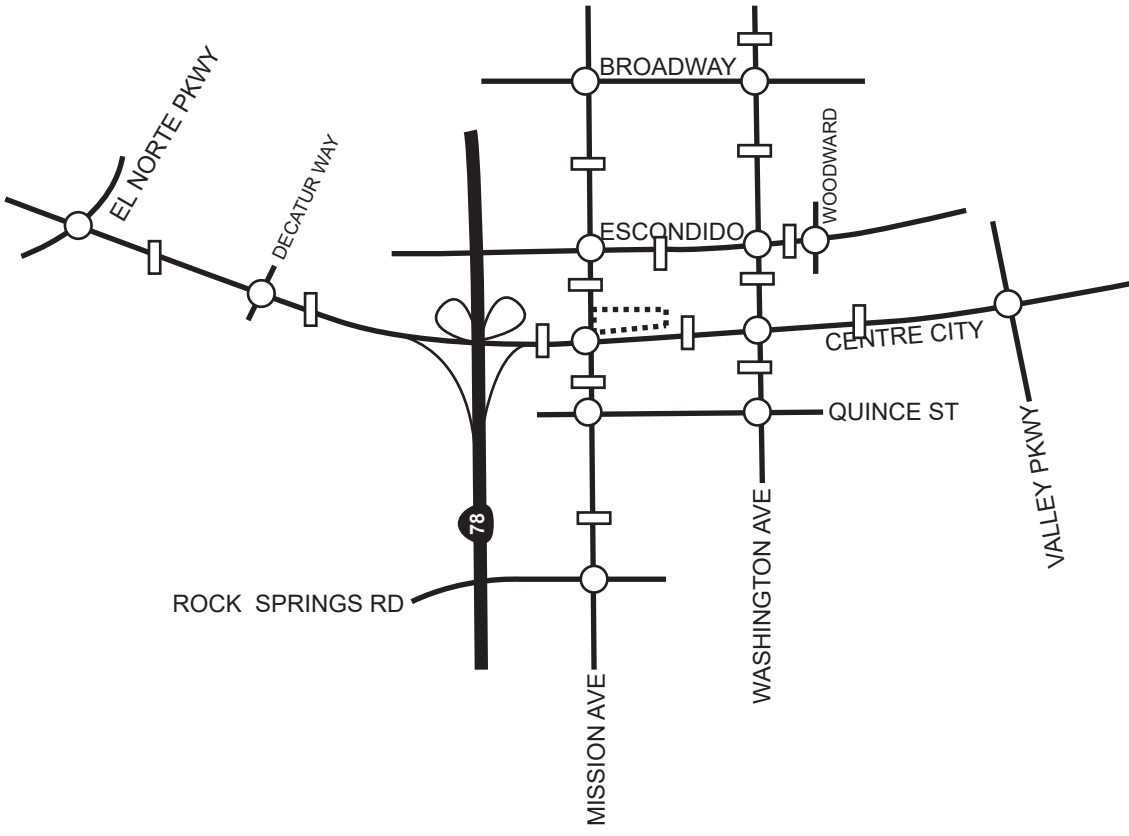
The following freeway ramp meter in the vicinity of the project site has been included in the analysis:

- 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*
- (5) *Horizon Year 2035 Without Project*
- (6) *Horizon Year 2035 With Project*



- 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. $PHF = [Hourly\ Volume] / [4 * Peak\ 15\ Minute\ Volume]$. 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, Osra, 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 Springs 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

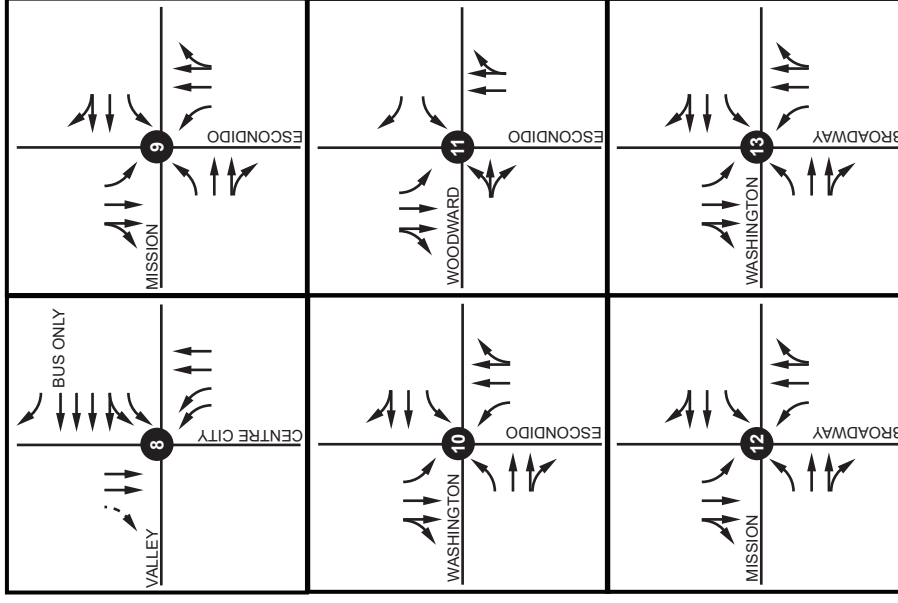
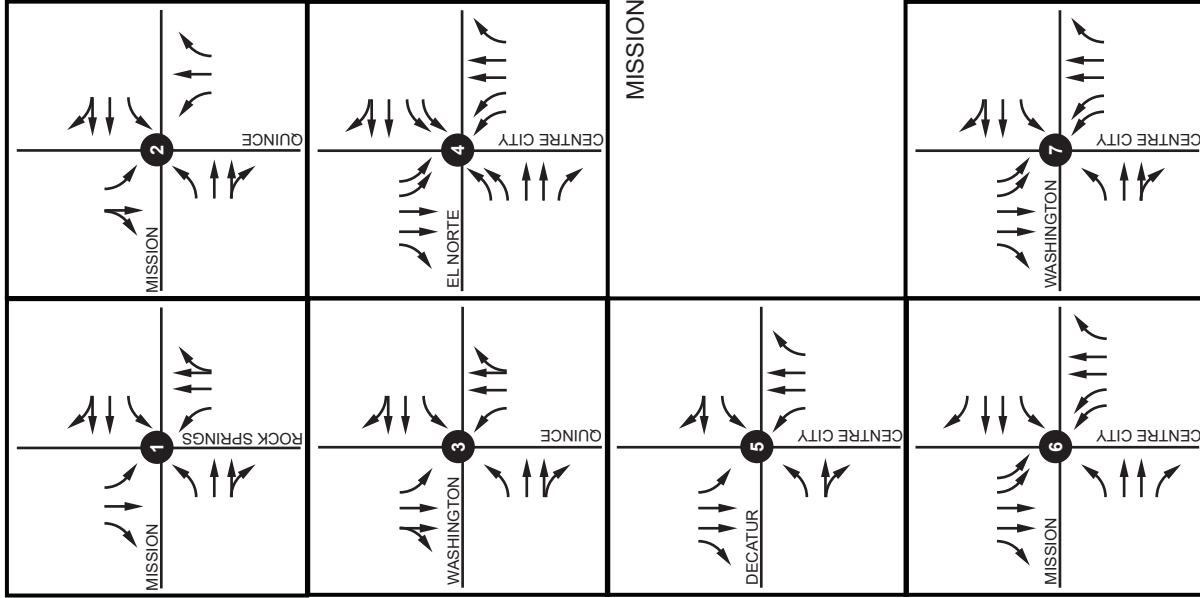
There are Class II bicycle lanes on Centre City Parkway and Mission Avenue throughout the study area and on El Norte Parkway east of Centre City Parkway. Sidewalks and curb ramps typically exist at all intersections in the study area, with the exception of both sides of Centre City Parkway where paved 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



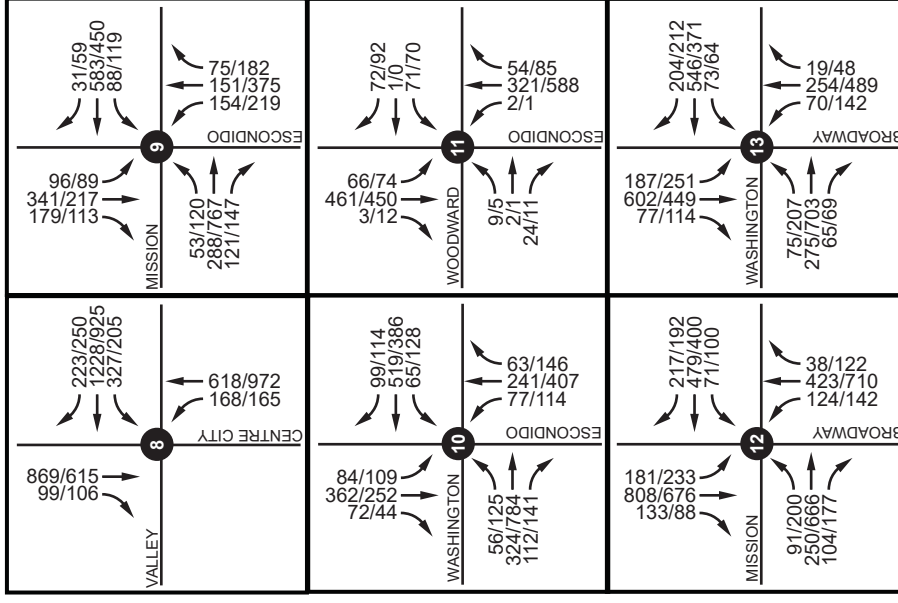
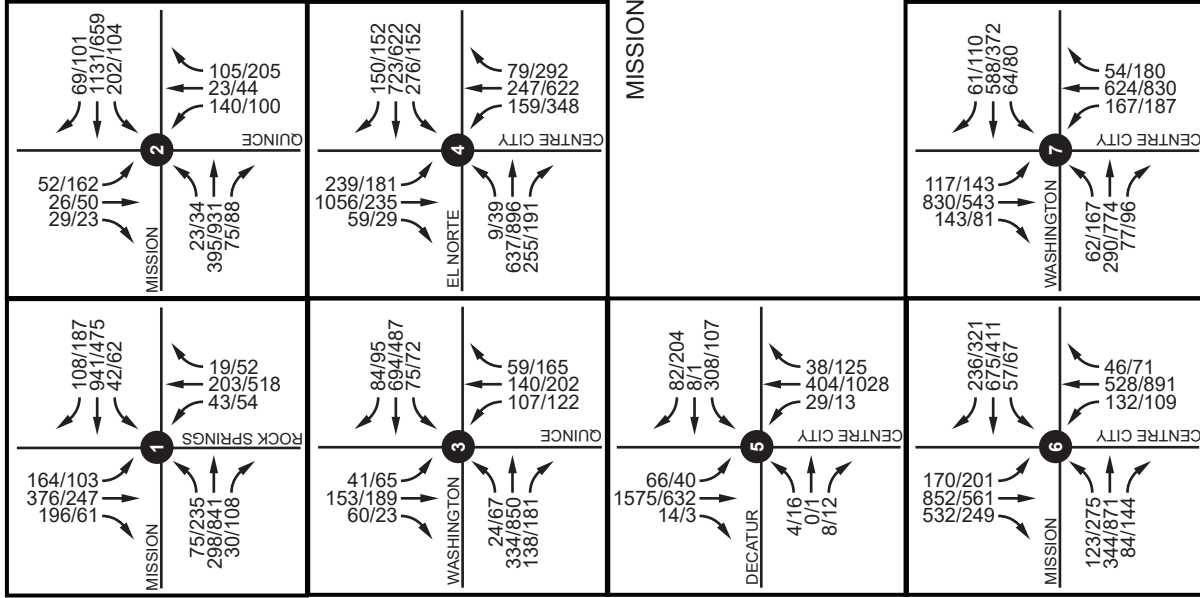
3.4 EXISTING TRAFFIC VOLUMES

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**.



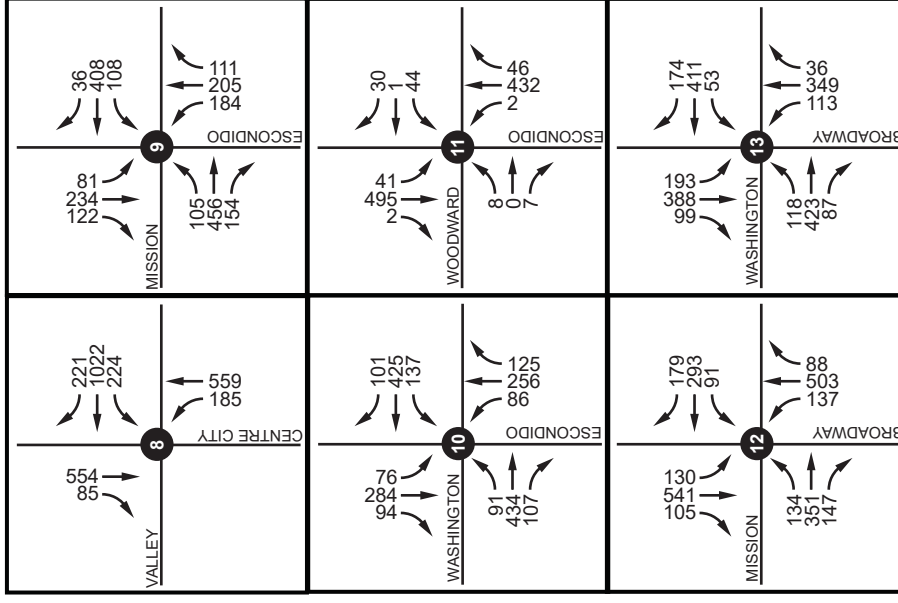
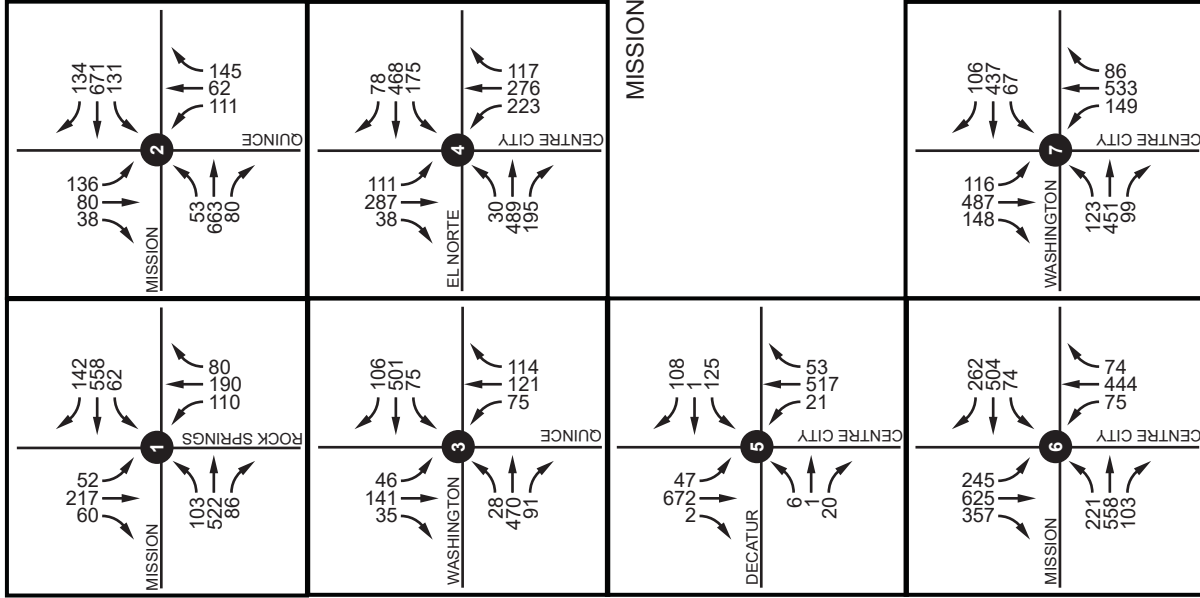
- Legend:**
- XX/XX AM/PM Peak Hour Volumes
 - X,XXX 24-Hour Traffic Volume
 - Project Site

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 MD PM	25.1 22.5 32.1	C C C
2	Quince St/Mission Ave	Signal	AM MD PM	26.5 35.7 45.1	C D D
3	Quince St/Washington Ave	Signal	AM MD PM	14.5 15.8 24.7	B B C
4	Centre City Pkwy/El Norte Pkwy	Signal	AM MD PM	55.0 45.7 56.5	E D E
5	Centre City Pkwy/Decatur	Signal	AM MD PM	23.0 23.1 32.1	C C C
6	Centre City Pkwy/Mission Ave	Signal	AM MD PM	47.0 41.9 57.3	D D E
7	Centre City Pkwy/Washington Ave	Signal	AM MD PM	38.1 39.3 45.5	D D D
8	Centre City Pkwy/Valley Pkwy	Signal	AM MD PM	32.3 25.5 31.2	C C C
9	Escondido Blvd/Mission Ave	Signal	AM MD PM	40.2 45.5 43.2	D D D
10	Escondido Blvd/Washington Ave	Signal	AM MD PM	40.4 42.5 37.9	D D D
11	Escondido Blvd/Woodward Ave	Signal	AM MD PM	11.6 7.4 12.3	B A B
12	Broadway/Mission Ave	Signal	AM MD PM	35.0 31.2 47.8	D C D
13	Broadway/Washington Ave	Signal	AM MD PM	32.1 30.4 35.3	C C D
14	Centre City Pkwy/Project Drwy	OWSC (with project)	AM MD PM	N/A	N/A
15	Project Drwy/Mission Ave	OWSC (with project)	AM MD 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								
(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								
(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								
(C) Subtotal Net Retail	3	2	5	8	7	15	179	
Proposed:	4.308 TSF (1 Site)	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.

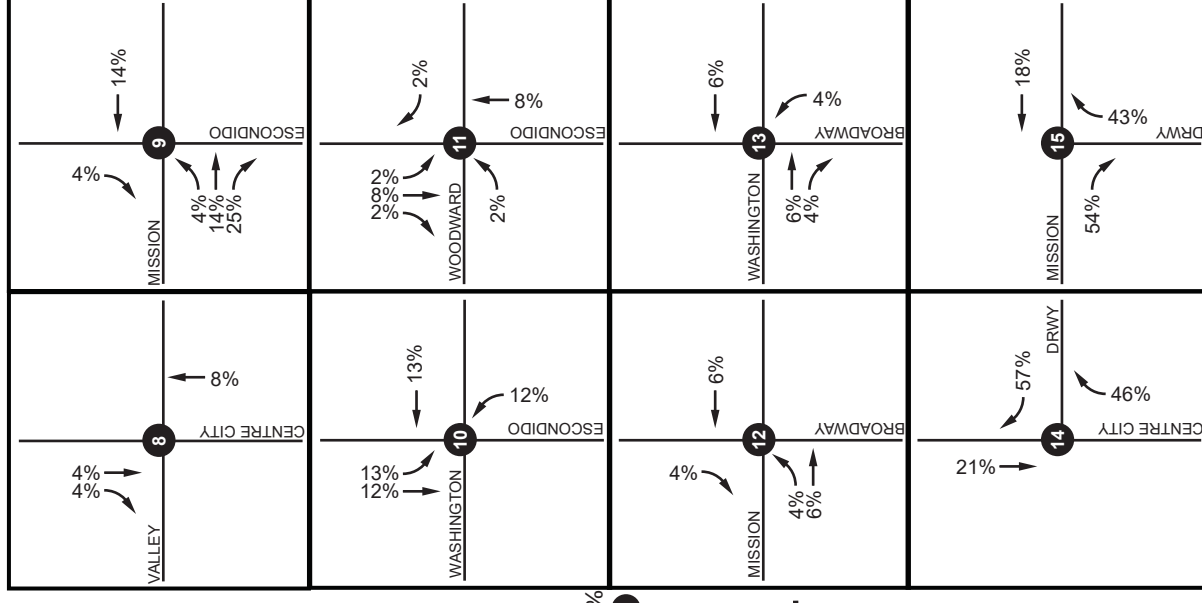
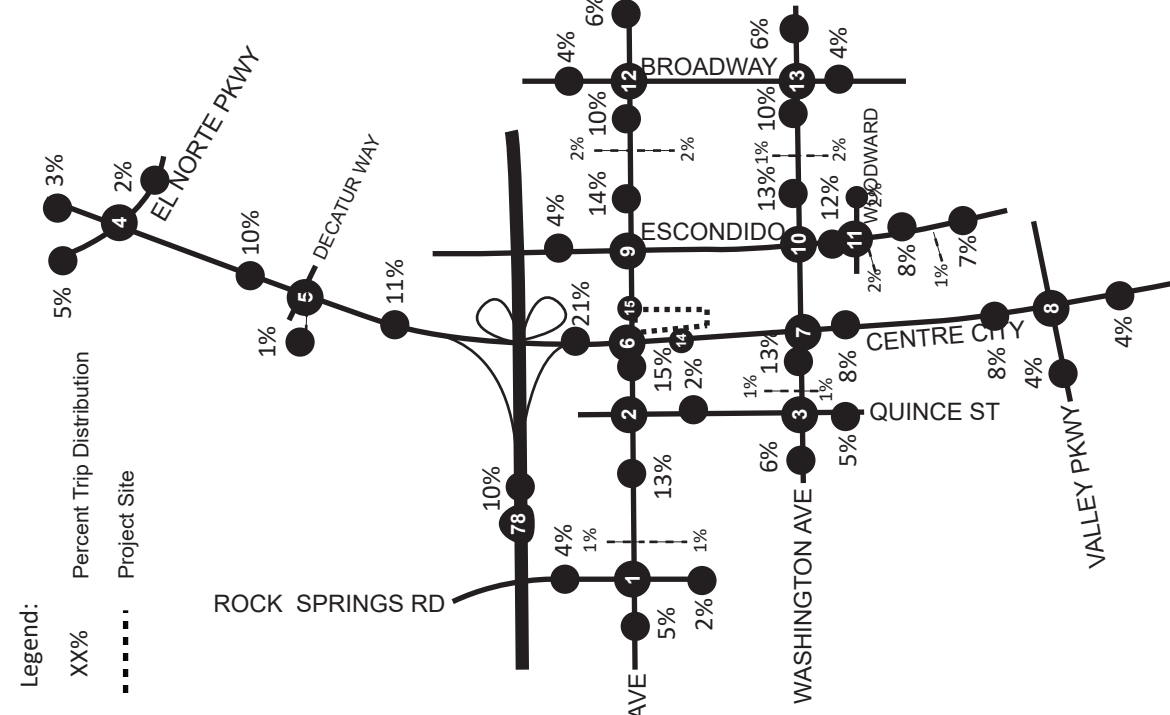
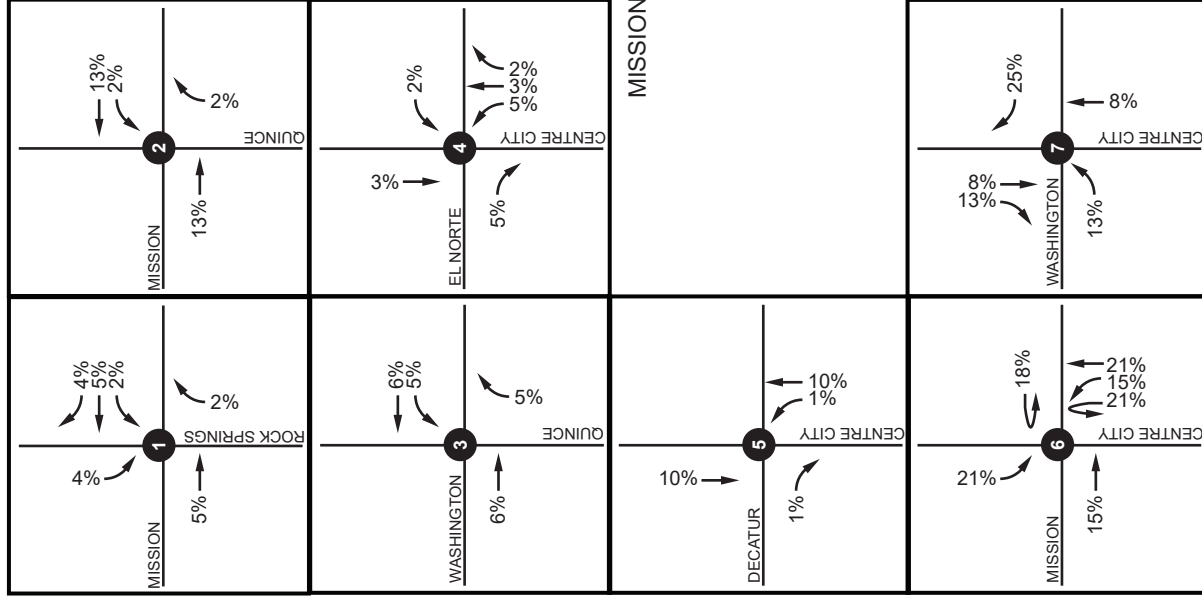


Exhibit 5A: Projected Trip Distribution of Proposed Project Net Trips

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

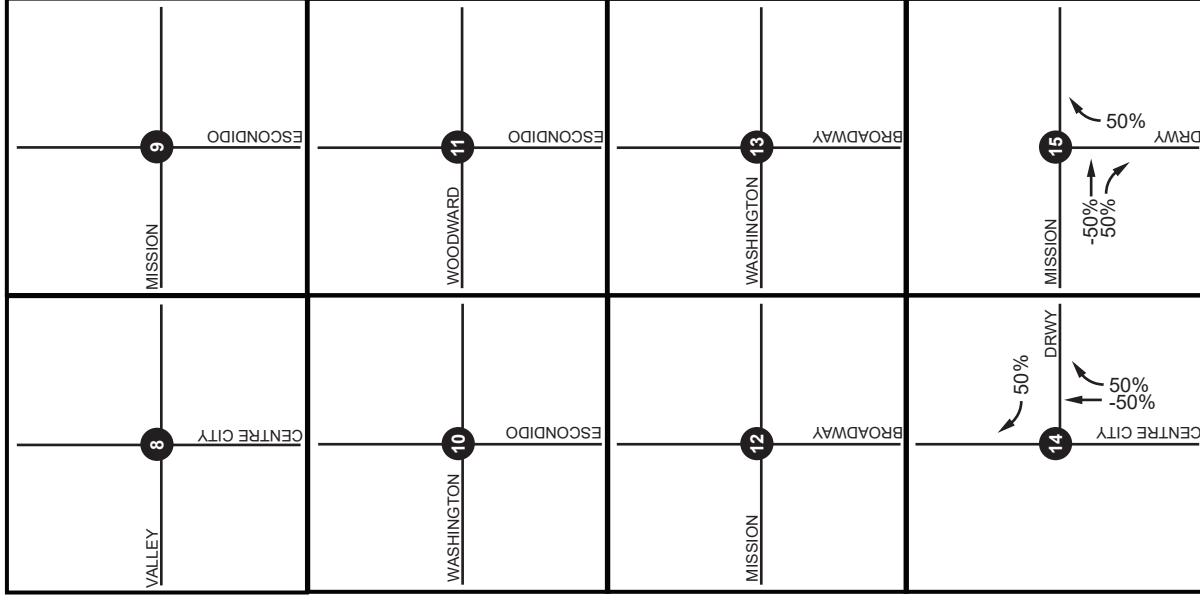
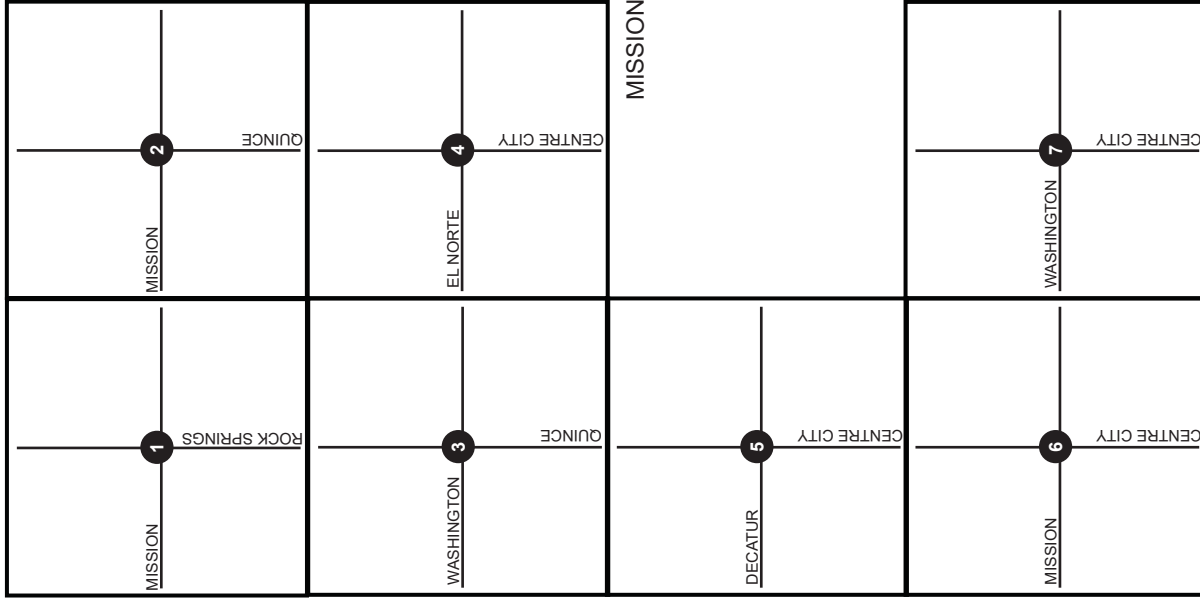


Exhibit 5B: Pass-By Trip Distribution

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

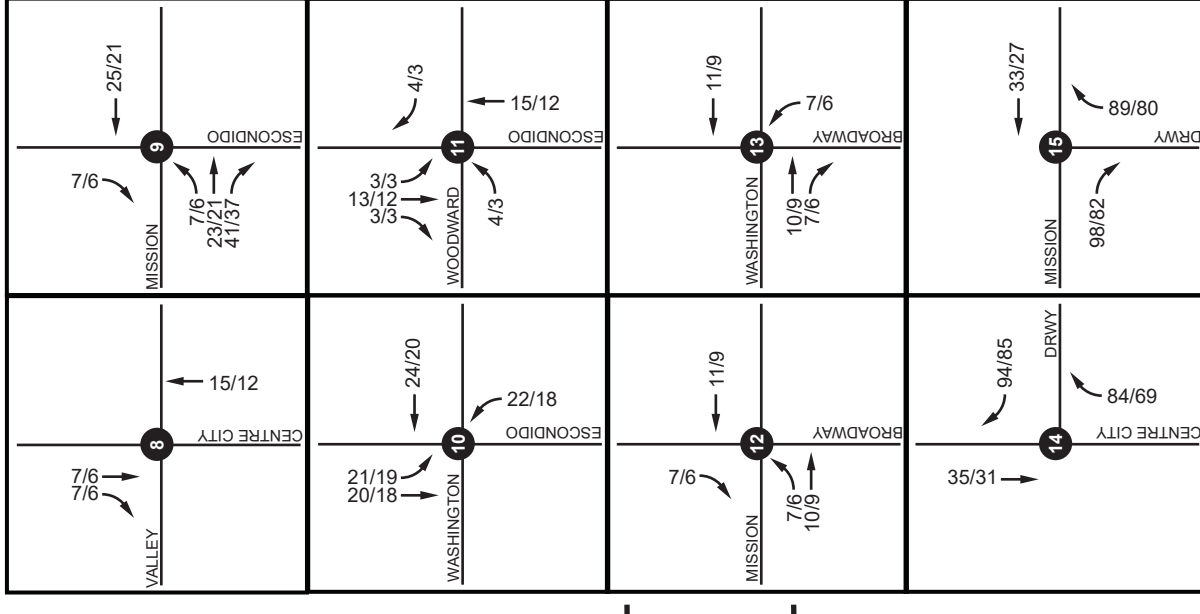
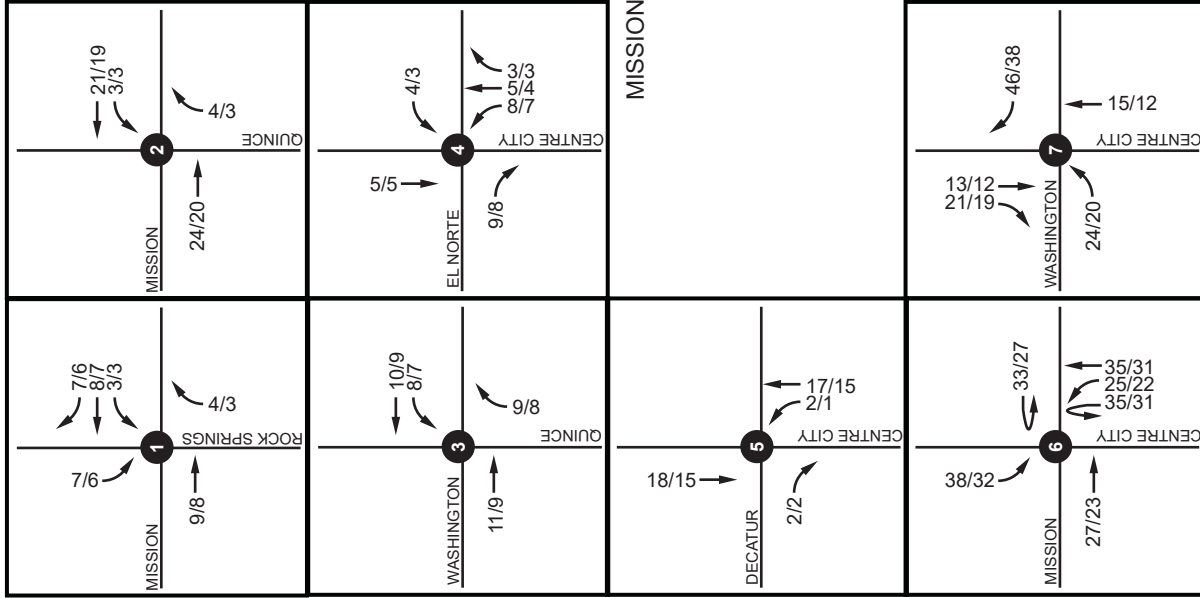
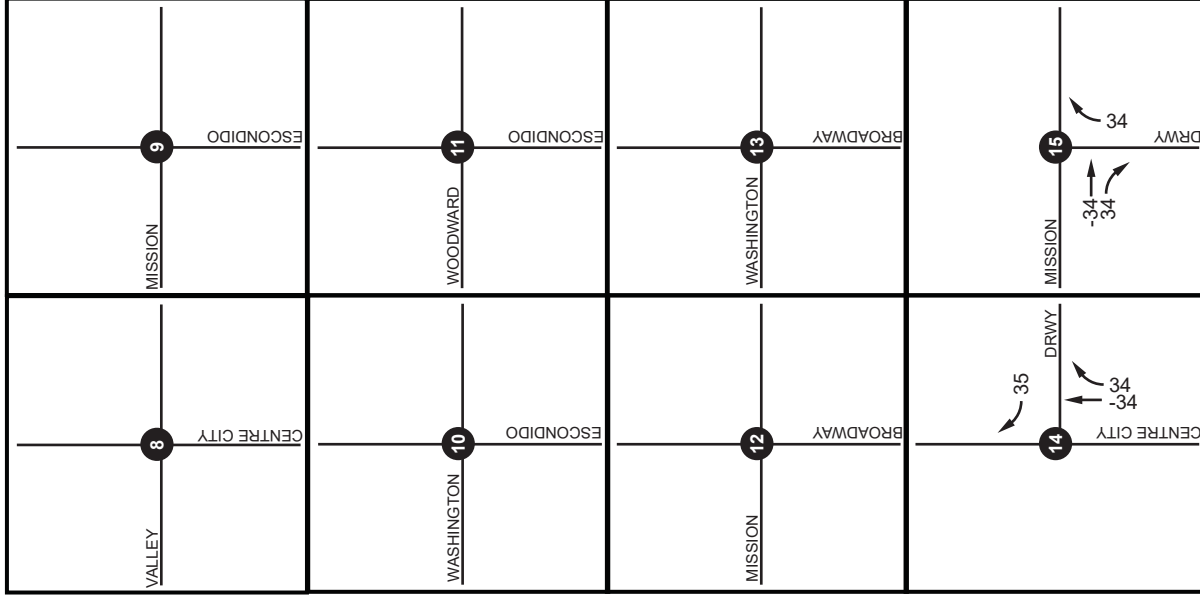
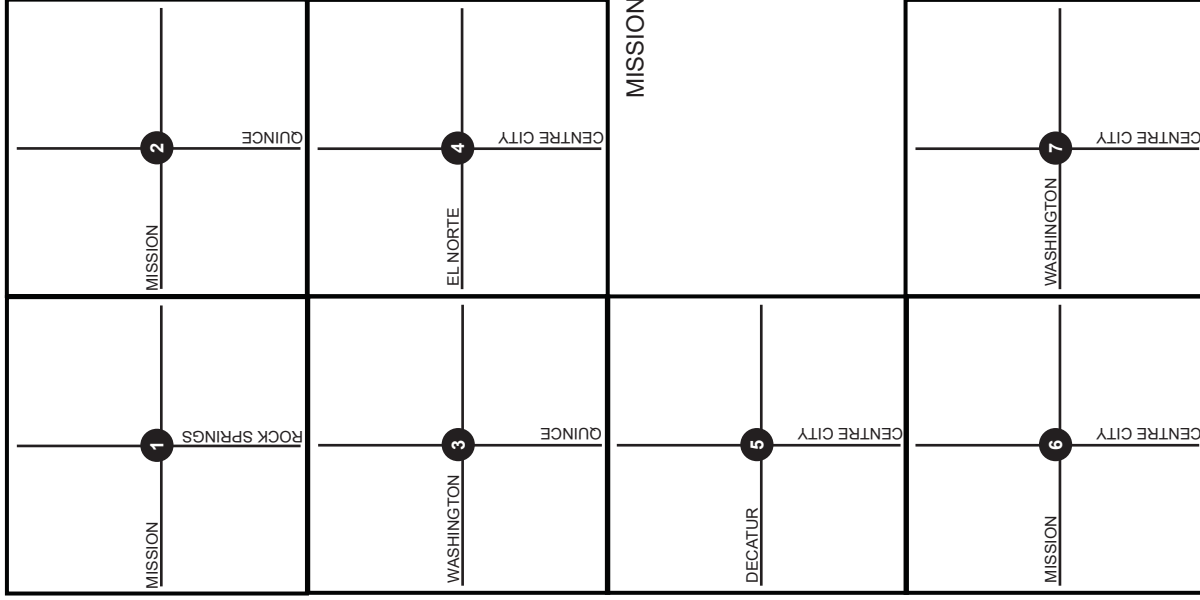


Exhibit 6A: AM-Midday & PM Peak Hour Trip Assignment

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

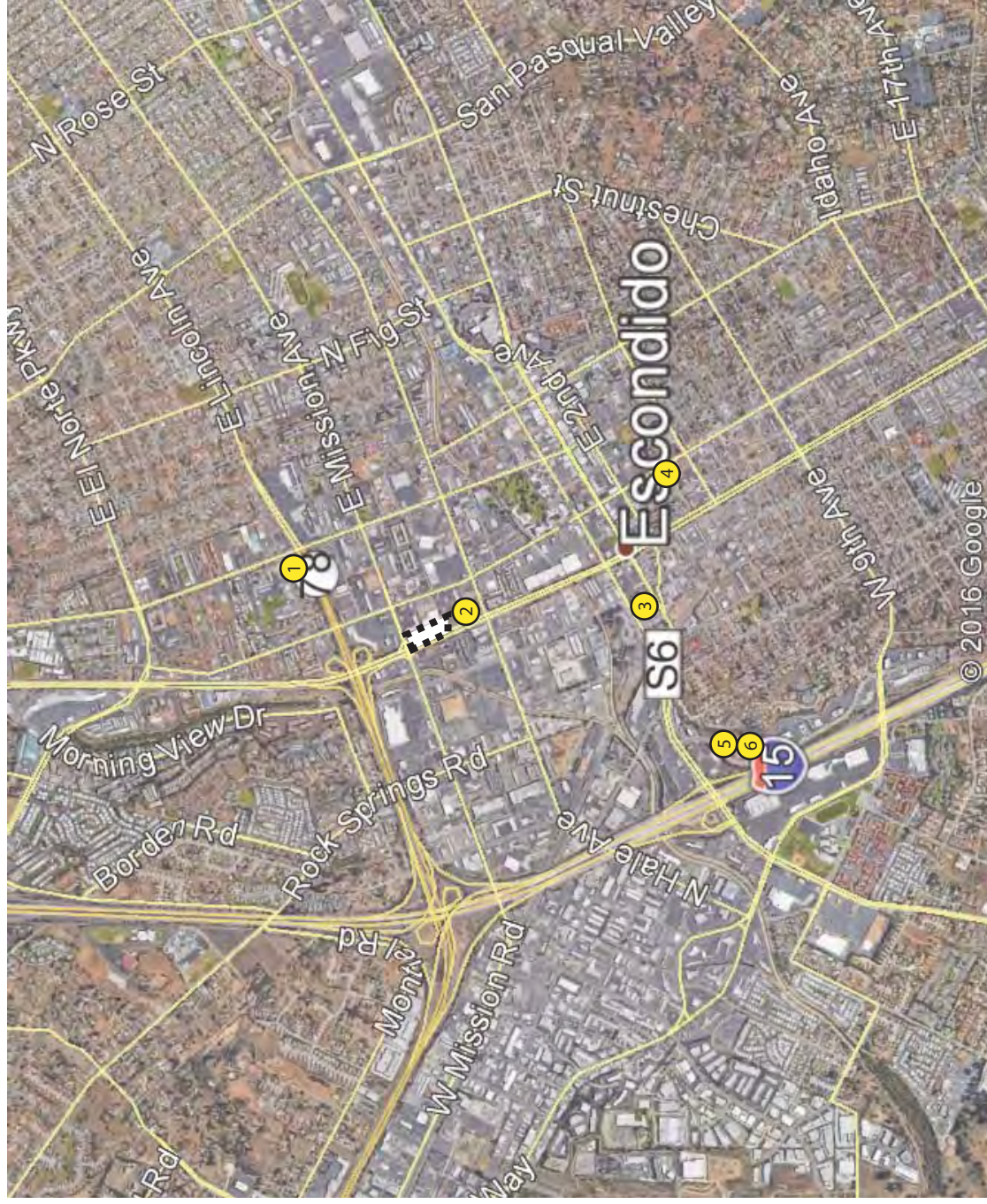


Exhibit 7: Cumulative Project Locations

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**.

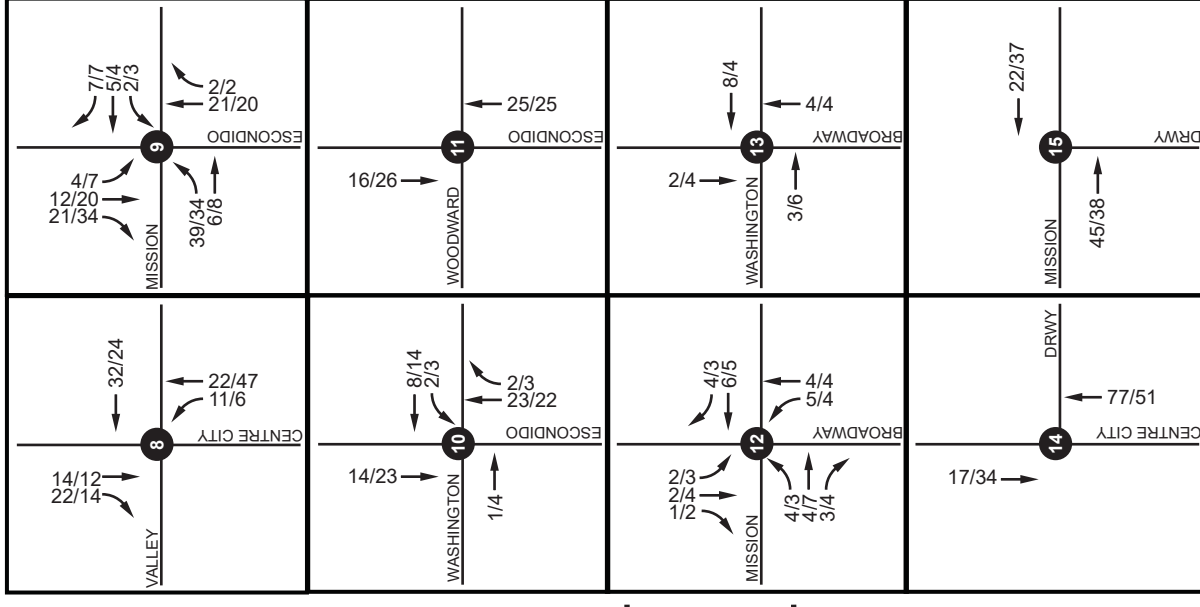
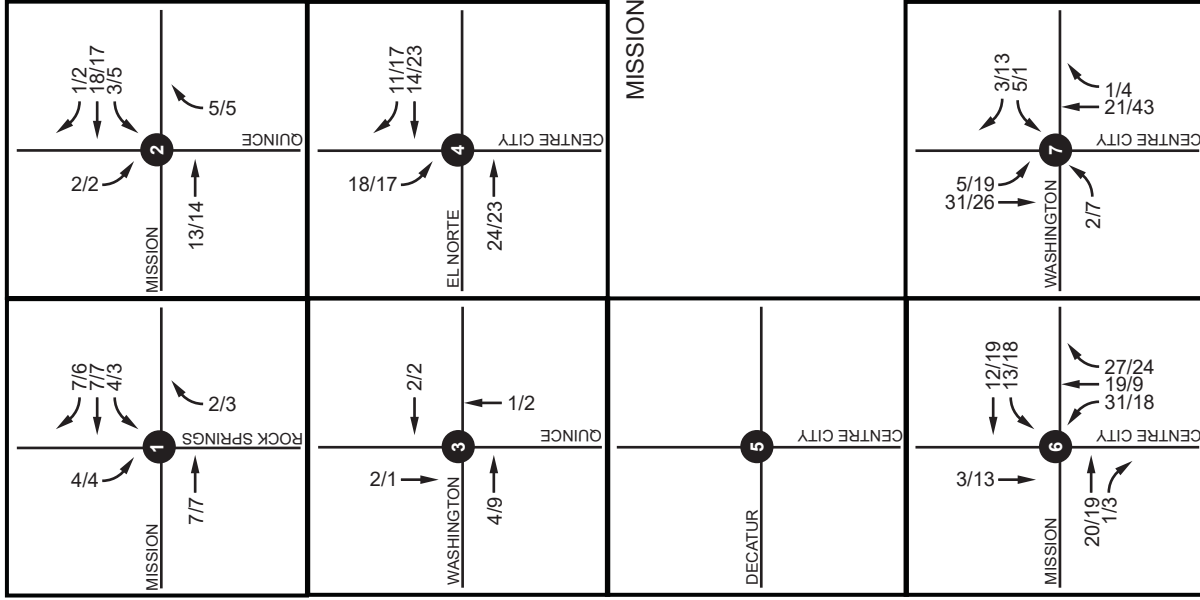


Exhibit 8: Cumulative Project AM/PM Peak Hour and Daily Trip Assignment

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**.

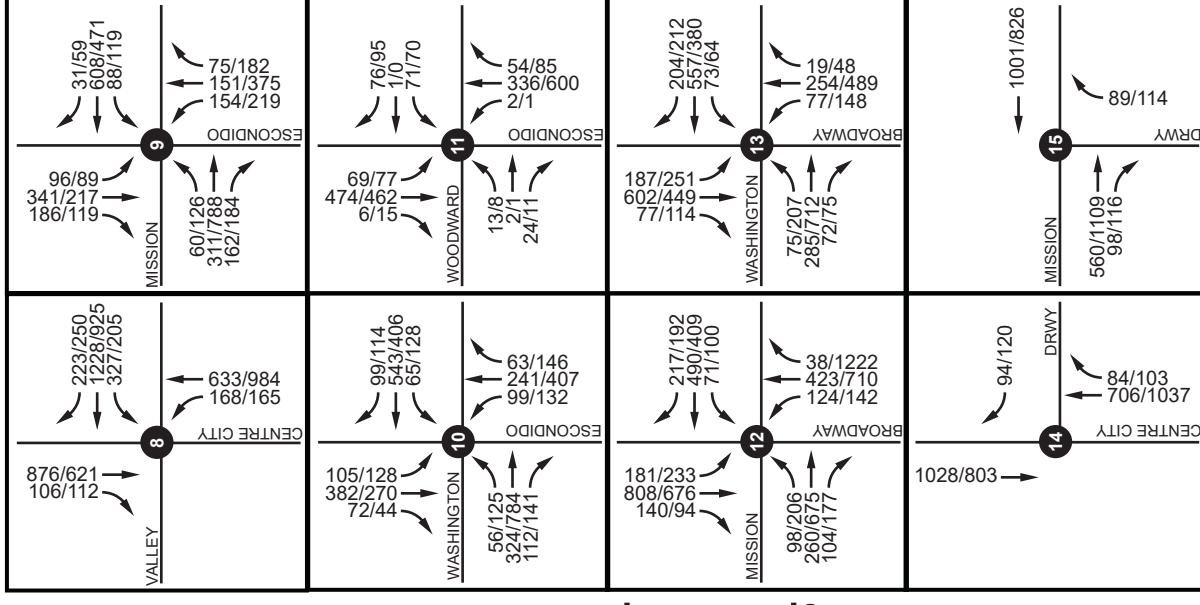
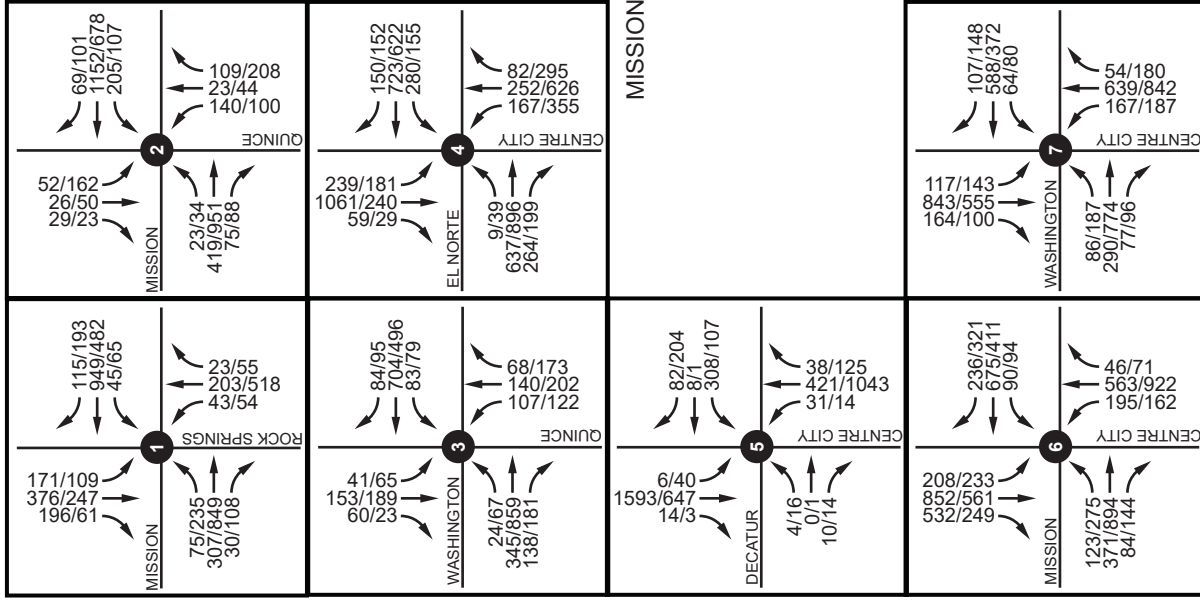


Exhibit 9A: Existing Plus Project AM/PM Peak Hour Volumes

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

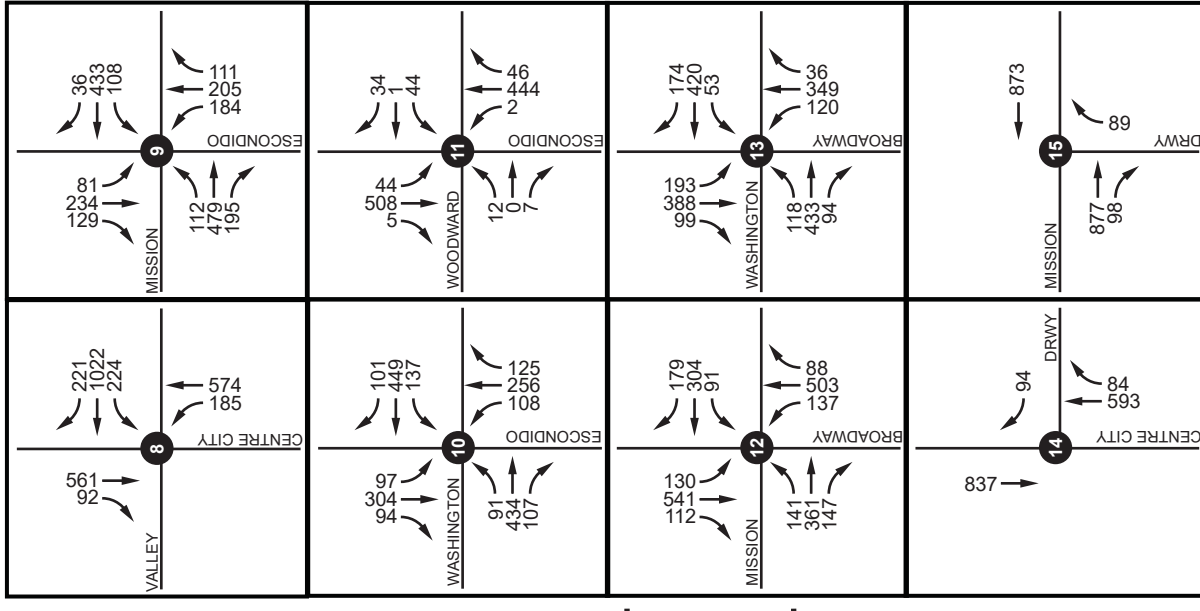
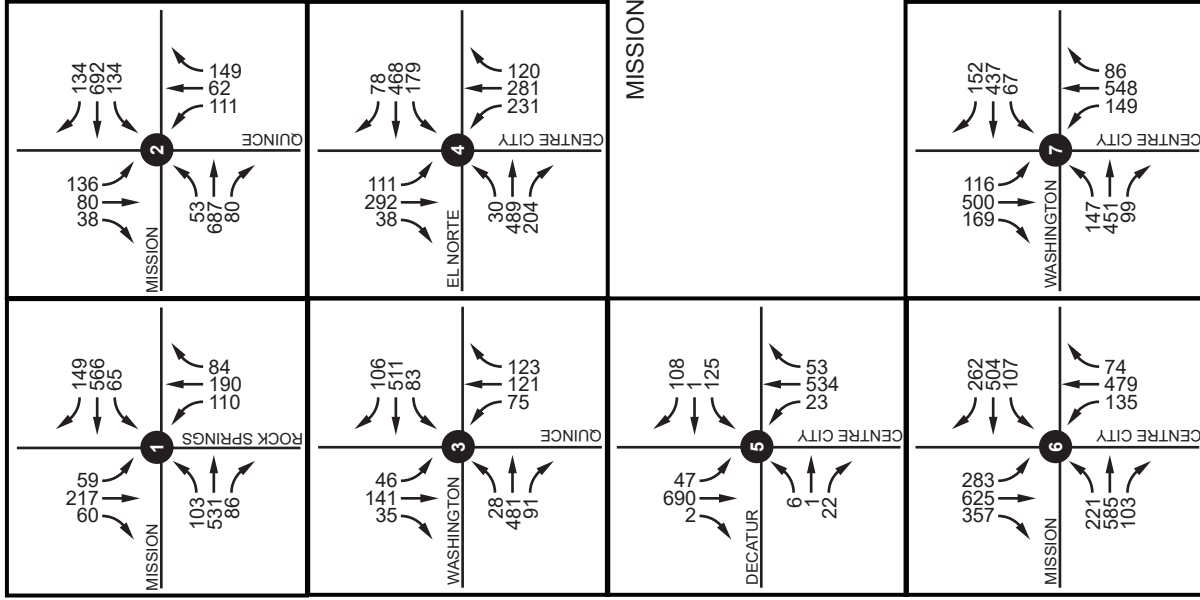


Exhibit 9B: Existing Plus Project Mid-day Peak Hour Volumes

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, Centre City Parkway/Quince Street, and Centre City Parkway/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)
- Centre City Parkway/Quince Street intersection
 - Signal timing modifications (project applicant)
- Centre City Parkway/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**.

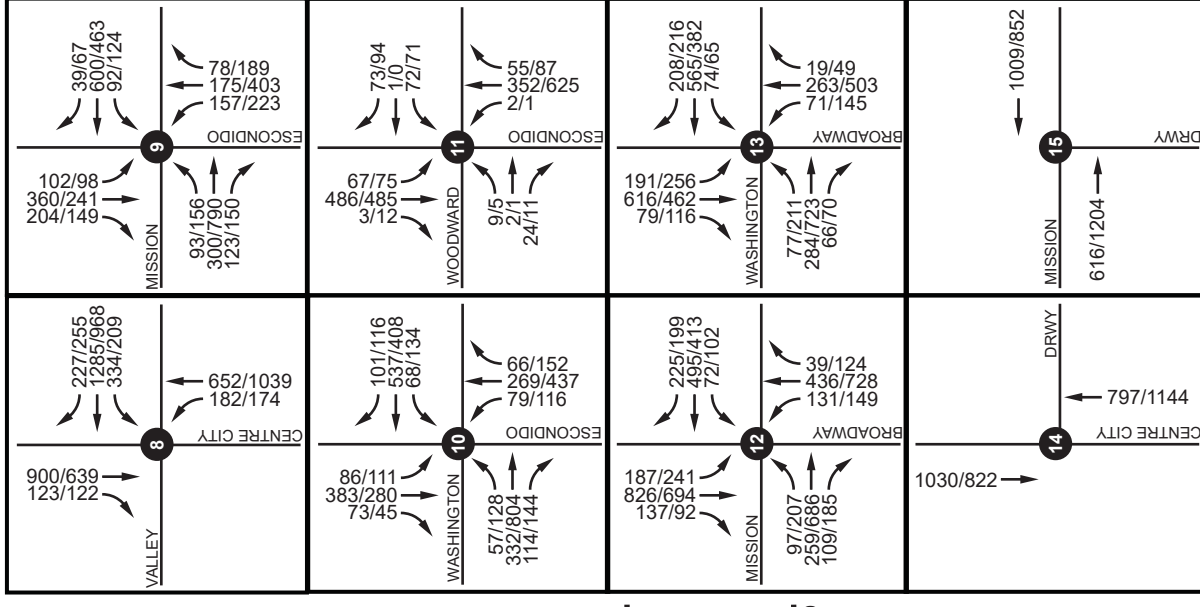
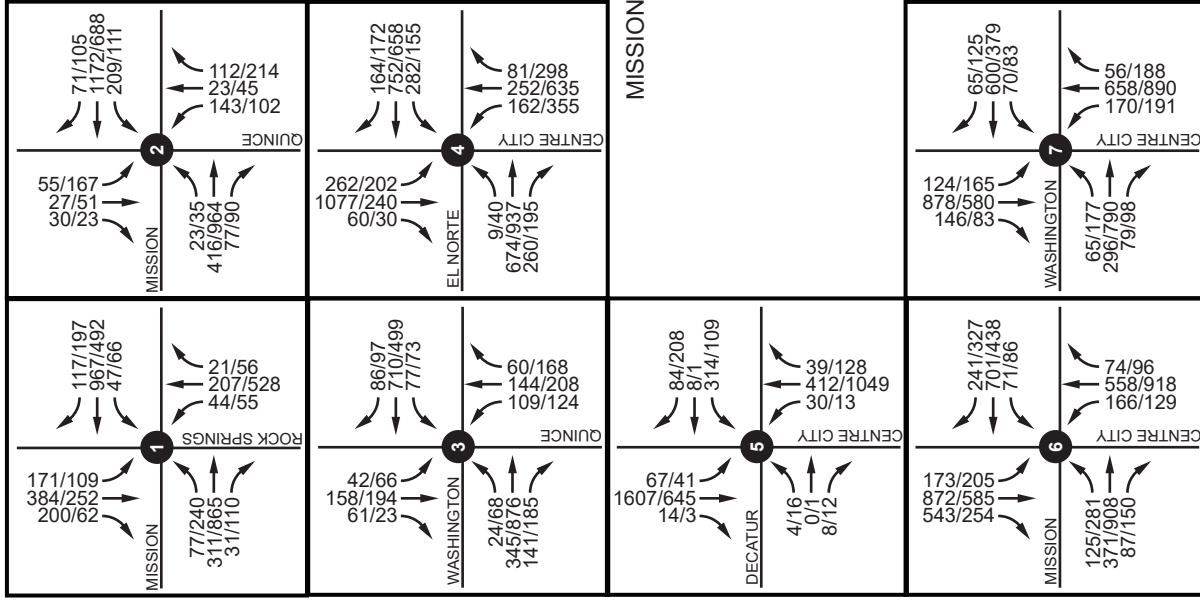


Exhibit 10A: Existing Plus Cumulative AM/PM Peak Hour Volumes

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

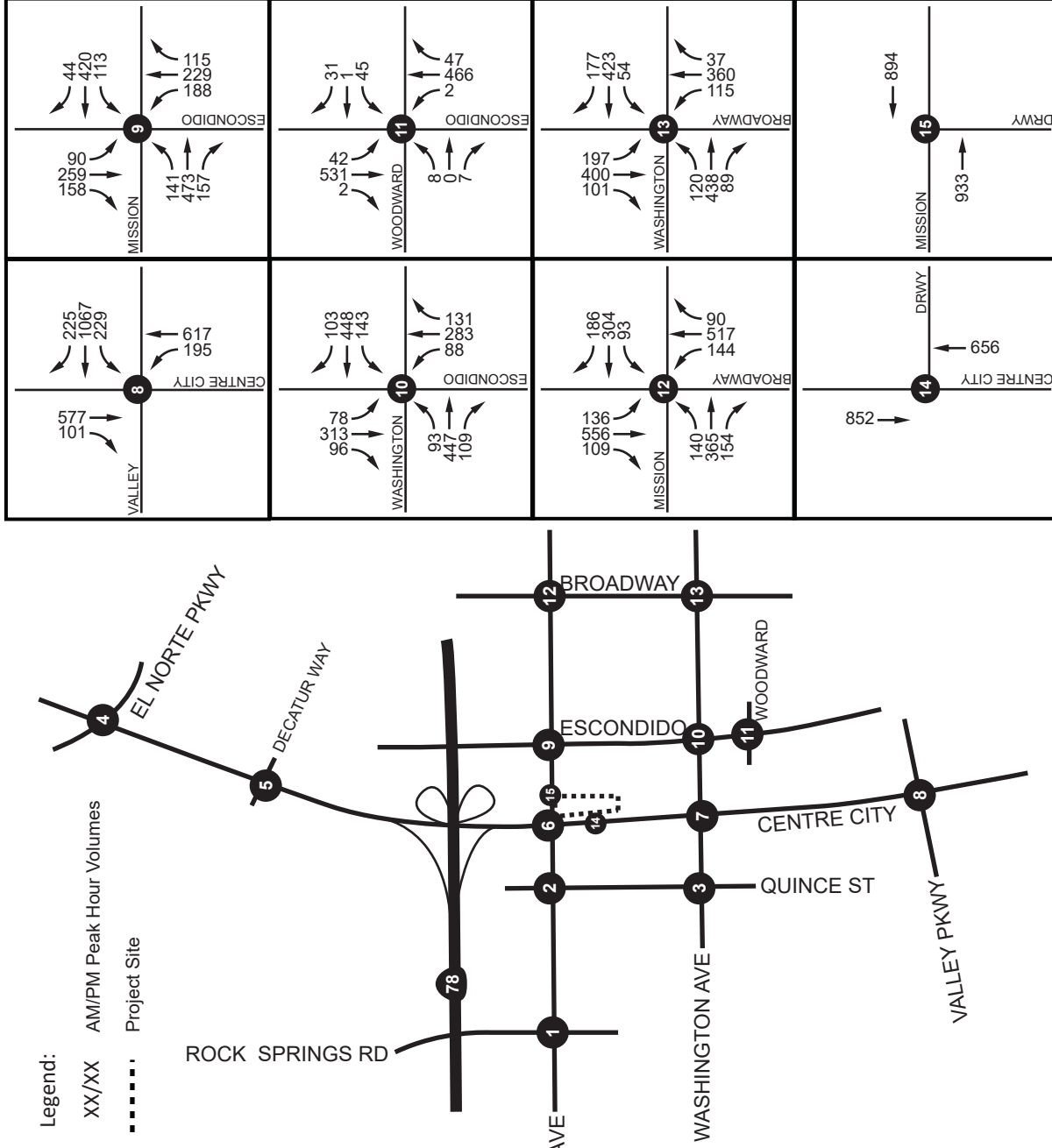
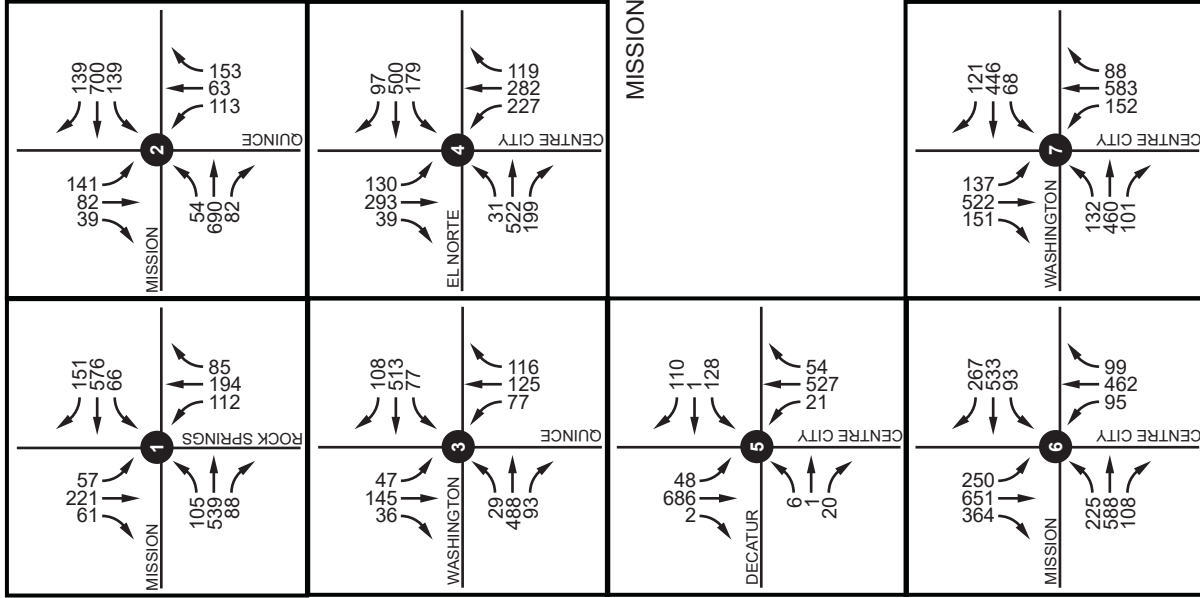


Exhibit 10B: Existing Plus Cumulative Mid-day Peak Hour Volumes

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

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**.

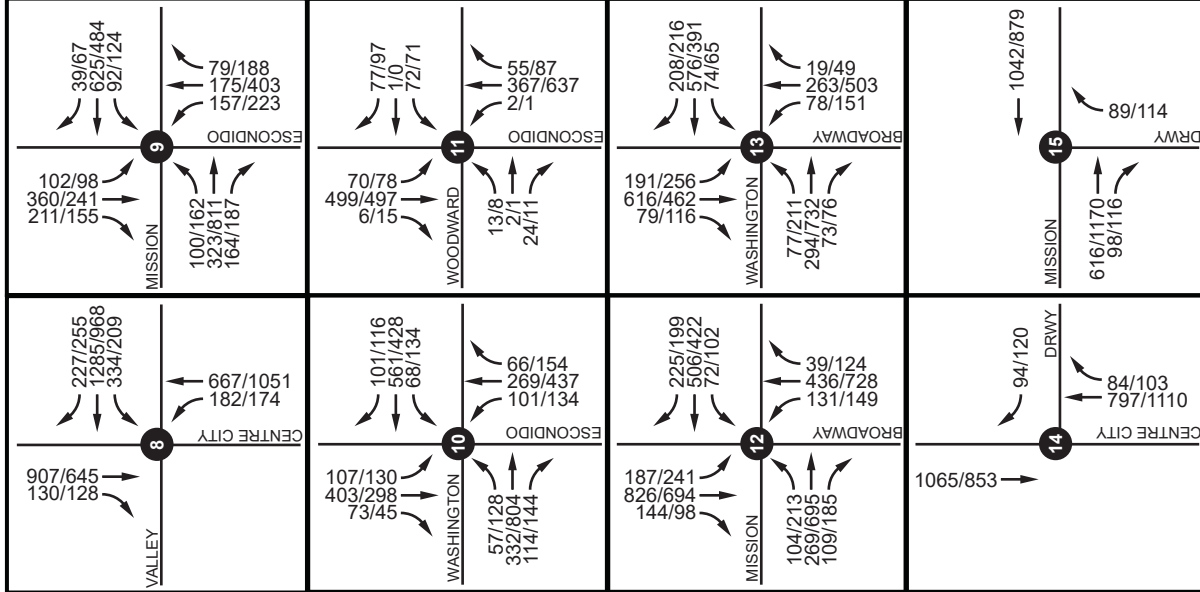
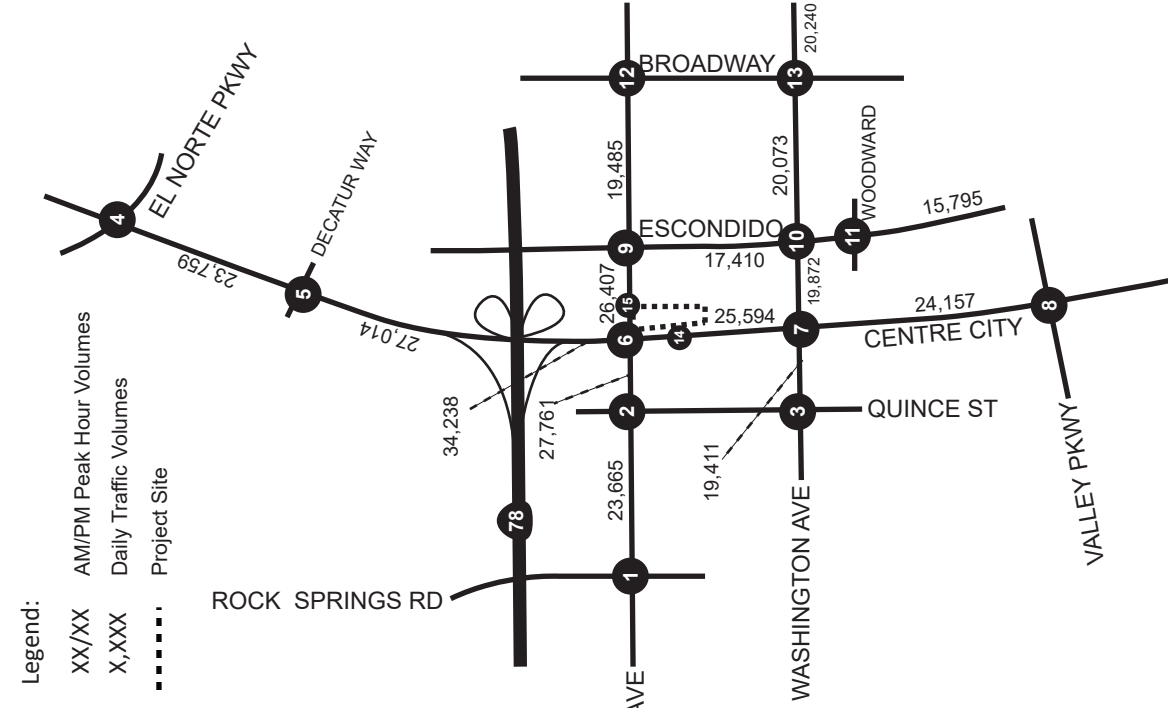
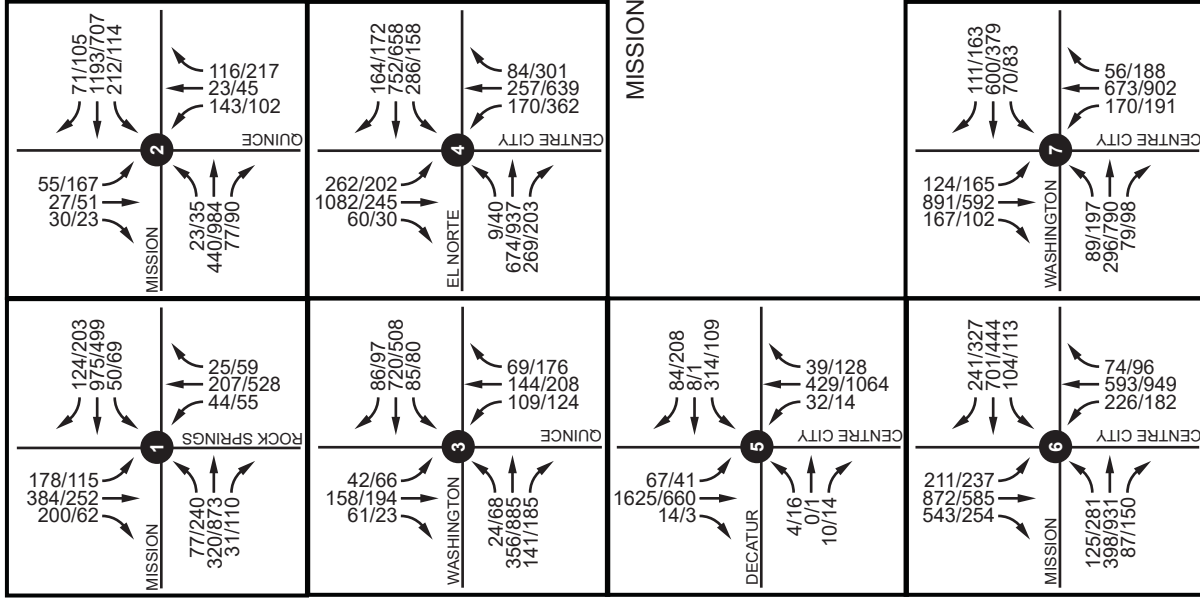


Exhibit 11A:

Existing Plus Cumulative Plus Project AM/PM Peak Hour Volumes

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

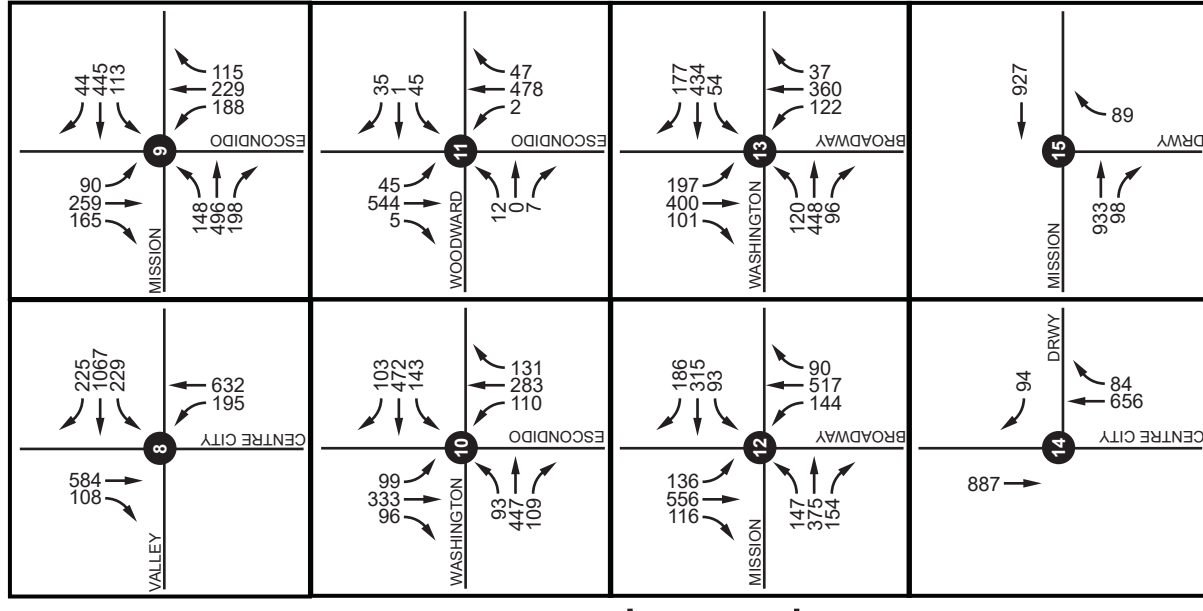
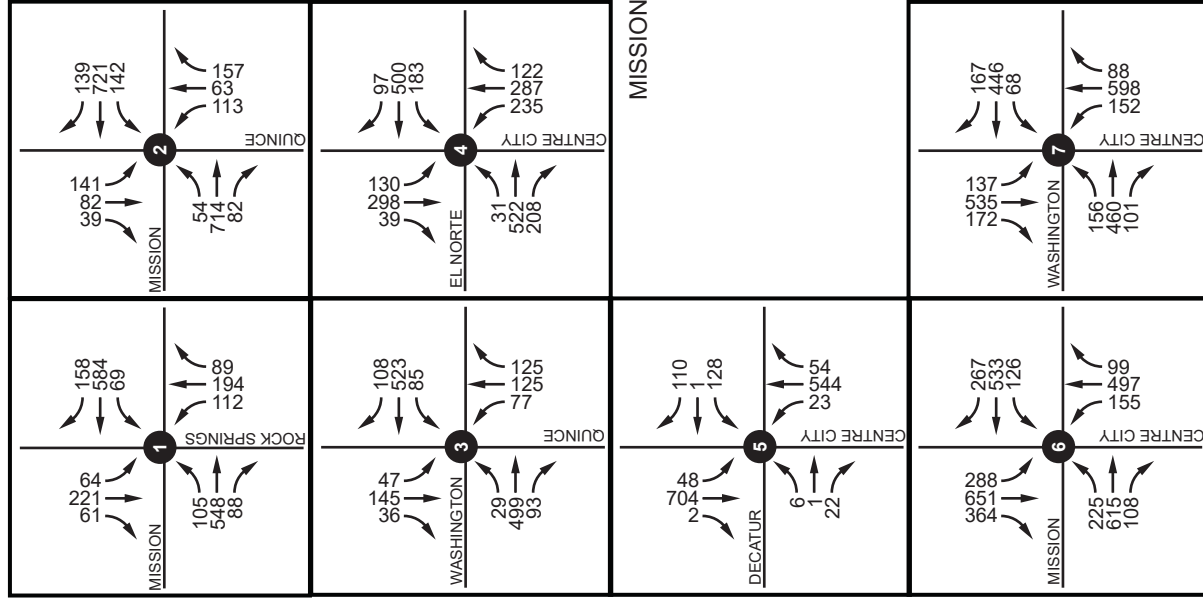


Exhibit 11B:

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, Centre City Parkway/Quince Street, and Centre City Parkway/Escondido Boulevard.

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

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

- Centre City Parkway/Quince Street intersection
 - Signal timing modifications (project applicant contribution to City CIP)
- Centre City Parkway/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 Horizon Year 2035 Without and With Project Conditions

Horizon Year 2035 without and with project conditions represents Year 2035 traffic conditions without and with the proposed Centre City Shopping Center project. The SANDAG 2035 Series 12 regional traffic model is based on planning efforts involving all jurisdictions in San Diego County. SANDAG is the regional planning agency for San Diego County and is responsible for traffic modeling as well as the Regional Transportation Plan (RTP) which is used by the traffic model to estimate future traffic. TJW obtained Year 2035 AM/PM peak hour link volumes from the Series 12 model GIS shapefiles.

Horizon year 2035 conditions assume optimized signal timing and a peak hour factor of 1.00 for all study intersections.

8.1 ROADWAY IMPROVEMENTS

No changes to the circulation system from existing conditions are assumed for Horizon Year 2035 without project conditions. For Horizon Year 2035 with project conditions, the project's proposed improvements at the Centre City Parkway/Mission Avenue intersection are included.

8.2 HORIZON YEAR 2035 WITHOUT AND WITH PROJECT TRAFFIC VOLUMES

Horizon Year 2035 without and with project volumes were derived from the Series 12 Model Run obtained from SANDAG's GIS shapefile. The SANDAG model uses a four-step method for projecting future traffic volumes on the roadway network and assumes land uses and roadway improvements listed in the City's General Plan have been completed for Horizon year 2035 conditions.

The forecasted traffic volumes are compared to the existing traffic counts taken in 2016 and reviewed for consistency with anticipated travel patterns and growth. This method produced little to no growth in several locations in the long-term so a factoring method was also utilized to ensure that long-term cumulative without project volumes are at least 5% higher than existing volumes plus the inclusion of cumulative projects volumes. The peak hour turning movement volumes have been extrapolated from peak hour approach volumes. The calculation worksheets for this extrapolation are contained in **Appendix K**.

Exhibit 12 shows *Horizon Year 2035 without project* AM and PM peak hour volumes at the study intersections and ADT volumes at the study roadway segments. **Exhibit 13** shows *Horizon Year 2035 without project* AM and PM peak hour volumes at the study intersections and ADT volumes at the study roadway segments.

Since the propose project is consistent with the site's current General Plan land use and Zoning designations, the peak hour volumes derived from the model are assumed to be horizon year 2035 with project volumes. *Horizon years 2035 without project* volumes have been derived by subtracting project trips from *horizon year 2035 with project* volumes.

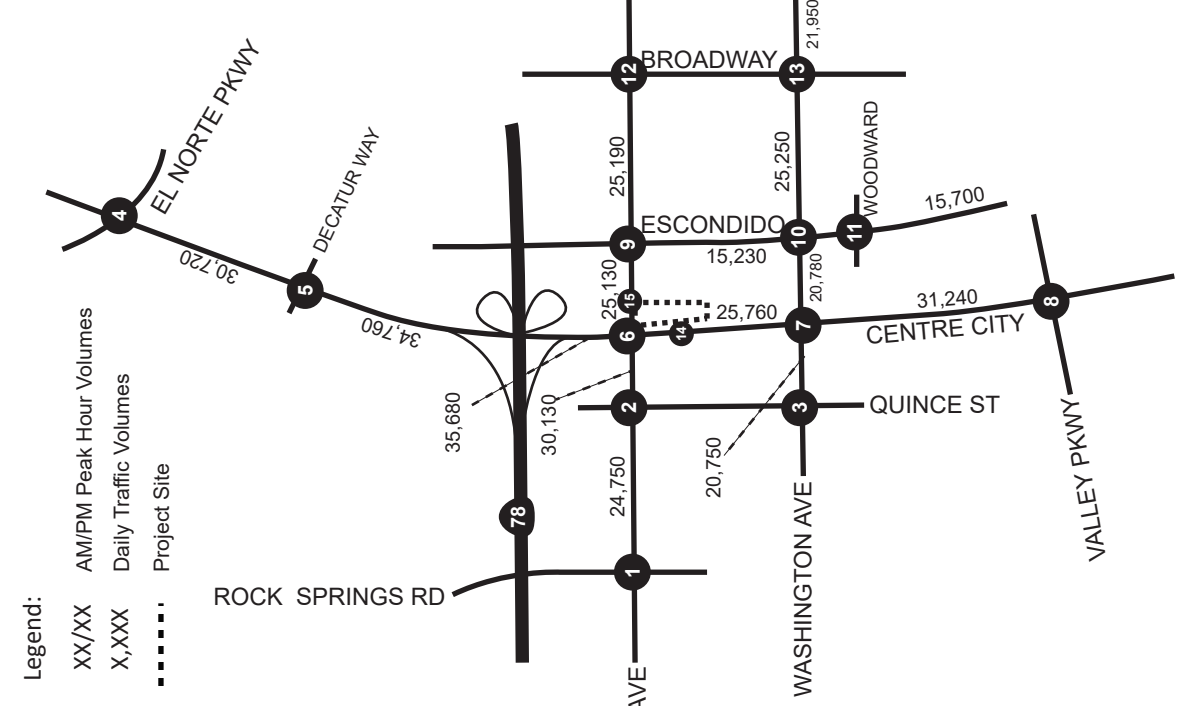
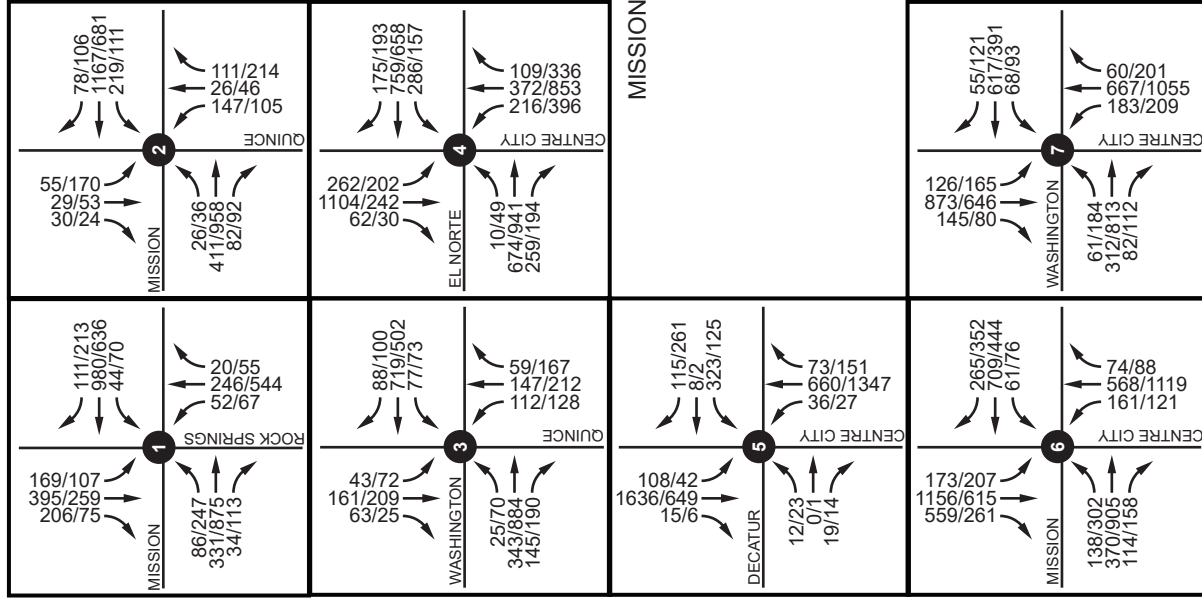


Exhibit 12: General Plan Without Project AM/PM Peak Hour Volumes

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

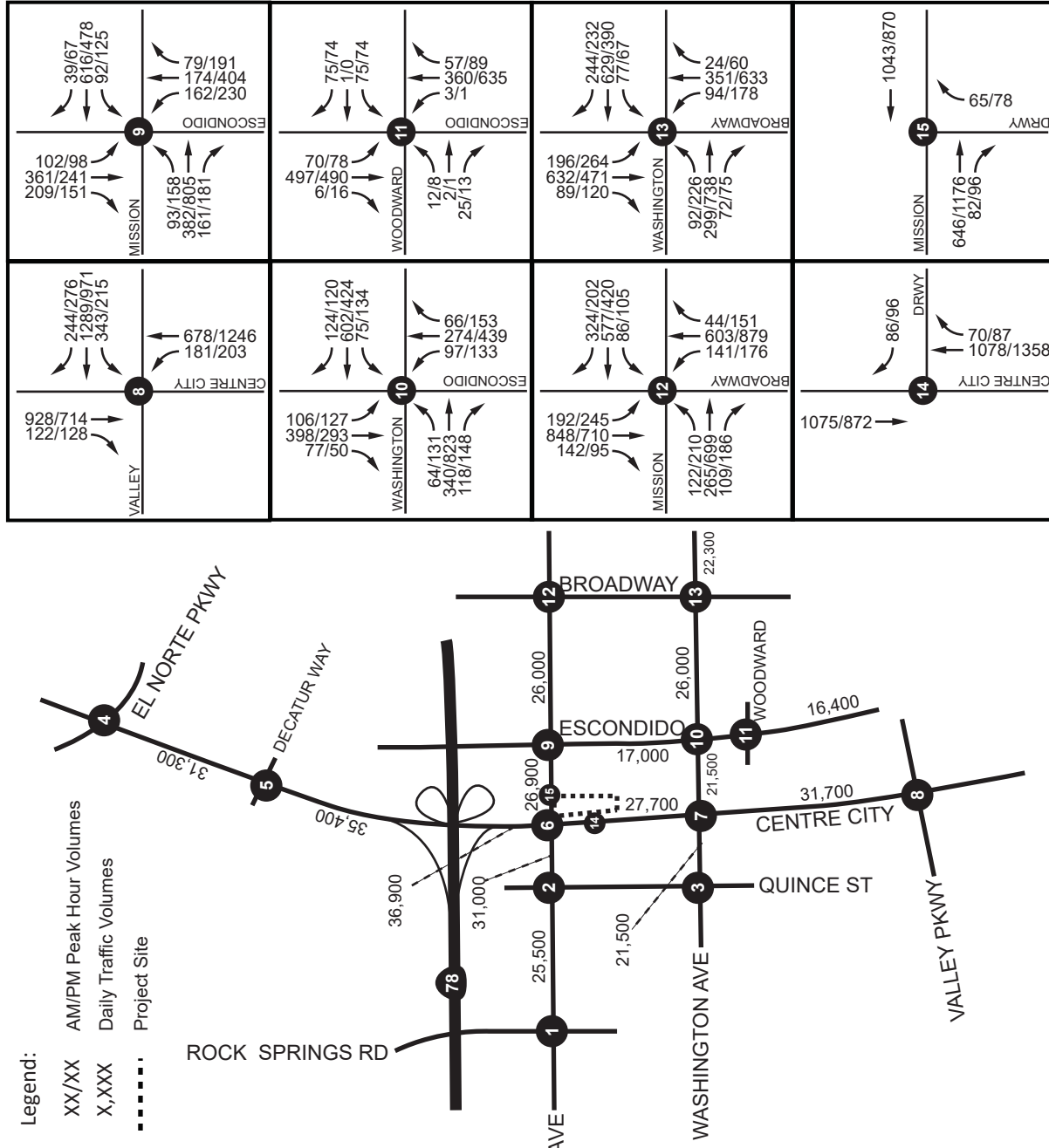
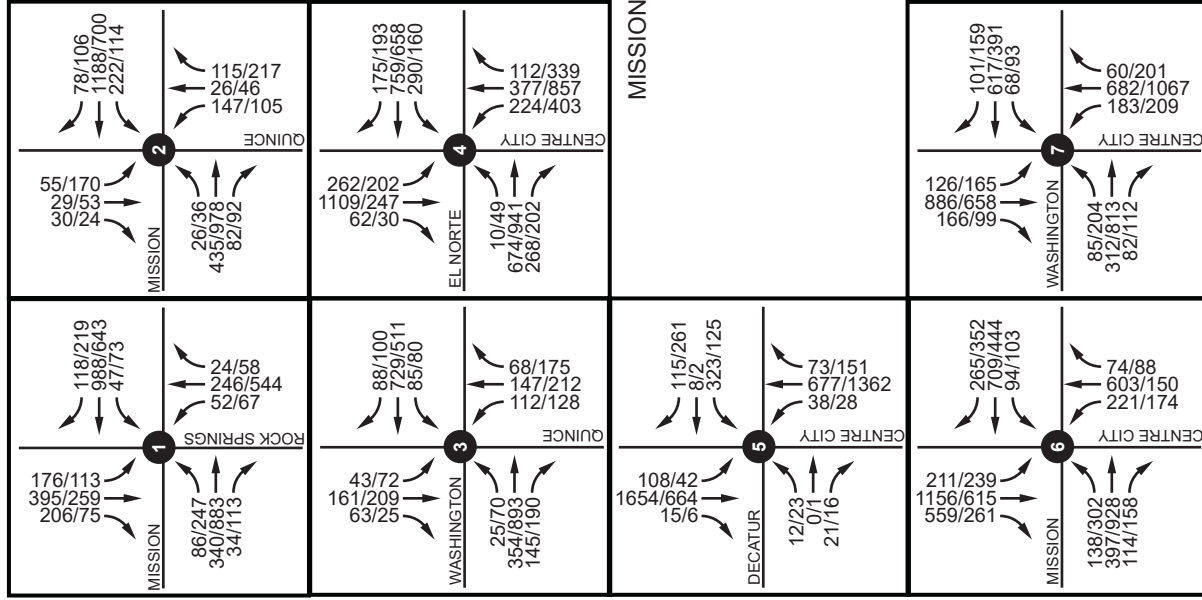


Exhibit 13: General Plan With Project AM/PM Peak Hour Volumes

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

Mid-day peak hour analysis was not performed for horizon year 2035 conditions since the SANDAG model does not include mid-day peak hour projections. It is generally assumed that AM and PM peak hour analysis will represent the worst case conditions for the long-term scenarios.

8.3 HORIZON YEAR 2035 INTERSECTION LEVEL OF SERVICE ANALYSIS

Horizon Year 2035 conditions AM and PM peak hour intersection analysis is shown in **Table 26**. HCM analysis sheets are provided in **Appendix L** and **Appendix M**.

Table 26
Intersection Analysis – Horizon Year 2035 Conditions

Intersection		Peak Hour	Horizon Year 2035 Without Project		Horizon Year 2035 With Project			
			Delay	LOS	Delay	LOS	Change	Impact?
1	Rock Springs Rd/Mission Ave	AM	22.9	C	23.4	C	0.5	No
		PM	25.5	C	25.5	C	0.0	
2	Quince St/Mission Ave	AM	46.7	D	46.8	D	0.1	No
		PM	42.1	D	42.9	D	0.8	
3	Quince St/Washington Ave	AM	14.7	B	14.7	B	0.0	No
		PM	11.3	B	11.4	B	0.1	
4	Centre City Pkwy/El Norte Pkwy	AM	53.9	D	54.2	D	0.3	No
		PM	48.0	D	48.3	D	0.3	
5	Centre City Pkwy/Decatur	AM	43.4	D	44.9	D	1.5	No
		PM	28.5	C	28.9	C	0.4	
6	Centre City Pkwy/Mission Ave	AM	48.8	D	49.2	D	0.4 ¹	No
		PM	52.4	D	47.4	D	-5.0 ¹	
7	Centre City Pkwy/Washington Ave	AM	29.3	C	30.1	C	0.8	No
		PM	43.6	D	45.4	D	1.8	
8	Centre City Pkwy/Valley Pkwy	AM	33.8	C	33.7	C	-0.1	No
		PM	21.5	C	21.5	C	0.0	
9	Escondido Blvd/Mission Ave	AM	41.6	D	42.0	D	0.4	No
		PM	40.2	D	42.1	D	1.9	
10	Escondido Blvd/Washington Ave	AM	30.0	C	30.7	C	0.7	No
		PM	35.1	D	37.0	D	1.9	
11	Escondido Blvd/Woodward Ave	AM	12.2	B	12.3	B	0.1	No
		PM	17.3	B	17.3	B	0.0	
12	Broadway/Mission Ave	AM	45.7	D	47.2	D	1.5	No
		PM	47.8	D	47.9	D	0.1	
13	Broadway/Washington Ave	AM	37.1	D	38.0	D	0.9	No
		PM	47.3	D	47.7	D	0.4	
14	Centre City Pkwy/Project Drwy	AM	N/A	N/A	14.0	B	14.0	No
		PM	N/A	N/A	17.1	C	17.1	
15	Project Drwy/Mission Ave	AM	N/A	N/A	11.3	B	11.3	No
		PM	N/A	N/A	15.5	C	15.5	

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

As shown in **Table 26**, the intersections are projected to operate at an acceptable LOS (LOS D or better) during the AM and PM peak hours for *horizon year 2035 without and with project* conditions.

Based on the published City of Escondido/SANTEC thresholds of significance, the proposed project is not projected to result in a significant impact at any of the study intersections for *horizon year 2035* conditions.

8.4 HORIZON YEAR 2035 ROADWAY SEGMENT LEVEL OF SERVICE ANALYSIS

Table 27 summarizes *horizon year 2035* conditions roadway segment analysis based on capacities contained in the City of Escondido traffic impact analysis guidelines.

Table 27
Roadway Segment Analysis – Horizon Year 2035 Conditions

Roadway Segment	Functional Class	LOS E Capacity	Horizon Year 2035 Without Project		Horizon Year 2035 With Project	
			ADT	V/C LOS	ADT	V/C LOS
Mission – Rock Springs to Quince	4 – M, NP	34,200	24,750	0.724 C	25,500	0.746 C
Mission – Quince to Centre City	4 – M, NP	34,200	30,310	0.881 D	31,000	0.906 E
Mission – Centre City to Escondido	4 – M, NP	34,200	25,130	0.735 C	26,900	0.787 D
Mission – Escondido to Broadway	4 – M, NP	34,200	25,190	0.737 C	26,000	0.760 D
Centre City – El Norte to Decatur	4 – M, NP	37,000	30,720	0.830 D	31,300	0.846 D
Centre City – Decatur to SR-78	4 – M, NP	37,000	34,760	0.939 E	35,400	0.957 E
Centre City – SR-78 to Mission	5 – M, NP	37,000/ 43,500*	35,680	0.964 E	36,900	0.848 D
Centre City – Mission to Washington	4 – SM, NP	37,000	25,760	0.696 C	27,700	0.749 C
Centre City – Washington to Valley	4 – SM, NP	37,000	31,240	0.844 D	31,700	0.857 D
Escondido – Mission to Washington	4 – C, NP	34,200	15,230	0.445 B	17,000	0.497 B
Escondido – Washington to Valley	4 – C, NP	34,200	15,700	0.459 B	16,400	0.480 B
Washington – Quince to Centre City	4 – C, NP	34,200	20,750	0.607 C	21,500	0.629 C
Washington – Centre City to Escondido	4 – C, NP	34,200	20,780	0.608 C	21,500	0.629 C
Washington – Escondido to Broadway	4 – C, NP	34,200	25,250	0.738 C	26,000	0.760 C
Washington – east of Broadway	4 – C, NP	34,200	21,950	0.642 C	22,300	0.652 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

* 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 27**, the study roadway segments are projected to operate at an acceptable LOS (LOS D or better) for *horizon year 2035* conditions with the exception of Centre City Parkway between Decatur and the SR-78 and Mission Avenue between Quince and Centre City Parkway.

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 Centre City Parkway between Decatur and the SR-78 Ramps, the Centre City Parkway/Decatur intersection is projected to operate at LOS D or better and the other end of the segment at the SR 78 ramps operates with free movements. In the case of Mission Avenue between Quince Street and Centre City Parkway the Mission Avenue intersections with Quince Street and Centre City Parkway 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 28 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 and Decatur/Centre City Parkway intersections.

Table 28
Approach Delay on Ends of Potentially Impacted Roadway Segments
Horizon Year 2035 With Project Conditions

Intersection/Approach	AM Peak Hour (Delay – LOS)	PM Peak Hour (Delay – LOS)
Quince Street/Mission Avenue		
Eastbound Mission Avenue	33.4 – C	48.4 – D
Westbound Mission Avenue	51.4 – D	37.2 – D
Centre City Parkway/Decatur		
Northbound Centre City Parkway	24.3 – C	29.5 – C
Southbound Centre City Parkway	47.5 – D	18.5 – B
Centre City Parkway/Mission Avenue		
Northbound Centre City Parkway	48.2 – D	41.0 – D
Southbound Centre City Parkway	60.2 – E	44.5 – D
Eastbound Mission Avenue	52.3 – D	57.5 – E
Westbound Mission Avenue	28.2 – C	45.7 – D
Escondido Boulevard/Mission Avenue		
Eastbound Mission Avenue	39.3 – D	50.6 – D
Westbound Mission Avenue	37.3 – D	36.8 – D
Centre City Parkway/Washington Avenue		
Northbound Centre City Parkway	49.3 – D	46.7 – D
Southbound Centre City Parkway	21.7 – C	36.0 – D

Note: Approach delay shown in seconds.

As shown in the table, approach delays at the Centre City Parkway/Decatur intersection in the northbound and southbound direction are LOS D or better, therefore no impact is projected on Center City Parkway between Decatur and the SR-78

As shown in the table, approach delays in the eastbound and southbound directions of the Centre City Parkway/Mission Avenue intersection operate at LOS E during at least one period. Recommended improvements to address the project's impacts are discussed in Section 8.6.

8.5 HORIZON YEAR 2035 RAMP METER ANALYSIS

Table 29 summarizes the *horizon year 2035* 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 provide by Caltrans.

Table 29
Ramp Meter Analysis – Horizon Year 2035 With 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)	144	570	0	0	0
	AM (SOV)	554	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)	144	352	0	0	0
	AM (SOV)	554	352	202	34.4	5050
	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)	144	436	0	0	0
	AM (SOV)	554	436	118	16.2	2950
	PM	Meter is not turned on				

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 *horizon year 2035 conditions*.

8.6 HORIZON YEAR 2035 WITH PROJECT RECOMMENDED IMPROVEMENTS

No additional improvements beyond those previously identified in the existing plus project scenario are recommended. As such, identical to the mitigation described in section 5.6, the following changes would occur under the existing plus cumulative plus project plus mitigation scenario:

- Centre City Parkway/Mission Avenue intersection
 - o Addition of second eastbound left-turn (project applicant contribution to City CIP)
 - o Addition of second westbound left-turn (project applicant contribution to City CIP)
 - o Signal timing modifications (project applicant contribution to City CIP)
- Centre City Parkway/Quince Street intersection
 - o Signal timing modifications (project applicant contribution to City CIP)
- Centre City Parkway/Escondido Boulevard intersection
 - o 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 30**. HCM analysis sheets are provided in **Appendix N**.

Table 30
Horizon year 2035 With Project Plus Mitigation Intersection LOS

Intersection/Approach	Horizon Year 2035 With Project		Horizon Year 2035 With Project Plus Mitigation	
	AM	PM	AM	PM
Quince Street/Mission Avenue				
Eastbound Mission Avenue	33.4 – C	48.4 – D	33.0 – C	35.1 – D
Westbound Mission Avenue	51.4 – D	37.2 – D	14.3 – B	48.1 – D
Overall Intersection	46.8 – D	42.9 – D	24.0 – C	42.9 – D
Centre City Parkway/Mission Avenue				
Northbound Centre City Parkway	48.2 – D	57.5 – E	23.6 – C	43.0 – D
Southbound Centre City Parkway	60.2 – E	45.7 – D	52.7 – D	42.8 – D
Eastbound Mission Avenue	52.3 – D	41.0 – D	47.1 – D	53.7 – D
Westbound Mission Avenue	28.2 – C	44.5 – D	28.2 – C	29.1 – D
Overall Intersection	49.2 – D	47.4 – D	40.4 – D	43.4 – D
Escondido Boulevard/Mission Avenue				
Eastbound Mission Avenue	39.3 – D	50.6 – D	37.5 – D	37.0 – D
Westbound Mission Avenue	37.3 – D	36.8 – D	36.6 – D	42.4 – D
Overall Intersection	42.0 – D	42.1 – D	41.5 – D	42.6 – 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.

9.0 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 14** 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.

9.1 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

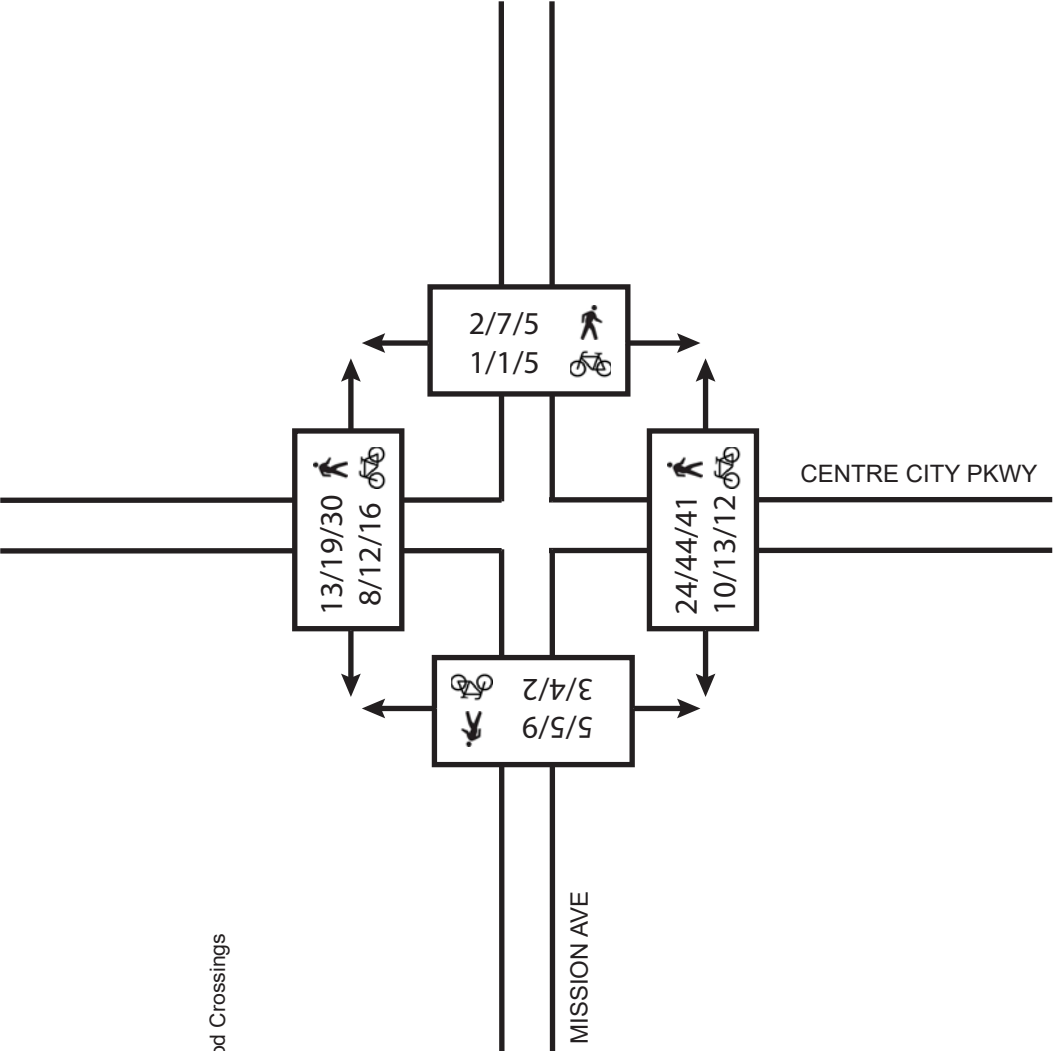


Exhibit 14: Existing AM/Mid-day/PM Peak Period Bicycle and Pedestrian Volumes

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

10.0 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.

11.0 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 31 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 O**.

Table 31
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.

- o 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.

- o 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**

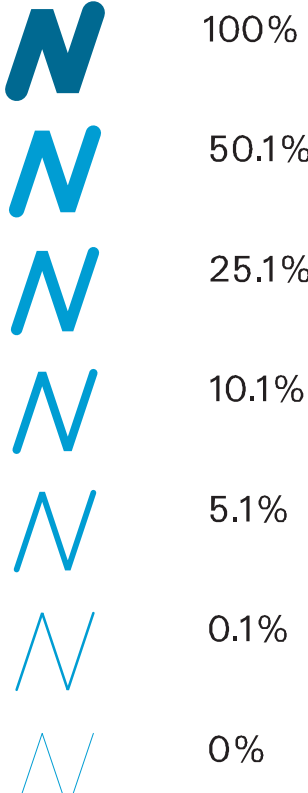
ESCONDIDO Area

Model Run 11/19/15
SR02 V2 2035 R01 R111
2035 - Revenue Constrained

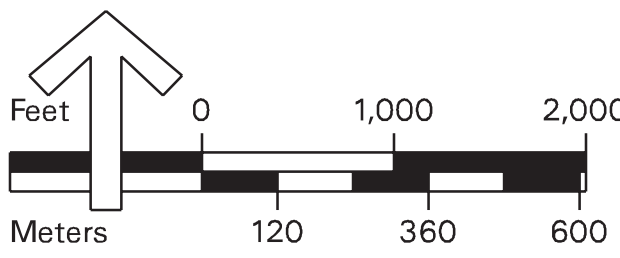
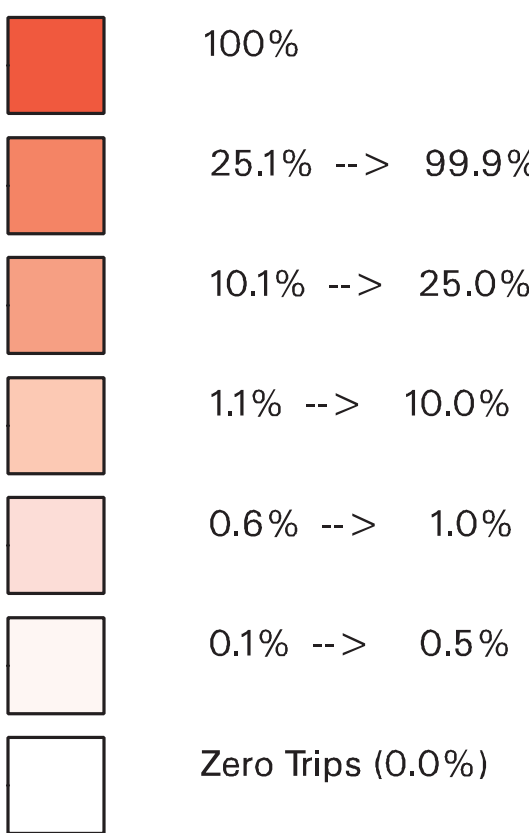
Forecasted Volumes:

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

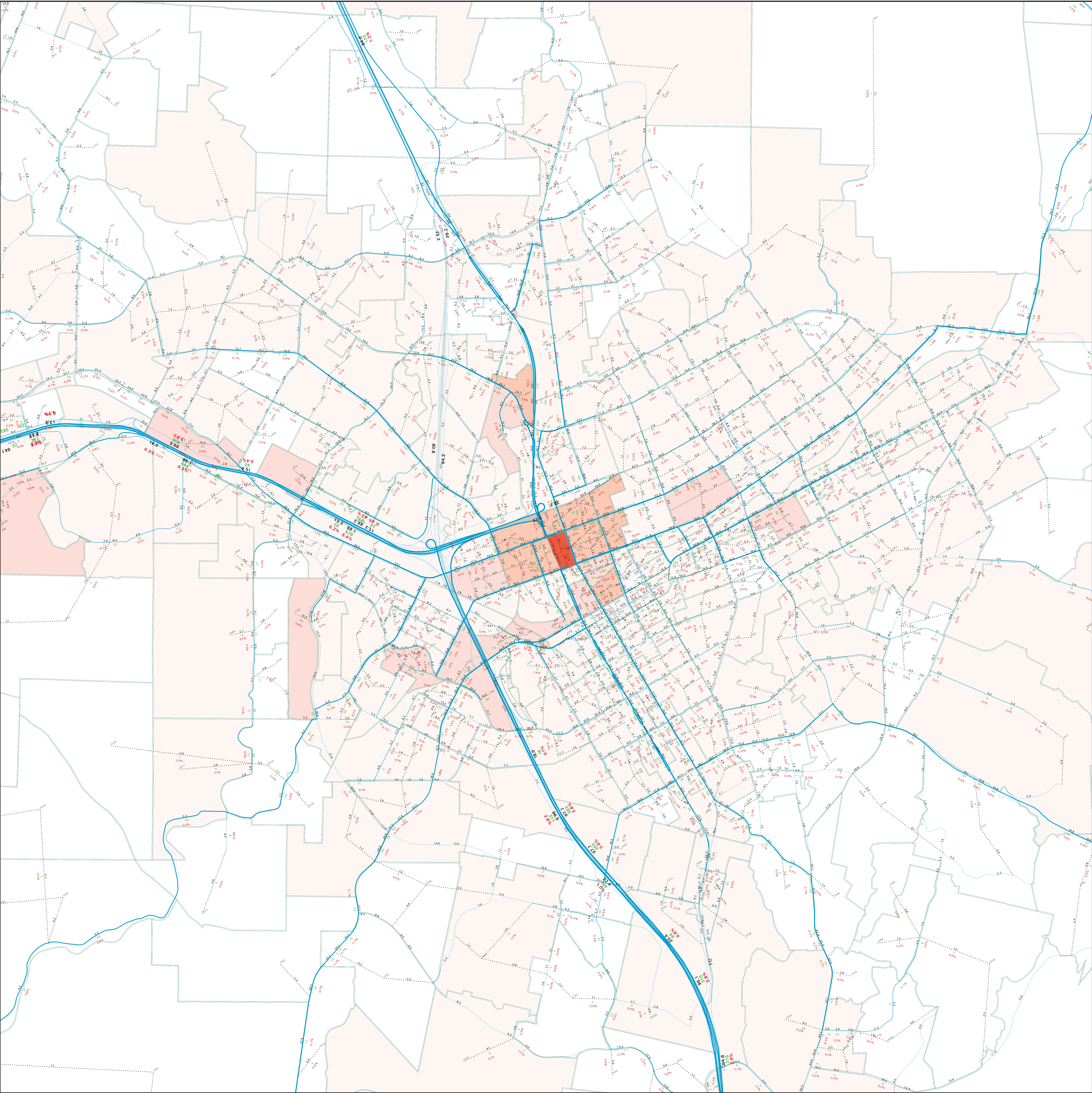
Link Distributions:



Zonal Distributions:

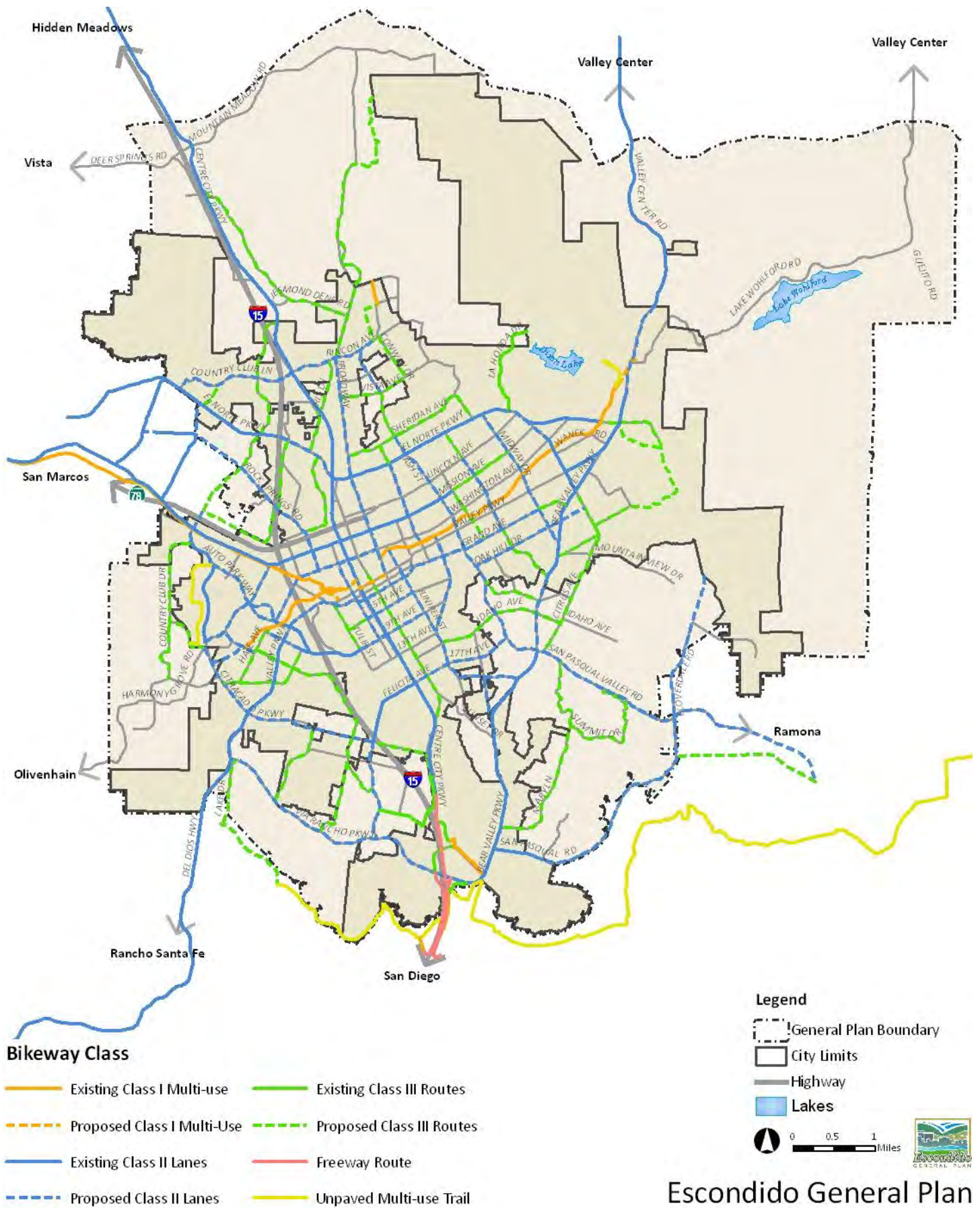


December 2, 2016

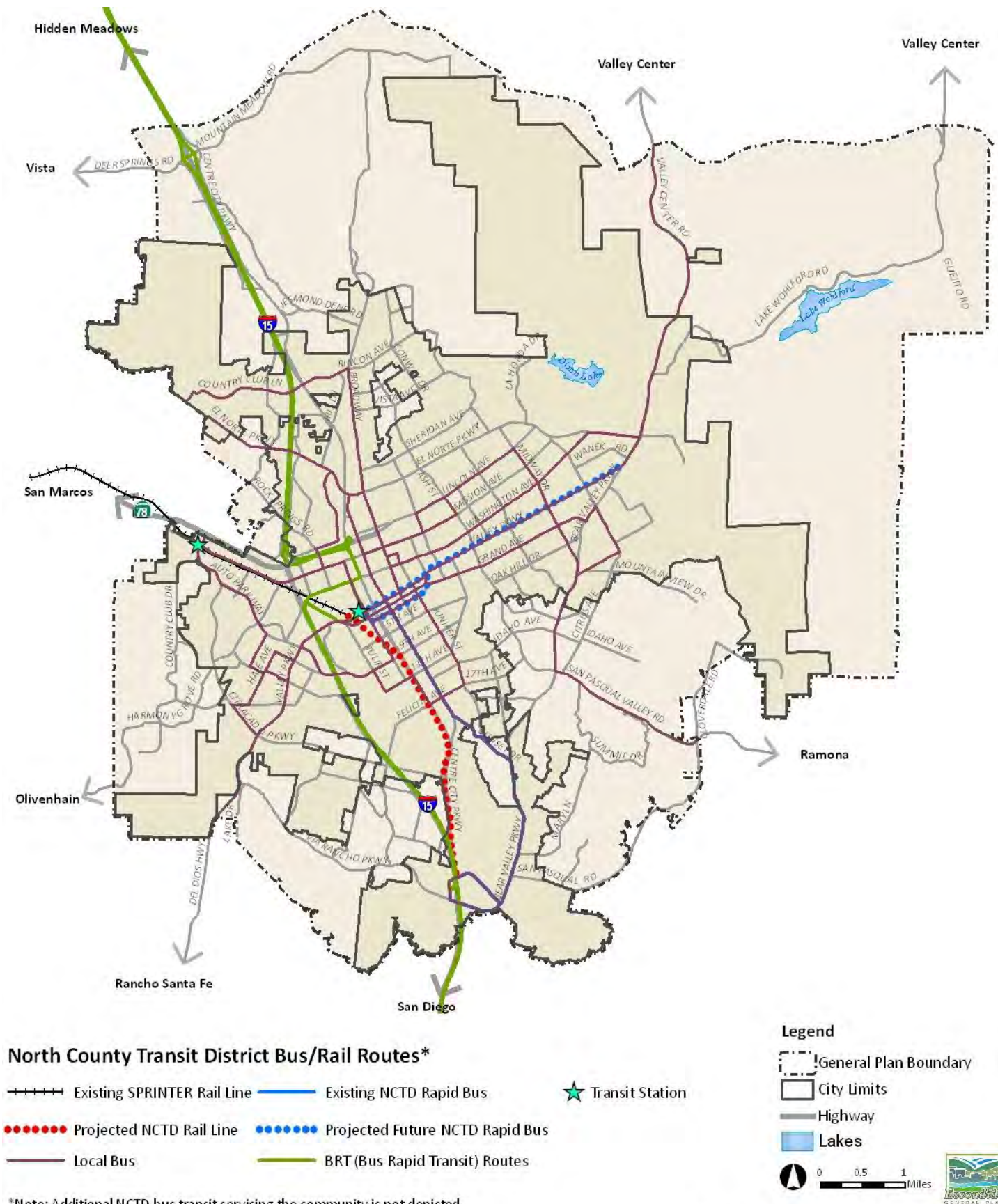


APPENDIX B

City of Escondido General Plan Circulation Element Roadway and Bikeway Maps



Source: City of Escondido

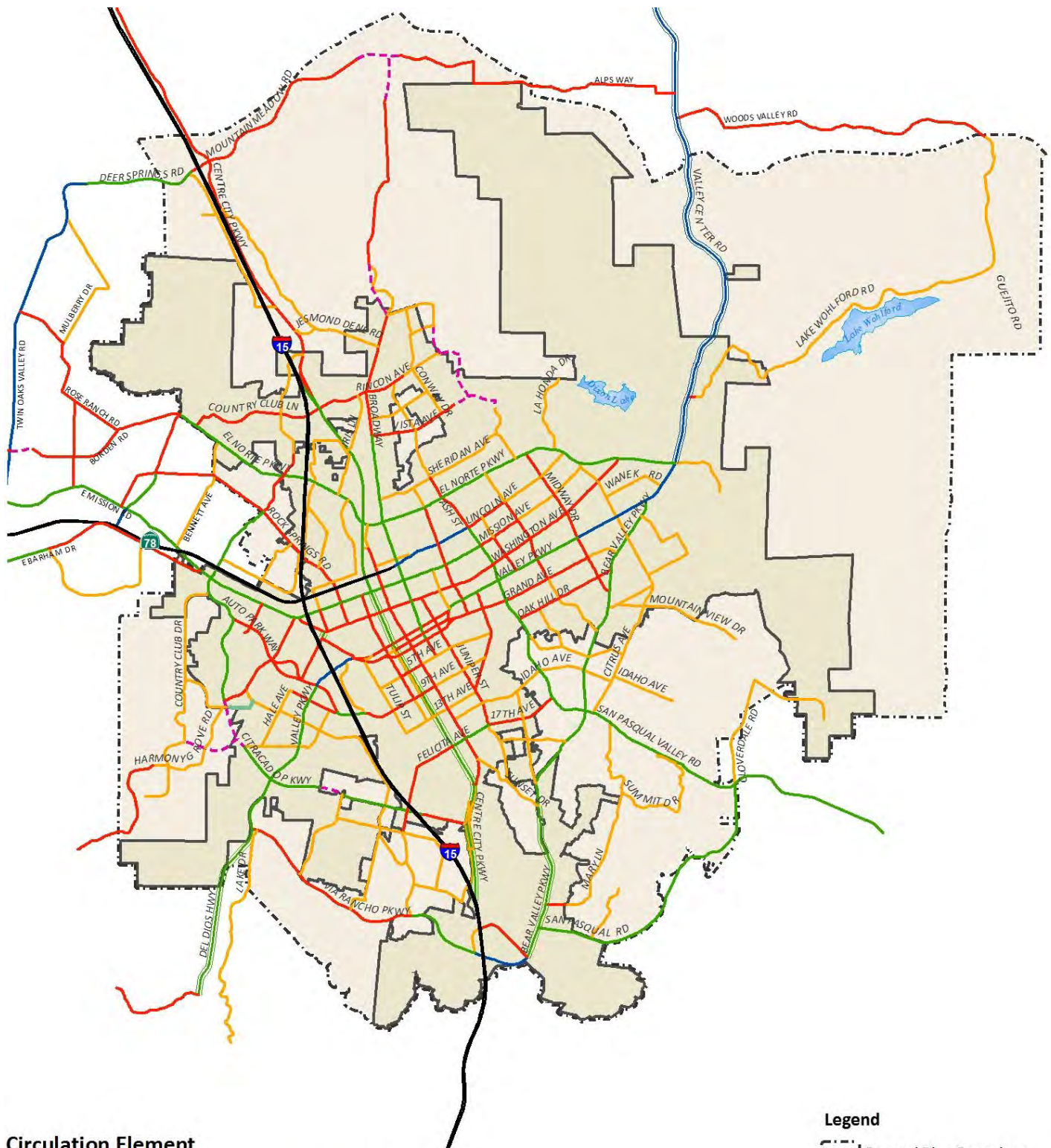


Escondido General Plan

Existing & Proposed Transit Routes

Figure III-4

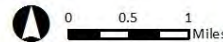
Source: City Of Escondido



Circulation Element

- | | |
|---|--|
|  Freeway |  Major Road |
|  Super Prime Arterial |  Collector |
|  Prime Arterial |  Local Collector |
|  Super Major Road |  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)

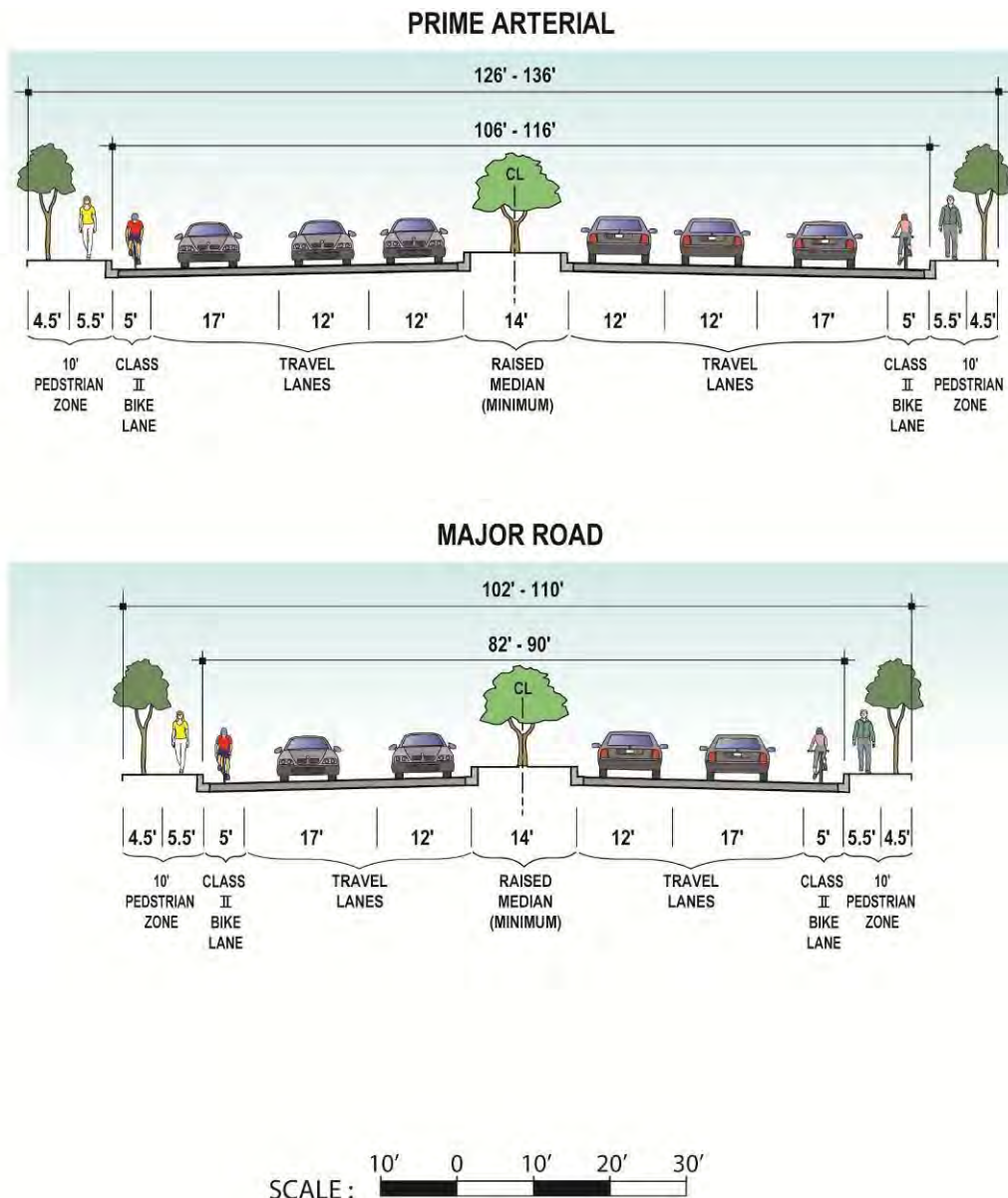


Figure III-8

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

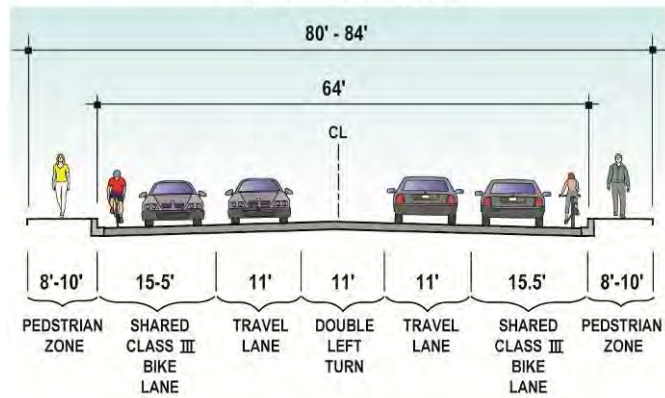
Local Collectors:

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.

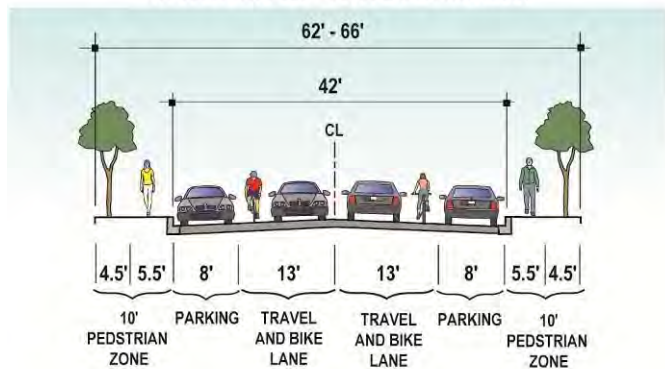
Figure III-7
(Part 2)

COLLECTOR STREET



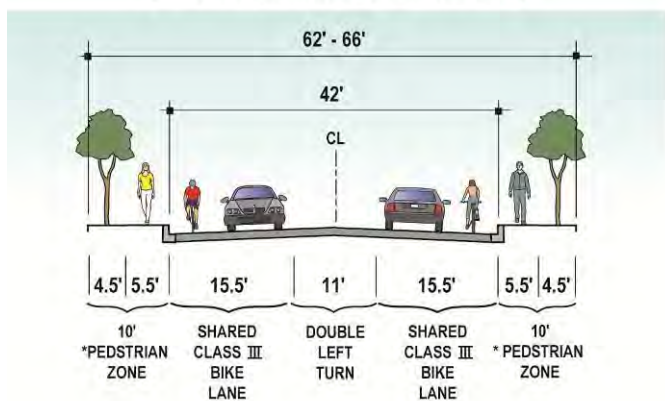
LOCAL COLLECTOR

(PARKING, NO LEFT TURN LANE PROVIDED)

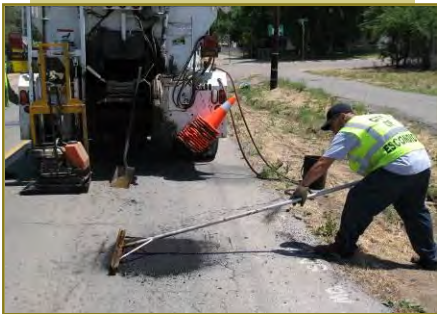


LOCAL COLLECTOR

(NO PARKING LEFT TURN LANE PROVIDED)



SCALE: 10' 0 10' 20' 30'



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*



*Grand Avenue
Collector Street Classification*



*Tulip Street
Local Collector 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.

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 Oaks Road.

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: NORTH & SOUTH: EAST & WEST:	Escondido Rock Springs Mission	PROJECT #: LOCATION #: CONTROL:	SC1152 1 SIGNAL
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NOTES:	AM		▲	
	PM		N	
	MD	◀ W		E ▶
	OTHER		S	
OTHER		▼		

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

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
MIDDAY	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
	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
PM	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
PM	APP/DEPART	329	/	462	380	/	337	711	/	693	762	/	690	0
	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
PM	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
PM	APP/DEPART	624	/	940	411	/	417	1,184	/	996	724	/	590	0

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

PROJECT #: SC1152
LOCATION #: 2
CONTROL: SIGNAL

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

AM		▲	
PM		N	
MD	◀ W		E ▶
OTHER		S	
OTHER		▼	

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
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
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			
	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	TOTAL

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%	
MIDDAY	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
	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
PM	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
	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: NORTH & SOUTH: EAST & WEST:	Escondido Centre City El Norte	PROJECT #: LOCATION #: CONTROL:	SC1152 4 SIGNAL
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NOTES:	AM		▲	
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Centre City			Centre City			El Norte			El Norte			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	2	2	1	2	2	1	2	2	1	2	2	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
MIDDAY	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
	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
PM	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
PM	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

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

PROJECT #: SC1152
LOCATION #: 5
CONTROL: SIGNAL

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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	

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

PROJECT #: SC1152
LOCATION #: 7
CONTROL: SIGNAL

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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: NORTH & SOUTH: EAST & WEST:	Escondido Centre City Valley	PROJECT #: LOCATION #: CONTROL:	SC1152 8 SIGNAL
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NOTES:	AM		▲	
	PM		N	
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Centre City			Centre City			Valley			Valley			
LANES:	NL 2	NT 2	NR X	SL X	ST 2	SR 0	EL X	ET X	ER X	WL 1	WT 3	WR 1	TOTAL

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%	
MIDDAY	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
	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
PM	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
	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

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

PROJECT #: SC1152
LOCATION #: 9
CONTROL: SIGNAL

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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	

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

PROJECT #: SC1152
LOCATION #: 10
CONTROL: SIGNAL

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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%	
MIDDAY	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
	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%	
PM	PEAK HR FACTOR	0.919			0.847			0.898			0.916			0.988
	APP/DEPART	467	/	448	454	/	528	632	/	635	663	/	605	0
	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	

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

PROJECT #: SC1152
LOCATION #: 11
CONTROL: SIGNAL

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

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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	

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

PROJECT #: SC1152
LOCATION #: 12
CONTROL: SIGNAL

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

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	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
	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
	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

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

PROJECT #: SC1152
LOCATION #: 13
CONTROL: SIGNAL

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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	

Thursday, December 08, 2016

CITY: Escondido

PROJECT: SC1152

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 %	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									

Tuesday, December 13, 2016

CITY: Escondido

PROJECT: SC1152

ADT3 Mission between Centre City and 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		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	0	0	12	49	16	55	104	12:45	0	0	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	0	0	11	43	5	26	69	13:45	0	0	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	0	0	4	22	3	19	41	14:45	0	0	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	0	0	3	27	2	17	44	15:45	0	0	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	0	0	13	43	33	74	117	16:45	0	0	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	0	0	29	95	129	295	390	17:45	0	0	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	0	0	84	236	294	917	1153	18:45	0	0	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	0	0	129	422	226	967	1389	19:45	0	0	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	0	0	176	628	203	863	1491	20:45	0	0	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	0	0	164	612	190	696	1308	21:45	0	0	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	0	0	190	731	162	657	1388	22:45	0	0	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	0	0	219	874	219	856	1730	23:45	0	0	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 %				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		

Thursday, December 08, 2016

CITY: Escondido

PROJECT: SC1152

ADT4 Mission between Escondido and Broadway. 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		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	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	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	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	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	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	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	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	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	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	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	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	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 %	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	

cs@aimtd.com

Tell. 714 253 7888

Tuesday, December 13, 2016

CITY: Escondido

PROJECT: SC1152

ADT6 Centre City between SR-78 and Mission. 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	25		20		0		0		12:00	222		293		0		0		
0:15	24		15		0		0		12:15	264		250		0		0		
0:30	18		24		0		0		12:30	263		265		0		0		
0:45	22	89	20	79	0	0	0	0	168	12:45	269	1018	279	1087	0	0	0	2105
1:00	14		13		0		0		13:00	250		268		0		0		
1:15	16		9		0		0		13:15	259		267		0		0		
1:30	10		15		0		0		13:30	294		292		0		0		
1:45	8	48	9	46	0	0	0	0	94	13:45	241	1044	275	1102	0	0	0	2146
2:00	13		10		0		0		14:00	247		258		0		0		
2:15	8		11		0		0		14:15	257		277		0		0		
2:30	10		6		0		0		14:30	280		300		0		0		
2:45	4	35	8	35	0	0	0	0	70	14:45	255	1039	297	1132	0	0	0	2171
3:00	10		16		0		0		15:00	259		310		0		0		
3:15	4		17		0		0		15:15	284		293		0		0		
3:30	11		18		0		0		15:30	295		277		0		0		
3:45	5	30	16	67	0	0	0	0	97	15:45	297	1135	263	1143	0	0	0	2278
4:00	8		19		0		0		16:00	346		258		0		0		
4:15	12		28		0		0		16:15	310		288		0		0		
4:30	21		40		0		0		16:30	363		251		0		0		
4:45	27	68	55	142	0	0	0	0	210	16:45	396	1415	266	1063	0	0	0	2478
5:00	23		47		0		0		17:00	329		240		0		0		
5:15	46		90		0		0		17:15	402		254		0		0		
5:30	72		114		0		0		17:30	337		266		0		0		
5:45	78	219	151	402	0	0	0	0	621	17:45	297	1365	232	992	0	0	0	2357
6:00	116		158		0		0		18:00	278		165		0		0		
6:15	187		162		0		0		18:15	258		206		0		0		
6:30	213		206		0		0		18:30	220		189		0		0		
6:45	197	713	264	790	0	0	0	0	1503	18:45	214	970	140	700	0	0	0	1670
7:00	219		330		0		0		19:00	210		151		0		0		
7:15	220		324		0		0		19:15	166		142		0		0		
7:30	245		395		0		0		19:30	168		121		0		0		
7:45	207	891	419	1468	0	0	0	0	2359	19:45	163	707	119	533	0	0	0	1240
8:00	230		371		0		0		20:00	163		134		0		0		
8:15	207		369		0		0		20:15	123		108		0		0		
8:30	225		365		0		0		20:30	98		102		0		0		
8:45	187	849	330	1435	0	0	0	0	2284	20:45	112	496	93	437	0	0	0	933
9:00	168		296		0		0		21:00	121		100		0		0		
9:15	181		243		0		0		21:15	135		73		0		0		
9:30	180		263		0		0		21:30	106		86		0		0		
9:45	184	713	298	1100	0	0	0	0	1813	21:45	74	436	55	314	0	0	0	750
10:00	185		254		0		0		22:00	77		74		0		0		
10:15	202		280		0		0		22:15	49		54		0		0		
10:30	220		298		0		0		22:30	43		39		0		0		
10:45	202	809	314	1146	0	0	0	0	1955	22:45	47	216	47	214	0	0	0	430
11:00	214		285		0		0		23:00	35		27		0		0		
11:15	223		290		0		0		23:15	35		38		0		0		
11:30	250		319		0		0		23:30	31		31		0		0		
11:45	234	921	325	1219	0	0	0	0	2140	23:45	20	121	24	120	0	0	0	241
Total Vol.	5385		7929						13314		9962		8837					18799
										Daily Totals								
										NB		SB		EB		WB		Combined
										15347		16766						32113
AM										PM								
Split %	40.4%		59.6%						41.5 %		53.0%		47.0%					58.5 %
Peak Hour	11:45		7:30		0:30		0:30		7:30		16:30		14:30					16:30
Volume	983		1554						2443		1490		1200					2501
P.H.F.	0.93		0.93						0.95		0.89		0.97					0.94

Tuesday, December 13, 2016

CITY: Escondido

PROJECT: SC1152

ADT7 Centre City between Mission and 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	24		17		0		0		12:00	149		187		0		0											
0:15	15		11		0		0		12:15	151		174		0		0											
0:30	19		17		0		0		12:30	187		163		0		0											
0:45	11	69	15	60	0	0	0	0	129	187	674	187	711	0	0	0	0	1385									
1:00	8		4		0		0		13:00	173		187		0		0											
1:15	11		6		0		0		13:15	171		183		0		0											
1:30	7		6		0		0		13:30	221		186		0		0											
1:45	9	35	5	21	0	0	0	0	56	171	736	194	750	0	0	0	0	1486									
2:00	11		4		0		0		14:00	170		191		0		0											
2:15	5		10		0		0		14:15	179		195		0		0											
2:30	7		4		0		0		14:30	196		190		0		0											
2:45	4	27	6	24	0	0	0	0	51	183	728	192	768	0	0	0	0	1496									
3:00	6		11		0		0		15:00	172		222		0		0											
3:15	2		9		0		0		15:15	186		219		0		0											
3:30	8		10		0		0		15:30	205		171		0		0											
3:45	3	19	11	41	0	0	0	0	60	208	771	190	802	0	0	0	0	1573									
4:00	5		12		0		0		16:00	243		205		0		0											
4:15	8		23		0		0		16:15	224		210		0		0											
4:30	14		18		0		0		16:30	270		184		0		0											
4:45	15	42	31	84	0	0	0	0	126	313	1050	211	810	0	0	0	0	1860									
5:00	18		27		0		0		17:00	213		188		0		0											
5:15	22		56		0		0		17:15	275		189		0		0											
5:30	49		57		0		0		17:30	256		180		0		0											
5:45	46	135	81	221	0	0	0	0	356	194	938	178	735	0	0	0	0	1673									
6:00	58		107		0		0		18:00	226		123		0		0											
6:15	111		99		0		0		18:15	191		148		0		0											
6:30	115		139		0		0		18:30	166		119		0		0											
6:45	139	423	175	520	0	0	0	0	943	168	751	103	493	0	0	0	0	1244									
7:00	179		259		0		0		19:00	163		120		0		0											
7:15	172		209		0		0		19:15	129		101		0		0											
7:30	193		277		0		0		19:30	125		88		0		0											
7:45	182	726	265	1010	0	0	0	0	1736	136	553	70	379	0	0	0	0	932									
8:00	186		238		0		0		20:00	100		90		0		0											
8:15	145		212		0		0		20:15	89		86		0		0											
8:30	180		215		0		0		20:30	68		62		0		0											
8:45	145	656	218	883	0	0	0	0	1539	99	356	67	305	0	0	0	0	661									
9:00	127		198		0		0		21:00	89		69		0		0											
9:15	124		168		0		0		21:15	99		44		0		0											
9:30	111		163		0		0		21:30	86		64		0		0											
9:45	119	481	202	731	0	0	0	0	1212	61	335	32	209	0	0	0	0	544									
10:00	140		172		0		0		22:00	55		51		0		0											
10:15	149		173		0		0		22:15	33		38		0		0											
10:30	140		197		0		0		22:30	32		28		0		0											
10:45	148	577	228	770	0	0	0	0	1347	37	157	31	148	0	0	0	0	305									
11:00	143		193		0		0		23:00	21		24		0		0											
11:15	143		204		0		0		23:15	22		28		0		0											
11:30	157		196		0		0		23:30	20		19		0		0											
11:45	144	587	211	804	0	0	0	0	1391	11	74	16	87	0	0	0	0	161									
Total Vol.	3777		5169				8946			7123		6197				13320											
										Daily Totals																	
										NB	SB	EB	WB	Combined													
										10900	11366			22266													
AM										PM																	
Split %	42.2%		57.8%				40.2 %			53.5%		46.5%				59.8 %											
Peak Hour	7:15		7:00		0:30		0:30		7:00			16:30		14:30		16:00											
Volume	733		1010				1736			1071		823				1860											
P.H.F.	0.95		0.91				0.92			0.81		0.93				0.89											

Thursday, December 08, 2016

CITY: Escondido

PROJECT: SC1152

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	0	0	0	0	92	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	0	0	0	0	72	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	0	0	0	0	50	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	0	0	0	0	54	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	0	0	0	0	79	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	0	0	0	0	288	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	0	0	0	0	944	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	0	0	0	0	1733	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	0	0	0	0	1587	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	0	0	0	0	1194	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	0	0	0	0	1249	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	0	0	0	0	1415	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		

Thursday, December 08, 2016

CITY: Escondido

PROJECT: SC1152

ADT9 Escondido 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	7	7	0	0	12:00	123	134	0	0
0:15	7	5	0	0	12:15	118	139	0	0
0:30	6	3	0	0	12:30	107	137	0	0
0:45	9 29	7 22	0 0	0 0 51	12:45	132 480	136 546	0 0	0 0 1026
1:00	6	3	0	0	13:00	130	146	0	0
1:15	4	3	0	0	13:15	126	112	0	0
1:30	3	3	0	0	13:30	134	124	0	0
1:45	8 21	3 12	0 0	0 0 33	13:45	137 527	134 516	0 0	0 0 1043
2:00	5	4	0	0	14:00	143	120	0	0
2:15	2	3	0	0	14:15	139	116	0	0
2:30	3	5	0	0	14:30	128	120	0	0
2:45	0 10	3 15	0 0	0 0 25	14:45	148 558	132 488	0 0	0 0 1046
3:00	5	4	0	0	15:00	163	146	0	0
3:15	1	2	0	0	15:15	165	166	0	0
3:30	2	2	0	0	15:30	161	125	0	0
3:45	3 11	7 15	0 0	0 0 26	15:45	165 654	130 567	0 0	0 0 1221
4:00	3	7	0	0	16:00	156	131	0	0
4:15	4	4	0	0	16:15	142	134	0	0
4:30	3	5	0	0	16:30	169	136	0	0
4:45	5 15	8 24	0 0	0 0 39	16:45	138 605	154 555	0 0	0 0 1160
5:00	7	8	0	0	17:00	196	121	0	0
5:15	12	14	0	0	17:15	171	140	0	0
5:30	12	22	0	0	17:30	176	110	0	0
5:45	22 53	29 73	0 0	0 0 126	17:45	140 683	115 486	0 0	0 0 1169
6:00	20	26	0	0	18:00	149	104	0	0
6:15	31	50	0	0	18:15	128	106	0	0
6:30	26	46	0	0	18:30	127	104	0	0
6:45	31 108	64 186	0 0	0 0 294	18:45	102 506	91 405	0 0	0 0 911
7:00	46	94	0	0	19:00	104	111	0	0
7:15	47	82	0	0	19:15	94	81	0	0
7:30	66	104	0	0	19:30	96	93	0	0
7:45	100 259	179 459	0 0	0 0 718	19:45	80 374	59 344	0 0	0 0 718
8:00	87	142	0	0	20:00	75	88	0	0
8:15	96	144	0	0	20:15	80	65	0	0
8:30	94	91	0	0	20:30	82	59	0	0
8:45	82 359	90 467	0 0	0 0 826	20:45	64 301	67 279	0 0	0 0 580
9:00	84	103	0	0	21:00	63	63	0	0
9:15	95	101	0	0	21:15	50	40	0	0
9:30	100	96	0	0	21:30	62	31	0	0
9:45	110 389	108 408	0 0	0 0 797	21:45	56 231	25 159	0 0	0 0 390
10:00	102	100	0	0	22:00	39	28	0	0
10:15	102	95	0	0	22:15	38	22	0	0
10:30	85	123	0	0	22:30	30	13	0	0
10:45	100 389	105 423	0 0	0 0 812	22:45	13 120	17 80	0 0	0 0 200
11:00	108	110	0	0	23:00	23	16	0	0
11:15	134	122	0	0	23:15	19	12	0	0
11:30	119	132	0	0	23:30	16	13	0	0
11:45	110 471	115 479	0 0	0 0 950	23:45	8 66	10 51	0 0	0 0 117
Total Vol.	2114	2583		4697		5105	4476		9581
					Daily Totals				
					NB	SB	EB	WB	Combined
					7219	7059			14278
AM					PM				
Split %	45.0%	55.0%		32.9 %		53.3%	46.7%		67.1 %
Peak Hour	11:15	7:30	0:30	0:30 11:30		17:00	14:45		16:30
Volume	486	569		990		683	569		1225
P.H.F.	0.91	0.79		0.96		0.92	0.86		0.97

Thursday, December 08, 2016

CITY: Escondido

PROJECT: SC1152

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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
Total Vol.			2917	3781	6698			6676	4792	11468
					Daily Totals					
					NB	SB	EB	WB	Combined	
							9593	8573	18166	
AM					PM					
Split %			43.6%	56.4%	36.9 %			58.2%	41.8%	63.1 %
Peak Hour	0:30	0:30	11:45	6:30	11:45			16:15	12:00	16:00
Volume			625	696	1218			1040	605	1589
P.H.F.			0.89	0.89	0.90			0.89	0.94	0.93

cs@aimtd.com

Tell. 714 253 7888

Thursday, December 08, 2016

CITY: Escondido

PROJECT: SC1152

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	0	0	9	19	4	18	37	12:45	0	0	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	0	0	7	29	10	34	63	13:45	0	0	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	0	0	3	21	6	18	39	14:45	0	0	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	0	0	12	21	6	21	42	15:45	0	0	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	0	0	12	30	27	70	100	16:45	0	0	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	0	0	28	66	100	282	348	17:45	0	0	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	0	0	50	184	187	624	808	18:45	0	0	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	0	0	126	380	204	708	1088	19:45	0	0	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	0	0	99	457	130	575	1032	20:45	0	0	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	0	0	130	486	112	459	945	21:45	0	0	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	0	0	131	492	144	540	1032	22:45	0	0	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	0	0	159	636	151	552	1188	23:45	0	0	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 %					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

PREPARED BY: TJW Engineering

1/17/17

Escondido

Centre City/SR-78 WB

ONP-16-002

1

meter

2

1

1 car per 7 seconds

AM
7:00 AM
7:15 AM
7:30 AM
7:45 AM
8:00 AM
8:15 AM
8:30 AM
8:45 AM
PM
4:00 PM
4:15 PM
4:30 PM
4:45 PM
5:00 PM
5:15 PM
5:30 PM
5:45 PM

[illegible]

7:30

$\frac{1}{2} \times 100 = 50$
 $\frac{1}{2} \times 100 = 50$
 $\frac{1}{2} \times 100 = 50$

7:45

59

[illegible]

(9)

[illegible]

7:15

$\frac{H_{2O}}{H_2}$
 $\frac{H_2}{H_2}$
 $\frac{H_2}{H_2}$
 $\frac{H_2}{H_2}$

GP

5:05

1. 1/2

III GPR

~~11~~ ~~12~~ ~~13~~ ~~14~~ ~~15~~ ~~16~~ ~~17~~ ~~18~~ ~~19~~ ~~20~~ ~~21~~ ~~22~~ ~~23~~ ~~24~~ ~~25~~ ~~26~~ ~~27~~ ~~28~~ ~~29~~ ~~30~~ ~~31~~ ~~32~~ ~~33~~ ~~34~~ ~~35~~ ~~36~~ ~~37~~ ~~38~~ ~~39~~ ~~40~~ ~~41~~ ~~42~~ ~~43~~ ~~44~~ ~~45~~ ~~46~~ ~~47~~ ~~48~~ ~~49~~ ~~50~~ ~~51~~ ~~52~~ ~~53~~ ~~54~~ ~~55~~ ~~56~~ ~~57~~ ~~58~~ ~~59~~ ~~60~~ ~~61~~ ~~62~~ ~~63~~ ~~64~~ ~~65~~ ~~66~~ ~~67~~ ~~68~~ ~~69~~ ~~70~~ ~~71~~ ~~72~~ ~~73~~ ~~74~~ ~~75~~ ~~76~~ ~~77~~ ~~78~~ ~~79~~ ~~80~~ ~~81~~ ~~82~~ ~~83~~ ~~84~~ ~~85~~ ~~86~~ ~~87~~ ~~88~~ ~~89~~ ~~90~~ ~~91~~ ~~92~~ ~~93~~ ~~94~~ ~~95~~ ~~96~~ ~~97~~ ~~98~~ ~~99~~ ~~100~~

8:15

409
111
111
111

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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									

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

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)	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									
Approach Delay, s/veh	71.5		85.7				22.9									
Approach LOS	E		F				C									
Timer	1	2	3	4	5	6	7	8								
Assigned Phs	1	2	3	4	5	6	7	8								
Phs Duration (G+Y+Rc), s	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																

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

SEC CCP/Mission TIA
7: Centre City Pkwy & 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)	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												

SEC CCP/Mission TIA
9: Escondido Blvd & 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)	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												

SEC CCP/Mission TIA
11: Escondido Blvd & Woodward

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	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								

SEC CCP/Mission TIA
13: Broadway & 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)	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								

SEC CCP/Mission TIA
2: Quince St & 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)	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									

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

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)	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												

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

SEC CCP/Mission TIA
7: Centre City Pkwy & 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)	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												

SEC CCP/Mission TIA
9: Escondido Blvd & 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)	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(l)	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												

SEC CCP/Mission TIA
11: Escondido Blvd & Woodward

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)	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(l)	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			
Approach Delay, s/veh	32.3				32.5				31.8			
Approach LOS	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											

SEC CCP/Mission TIA
2: Quince St & 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)	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												

SEC CCP/Mission TIA
3: Quince St & 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)	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												

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

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)	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			
Approach Delay, s/veh	51.3				55.8				62.4			
Approach LOS	D				E				E			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	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											

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

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)	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
7: Centre City Pkwy & 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)	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												

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

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)	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												

SEC CCP/Mission TIA
11: Escondido Blvd & Woodward

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)	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												

SEC CCP/Mission TIA
12: Broadway & Mission Ave

HCM 2010 Signalized Intersection Summary
Existing Conditions PM Peak Hour

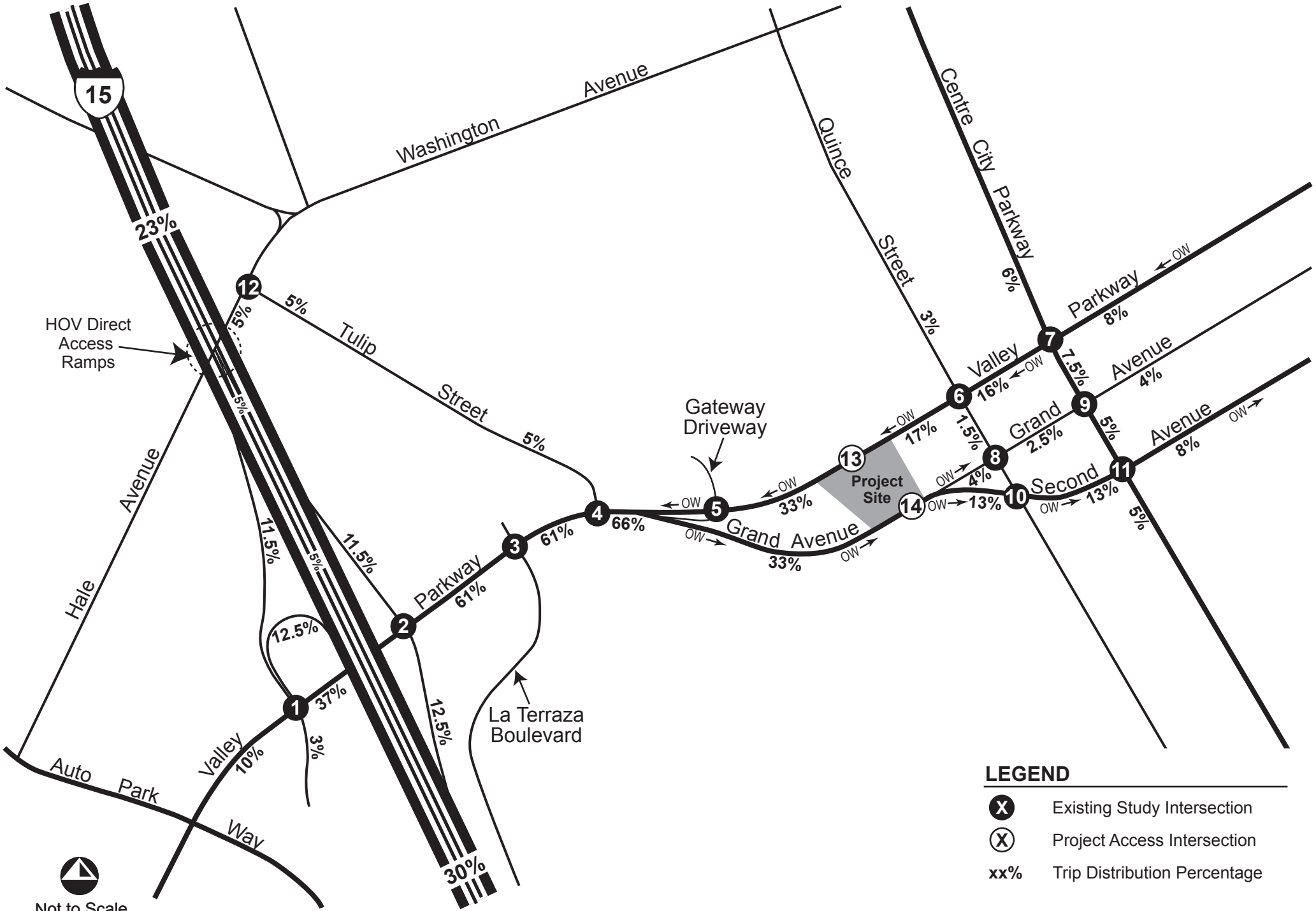
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	666	177	100	400	192	142	710	122	233	676	88
Future Volume (veh/h)	200	666	177	100	400	192	142	710	122	233	676	88
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	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			
Approach Delay, s/veh	47.1				55.2				49.8			
Approach LOS	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	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

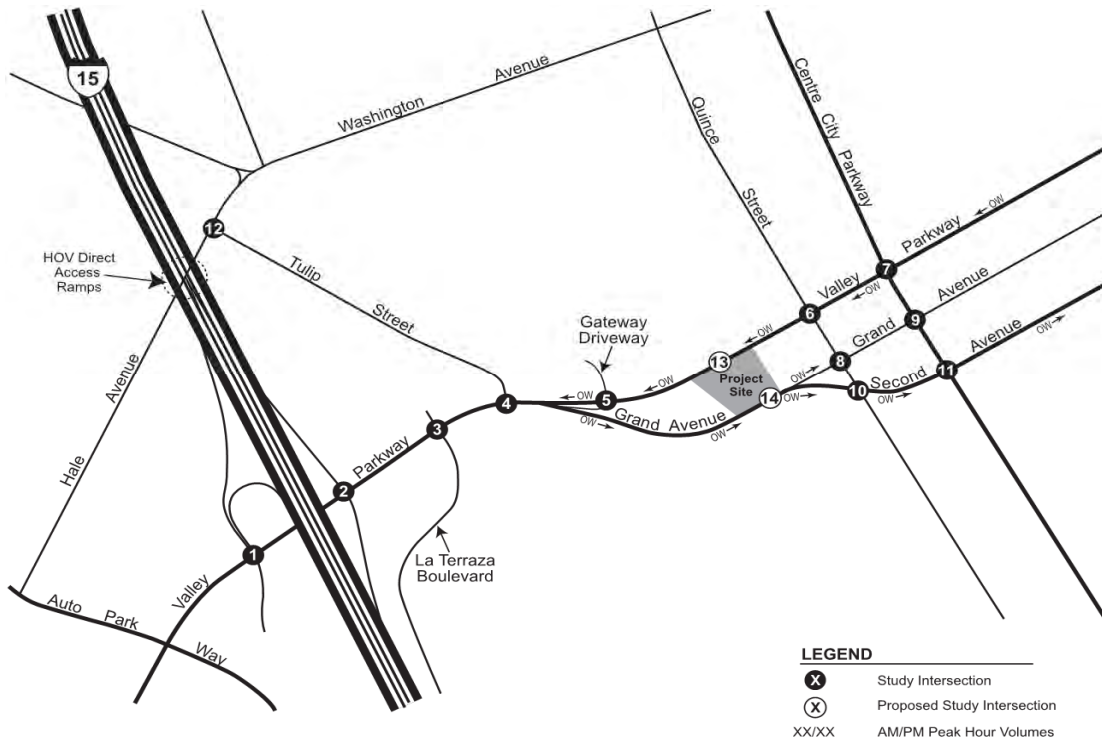
																
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR				
Lane Configurations																
Traffic Volume (veh/h)	207	703	69	64	371	212	142	489	48	251	449	114				
Future Volume (veh/h)	207	703	69	64	371	212	142	489	48	251	449	114				
Number	7	4	14	3	8	18	5	2	12	1	6	16				
Initial Q (Qb), veh	0	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							
Approach Delay, s/veh	33.8				52.9				42.5							
Approach LOS	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	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															

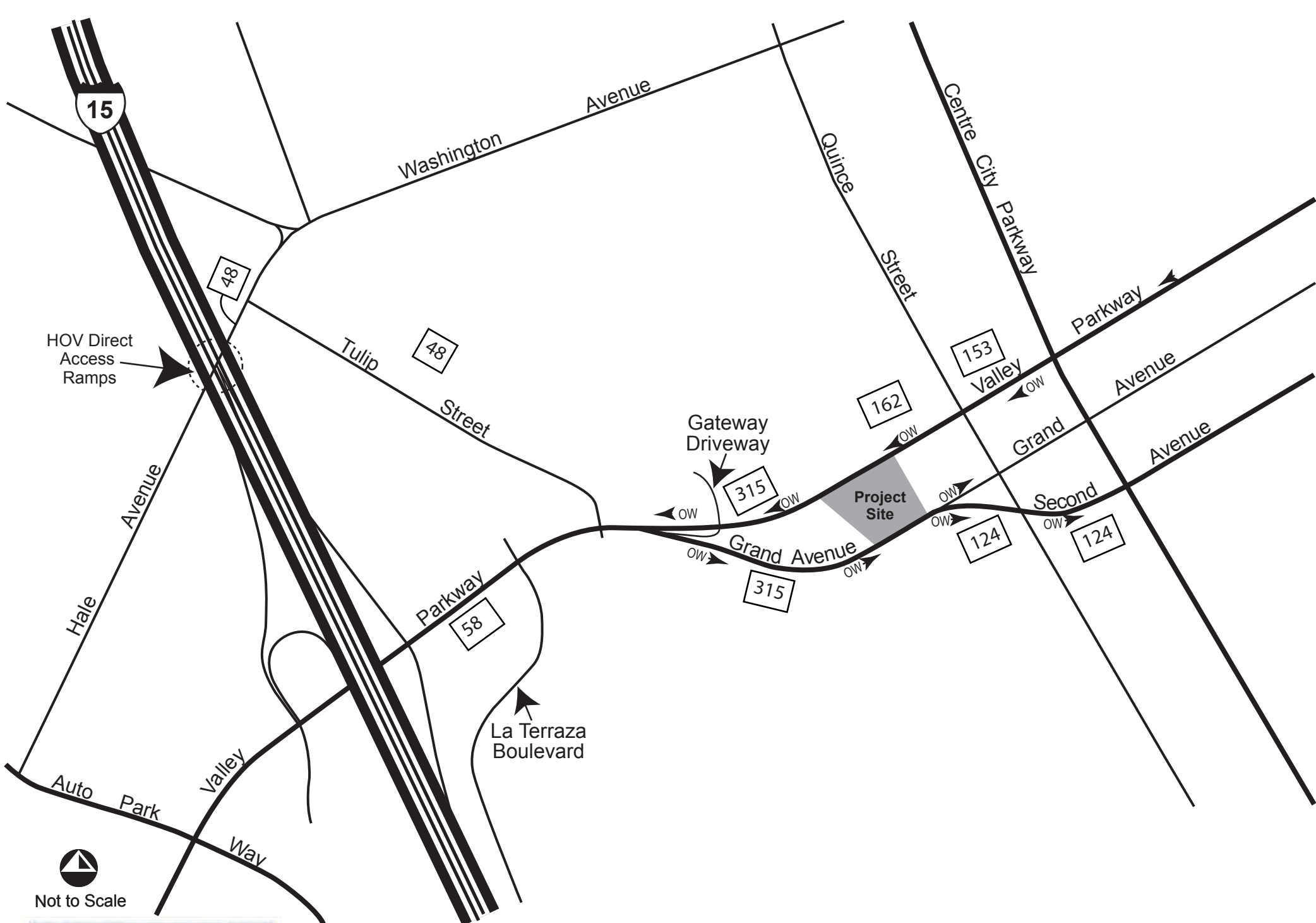
APPENDIX E
Cumulative Projects Information



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 ↘		I-15 SB Ramps	↖ 14/8 ↖ 5/3 ↖ 2/1	I-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 →		I-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	Quince St.	2/1 ↖ 3/2 →
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										
			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	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	8
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	27
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

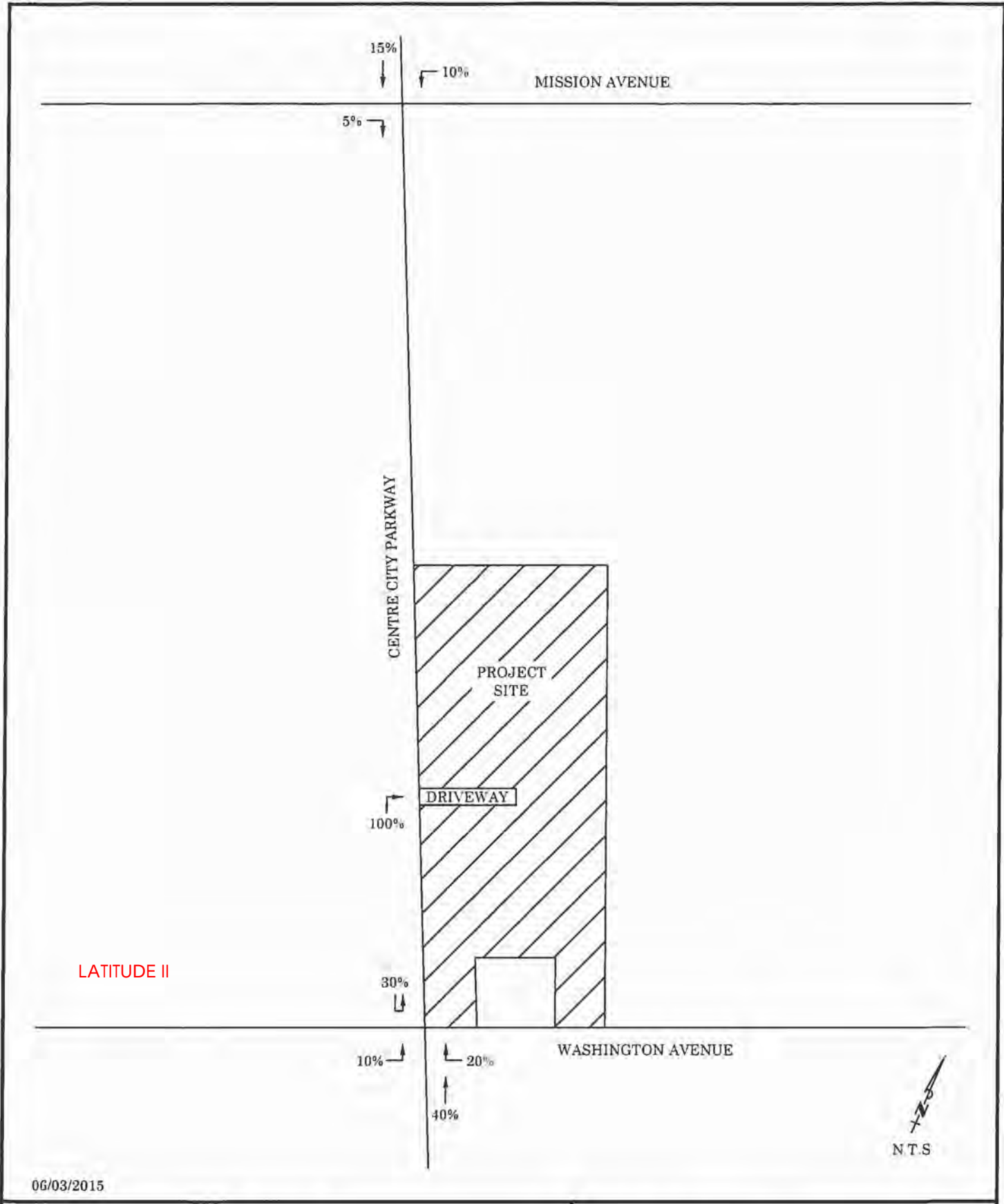


Figure 1A
Project Site/ Trip Distribution (%) - Peak Hour Inbound
Escondido, California

MISSION AVENUE

30% 20% 30% 20%

CENTRE CITY PARKWAY

PROJECT
SITE

100%

DRIVEWAY

LATITUDE II

30%

WASHINGTON AVENUE

N.T.S

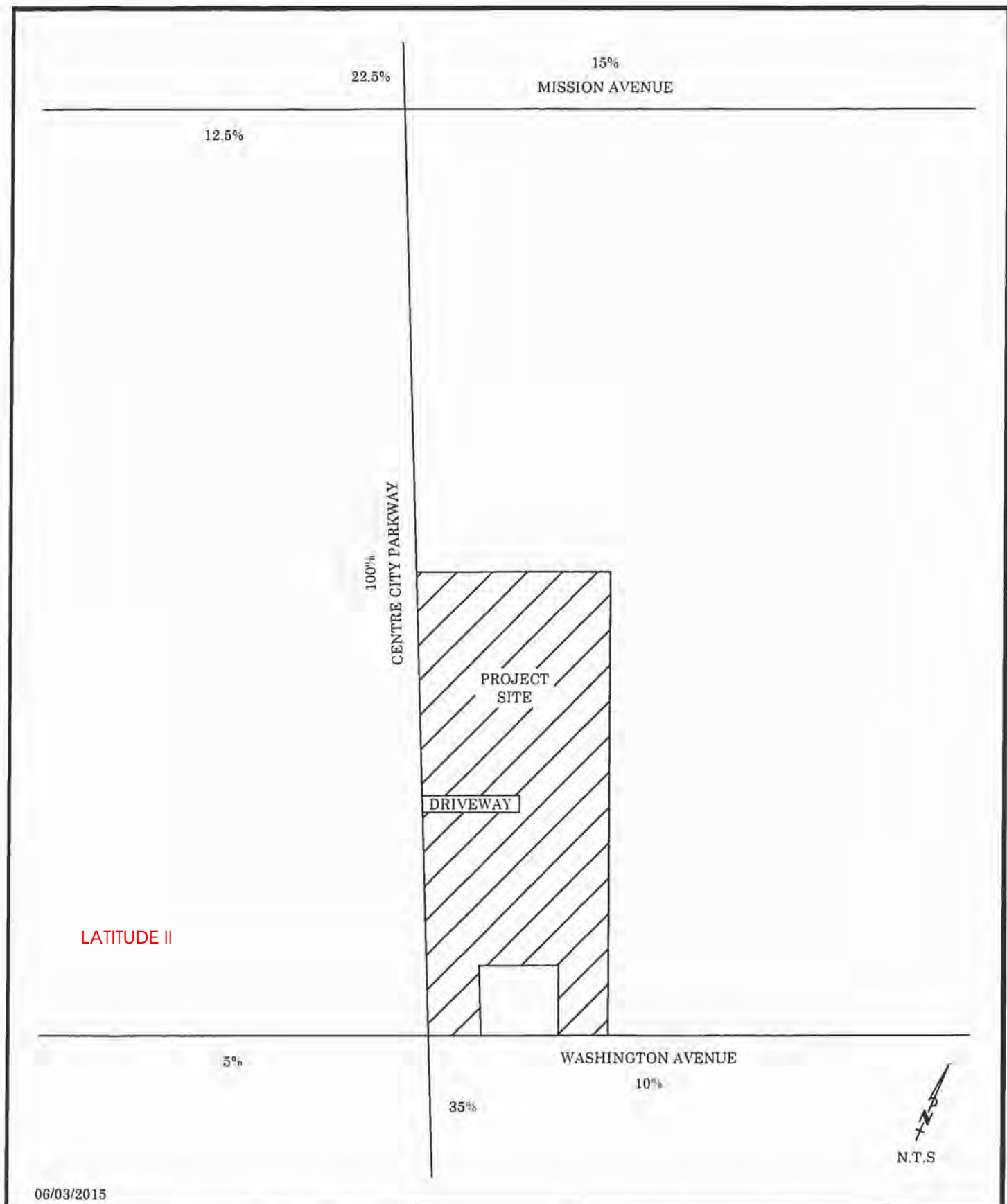
06/03/2015

Figure 1B

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



Pirzadeh
ASSOCIATES, INC.



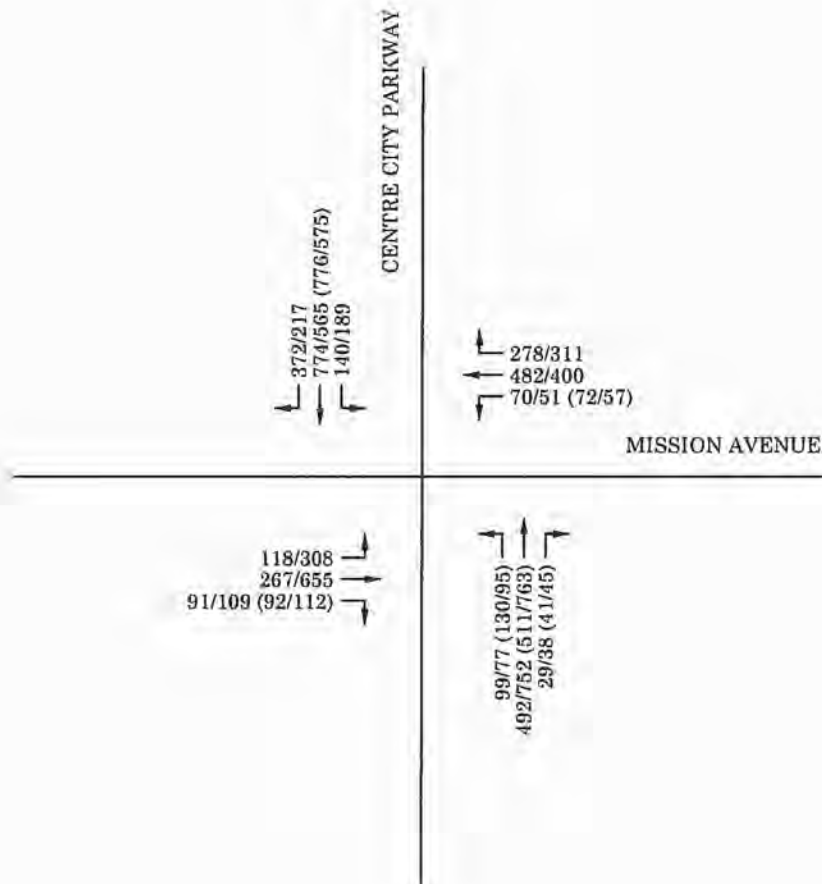
LATITUDE II

06/03/2015

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



Pirzadeh
ASSOCIATES, INC.



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

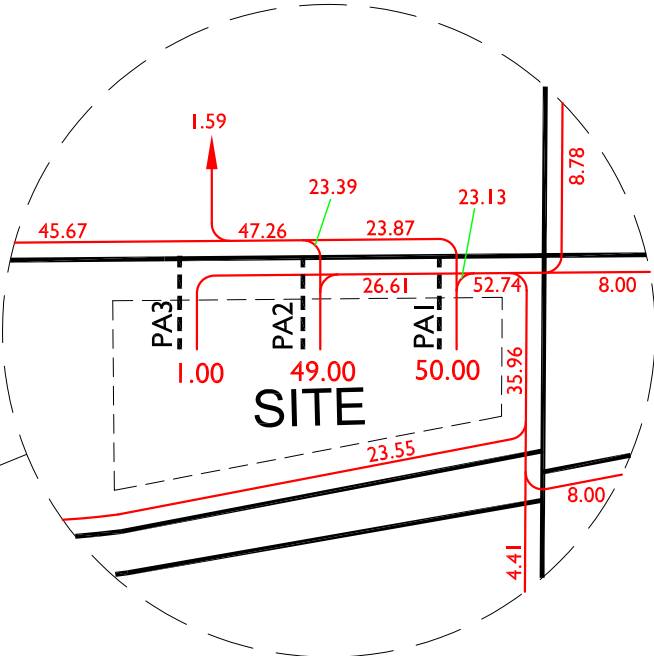
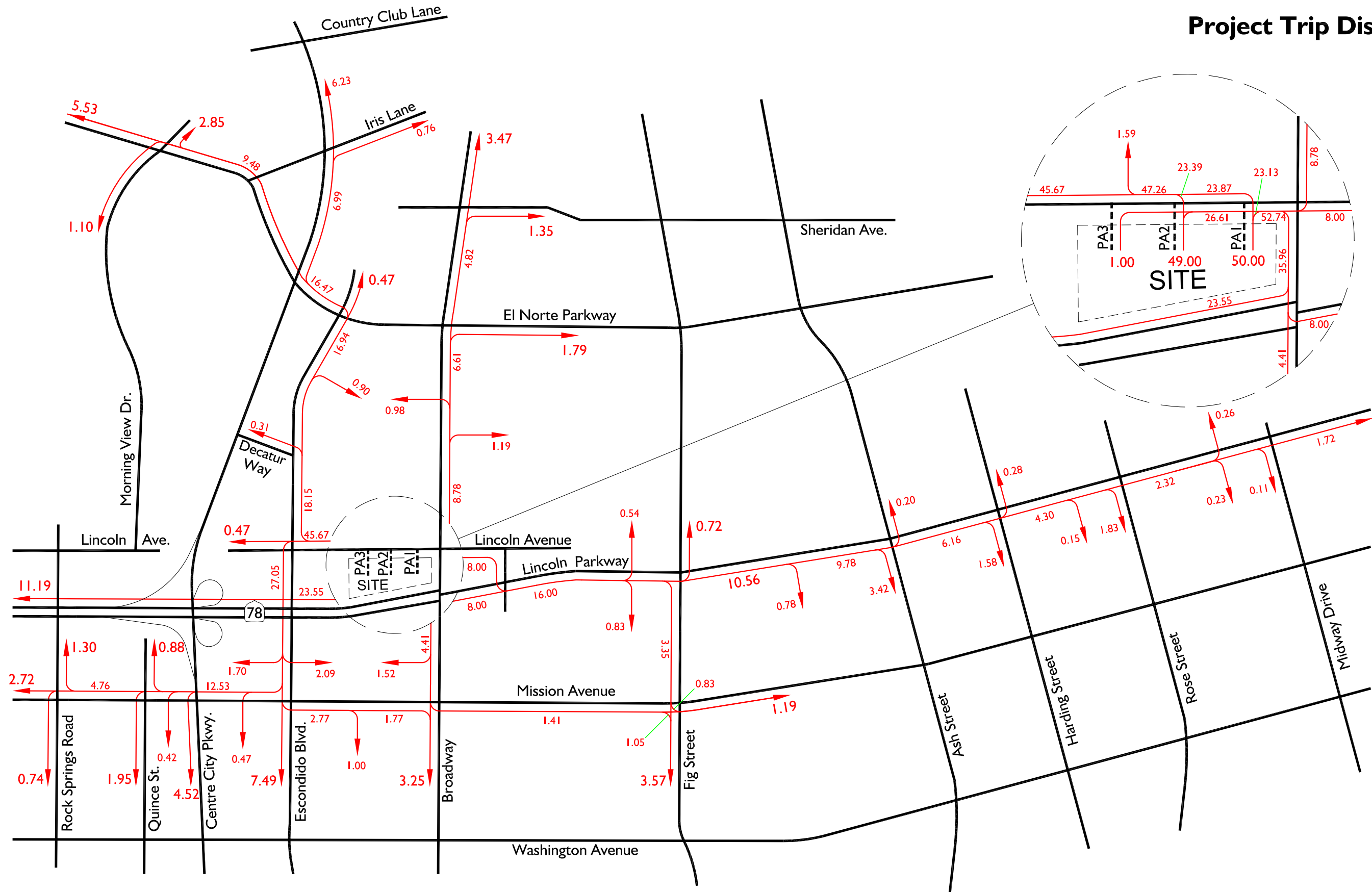
Currently Proposed Land Use

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			n/a	n/a	n/a	-130	-131	-261	n/a
	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			n/a	n/a	n/a	-29	-29	-58	n/a
	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:

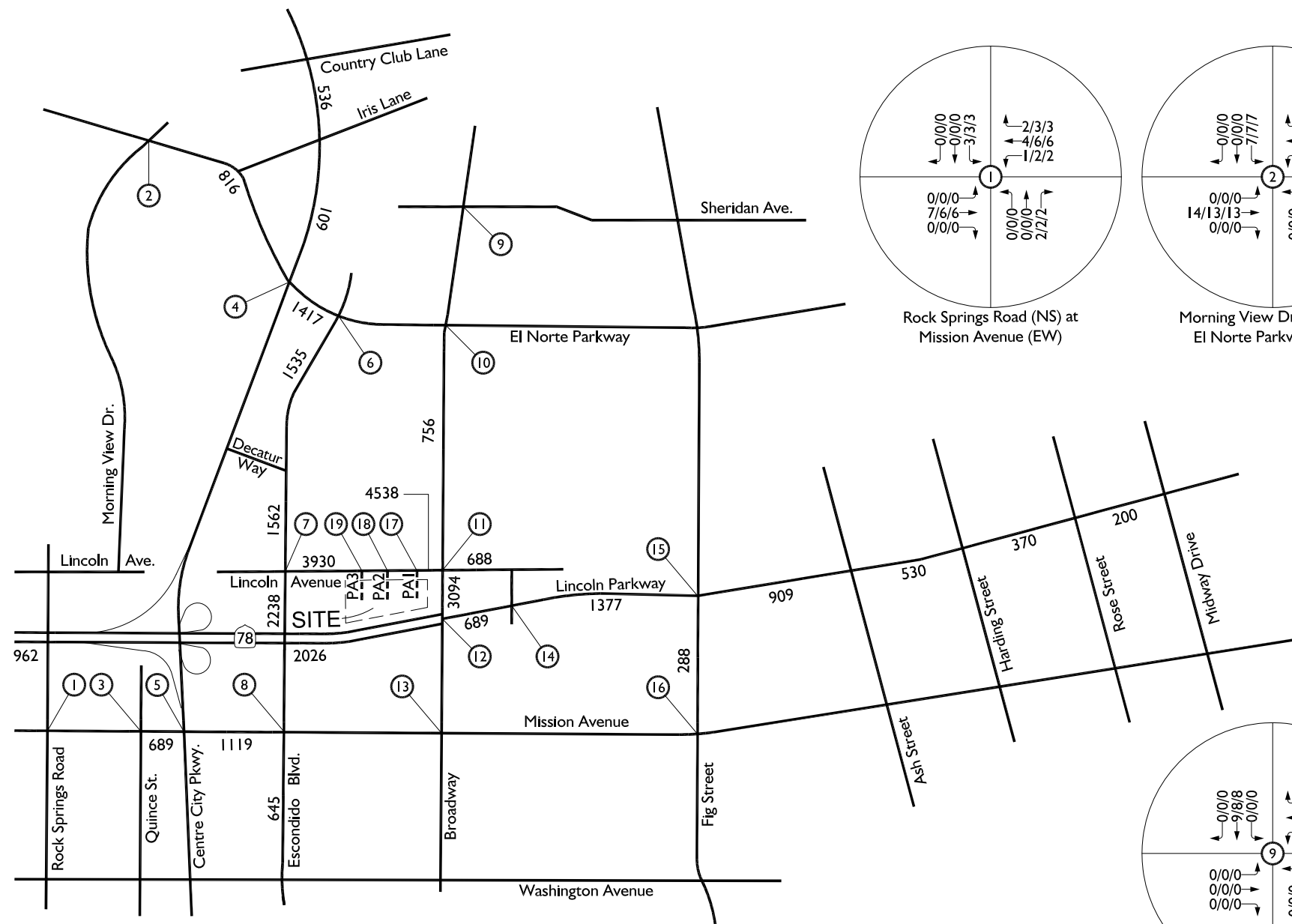
10 = Percent to/from Project

Note:

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

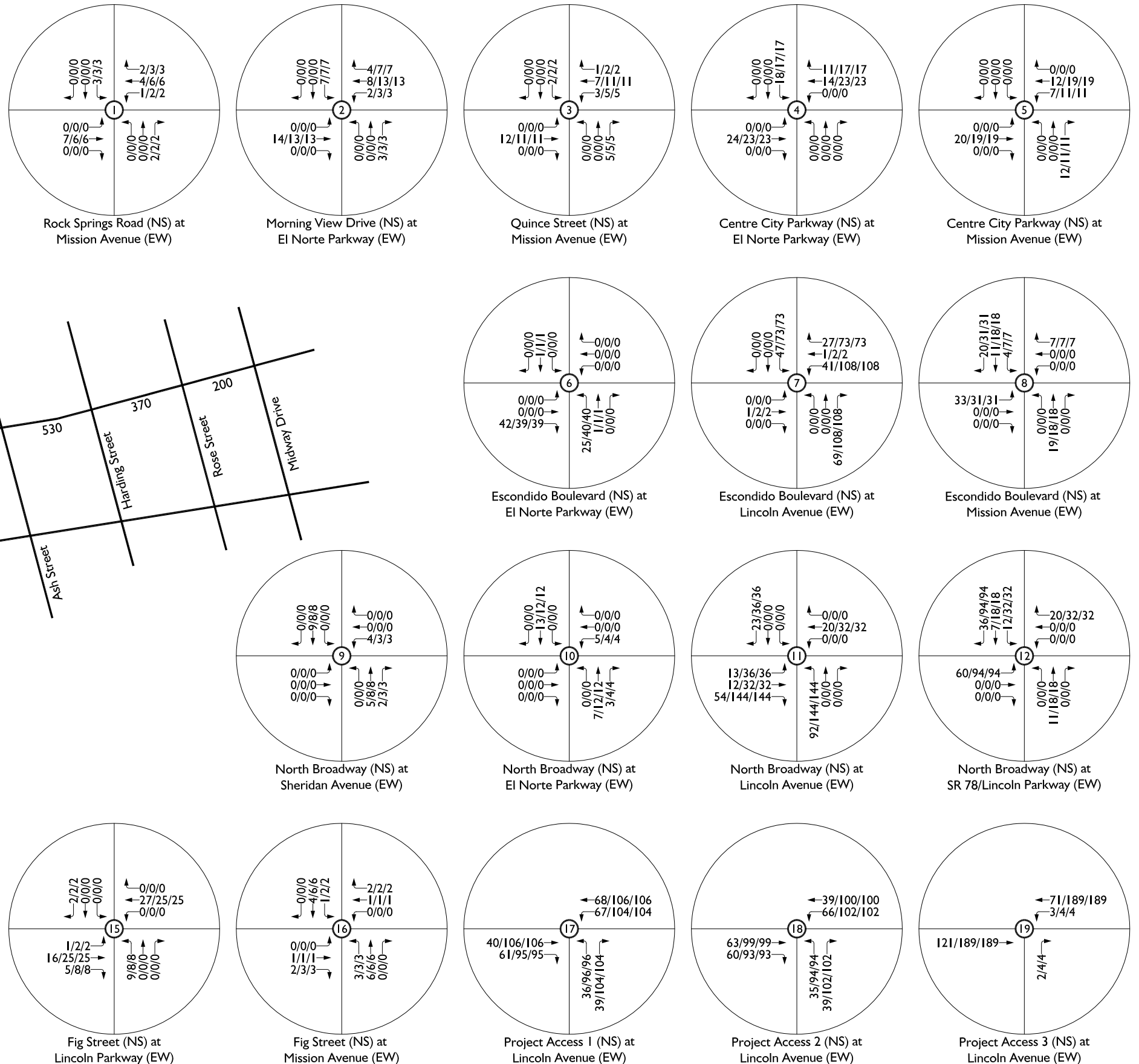


Exhibit 4-2 Project Traffic Volumes



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

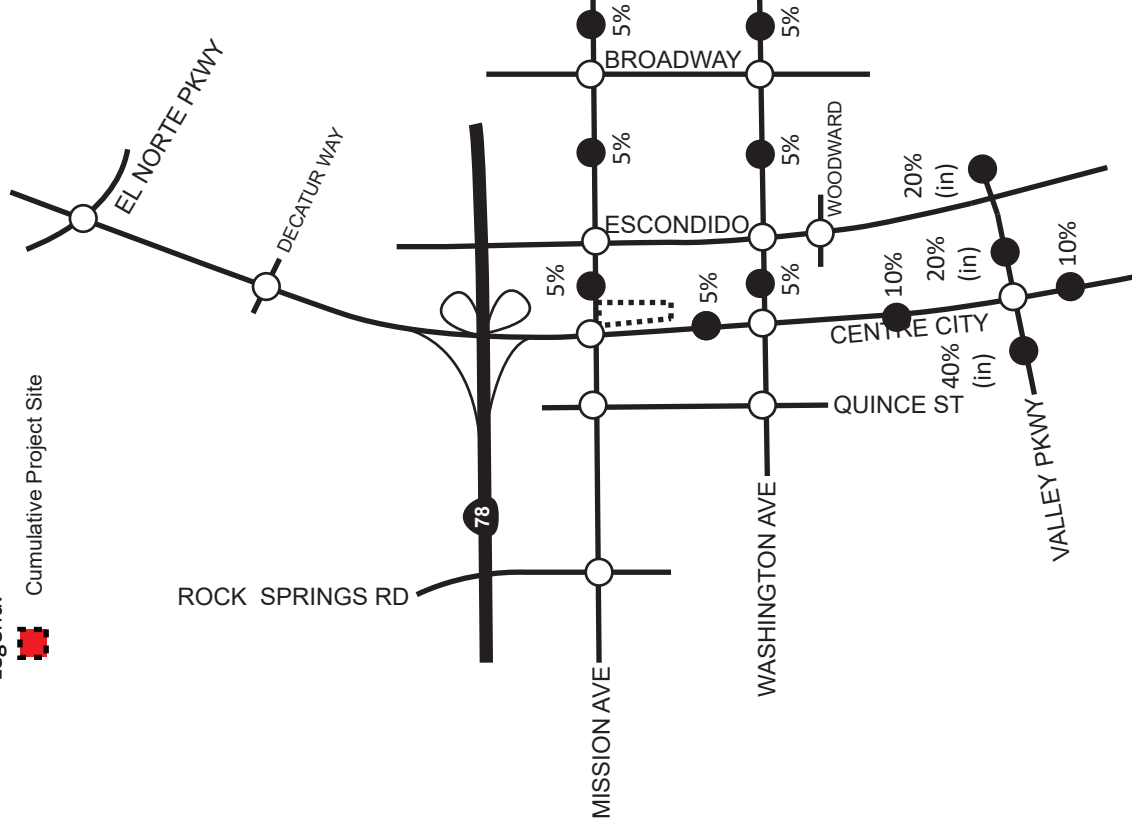


Exhibit: Projected La Terraza Office Distribution in Study Area

ONP-16-002 Centre City Shopping Center TIA



Not to Scale

Legend:



Cumulative Project Site

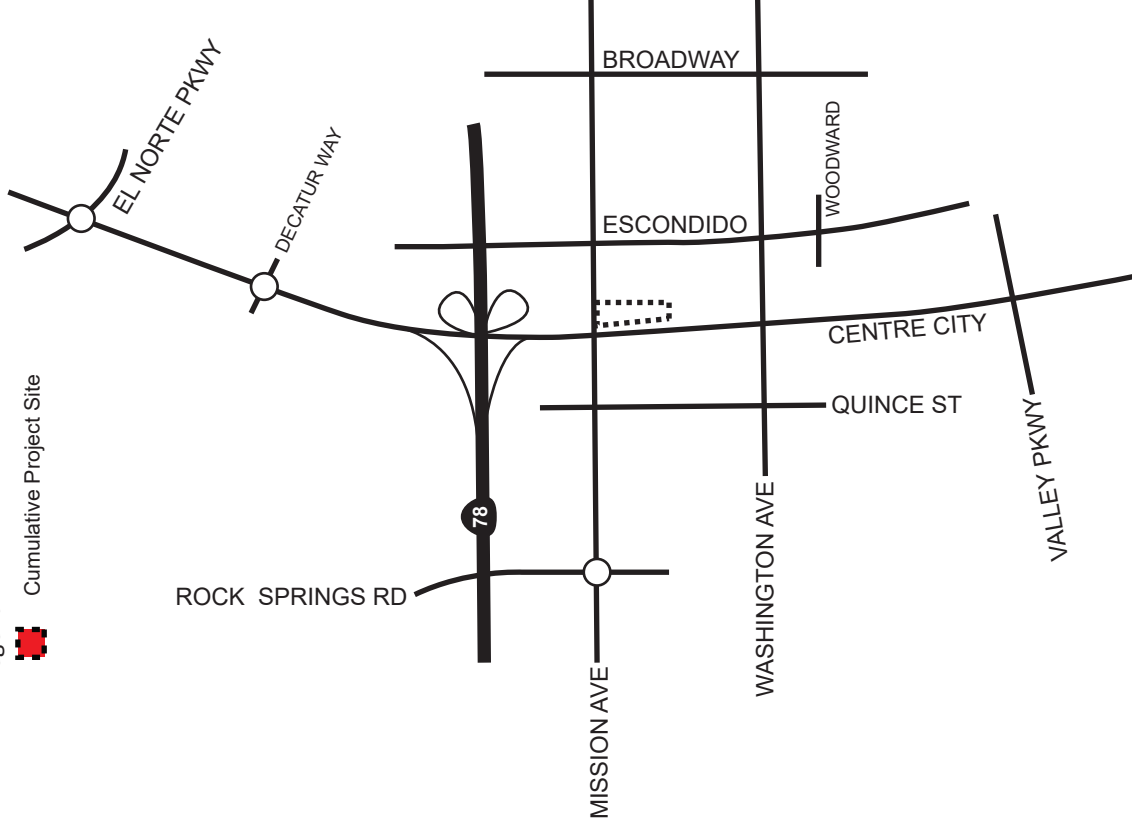


Exhibit: Projected Hotel La Terraza Trip Distribution in Study Area

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

[illegible][illegible][illegible]

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

AM PH	Cumulative Project	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
	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

Mid PH	Cumulative Project	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
	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

PM PH	Cumulative Project	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
	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

AM PH	Cumulative Project	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
	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

Mid PH	Cumulative Project	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
	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

PM PH	Cumulative Project	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
	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

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

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

SEC CCP/Mission TIA
3: Quince St & 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)	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+I1), 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	20.6	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+I), s	14.3	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									

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

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)	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	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+1.3), s	13.3	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												

SEC CCP/Mission TIA
6: Centre City Pkwy & Mission 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)	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	4.6	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	23.5	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	11.2	39.5	9.5	39.5	11.0	39.7	13.5	* 36										
Max Q Clear Time (g_c+1.8), s	19.8	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																		

SEC CCP/Mission TIA
7: Centre City Pkwy & 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)	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+1.4), s	14.8	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												

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

SEC CCP/Mission TIA
9: Escondido Blvd & Mission 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)	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	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+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	14.5	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												

SEC CCP/Mission TIA
11: Escondido Blvd & Woodward

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)	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/ln	1553	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/ln	1.0	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), s	8.8	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+1.5), s	15.7	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												

SEC CCP/Mission TIA
12: Broadway & Mission 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)	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+1.6), 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											

SEC CCP/Mission TIA
13: Broadway & 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)	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+1.2), s	19.7	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	NBR	WBLn1	WBR	SBT	SBLn1
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	-	0	638
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	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								

SEC CCP/Mission TIA
2: Quince St & 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)	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	41.7	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	17.6	37.4	15.7	30.1	9.4	* 46	17.9	27.9				
Max Q Clear Time (g_c+10), 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	13.0	60.6	14.5	52.5	16.7	56.7	10.0	57.0				
Max Q Clear Time (g_c+10), 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+14), s	14.1	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												

SEC CCP/Mission TIA
6: Centre City Pkwy & 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)	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	25.6	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+1), s	11.1	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												

SEC CCP/Mission TIA
7: Centre City Pkwy & 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)	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+14.3), s	14.3	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												

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+1.5), s	13.5	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												

SEC CCP/Mission TIA
11: Escondido Blvd & Woodward

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)	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/ln	1501	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/ln	0.5	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), s	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), s	40.0			* 25		56.0		24.0				
Max Q Clear Time (g_c+14.2), s	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	22.9	6.6	20.9	8.5	21.0	7.5	20.0					
Max Q Clear Time (g_c+17), s	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	17.5	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	9.5	21.0	5.7	20.8	7.7	22.8	6.5	20.0				
Max Q Clear Time (g_c+19.5), s	19.5	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	-	0	493
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	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	-	-	-		

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

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)	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			
Approach Delay, s/veh	32.5				32.8				31.9			
Approach LOS	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											

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

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)	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	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+1.6), 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												

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

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)	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	1.7	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+I1), 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												

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

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)	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	10.7	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	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+14), s	14.7	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													

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

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)	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+1), s	11.3	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											

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

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)	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	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+10), 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												

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

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)	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												

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

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)	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+1), 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												

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

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)	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	4.0	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	16.1	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	16.5	31.2	18.7	49.4	16.9	* 31	18.5	49.6				
Max Q Clear Time (g_c+1.0), s	12.0	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												

SEC CCP/Mission TIA
11: Escondido Blvd & Woodward

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)	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	17.0	48.0		* 27		69.0		26.0											
Max Q Clear Time (g_c+10), s	10.6	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																			

SEC CCP/Mission TIA
12: Broadway & Mission Ave

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)	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+14.2), 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																		

SEC CCP/Mission TIA
13: Broadway & Washington Ave

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)	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	5.8	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	23.2	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+1.0), s	13.0	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	NBR	WBLn1	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	-	0	402
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	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

05/05/2017

												
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

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			
Approach Delay, s/veh	39.5				34.3				51.8			
Approach LOS	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	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												

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							
Approach Delay, s/veh	56.4				63.9				31.6							
Approach LOS	E				E				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	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																			

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

SEC CCP/Mission TIA
7: Centre City Pkwy & 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)	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												

SEC CCP/Mission TIA
9: Escondido Blvd & 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)	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												

SEC CCP/Mission TIA
11: Escondido Blvd & Woodward

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	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			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								

SEC CCP/Mission TIA
2: Quince St & 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)	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									

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

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)	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(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	20.0	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												

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

SEC CCP/Mission TIA
7: Centre City Pkwy & 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)	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																

SEC CCP/Mission TIA
9: Escondido Blvd & 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)	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												

SEC CCP/Mission TIA
11: Escondido Blvd & Woodward

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)	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			
Approach Delay, s/veh	13.3				19.8				47.4			
Approach LOS	B				B				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												

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

SEC CCP/Mission TIA
7: Centre City Pkwy & 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)	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							
Approach Delay, s/veh	70.3				33.8				52.1							
Approach LOS	E				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	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												

SEC CCP/Mission TIA
9: Escondido Blvd & 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)	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							
Approach Delay, s/veh	49.1				57.1				54.1							
Approach LOS	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	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							
Approach Delay, s/veh	33.9				54.0				43.3							
Approach LOS	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	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								

SEC CCP/Mission TIA
2: Quince St & 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)	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+I1), 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	21.8	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+1.5), s	19.5	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	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+1.5), s	19.4	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	4.7	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	22.6	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	11.2	39.5	9.5	39.5	11.0	39.7	13.5	* 36				
Max Q Clear Time (g_c+1.0), s	11.8	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+1.0), s	15.0	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			
Approach Delay, s/veh	37.6				38.8				41.9			
Approach LOS	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+I), s	19.1	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												

SEC CCP/Mission TIA
11: Escondido Blvd & Woodward

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)	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	1.0	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+1.5), s	15.7	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	22.0	5.5	20.0	7.5	24.0	5.5	20.0				
Max Q Clear Time (g_c+10), s	10.4	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+10), s	10.0	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	-	0	611
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	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+10, 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	17.4	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	14.1	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	25.1	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+1), s	11.3	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
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+l1), 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
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	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), s	40.0			* 25		56.0		24.0				
Max Q Clear Time (g_c+14.3), s	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	6.6	22.9	6.6	20.9	8.5	21.0	7.5	20.0				
Max Q Clear Time (g_c+1/4), s	17.4	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	8.5	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	17.2	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	9.5	21.0	5.7	20.8	7.7	22.8	6.5	20.0				
Max Q Clear Time (g_c+10), s	10.1	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	-	0	472
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	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									

SEC CCP/Mission TIA
2: Quince St & 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)	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	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+10), s	10.2	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	1.8	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+1), 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	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+14.8), s	14.8	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+1), s	11.5	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	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+1/2), s	17.2	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																			

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+1), s	11.6	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	4.0	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	16.2	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	16.5	31.2	18.7	49.4	16.9	* 31	18.5	49.6											
Max Q Clear Time (g_c+1/2), s	11.5	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	17.0	48.0		* 27		69.0		26.0											
Max Q Clear Time (g_c+10, s)	10.7	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+14.6), 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	NBR	WBLn1	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	-	0	382
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	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(l)	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							
Approach Delay, s/veh	37.7				32.3				43.0							
Approach LOS	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	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							
Approach Delay, s/veh	42.2				37.1				53.7							
Approach LOS	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(l)	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			
Approach Delay, s/veh	71.2				36.5				52.7			
Approach LOS	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	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
Horizon Year 2035 Traffic Volume Worksheets

Intersection	2016		2035		Growth		Growth Factor		Northbound			Southbound			Eastbound			Westbound		
AM PEAK Hour	Approach	Departure	Approach	Departure	Approach	Departure	Approach	Departure	L	T	R	L	T	R	L	T	R	L	T	R
Rock Springs (NS) at Mission (EW)									1.2118	1.2118	1.2118	1.0500	1.0500	1.0500	1.1404	1.1404	1.1404	1.0500	1.0500	1.0500
North Leg	736	386	361	167	-375	-219	1.0500	1.0500												
South Leg	265	448	364	441	99	-7	1.3736	1.0500												
East Leg	1091	1124	823	649	-268	-475	1.0500	1.0500												
West Leg	403	1180	496	1043	93	-137	1.2308	1.0500												
Quince (NS) at Mission (EW)									1.0500	1.1293	1.0500	1.0500	1.0993	1.0500	1.1293	1.0500	1.0993	1.0993	1.0500	1.1293
North Leg	107	115	42	139	-65	24	1.0500	1.2087												
South Leg	268	303	104	348	-164	45	1.0500	1.1485												
East Leg	1402	552	1219	564	-183	12	1.0500	1.0500												
West Leg	493	1300	457	758	-36	-542	1.0500	1.0500												
Quince (NS) at Washington (EW)									1.0500	1.0500	1.0500	1.0545	1.0545	1.0545	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500
North Leg	254	248	269	165	15	-83	1.0591	1.0500												
South Leg	306	366	236	374	-70	8	1.0500	1.0500												
East Leg	853	434	686	410	-167	-24	1.0500	1.0500												
West Leg	496	861	448	622	-48	-239	1.0500	1.0500												
Centre City (NS) at El Norte (EW)									1.4116	1.5270	1.4116	1.0500	1.0500	1.0500	1.1654	1.0500	1.0500	1.0500	1.0500	1.1654
North Leg	1354	406	952	520	-402	114	1.0500	1.2808												
South Leg	485	1587	860	1033	375	-554	1.7732	1.0500												
East Leg	1149	955	616	884	-533	-71	1.0500	1.0500												
West Leg	901	941	755	766	-146	-175	1.0500	1.0500												
Centre City (NS) at Decatur (EW)									1.3233	1.6759	1.9089	1.6356	1.0500	1.0500	2.9609	3.1939	2.6083	1.0500	1.0500	1.4026
North Leg	1655	490	1033	860	-622	370	1.0500	1.7551												
South Leg	471	1891	752	1351	281	-540	1.5966	1.0500												
East Leg	398	104	373	231	-25	127	1.0500	2.2212												
West Leg	12	51	50	46	38	-5	4.1667	1.0500												
Centre City (NS) at Mission (EW)									1.0675	1.1423	1.1711	1.1536	1.3563	1.0500	1.1248	1.1536	1.3563	1.3563	1.0500	1.1248
North Leg	1554	887	739	1064	-815	177	1.0500	1.1995												
South Leg	706	993	766	1651	60	658	1.0850	1.6626												
East Leg	968	560	732	704	-236	144	1.0500	1.2571												
West Leg	551	1339	564	1219	13	-120	1.0500	1.0500												
Centre City (NS) at Washington (EW)									1.0936	1.0936	1.1185	1.0749	1.0657	1.0500	1.0500	1.0749	1.0657	1.0657	1.0500	1.0500
North Leg	845	971	961	1050	116	79	1.1373	1.0814												
South Leg	713	461	605	507	-108	46	1.0500	1.0998												
West Leg	429	898	410	686	-19	-212	1.0500	1.0500												
Centre City (NS) at Valley (EW)									1.0500	1.0963	#DIV/0!	#DIV/0!	1.0674	1.0674	#DIV/0!	#DIV/0!	#DIV/0!	1.0500	1.0500	1.0963
North Leg	968	841	1050	961	82	120	1.0847	1.1427												
South Leg	786	1196	739	1239	-47	43	1.0500	1.0500												
East Leg	1778	0	1039	0	-739	0	1.0500	#DIV/0!												
West Leg	0	1496	0	1246	0	-250	#DIV/0!	1.0500												
Escondido (NS) at Mission (EW)									1.0500	1.0500	1.0588	1.0588	1.0500	1.0500	1.3172	1.3260	1.3172	1.0500	1.0500	1.0500
North Leg	616	235	338	175	-278	-60	1.0500	1.0500												
South Leg	380	550	184	486	-196	-64	1.0500	1.0500												
East Leg	702	459	643	490	-59	31	1.0500	1.0675												
West Leg	462	916	732	704	270	-212	1.5844	1.0500												
Escondido (NS) at Washington (EW)									1.0500	1.1386	1.0500	1.0500	1.0500	1.0500	1.1386	1.0500	1.0500	1.1604	1.1604	1.2491
North Leg	518	396	184	486	-334	90	1.0500	1.2273												
South Leg	381	539	240	395	-141	-144	1.0500	1.0500												
East Leg	683	471	868	468	185	-3	1.2709	1.0500												
West Leg	492	668	448	498	-44	-170	1.0500	1.0500												

[illegible]

Intersection	2016		2035		Growth		Growth Factor		Northbound			Southbound			Eastbound			Westbound		
PM Peak Hour	Approach	Departure	Approach	Departure	Approach	Departure	Approach	Departure	L	T	R	L	T	R	L	T	R	L	T	R
Rock Springs (NS) at Mission (EW)									1.2343	1.0500	1.0500	1.0500	1.0500	1.2343	1.0500	1.0500	1.0500	1.1700	1.3543	1.1700
North Leg	411	940	229	493	-182	-447	1.0500	1.0500												
South Leg	624	417	567	268	-57	-149	1.0500	1.0500												
East Leg	724	996	934	867	210	-129	1.2901	1.0500												
West Leg	1184	590	723	837	-461	247	1.0500	1.4186												
Quince (NS) at Mission (EW)									1.0500	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500
North Leg	235	179	180	64	-55	-115	1.0500	1.0500												
South Leg	349	242	317	174	-32	-68	1.0500	1.0500												
East Leg	864	1298	791	1163	-73	-135	1.0500	1.0500												
West Leg	1053	782	619	722	-434	-60	1.0500	1.0500												
Quince (NS) at Washington (EW)									1.0500	1.0500	1.0500	1.1062	1.1062	1.1062	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500
North Leg	277	364	322	205	45	-159	1.1625	1.0500												
South Leg	489	442	446	315	-43	-127	1.0500	1.0500												
East Leg	654	1080	500	723	-154	-357	1.0500	1.0500												
West Leg	1098	632	508	551	-590	-81	1.0500	1.0500												
Centre City (NS) at El Norte (EW)									1.1593	1.3772	1.1593	1.0500	1.0500	1.0500	1.2679	1.0500	1.0500	1.0500	1.0500	1.2679
North Leg	445	813	369	1208	-76	395	1.0500	1.4859												
South Leg	1262	578	1601	380	339	-198	1.2686	1.0500												
East Leg	926	1425	688	1063	-238	-362	1.0500	1.0500												
West Leg	1126	999	991	584	-135	-415	1.0500	1.0500												
Centre City (NS) at Decatur (EW)									2.1537	1.3245	1.2081	1.0500	1.0500	1.9956	1.4345	1.3181	1.3181	1.1639	2.1095	1.2803
North Leg	675	1248	380	1601	-295	353	1.0500	1.2829												
South Leg	1166	751	1593	609	427	-142	1.3662	1.0500												
East Leg	306	166	391	145	85	-21	1.2778	1.0500												
West Leg	29	17	46	50	17	33	1.5862	2.9412												
Centre City (NS) at Mission (EW)									1.2440	1.2909	1.2440	1.0500	1.0956	1.0500	1.0970	1.0500	1.0956	1.0956	1.0500	1.0970
North Leg	1011	1487	1000	1701	-11	214	1.0500	1.1439												
South Leg	1071	772	1540	881	469	109	1.4379	1.1412												
East Leg	799	1143	764	974	-35	-169	1.0500	1.0500												
West Leg	1290	769	1163	791	-127	22	1.0500	1.0500												
Centre City (NS) at Washington (EW)									1.1152	1.2858	1.1152	1.0993	1.2113	1.0993	1.2206	1.0500	1.1620	1.1620	1.0500	1.2206
North Leg	767	1107	881	1540	114	433	1.1486	1.3911												
South Leg	1197	719	1413	916	216	197	1.1805	1.2740												
East Leg	562	1097	581	684	19	-413	1.0500	1.0500												
West Leg	1037	640	723	500	-314	-140	1.0500	1.0500												
Centre City (NS) at Valley (EW)									1.2290	1.2822	#DIV/0!	#DIV/0!	1.1611	1.1611	#DIV/0!	#DIV/0!	#DIV/0!	1.0500	1.0500	1.1032
North Leg	720	1222	916	1413	196	191	1.2722	1.1563												
South Leg	1137	820	1601	763	464	-57	1.4081	1.0500												
East Leg	1380	0	1265	0	-115	0	1.0500	#DIV/0!												
West Leg	0	1196	0	1076	0	-120	#DIV/0!	1.0500												
Escondido (NS) at Mission (EW)									1.0500	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500
North Leg	419	554	203	464	-216	-90	1.0500	1.0500												
South Leg	776	383	564	234	-212	-149	1.0500	1.0500												
East Leg	628	1038	470	932	-158	-106	1.0500	1.0500												
West Leg	1034	782	974	764	-60	-18	1.0500	1.0500												
Escondido (NS) at Washington (EW)									1.0500	1.0500	1.0500	1.1250	1.1250	1.1250	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500
North Leg	405	646	486	564	81	-82	1.2000	1.0500												
South Leg	667	521	589	297	-78	-224	1.0500	1.0500												
East Leg	628	1039	598	866	-30	-173	1.0500	1.0500												
West Leg	1050	544	569	500	-481	-44	1.0500	1.0500												

[illegible]

APPENDIX L

Horizon Year 2035 Without Project HCM Analysis Sheets

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

HCM 2010 Signalized Intersection Summary
General Plan Without Project AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	331	34	44	980	111	52	246	20	169	395	206
Future Volume (veh/h)	86	331	34	44	980	111	52	246	20	169	395	206
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	86	331	34	44	980	111	52	246	20	169	395	206
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	1	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	1223	125	60	1144	130	284	1251	101	475	702	597
Arrive On Green	0.06	0.38	0.38	0.03	0.36	0.36	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1774	3243	331	1774	3205	363	815	3317	268	1109	1863	1583
Grp Volume(v), veh/h	86	180	185	44	541	550	52	130	136	169	395	206
Grp Sat Flow(s),veh/h/ln	1774	1770	1804	1774	1770	1799	815	1770	1815	1109	1863	1583
Q Serve(g_s), s	3.0	4.5	4.5	1.6	18.0	18.0	3.4	3.2	3.2	7.7	10.7	5.9
Cycle Q Clear(g_c), s	3.0	4.5	4.5	1.6	18.0	18.0	14.1	3.2	3.2	10.9	10.7	5.9
Prop In Lane	1.00		0.18	1.00		0.20	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	110	667	680	60	632	642	284	667	684	475	702	597
V/C Ratio(X)	0.78	0.27	0.27	0.73	0.86	0.86	0.18	0.20	0.20	0.36	0.56	0.35
Avail Cap(c_a), veh/h	111	667	680	111	667	678	284	667	684	475	702	597
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	29.4	13.8	13.8	30.5	19.0	19.0	21.3	13.3	13.4	17.0	15.7	14.2
Incr Delay (d2), s/veh	26.9	1.0	1.0	6.2	10.5	10.4	1.4	0.7	0.6	0.3	0.9	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	2.3	2.4	2.5	0.9	10.6	10.7	0.9	1.6	1.7	2.4	5.7	2.6
LnGrp Delay(d),s/veh	56.3	14.7	14.8	36.6	29.5	29.4	22.7	14.0	14.0	17.4	16.6	14.5
LnGrp LOS	E	B	B	D	C	C	C	B	B	B	B	B
Approach Vol, veh/h		451			1135			318			770	
Approach Delay, s/veh		22.7			29.7			15.4			16.2	
Approach LOS		C			C			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.7	28.5		28.5	7.9	27.2		28.5				
Change Period (Y+Rc), s	4.5	* 4.5		4.5	4.0	4.5		4.5				
Max Green Setting (Gmax), s	4.0	* 24		24.0	4.0	24.0		24.0				
Max Q Clear Time (g_c+I1), s	3.6	6.5		12.9	5.0	20.0		16.1				
Green Ext Time (p_c), s	0.3	2.2		3.6	0.0	2.6		3.0				
Intersection Summary												
HCM 2010 Ctrl Delay				22.9								
HCM 2010 LOS				C								
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan Without Project AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	411	82	219	1167	78	147	26	111	55	29	30
Future Volume (veh/h)	26	411	82	219	1167	78	147	26	111	55	29	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	26	411	82	219	1167	78	147	26	111	55	29	30
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	1027	203	254	1539	103	175	539	458	105	210	217
Arrive On Green	0.04	0.35	0.35	0.05	0.15	0.15	0.10	0.29	0.29	0.06	0.25	0.25
Sat Flow, veh/h	1774	2946	583	1774	3368	225	1774	1863	1583	1774	840	869
Grp Volume(v), veh/h	26	246	247	219	613	632	147	26	111	55	0	59
Grp Sat Flow(s),veh/h/ln	1774	1770	1760	1774	1770	1823	1774	1863	1583	1774	0	1709
Q Serve(g_s), s	1.7	12.6	12.8	14.7	39.8	39.9	9.8	1.2	4.4	3.6	0.0	3.2
Cycle Q Clear(g_c), s	1.7	12.6	12.8	14.7	39.8	39.9	9.8	1.2	4.4	3.6	0.0	3.2
Prop In Lane	1.00		0.33	1.00		0.12	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	69	617	613	254	809	833	175	539	458	105	0	427
V/C Ratio(X)	0.38	0.40	0.40	0.86	0.76	0.76	0.84	0.05	0.24	0.52	0.00	0.14
Avail Cap(c_a), veh/h	118	617	613	361	809	833	207	539	458	137	0	427
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	0.61	0.61	0.61	0.94	0.94	0.94	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.3	29.6	29.6	56.0	44.6	44.6	53.2	30.7	15.3	54.8	0.0	35.0
Incr Delay (d2), s/veh	4.0	1.8	1.9	9.8	4.1	4.0	22.3	0.2	1.2	4.8	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	6.5	6.5	7.9	20.4	21.1	5.9	0.6	2.1	1.9	0.0	1.6
LnGrp Delay(d),s/veh	60.2	31.4	31.5	65.8	48.7	48.6	75.5	30.9	16.5	59.5	0.0	35.6
LnGrp LOS	E	C	C	E	D	D	E	C	B	E		D
Approach Vol, veh/h		519			1464			284			114	
Approach Delay, s/veh		32.9			51.2			48.3			47.2	
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	21.8	47.2	15.9	35.1	8.7	60.2	11.2	39.8				
Change Period (Y+Rc), s	4.6	5.4	4.1	5.1	4.1	5.4	4.1	5.1				
Max Green Setting (Gmax), s	24.4	32.4	14.0	30.0	8.0	49.3	9.3	34.7				
Max Q Clear Time (g_c+I1), s	16.7	14.8	11.8	5.2	3.7	41.9	5.6	6.4				
Green Ext Time (p_c), s	0.5	14.8	0.1	0.3	0.0	6.7	0.2	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay				46.7								
HCM 2010 LOS				D								

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

HCM 2010 Signalized Intersection Summary
General Plan Without Project AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	343	145	77	719	88	112	147	59	43	161	63
Future Volume (veh/h)	25	343	145	77	719	88	112	147	59	43	161	63
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	25	343	145	77	719	88	112	147	59	43	161	63
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	553	1789	743	683	2328	285	211	471	181	219	474	179
Arrive On Green	0.73	0.73	0.73	1.00	1.00	1.00	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	672	2440	1014	904	3175	388	1152	2499	963	1171	2517	948
Grp Volume(v), veh/h	25	247	241	77	400	407	112	102	104	43	111	113
Grp Sat Flow(s),veh/h/ln	672	1770	1684	904	1770	1794	1152	1770	1693	1171	1770	1695
Q Serve(g_s), s	1.2	5.2	5.3	0.7	0.0	0.0	11.2	6.0	6.4	4.0	6.5	6.9
Cycle Q Clear(g_c), s	1.2	5.2	5.3	6.0	0.0	0.0	18.2	6.0	6.4	10.3	6.5	6.9
Prop In Lane	1.00		0.60	1.00		0.22	1.00		0.57	1.00		0.56
Lane Grp Cap(c), veh/h	553	1298	1235	683	1298	1316	211	333	319	219	333	319
V/C Ratio(X)	0.05	0.19	0.20	0.11	0.31	0.31	0.53	0.31	0.33	0.20	0.33	0.35
Avail Cap(c_a), veh/h	553	1298	1235	683	1298	1316	419	653	625	430	653	626
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	0.69	0.69	0.69	1.00	1.00	1.00	0.75	0.75	0.75
Uniform Delay (d), s/veh	4.4	5.0	5.0	0.2	0.0	0.0	50.2	41.9	42.1	46.6	42.2	42.3
Incr Delay (d2), s/veh	0.2	0.3	0.4	0.2	0.4	0.4	1.5	0.4	0.4	0.2	0.3	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	2.7	2.6	0.2	0.2	0.2	3.7	3.0	3.0	1.3	3.2	3.3
LnGrp Delay(d),s/veh	4.6	5.3	5.3	0.4	0.4	0.4	51.8	42.3	42.5	46.8	42.5	42.7
LnGrp LOS	A	A	A	A	A	A	D	D	D	D	D	D
Approach Vol, veh/h		513			884			318			267	
Approach Delay, s/veh		5.3			0.4			45.7			43.3	
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		92.7		27.3		92.7		27.3				
Change Period (Y+Rc), s		* 4.7		* 4.7		* 4.7		* 4.7				
Max Green Setting (Gmax), s		* 66		* 44		* 66		* 44				
Max Q Clear Time (g_c+I1), s		7.3		20.2		8.0		12.3				
Green Ext Time (p_c), s		9.0		2.4		9.0		2.5				
Intersection Summary												
HCM 2010 Ctrl Delay				14.7								
HCM 2010 LOS				B								
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan Without Project AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	674	259	286	759	175	216	372	109	262	1104	62
Future Volume (veh/h)	10	674	259	286	759	175	216	372	109	262	1104	62
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	674	259	286	759	175	216	372	109	262	1104	62
Adj No. of Lanes	2	2	1	2	2	0	2	2	1	2	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	1043	467	329	1051	242	307	1291	578	308	1288	576
Arrive On Green	0.02	0.29	0.29	0.10	0.37	0.37	0.09	0.36	0.36	0.09	0.36	0.36
Sat Flow, veh/h	3442	3539	1583	3442	2857	659	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	10	674	259	286	470	464	216	372	109	262	1104	62
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1721	1770	1746	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	0.4	26.0	21.6	12.9	35.9	35.9	9.6	11.7	7.4	11.8	45.3	4.1
Cycle Q Clear(g_c), s	0.4	26.0	21.6	12.9	35.9	35.9	9.6	11.7	7.4	11.8	45.3	4.1
Prop In Lane	1.00		1.00	1.00		0.38	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	77	1043	467	329	651	642	307	1291	578	308	1288	576
V/C Ratio(X)	0.13	0.65	0.55	0.87	0.72	0.72	0.70	0.29	0.19	0.85	0.86	0.11
Avail Cap(c_a), veh/h	219	1179	528	373	669	660	307	1291	578	428	1288	576
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	75.2	48.2	46.7	70.0	42.7	42.7	69.5	35.4	34.0	70.4	46.2	33.1
Incr Delay (d2), s/veh	0.6	1.4	1.8	16.3	4.4	4.4	6.1	0.6	0.7	8.6	7.5	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	12.9	9.7	6.9	18.3	18.1	4.8	5.8	3.3	6.0	23.4	1.8
LnGrp Delay(d),s/veh	75.8	49.7	48.4	86.4	47.1	47.1	75.5	35.9	34.7	79.0	53.7	33.4
LnGrp LOS	E	D	D	F	D	D	E	D	C	E	D	C
Approach Vol, veh/h		943			1220			697			1428	
Approach Delay, s/veh		49.6			56.3			48.0			57.5	
Approach LOS		D			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	20.1	64.2	20.1	52.6	20.3	64.0	8.6	64.0				
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	19.5	51.8	17.0	52.3	14.0	57.1	10.0	59.3				
Max Q Clear Time (g_c+I1), s	13.8	13.7	14.9	28.0	11.6	47.3	2.4	37.9				
Green Ext Time (p_c), s	0.2	18.0	0.1	18.2	0.1	7.3	0.0	16.5				
Intersection Summary												
HCM 2010 Ctrl Delay				53.9								
HCM 2010 LOS				D								

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

HCM 2010 Signalized Intersection Summary
General Plan Without Project AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	0	19	323	8	115	36	660	73	108	1636	15
Future Volume (veh/h)	12	0	19	323	8	115	36	660	73	108	1636	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	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	12	0	19	323	8	115	36	660	73	108	1636	15
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	54	0	157	339	27	388	94	1515	678	182	1691	756
Arrive On Green	0.03	0.00	0.10	0.19	0.26	0.26	0.05	0.43	0.43	0.10	0.48	0.48
Sat Flow, veh/h	1774	0	1583	1774	104	1495	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	12	0	19	323	0	123	36	660	73	108	1636	15
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1774	0	1599	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	0.8	0.0	1.3	21.0	0.0	7.2	2.3	15.3	1.6	6.8	52.4	0.4
Cycle Q Clear(g_c), s	0.8	0.0	1.3	21.0	0.0	7.2	2.3	15.3	1.6	6.8	52.4	0.4
Prop In Lane	1.00		1.00	1.00		0.93	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	54	0	157	339	0	415	94	1515	678	182	1691	756
V/C Ratio(X)	0.22	0.00	0.12	0.95	0.00	0.30	0.38	0.44	0.11	0.59	0.97	0.02
Avail Cap(c_a), veh/h	167	0	163	339	0	415	137	1515	678	225	1691	756
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	55.3	0.0	48.0	46.7	0.0	34.7	53.4	23.5	4.9	50.1	29.6	9.1
Incr Delay (d2), s/veh	0.8	0.0	0.3	36.4	0.0	0.3	0.9	0.9	0.3	1.1	15.4	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	0.4	0.0	0.6	13.7	0.0	3.2	1.1	7.6	1.4	3.4	29.1	0.3
LnGrp Delay(d),s/veh	56.0	0.0	48.2	83.1	0.0	35.0	54.4	24.4	5.2	51.2	45.0	9.1
LnGrp LOS	E		D	F		C	D	C	A	D	D	A
Approach Vol, veh/h		31			446			769			1759	
Approach Delay, s/veh		51.2			69.8			24.0			45.1	
Approach LOS		D			E			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.6	56.9	27.0	16.3	10.8	62.7	8.2	35.0				
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	14.8	50.0	* 22	* 12	9.0	55.8	* 11	* 23				
Max Q Clear Time (g_c+I1), s	8.8	17.3	23.0	3.3	4.3	54.4	2.8	9.2				
Green Ext Time (p_c), s	0.1	6.3	0.0	0.0	0.1	1.2	0.0	0.5				
Intersection Summary												
HCM 2010 Ctrl Delay			43.4									
HCM 2010 LOS			D									
Notes												

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	370	114	61	709	265	161	568	74	173	1156	559
Future Volume (veh/h)	138	370	114	61	709	265	161	568	74	173	1156	559
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	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	138	370	114	61	709	265	161	568	74	173	1156	559
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	2	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	766	327	201	896	382	281	1242	547	265	1247	548
Arrive On Green	0.03	0.07	0.07	0.25	0.51	0.51	0.03	0.12	0.12	0.08	0.35	0.35
Sat Flow, veh/h	1774	3539	1511	1587	3539	1511	3079	3539	1559	3442	3539	1555
Grp Volume(v), veh/h	138	370	114	61	709	265	161	568	74	173	1156	559
Grp Sat Flow(s),veh/h/ln	1774	1770	1511	1587	1770	1511	1540	1770	1559	1721	1770	1555
Q Serve(g_s), s	9.3	12.1	6.3	3.7	19.8	11.5	6.2	18.0	5.1	5.9	37.7	42.3
Cycle Q Clear(g_c), s	9.3	12.1	6.3	3.7	19.8	11.5	6.2	18.0	5.1	5.9	37.7	42.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	766	327	201	896	382	281	1242	547	265	1247	548
V/C Ratio(X)	0.84	0.48	0.35	0.30	0.79	0.69	0.57	0.46	0.14	0.65	0.93	1.02
Avail Cap(c_a), veh/h	170	1056	451	201	1032	441	282	1242	547	318	1247	548
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.2	49.3	25.5	40.6	27.0	13.4	55.9	42.4	36.7	53.8	37.4	38.9
Incr Delay (d2), s/veh	24.9	0.3	0.4	0.3	3.5	3.4	1.8	1.2	0.5	2.0	13.1	43.5
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	6.0	2.7	1.6	9.9	5.0	2.7	9.0	2.3	2.9	20.7	24.7
LnGrp Delay(d),s/veh	82.1	49.6	25.9	40.9	30.5	16.8	57.7	43.6	37.2	55.8	50.4	82.4
LnGrp LOS	F	D	C	D	C	B	E	D	D	E	D	F
Approach Vol, veh/h		622			1035			803			1888	
Approach Delay, s/veh		52.5			27.6			45.8			60.4	
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	15.6	48.5	20.1	30.9	15.4	48.7	15.7	35.3				
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	11.1	* 42	10.7	* 36	11.0	42.2	11.5	35.0				
Max Q Clear Time (g_c+I1), s	7.9	20.0	5.7	14.1	8.2	44.3	11.3	21.8				
Green Ext Time (p_c), s	1.4	3.3	2.2	2.2	0.1	0.0	0.0	3.8				
Intersection Summary												
HCM 2010 Ctrl Delay			48.8									
HCM 2010 LOS			D									
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan Without Project AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	312	82	68	617	55	183	667	60	126	873	145
Future Volume (veh/h)	61	312	82	68	617	55	183	667	60	126	873	145
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	61	312	82	68	617	55	183	667	60	126	873	145
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	585	151	133	722	64	343	1091	488	770	1588	711
Arrive On Green	0.13	0.42	0.42	0.15	0.44	0.44	0.03	0.10	0.10	0.45	0.90	0.90
Sat Flow, veh/h	1774	2785	721	1774	3288	293	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	61	197	197	68	332	340	183	667	60	126	873	145
Grp Sat Flow(s),veh/h/ln	1774	1770	1736	1774	1770	1811	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	3.9	9.9	10.3	4.2	20.2	20.3	6.3	21.7	3.1	2.6	6.0	1.4
Cycle Q Clear(g_c), s	3.9	9.9	10.3	4.2	20.2	20.3	6.3	21.7	3.1	2.6	6.0	1.4
Prop In Lane	1.00		0.42	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	116	372	365	133	389	398	343	1091	488	770	1588	711
V/C Ratio(X)	0.53	0.53	0.54	0.51	0.85	0.86	0.53	0.61	0.12	0.16	0.55	0.20
Avail Cap(c_a), veh/h	133	605	593	148	619	634	344	1091	488	770	1588	711
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.99	0.99	0.99	0.86	0.86	0.86	0.95	0.95	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.5	30.4	30.5	49.0	31.9	31.9	55.3	47.0	22.6	26.5	3.7	3.5
Incr Delay (d2), s/veh	1.4	0.4	0.5	1.0	3.2	3.3	0.8	2.4	0.5	0.0	1.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	4.8	4.9	2.1	10.1	10.4	3.0	11.0	1.4	1.2	3.0	0.7
LnGrp Delay(d),s/veh	51.8	30.8	30.9	50.0	35.2	35.2	56.1	49.4	23.1	26.5	5.1	4.1
LnGrp LOS	D	C	C	D	D	D	E	D	C	C	A	A
Approach Vol, veh/h		455			740			910			1144	
Approach Delay, s/veh		33.7			36.5			49.0			7.3	
Approach LOS		C			D			D			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	33.3	43.5	13.5	29.7	16.5	60.4	12.3	30.8				
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	* 37	10.0	41.0	12.0	37.0	9.0	42.0				
Max Q Clear Time (g_c+I1), s	4.6	23.7	6.2	12.3	8.3	8.0	5.9	22.3				
Green Ext Time (p_c), s	1.2	2.6	0.0	4.4	0.1	4.8	0.0	4.1				
Intersection Summary												
HCM 2010 Ctrl Delay			29.3									
HCM 2010 LOS			C									
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan Without 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	343	1289	244	181	663	0	0	921	115
Future Volume (veh/h)	0	0	0	343	1289	244	181	663	0	0	921	115
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				343	1289	244	181	663	0	0	921	115
Adj No. of Lanes				1	3	1	2	2	0	0	2	1
Peak Hour Factor				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				530	1669	473	524	2131	0	0	1389	621
Arrive On Green				0.30	0.30	0.30	0.30	1.00	0.00	0.00	0.13	0.13
Sat Flow, veh/h				1774	5588	1583	3442	3632	0	0	3632	1583
Grp Volume(v), veh/h				343	1289	244	181	663	0	0	921	115
Grp Sat Flow(s),veh/h/ln				1774	1863	1583	1721	1770	0	0	1770	1583
Q Serve(g_s), s				20.2	25.2	15.3	4.9	0.0	0.0	0.0	29.7	7.8
Cycle Q Clear(g_c), s				20.2	25.2	15.3	4.9	0.0	0.0	0.0	29.7	7.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				530	1669	473	524	2131	0	0	1389	621
V/C Ratio(X)				0.65	0.77	0.52	0.35	0.31	0.00	0.00	0.66	0.19
Avail Cap(c_a), veh/h				650	2049	581	524	2131	0	0	1389	621
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	0.33	0.33
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.82	0.82
Uniform Delay (d), s/veh				36.6	38.4	34.9	37.1	0.0	0.0	0.0	44.7	35.1
Incr Delay (d2), s/veh				1.3	1.4	0.6	0.3	0.4	0.0	0.0	2.1	0.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				10.1	13.2	13.9	2.3	0.1	0.0	0.0	15.0	3.5
LnGrp Delay(d),s/veh				37.9	39.7	35.5	37.4	0.4	0.0	0.0	46.7	35.6
LnGrp LOS				D	D	D	D	A			D	D
Approach Vol, veh/h					1876			844			1036	
Approach Delay, s/veh					38.8			8.3			45.5	
Approach LOS					D			A			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		79.2		40.8	25.2	54.0						
Change Period (Y+Rc), s		6.9		5.0	6.9	* 6.9						
Max Green Setting (Gmax), s		64.1		44.0	11.9	* 47						
Max Q Clear Time (g_c+I1), s		2.0		27.2	6.9	31.7						
Green Ext Time (p_c), s		4.6		8.6	1.9	5.0						
Intersection Summary												
HCM 2010 Ctrl Delay			33.8									
HCM 2010 LOS			C									
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan Without Project AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	359	120	92	591	39	162	174	79	102	361	202
Future Volume (veh/h)	86	359	120	92	591	39	162	174	79	102	361	202
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	86	359	120	92	591	39	162	174	79	102	361	202
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	297	787	259	312	1042	69	232	728	317	129	540	297
Arrive On Green	0.17	0.30	0.30	0.18	0.31	0.31	0.13	0.30	0.30	0.07	0.25	0.25
Sat Flow, veh/h	1774	2618	863	1774	3371	222	1774	2401	1047	1774	2205	1213
Grp Volume(v), veh/h	86	241	238	92	310	320	162	126	127	102	289	274
Grp Sat Flow(s),veh/h/ln	1774	1770	1711	1774	1770	1824	1774	1770	1678	1774	1770	1649
Q Serve(g_s), s	5.1	13.2	13.6	5.4	17.6	17.7	10.5	6.4	6.8	6.8	17.7	18.1
Cycle Q Clear(g_c), s	5.1	13.2	13.6	5.4	17.6	17.7	10.5	6.4	6.8	6.8	17.7	18.1
Prop In Lane	1.00		0.50	1.00		0.12	1.00		0.62	1.00		0.74
Lane Grp Cap(c), veh/h	297	532	515	312	547	564	232	537	509	129	434	404
V/C Ratio(X)	0.29	0.45	0.46	0.29	0.57	0.57	0.70	0.24	0.25	0.79	0.67	0.68
Avail Cap(c_a), veh/h	297	532	515	312	547	564	324	537	509	220	434	404
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	0.34	0.34	0.34	0.94	0.94	0.94	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	34.0	34.1	43.0	34.7	34.7	49.9	31.4	31.5	54.8	40.9	41.0
Incr Delay (d2), s/veh	0.2	2.8	3.0	0.1	1.4	1.4	1.3	1.0	1.1	4.1	7.9	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	2.5	6.8	6.8	2.7	8.8	9.1	5.2	3.3	3.3	3.5	9.6	9.2
LnGrp Delay(d),s/veh	43.9	36.7	37.0	43.0	36.2	36.1	51.2	32.3	32.6	58.9	48.7	49.9
LnGrp LOS	D	D	D	D	D	D	D	C	C	E	D	D
Approach Vol, veh/h		565			722			415			665	
Approach Delay, s/veh		37.9			37.0			39.8			50.8	
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	25.2	41.0	19.8	34.0	24.2	42.0	12.8	41.0				
Change Period (Y+Rc), s	4.1	4.9	4.1	4.6	4.1	4.9	4.1	4.6				
Max Green Setting (Gmax), s	14.9	36.1	21.9	29.4	13.9	37.1	14.9	36.4				
Max Q Clear Time (g_c+I1), s	7.4	15.6	12.5	20.1	7.1	19.7	8.8	8.8				
Green Ext Time (p_c), s	0.1	1.7	0.3	1.6	0.1	2.2	0.2	0.9				
Intersection Summary												
HCM 2010 Ctrl Delay				41.6								
HCM 2010 LOS				D								

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

HCM 2010 Signalized Intersection Summary
General Plan Without Project AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	340	118	75	578	124	75	274	66	95	378	77
Future Volume (veh/h)	64	340	118	75	578	124	75	274	66	95	378	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	64	340	118	75	578	124	75	274	66	95	378	77
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	252	1114	380	109	1001	214	122	748	177	152	822	166
Arrive On Green	0.28	0.86	0.86	0.06	0.34	0.34	0.14	0.53	0.53	0.09	0.28	0.28
Sat Flow, veh/h	1774	2591	885	1774	2902	621	1774	2841	673	1774	2936	592
Grp Volume(v), veh/h	64	230	228	75	352	350	75	169	171	95	226	229
Grp Sat Flow(s),veh/h/ln	1774	1770	1707	1774	1770	1753	1774	1770	1744	1774	1770	1758
Q Serve(g_s), s	3.3	3.0	3.1	5.0	19.5	19.6	4.8	6.7	6.9	6.2	12.7	12.9
Cycle Q Clear(g_c), s	3.3	3.0	3.1	5.0	19.5	19.6	4.8	6.7	6.9	6.2	12.7	12.9
Prop In Lane	1.00		0.52	1.00		0.35	1.00		0.39	1.00		0.34
Lane Grp Cap(c), veh/h	252	761	734	109	611	605	122	466	459	152	495	492
V/C Ratio(X)	0.25	0.30	0.31	0.69	0.58	0.58	0.61	0.36	0.37	0.63	0.46	0.46
Avail Cap(c_a), veh/h	252	761	734	205	611	605	205	466	459	235	495	492
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	0.39	0.39	0.39	0.99	0.99	0.99	0.80	0.80	0.80
Uniform Delay (d), s/veh	38.1	5.0	5.0	55.2	32.1	32.2	50.2	22.5	22.6	53.0	35.7	35.8
Incr Delay (d2), s/veh	0.2	0.9	1.0	1.1	1.5	1.6	1.8	2.2	2.3	1.3	2.4	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.6	1.6	2.5	9.7	9.7	2.4	3.5	3.6	3.1	6.5	6.6
LnGrp Delay(d),s/veh	38.2	5.9	6.0	56.4	33.7	33.7	52.1	24.7	24.8	54.3	38.1	38.3
LnGrp LOS	D	A	A	E	C	C	D	C	C	D	D	D
Approach Vol, veh/h		522			777			415			550	
Approach Delay, s/veh		9.9			35.9			29.7			41.0	
Approach LOS		A			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	14.4	38.0	11.4	56.2	12.4	40.0	21.6	46.0				
Change Period (Y+Rc), s	4.1	6.4	4.1	4.6	4.1	6.4	4.6	* 4.6				
Max Green Setting (Gmax), s	15.9	31.6	13.9	39.4	13.9	33.6	11.9	* 41				
Max Q Clear Time (g_c+I1), s	8.2	8.9	7.0	5.1	6.8	14.9	5.3	21.6				
Green Ext Time (p_c), s	0.1	1.2	0.0	1.8	0.1	1.6	0.1	2.7				
Intersection Summary												
HCM 2010 Ctrl Delay			30.0									
HCM 2010 LOS			C									
Notes												

SEC CCP/Mission TIA
11: Escondido Blvd & Woodward

HCM 2010 Signalized Intersection Summary
General Plan Without Project AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	2	25	75	1	72	3	345	57	67	484	3
Future Volume (veh/h)	8	2	25	75	1	72	3	345	57	67	484	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	1900	1863	1863	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	8	2	25	75	1	72	3	345	57	67	484	3
Adj No. of Lanes	0	1	0	0	1	1	0	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	24	106	263	3	151	63	968	157	585	2662	16
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.32	0.32	0.32	0.33	0.74	0.74
Sat Flow, veh/h	191	253	1112	1513	29	1583	5	2978	484	1774	3606	22
Grp Volume(v), veh/h	35	0	0	76	0	72	215	0	190	67	237	250
Grp Sat Flow(s),veh/h/ln	1557	0	0	1542	0	1583	1857	0	1610	1774	1770	1859
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	2.6	0.0	0.0	5.4	1.6	2.4	2.4
Cycle Q Clear(g_c), s	2.6	0.0	0.0	2.5	0.0	2.6	5.3	0.0	5.4	1.6	2.4	2.4
Prop In Lane	0.23		0.71	0.99		1.00	0.01		0.30	1.00		0.01
Lane Grp Cap(c), veh/h	222	0	0	266	0	151	664	0	523	585	1306	1372
V/C Ratio(X)	0.16	0.00	0.00	0.29	0.00	0.48	0.32	0.00	0.36	0.11	0.18	0.18
Avail Cap(c_a), veh/h	637	0	0	630	0	567	664	0	523	585	1306	1372
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	25.1	0.0	0.0	25.7	0.0	25.7	15.5	0.0	15.5	14.0	2.4	2.4
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.9	1.3	0.0	1.9	0.0	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	0.5	0.0	0.0	1.2	0.0	1.2	2.9	0.0	2.7	0.8	1.3	1.3
LnGrp Delay(d),s/veh	25.2	0.0	0.0	25.9	0.0	26.6	16.8	0.0	17.4	14.0	2.7	2.6
LnGrp LOS	C			C		C	B		B	B	A	A
Approach Vol, veh/h		35			148			405			554	
Approach Delay, s/veh		25.2			26.2			17.1			4.0	
Approach LOS		C			C			B			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	24.8	24.5		10.7		49.3		10.7				
Change Period (Y+Rc), s	5.0	* 5		* 5		5.0		5.0				
Max Green Setting (Gmax), s	5.0	* 20		* 22		28.5		21.5				
Max Q Clear Time (g_c+I1), s	3.6	7.4		4.6		4.4		4.6				
Green Ext Time (p_c), s	0.4	1.8		0.4		2.9		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
General Plan Without Project AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	255	109	86	566	324	141	603	44	192	848	135
Future Volume (veh/h)	115	255	109	86	566	324	141	603	44	192	848	135
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	115	255	109	86	566	324	141	603	44	192	848	135
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	140	691	287	110	579	331	177	964	70	225	963	153
Arrive On Green	0.08	0.28	0.28	0.06	0.27	0.27	0.10	0.29	0.29	0.13	0.31	0.31
Sat Flow, veh/h	1774	2439	1014	1774	2171	1242	1774	3346	244	1774	3059	487
Grp Volume(v), veh/h	115	183	181	86	461	429	141	319	328	192	491	492
Grp Sat Flow(s),veh/h/ln	1774	1770	1684	1774	1770	1644	1774	1770	1820	1774	1770	1777
Q Serve(g_s), s	4.8	6.2	6.5	3.6	19.4	19.4	5.8	11.7	11.8	7.9	19.7	19.7
Cycle Q Clear(g_c), s	4.8	6.2	6.5	3.6	19.4	19.4	5.8	11.7	11.8	7.9	19.7	19.7
Prop In Lane	1.00		0.60	1.00		0.76	1.00		0.13	1.00		0.27
Lane Grp Cap(c), veh/h	140	501	477	110	472	438	177	510	524	225	557	559
V/C Ratio(X)	0.82	0.37	0.38	0.78	0.98	0.98	0.79	0.63	0.63	0.85	0.88	0.88
Avail Cap(c_a), veh/h	140	501	477	121	472	438	177	510	524	225	557	559
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	21.5	21.6	34.7	27.3	27.3	33.0	23.2	23.2	32.1	24.4	24.4
Incr Delay (d2), s/veh	31.3	0.4	0.5	25.5	35.5	37.2	21.6	5.7	5.6	26.0	17.9	17.9
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	3.5	3.1	3.1	2.5	14.1	13.3	3.9	6.5	6.7	5.5	12.3	12.3
LnGrp Delay(d),s/veh	65.4	21.9	22.1	60.2	62.7	64.5	54.6	28.9	28.8	58.1	42.3	42.2
LnGrp LOS	E	C	C	E	E	E	D	C	C	E	D	D
Approach Vol, veh/h		479			976			788			1175	
Approach Delay, s/veh		32.4			63.3			33.4			44.8	
Approach LOS		C			E			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	26.1	9.2	25.7	12.0	28.1	10.4	24.5				
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	21.6	5.1	20.8	7.5	23.6	5.9	20.0				
Max Q Clear Time (g_c+I1), s	9.9	13.8	5.6	8.5	7.8	21.7	6.8	21.4				
Green Ext Time (p_c), s	0.0	2.6	0.0	1.9	0.0	1.1	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				45.7								
HCM 2010 LOS				D								

SEC CCP/Mission TIA
13: Broadway & Washington Ave

HCM 2010 Signalized Intersection Summary
General Plan Without Project AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	289	65	77	618	244	87	351	24	196	632	89
Future Volume (veh/h)	92	289	65	77	618	244	87	351	24	196	632	89
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	289	65	77	618	244	87	351	24	196	632	89
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	118	805	178	99	667	263	112	994	68	226	1123	158
Arrive On Green	0.07	0.28	0.28	0.06	0.27	0.27	0.06	0.30	0.30	0.13	0.36	0.36
Sat Flow, veh/h	1774	2881	638	1774	2481	979	1774	3363	229	1774	3117	438
Grp Volume(v), veh/h	92	176	178	77	441	421	87	184	191	196	358	363
Grp Sat Flow(s),veh/h/ln	1774	1770	1750	1774	1770	1690	1774	1770	1822	1774	1770	1785
Q Serve(g_s), s	3.8	5.9	6.1	3.2	18.0	18.1	3.6	6.1	6.1	8.1	12.1	12.1
Cycle Q Clear(g_c), s	3.8	5.9	6.1	3.2	18.0	18.1	3.6	6.1	6.1	8.1	12.1	12.1
Prop In Lane	1.00		0.36	1.00		0.58	1.00		0.13	1.00		0.25
Lane Grp Cap(c), veh/h	118	495	489	99	475	454	112	523	539	226	638	643
V/C Ratio(X)	0.78	0.36	0.36	0.78	0.93	0.93	0.78	0.35	0.35	0.87	0.56	0.56
Avail Cap(c_a), veh/h	131	495	489	122	475	454	155	523	539	226	638	643
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	21.5	21.5	34.7	26.5	26.5	34.4	20.6	20.6	31.8	19.1	19.1
Incr Delay (d2), s/veh	23.6	0.4	0.5	22.6	24.4	25.4	15.4	1.9	1.8	27.7	3.6	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	2.9	3.0	2.2	12.0	11.6	2.2	3.2	3.4	5.7	6.5	6.6
LnGrp Delay(d),s/veh	57.8	21.9	22.0	57.3	50.9	51.9	49.8	22.5	22.5	59.6	22.7	22.7
LnGrp LOS	E	C	C	E	D	D	D	C	C	E	C	C
Approach Vol, veh/h		446			939			462			917	
Approach Delay, s/veh		29.3			51.9			27.6			30.5	
Approach LOS		C			D			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.0	26.5	8.6	25.3	9.2	31.3	9.4	24.5				
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	5.1	20.4	6.5	25.0	5.5	20.0				
Max Q Clear Time (g_c+I1), s	10.1	8.1	5.2	8.1	5.6	14.1	5.8	20.1				
Green Ext Time (p_c), s	0.0	1.7	0.0	1.8	0.0	3.7	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				37.1								
HCM 2010 LOS				D								

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

HCM 2010 Signalized Intersection Summary
General Plan Without Project PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	247	875	113	70	636	213	67	544	55	107	259	75
Future Volume (veh/h)	247	875	113	70	636	213	67	544	55	107	259	75
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	875	113	70	636	213	67	544	55	107	259	75
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	1	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	280	1403	181	151	983	329	309	1088	110	236	624	530
Arrive On Green	0.16	0.44	0.44	0.17	0.75	0.75	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1774	3153	407	1774	2606	872	1042	3247	327	816	1863	1583
Grp Volume(v), veh/h	247	491	497	70	432	417	67	296	303	107	259	75
Grp Sat Flow(s),veh/h/ln	1774	1770	1791	1774	1770	1709	1042	1770	1805	816	1863	1583
Q Serve(g_s), s	13.6	21.3	21.3	3.6	11.7	11.7	5.3	13.3	13.4	12.1	10.7	3.3
Cycle Q Clear(g_c), s	13.6	21.3	21.3	3.6	11.7	11.7	16.0	13.3	13.4	25.5	10.7	3.3
Prop In Lane	1.00		0.23	1.00		0.51	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	280	787	797	151	667	645	309	593	605	236	624	530
V/C Ratio(X)	0.88	0.62	0.62	0.46	0.65	0.65	0.22	0.50	0.50	0.45	0.42	0.14
Avail Cap(c_a), veh/h	373	787	797	160	667	645	309	593	605	236	624	530
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	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.2	21.3	21.3	39.4	9.1	9.1	31.9	26.5	26.6	36.8	25.7	23.2
Incr Delay (d2), s/veh	14.4	3.7	3.7	0.6	1.8	1.9	1.6	3.0	3.0	1.0	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	11.2	11.3	1.7	5.9	5.7	1.7	7.0	7.1	2.8	5.6	1.5
LnGrp Delay(d),s/veh	55.6	25.0	25.0	40.1	10.9	11.0	33.5	29.5	29.5	37.8	26.0	23.3
LnGrp LOS	E	C	C	D	B	B	C	C	C	D	C	C
Approach Vol, veh/h	1235				919				666			
Approach Delay, s/veh	31.1				13.2				29.9			
Approach LOS	C				B				C			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.0	49.0		38.0	19.8	42.2		38.0				
Change Period (Y+Rc), s	4.5	* 4.5		4.5	4.0	4.5		4.5				
Max Green Setting (Gmax), s	9.0	* 45		33.5	21.0	32.5		33.5				
Max Q Clear Time (g_c+I1), s	5.6	23.3		27.5	15.6	13.7		18.0				
Green Ext Time (p_c), s	0.1	7.7		2.7	0.2	6.2		4.7				
Intersection Summary												
HCM 2010 Ctrl Delay	25.5											
HCM 2010 LOS	C											
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan Without Project PM Peak Hour

																
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR				
Lane Configurations																
Traffic Volume (veh/h)	36	958	92	111	681	106	105	46	214	170	53	24				
Future Volume (veh/h)	36	958	92	111	681	106	105	46	214	170	53	24				
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	958	92	111	681	106	105	46	214	170	53	24				
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0				
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2				
Cap, veh/h	129	1128	108	138	1053	164	148	505	429	201	366	166				
Arrive On Green	0.05	0.23	0.23	0.08	0.34	0.34	0.08	0.27	0.27	0.11	0.30	0.30				
Sat Flow, veh/h	1774	3264	313	1774	3071	477	1774	1863	1583	1774	1215	550				
Grp Volume(v), veh/h	36	519	531	111	392	395	105	46	214	170	0	77				
Grp Sat Flow(s),veh/h/ln	1774	1770	1807	1774	1770	1778	1774	1863	1583	1774	0	1766				
Q Serve(g_s), s	2.0	28.1	28.1	6.2	18.7	18.7	5.8	1.8	8.7	9.4	0.0	3.2				
Cycle Q Clear(g_c), s	2.0	28.1	28.1	6.2	18.7	18.7	5.8	1.8	8.7	9.4	0.0	3.2				
Prop In Lane	1.00		0.17	1.00		0.27	1.00		1.00	1.00		0.31				
Lane Grp Cap(c), veh/h	129	612	625	138	607	610	148	505	429	201	0	531				
V/C Ratio(X)	0.28	0.85	0.85	0.80	0.65	0.65	0.71	0.09	0.50	0.84	0.00	0.14				
Avail Cap(c_a), veh/h	142	612	625	149	607	610	158	505	429	211	0	531				
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Upstream Filter(I)	0.75	0.75	0.75	0.87	0.87	0.87	0.91	0.91	0.91	1.00	0.00	1.00				
Uniform Delay (d), s/veh	45.1	35.9	35.9	45.4	27.7	27.7	44.6	27.2	17.8	43.5	0.0	25.5				
Incr Delay (d2), s/veh	1.1	10.8	10.6	23.0	4.6	4.6	12.4	0.3	3.7	25.3	0.0	0.6				
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
%ile BackOfQ(50%),veh/ln	1.0	15.6	15.9	3.9	9.9	10.0	3.3	1.0	4.2	6.0	0.0	1.6				
LnGrp Delay(d),s/veh	46.1	46.7	46.5	68.3	32.3	32.3	57.1	27.6	21.5	68.8	0.0	26.1				
LnGrp LOS	D	D	D	E	C	C	E	C	C	E		C				
Approach Vol, veh/h	1086				898				365							
Approach Delay, s/veh	46.6				36.8				32.5							
Approach LOS	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	12.4	40.0	12.4	35.2	12.7	39.7	15.4	32.2								
Change Period (Y+Rc), s	4.6	5.4	4.1	5.1	5.4	* 5.4	4.1	5.1								
Max Green Setting (Gmax), s	8.4	33.4	8.9	30.1	8.0	* 34	11.9	27.1								
Max Q Clear Time (g_c+I1), s	8.2	30.1	7.8	5.2	4.0	20.7	11.4	10.7								
Green Ext Time (p_c), s	0.0	2.6	0.1	0.4	3.1	6.7	0.1	1.0								
Intersection Summary																
HCM 2010 Ctrl Delay	42.1															
HCM 2010 LOS	D															
Notes																

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

HCM 2010 Signalized Intersection Summary
General Plan Without Project PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	884	190	73	502	100	128	212	167	72	209	25
Future Volume (veh/h)	70	884	190	73	502	100	128	212	167	72	209	25
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	70	884	190	73	502	100	128	212	167	72	209	25
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	515	1606	345	327	1631	323	381	510	383	308	842	100
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	814	2899	623	523	2945	584	1142	1929	1448	1000	3189	377
Grp Volume(v), veh/h	70	539	535	73	301	301	128	194	185	72	115	119
Grp Sat Flow(s),veh/h/ln	814	1770	1753	523	1770	1760	1142	1770	1607	1000	1770	1796
Q Serve(g_s), s	2.6	10.1	10.1	5.4	4.7	4.8	5.1	4.7	5.0	3.3	2.6	2.7
Cycle Q Clear(g_c), s	7.4	10.1	10.1	15.5	4.7	4.8	7.8	4.7	5.0	8.3	2.6	2.7
Prop In Lane	1.00		0.36	1.00		0.33	1.00		0.90	1.00		0.21
Lane Grp Cap(c), veh/h	515	980	971	327	980	975	381	468	425	308	468	475
V/C Ratio(X)	0.14	0.55	0.55	0.22	0.31	0.31	0.34	0.41	0.44	0.23	0.25	0.25
Avail Cap(c_a), veh/h	515	980	971	327	980	975	677	925	840	566	925	939
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	8.2	7.4	7.4	12.4	6.2	6.2	18.1	15.7	15.8	19.2	15.0	15.0
Incr Delay (d2), s/veh	0.5	2.2	2.2	1.6	0.8	0.8	0.4	0.4	0.5	0.3	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	0.7	5.4	5.4	0.9	2.5	2.5	1.6	2.3	2.2	0.9	1.3	1.4
LnGrp Delay(d),s/veh	8.7	9.6	9.6	13.9	7.0	7.0	18.4	16.1	16.3	19.5	15.2	15.2
LnGrp LOS	A	A	A	B	A	A	B	B	B	B	B	B
Approach Vol, veh/h	1144			675			507			306		
Approach Delay, s/veh	9.6			7.8			16.8			16.2		
Approach LOS	A			A			B			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	33.3			18.3			33.3			18.3		
Change Period (Y+Rc), s	* 4.7			* 4.7			* 4.7			* 4.7		
Max Green Setting (Gmax), s	* 29			* 27			* 29			* 27		
Max Q Clear Time (g_c+I1), s	12.1			9.8			17.5			10.3		
Green Ext Time (p_c), s	9.2			3.4			7.1			3.4		
Intersection Summary												
HCM 2010 Ctrl Delay	11.3											
HCM 2010 LOS	B											
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan Without Project PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	941	194	157	658	193	396	853	336	202	242	30
Future Volume (veh/h)	49	941	194	157	658	193	396	853	336	202	242	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	49	941	194	157	658	193	396	853	336	202	242	30
Adj No. of Lanes	2	2	1	2	2	0	2	2	1	2	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	249	991	443	325	816	239	459	953	426	425	911	408
Arrive On Green	0.07	0.28	0.28	0.09	0.30	0.30	0.13	0.27	0.27	0.12	0.26	0.26
Sat Flow, veh/h	3442	3539	1583	3442	2701	792	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	49	941	194	157	431	420	396	853	336	202	242	30
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1721	1770	1723	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	1.4	27.3	10.5	4.5	23.6	23.6	11.8	24.3	20.6	5.7	5.7	1.5
Cycle Q Clear(g_c), s	1.4	27.3	10.5	4.5	23.6	23.6	11.8	24.3	20.6	5.7	5.7	1.5
Prop In Lane	1.00		1.00	1.00		0.46	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	249	991	443	325	534	520	459	953	426	425	911	408
V/C Ratio(X)	0.20	0.95	0.44	0.48	0.81	0.81	0.86	0.90	0.79	0.47	0.27	0.07
Avail Cap(c_a), veh/h	328	992	444	328	534	520	459	953	426	427	911	408
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	45.8	37.0	31.0	45.1	33.8	33.8	44.5	36.9	35.5	42.8	31.0	29.5
Incr Delay (d2), s/veh	0.3	17.8	1.2	0.4	9.6	9.9	14.7	12.7	13.7	0.3	0.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	15.8	4.8	2.2	12.9	12.6	6.6	13.5	10.6	2.7	2.9	0.7
LnGrp Delay(d),s/veh	46.0	54.8	32.1	45.5	43.3	43.6	59.2	49.6	49.3	43.1	31.7	29.8
LnGrp LOS	D	D	C	D	D	D	E	D	D	D	C	C
Approach Vol, veh/h	1184				1008				1585			
Approach Delay, s/veh	50.8				43.8				51.9			
Approach LOS	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	19.1	35.1	15.0	35.7	20.3	33.9	12.7	38.0				
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	28.2	10.0	29.4	14.0	27.0	10.0	29.4				
Max Q Clear Time (g_c+I1), s	7.7	26.3	6.5	29.3	13.8	7.7	3.4	25.6				
Green Ext Time (p_c), s	0.2	1.5	0.1	0.0	0.0	10.2	0.0	3.5				
Intersection Summary												
HCM 2010 Ctrl Delay	48.0											
HCM 2010 LOS	D											

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

HCM 2010 Signalized Intersection Summary
General Plan Without Project PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	1	14	125	2	261	27	1347	151	42	649	6
Future Volume (veh/h)	23	1	14	125	2	261	27	1347	151	42	649	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	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	23	1	14	125	2	261	27	1347	151	42	649	6
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	14	195	218	2	313	111	1507	674	131	1549	693
Arrive On Green	0.05	0.13	0.13	0.12	0.20	0.20	0.06	0.43	0.43	0.07	0.44	0.44
Sat Flow, veh/h	1774	107	1493	1774	12	1573	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	23	0	15	125	0	263	27	1347	151	42	649	6
Grp Sat Flow(s),veh/h/ln	1774	0	1599	1774	0	1585	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	1.1	0.0	0.7	5.6	0.0	13.5	1.2	29.9	2.8	1.9	10.7	0.1
Cycle Q Clear(g_c), s	1.1	0.0	0.7	5.6	0.0	13.5	1.2	29.9	2.8	1.9	10.7	0.1
Prop In Lane	1.00		0.93	1.00		0.99	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	96	0	209	218	0	316	111	1507	674	131	1549	693
V/C Ratio(X)	0.24	0.00	0.07	0.57	0.00	0.83	0.24	0.89	0.22	0.32	0.42	0.01
Avail Cap(c_a), veh/h	230	0	226	230	0	316	188	1507	674	209	1549	693
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	38.4	0.0	32.3	35.1	0.0	32.6	37.8	22.6	4.6	37.2	16.4	5.9
Incr Delay (d2), s/veh	0.5	0.0	0.1	1.7	0.0	16.7	0.4	8.5	0.8	0.5	0.8	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	0.5	0.0	0.3	2.8	0.0	7.4	0.6	16.4	2.1	1.0	5.4	0.1
LnGrp Delay(d),s/veh	38.9	0.0	32.4	36.8	0.0	49.3	38.3	31.1	5.4	37.7	17.2	5.9
LnGrp LOS	D		C	D		D	D	C	A	D	B	A
Approach Vol, veh/h		38			388			1525			697	
Approach Delay, s/veh		36.3			45.3			28.7			18.4	
Approach LOS		D			D			C			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.9	43.0	15.1	15.8	9.9	44.0	9.3	21.6				
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	10.0	36.1	* 11	* 12	9.0	37.1	* 11	* 12				
Max Q Clear Time (g_c+I1), s	3.9	31.9	7.6	2.7	3.2	12.7	3.1	15.5				
Green Ext Time (p_c), s	0.0	3.4	0.0	0.1	0.0	5.4	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			28.5									
HCM 2010 LOS			C									
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan Without Project PM Peak Hour

																
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR				
Lane Configurations																
Traffic Volume (veh/h)	302	905	158	76	444	352	121	1119	88	207	615	261				
Future Volume (veh/h)	302	905	158	76	444	352	121	1119	88	207	615	261				
Number	7	4	14	3	8	18	5	2	12	1	6	16				
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0				
Ped-Bike Adj(A_pbT)	1.00		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	302	905	158	76	444	352	121	1119	88	207	615	261				
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	2	2	1				
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2				
Cap, veh/h	298	1038	447	194	889	379	273	1135	500	272	1156	508				
Arrive On Green	0.17	0.29	0.29	0.12	0.25	0.25	0.09	0.32	0.32	0.08	0.33	0.33				
Sat Flow, veh/h	1774	3539	1525	1587	3539	1510	3079	3539	1559	3442	3539	1555				
Grp Volume(v), veh/h	302	905	158	76	444	352	121	1119	88	207	615	261				
Grp Sat Flow(s),veh/h/ln	1774	1770	1525	1587	1770	1510	1540	1770	1559	1721	1770	1555				
Q Serve(g_s), s	20.5	29.7	7.6	5.4	13.1	21.5	4.6	38.4	5.0	7.2	17.3	16.6				
Cycle Q Clear(g_c), s	20.5	29.7	7.6	5.4	13.1	21.5	4.6	38.4	5.0	7.2	17.3	16.6				
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	298	1038	447	194	889	379	273	1135	500	272	1156	508				
V/C Ratio(X)	1.02	0.87	0.35	0.39	0.50	0.93	0.44	0.99	0.18	0.76	0.53	0.51				
Avail Cap(c_a), veh/h	298	1225	528	194	1013	433	277	1135	500	282	1156	508				
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	50.9	41.0	20.0	49.5	39.2	26.6	52.9	41.2	29.9	55.2	33.5	33.3				
Incr Delay (d2), s/veh	56.1	6.0	0.4	0.5	0.3	24.1	0.4	23.5	0.8	10.0	1.8	3.7				
Initial Q Delay(d3),s/veh	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
%ile BackOfQ(50%),veh/ln	14.6	15.3	3.8	2.4	6.5	11.5	2.0	22.5	2.2	3.8	8.7	7.6				
LnGrp Delay(d),s/veh	107.0	47.0	20.3	50.0	39.5	50.7	53.3	64.8	30.7	65.1	35.3	37.0				
LnGrp LOS	F	D	C	D	D	D	D	E	C	E	D	D				
Approach Vol, veh/h	1365				872				1328							
Approach Delay, s/veh	57.2				45.0				61.5							
Approach LOS	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	16.0	45.6	19.8	40.8	15.3	46.3	25.0	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	10.0	* 39	13.2	* 42	11.0	38.2	20.5	35.0								
Max Q Clear Time (g_c+I1), s	9.2	40.4	7.4	31.7	6.6	19.3	22.5	23.5								
Green Ext Time (p_c), s	0.1	0.0	1.9	4.2	0.1	4.3	0.0	2.6								
Intersection Summary																
HCM 2010 Ctrl Delay	52.4															
HCM 2010 LOS	D															
Notes																

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

HCM 2010 Signalized Intersection Summary
General Plan Without Project PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	813	112	93	391	121	209	1055	201	165	646	80
Future Volume (veh/h)	184	813	112	93	391	121	209	1055	201	165	646	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	184	813	112	93	391	121	209	1055	201	165	646	80
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	962	133	146	729	223	359	1154	516	318	1174	525
Arrive On Green	0.12	0.31	0.31	0.08	0.27	0.27	0.10	0.33	0.33	0.09	0.33	0.33
Sat Flow, veh/h	1774	3126	431	1774	2671	817	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	184	460	465	93	258	254	209	1055	201	165	646	80
Grp Sat Flow(s),veh/h/ln	1774	1770	1787	1774	1770	1719	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	11.7	28.0	28.0	5.8	14.2	14.5	6.7	32.9	8.3	5.3	17.2	4.1
Cycle Q Clear(g_c), s	11.7	28.0	28.0	5.8	14.2	14.5	6.7	32.9	8.3	5.3	17.2	4.1
Prop In Lane	1.00		0.24	1.00		0.48	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	545	550	146	483	469	359	1154	516	318	1174	525
V/C Ratio(X)	0.88	0.84	0.84	0.64	0.53	0.54	0.58	0.91	0.39	0.52	0.55	0.15
Avail Cap(c_a), veh/h	208	698	705	156	646	627	389	1154	516	359	1174	525
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	50.0	37.2	37.2	51.1	35.6	35.7	49.1	37.2	16.2	49.8	31.4	27.1
Incr Delay (d2), s/veh	32.1	6.2	6.1	5.4	0.3	0.4	1.0	12.6	2.2	0.5	1.9	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	7.6	14.6	14.7	3.1	7.0	7.0	3.2	18.1	3.9	2.5	8.6	1.9
LnGrp Delay(d),s/veh	82.0	43.4	43.3	56.5	35.9	36.0	50.2	49.8	18.4	50.3	33.3	27.7
LnGrp LOS	F	D	D	E	D	D	D	D	B	D	C	C
Approach Vol, veh/h	1109				605			1465			891	
Approach Delay, s/veh	49.8				39.1			45.5			35.9	
Approach LOS	D				D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.1	44.0	14.0	39.9	16.5	44.6	18.0	35.9				
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	* 38	10.1	45.4	13.0	36.5	13.5	42.0				
Max Q Clear Time (g_c+I1), s	7.3	34.9	7.8	30.0	8.7	19.2	13.7	16.5				
Green Ext Time (p_c), s	0.3	1.4	0.0	5.4	0.1	3.1	0.0	6.4				
Intersection Summary												
HCM 2010 Ctrl Delay	43.6											
HCM 2010 LOS	D											
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan Without 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	215	971	276	203	1234	0	0	708	122
Future Volume (veh/h)	0	0	0	215	971	276	203	1234	0	0	708	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				215	971	276	203	1234	0	0	708	122
Adj No. of Lanes				1	3	1	2	2	0	0	2	1
Peak Hour Factor				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				442	1392	395	798	2236	0	0	1171	524
Arrive On Green				0.25	0.25	0.25	0.46	1.00	0.00	0.00	0.33	0.33
Sat Flow, veh/h				1774	5588	1583	3442	3632	0	0	3632	1583
Grp Volume(v), veh/h				215	971	276	203	1234	0	0	708	122
Grp Sat Flow(s),veh/h/ln				1774	1863	1583	1721	1770	0	0	1770	1583
Q Serve(g_s), s				10.4	15.8	15.9	3.6	0.0	0.0	0.0	16.7	5.6
Cycle Q Clear(g_c), s				10.4	15.8	15.9	3.6	0.0	0.0	0.0	16.7	5.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				442	1392	395	798	2236	0	0	1171	524
V/C Ratio(X)				0.49	0.70	0.70	0.25	0.55	0.00	0.00	0.60	0.23
Avail Cap(c_a), veh/h				692	2179	617	798	2236	0	0	1171	524
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.80	0.80
Uniform Delay (d), s/veh				32.1	34.1	34.1	21.6	0.0	0.0	0.0	28.0	24.2
Incr Delay (d2), s/veh				0.6	0.5	1.7	0.1	1.0	0.0	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
%ile BackOfQ(50%),veh/ln				5.2	8.2	13.5	1.7	0.3	0.0	0.0	8.5	2.6
LnGrp Delay(d),s/veh				32.7	34.6	35.8	21.7	1.0	0.0	0.0	29.8	25.1
LnGrp LOS				C	C	D	C	A			C	C
Approach Vol, veh/h					1462			1437			830	
Approach Delay, s/veh					34.5			3.9			29.1	
Approach LOS					C			A			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		70.1		29.9	30.1	40.0						
Change Period (Y+Rc), s		6.9		5.0	6.9	* 6.9						
Max Green Setting (Gmax), s		49.1		39.0	10.9	* 33						
Max Q Clear Time (g_c+I1), s		2.0		17.9	5.6	18.7						
Green Ext Time (p_c), s		10.5		7.1	3.4	3.7						
Intersection Summary												
HCM 2010 Ctrl Delay			21.5									
HCM 2010 LOS			C									
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan Without Project PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	784	144	125	457	67	230	404	191	98	241	145
Future Volume (veh/h)	152	784	144	125	457	67	230	404	191	98	241	145
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	152	784	144	125	457	67	230	404	191	98	241	145
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	190	967	178	153	915	133	262	793	370	133	561	326
Arrive On Green	0.11	0.32	0.32	0.09	0.30	0.30	0.15	0.34	0.34	0.07	0.26	0.26
Sat Flow, veh/h	1774	2987	549	1774	3100	452	1774	2344	1095	1774	2159	1253
Grp Volume(v), veh/h	152	464	464	125	260	264	230	304	291	98	196	190
Grp Sat Flow(s),veh/h/ln	1774	1770	1766	1774	1770	1783	1774	1770	1669	1774	1770	1642
Q Serve(g_s), s	8.4	24.1	24.1	6.9	12.1	12.3	12.7	13.7	14.0	5.4	9.2	9.7
Cycle Q Clear(g_c), s	8.4	24.1	24.1	6.9	12.1	12.3	12.7	13.7	14.0	5.4	9.2	9.7
Prop In Lane	1.00		0.31	1.00		0.25	1.00		0.66	1.00		0.76
Lane Grp Cap(c), veh/h	190	573	572	153	522	526	262	598	564	133	460	427
V/C Ratio(X)	0.80	0.81	0.81	0.81	0.50	0.50	0.88	0.51	0.52	0.74	0.43	0.45
Avail Cap(c_a), veh/h	193	573	572	158	522	526	282	598	564	215	460	427
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	0.59	0.59	0.59	0.79	0.79	0.79	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.6	31.0	31.0	44.9	29.1	29.2	41.7	26.4	26.5	45.3	30.8	31.0
Incr Delay (d2), s/veh	18.9	11.8	11.9	15.7	2.0	2.0	18.9	2.4	2.6	3.0	2.9	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	5.1	13.6	13.6	4.1	6.2	6.3	7.6	7.1	6.8	2.8	4.9	4.8
LnGrp Delay(d),s/veh	62.5	42.8	42.9	60.6	31.1	31.2	60.6	28.9	29.2	48.3	33.7	34.3
LnGrp LOS	E	D	D	E	C	C	E	C	C	D	C	C
Approach Vol, veh/h	1080				649				825			
Approach Delay, s/veh	45.6				36.8				37.8			
Approach LOS	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	37.3	19.4	30.6	15.6	34.4	11.6	38.4				
Change Period (Y+Rc), s	4.1	4.9	4.6	* 4.6	4.9	* 4.9	4.1	4.6				
Max Green Setting (Gmax), s	8.9	31.5	15.9	* 26	10.9	* 30	12.1	29.8				
Max Q Clear Time (g_c+I1), s	8.9	26.1	14.7	11.7	10.4	14.3	7.4	16.0				
Green Ext Time (p_c), s	0.0	2.1	0.1	1.2	0.0	1.7	0.0	2.3				
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
General Plan Without Project PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	823	148	134	404	120	115	439	153	108	275	50
Future Volume (veh/h)	131	823	148	134	404	120	115	439	153	108	275	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	131	823	148	134	404	120	115	439	153	108	275	50
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	241	1009	181	163	777	228	153	723	250	135	879	158
Arrive On Green	0.14	0.34	0.34	0.09	0.29	0.29	0.17	0.56	0.56	0.08	0.29	0.29
Sat Flow, veh/h	1774	2998	539	1774	2699	793	1774	2583	892	1774	2999	538
Grp Volume(v), veh/h	131	486	485	134	263	261	115	300	292	108	161	164
Grp Sat Flow(s),veh/h/ln	1774	1770	1768	1774	1770	1723	1774	1770	1705	1774	1770	1768
Q Serve(g_s), s	6.9	25.1	25.1	7.4	12.5	12.7	6.2	11.3	11.5	6.0	7.1	7.2
Cycle Q Clear(g_c), s	6.9	25.1	25.1	7.4	12.5	12.7	6.2	11.3	11.5	6.0	7.1	7.2
Prop In Lane	1.00		0.31	1.00		0.46	1.00		0.52	1.00		0.30
Lane Grp Cap(c), veh/h	241	596	595	163	510	496	153	495	477	135	519	518
V/C Ratio(X)	0.54	0.82	0.82	0.82	0.52	0.53	0.75	0.60	0.61	0.80	0.31	0.32
Avail Cap(c_a), veh/h	261	596	595	197	510	496	172	495	477	165	519	518
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)	0.62	0.62	0.62	0.48	0.48	0.48	0.95	0.95	0.95	0.86	0.86	0.86
Uniform Delay (d), s/veh	40.3	30.3	30.3	44.6	29.8	29.9	40.3	18.3	18.4	45.4	27.5	27.6
Incr Delay (d2), s/veh	0.5	7.6	7.6	9.0	1.8	1.9	11.9	5.1	5.5	14.2	1.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	13.5	13.5	4.1	6.3	6.3	3.5	6.0	5.9	3.5	3.6	3.7
LnGrp Delay(d),s/veh	40.8	37.9	37.9	53.5	31.6	31.8	52.2	23.5	23.9	59.6	28.8	28.9
LnGrp LOS	D	D	D	D	C	C	D	C	C	E	C	C
Approach Vol, veh/h		1102			658			707			433	
Approach Delay, s/veh		38.2			36.1			28.3			36.5	
Approach LOS		D			D			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.0	34.4	13.3	38.3	12.7	35.7	18.2	33.4				
Change Period (Y+Rc), s	6.4	* 6.4	4.1	4.6	4.1	6.4	4.6	* 4.6				
Max Green Setting (Gmax), s	9.3	* 28	11.1	32.4	9.7	27.6	14.7	* 29				
Max Q Clear Time (g_c+I1), s	8.0	13.5	9.4	27.1	8.2	9.2	8.9	14.7				
Green Ext Time (p_c), s	0.1	2.0	0.0	2.2	0.0	1.2	2.3	1.7				
Intersection Summary												
HCM 2010 Ctrl Delay			35.1									
HCM 2010 LOS			D									
Notes												

SEC CCP/Mission TIA
11: Escondido Blvd & Woodward

HCM 2010 Signalized Intersection Summary
General Plan Without Project PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	13	74	0	94	1	623	89	75	478	13
Future Volume (veh/h)	5	1	13	74	0	94	1	623	89	75	478	13
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	13	74	0	94	1	623	89	75	478	13
Adj No. of Lanes	0	1	0	0	1	1	0	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	58	23	78	187	0	129	36	1432	204	529	2881	78
Arrive On Green	0.08	0.08	0.08	0.08	0.00	0.08	0.47	0.47	0.47	0.30	0.82	0.82
Sat Flow, veh/h	154	287	957	1415	0	1583	1	3046	434	1774	3520	96
Grp Volume(v), veh/h	19	0	0	74	0	94	381	0	332	75	240	251
Grp Sat Flow(s),veh/h/ln	1399	0	0	1415	0	1583	1862	0	1619	1774	1770	1846
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	5.8	0.0	0.0	13.7	3.1	2.9	2.9
Cycle Q Clear(g_c), s	5.0	0.0	0.0	5.0	0.0	5.8	13.6	0.0	13.7	3.1	2.9	2.9
Prop In Lane	0.26		0.68	1.00		1.00	0.00		0.27	1.00		0.05
Lane Grp Cap(c), veh/h	160	0	0	187	0	129	911	0	761	529	1448	1511
V/C Ratio(X)	0.12	0.00	0.00	0.39	0.00	0.73	0.42	0.00	0.44	0.14	0.17	0.17
Avail Cap(c_a), veh/h	421	0	0	422	0	396	911	0	761	529	1448	1511
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	42.7	0.0	0.0	44.5	0.0	44.8	17.7	0.0	17.7	25.7	1.9	1.9
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.5	0.0	2.9	1.4	0.0	1.8	0.0	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	0.5	0.0	0.0	2.0	0.0	2.6	7.3	0.0	6.5	1.5	1.4	1.5
LnGrp Delay(d),s/veh	42.8	0.0	0.0	45.0	0.0	47.7	19.1	0.0	19.5	25.7	2.1	2.1
LnGrp LOS	D			D		D	B		B	C	A	A
Approach Vol, veh/h		19			168			713			566	
Approach Delay, s/veh		42.8			46.5			19.3			5.3	
Approach LOS		D			D			B			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	34.8	52.0		13.2		86.8		13.2				
Change Period (Y+Rc), s	5.0	* 5		* 5		5.0		5.0				
Max Green Setting (Gmax), s	14.0	* 47		* 26		65.0		25.0				
Max Q Clear Time (g_c+I1), s	5.1	15.7		7.0		4.9		7.8				
Green Ext Time (p_c), s	1.9	4.7		0.4		3.1		0.4				
Intersection Summary												
HCM 2010 Ctrl Delay				17.3								
HCM 2010 LOS				B								
Notes												

SEC CCP/Mission TIA
12: Broadway & Mission Ave

HCM 2010 Signalized Intersection Summary
General Plan Without Project PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	204	690	186	105	411	202	176	879	151	245	710	89
Future Volume (veh/h)	204	690	186	105	411	202	176	879	151	245	710	89
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	204	690	186	105	411	202	176	879	151	245	710	89
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	221	743	200	132	507	247	255	938	161	258	988	124
Arrive On Green	0.12	0.27	0.27	0.07	0.22	0.22	0.14	0.31	0.31	0.15	0.31	0.31
Sat Flow, veh/h	1774	2758	743	1774	2311	1123	1774	3022	519	1774	3166	397
Grp Volume(v), veh/h	204	443	433	105	314	299	176	515	515	245	397	402
Grp Sat Flow(s),veh/h/ln	1774	1770	1732	1774	1770	1665	1774	1770	1771	1774	1770	1793
Q Serve(g_s), s	10.2	21.9	21.9	5.2	15.1	15.4	8.5	25.5	25.5	12.3	17.9	17.9
Cycle Q Clear(g_c), s	10.2	21.9	21.9	5.2	15.1	15.4	8.5	25.5	25.5	12.3	17.9	17.9
Prop In Lane	1.00		0.43	1.00		0.67	1.00		0.29	1.00		0.22
Lane Grp Cap(c), veh/h	221	477	467	132	389	365	255	549	550	258	553	560
V/C Ratio(X)	0.92	0.93	0.93	0.80	0.81	0.82	0.69	0.94	0.94	0.95	0.72	0.72
Avail Cap(c_a), veh/h	221	482	471	132	393	370	255	549	550	258	553	560
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)	0.48	0.48	0.48	1.00	1.00	1.00	0.60	0.60	0.60	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	32.0	32.0	41.0	33.3	33.4	36.6	30.2	30.2	38.1	27.4	27.4
Incr Delay (d2), s/veh	24.6	14.2	14.6	27.6	11.7	13.4	4.7	18.0	18.0	42.1	7.8	7.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	12.6	12.4	3.6	8.7	8.4	4.5	15.2	15.2	9.1	9.9	10.0
LnGrp Delay(d),s/veh	63.6	46.3	46.6	68.6	45.0	46.8	41.3	48.2	48.2	80.2	35.2	35.2
LnGrp LOS	E	D	D	E	D	D	D	D	D	F	D	D
Approach Vol, veh/h	1080			718				1206			1044	
Approach Delay, s/veh	49.7			49.2				47.2			45.8	
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	17.6	32.4	11.2	28.8	17.4	32.6	15.7	24.3				
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	13.1	27.7	6.7	24.5	12.7	28.1	11.2	20.0				
Max Q Clear Time (g_c+I1), s	14.3	27.5	7.2	23.9	10.5	19.9	12.2	17.4				
Green Ext Time (p_c), s	0.0	0.2	0.0	0.3	1.4	3.1	0.0	1.1				
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
General Plan Without Project PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	729	69	67	381	232	172	633	60	264	471	120
Future Volume (veh/h)	226	729	69	67	381	232	172	633	60	264	471	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	226	729	69	67	381	232	172	633	60	264	471	120
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	262	866	82	144	423	254	206	837	79	386	1001	253
Arrive On Green	0.05	0.09	0.09	0.08	0.20	0.20	0.12	0.26	0.26	0.22	0.36	0.36
Sat Flow, veh/h	1774	3269	309	1774	2129	1278	1774	3268	309	1774	2799	708
Grp Volume(v), veh/h	226	395	403	67	316	297	172	342	351	264	297	294
Grp Sat Flow(s),veh/h/ln	1774	1770	1808	1774	1770	1637	1774	1770	1808	1774	1770	1738
Q Serve(g_s), s	12.7	22.0	22.0	3.6	17.4	17.8	9.5	17.8	17.9	13.7	12.9	13.1
Cycle Q Clear(g_c), s	12.7	22.0	22.0	3.6	17.4	17.8	9.5	17.8	17.9	13.7	12.9	13.1
Prop In Lane	1.00		0.17	1.00		0.78	1.00		0.17	1.00		0.41
Lane Grp Cap(c), veh/h	262	469	479	144	351	325	206	453	463	386	633	621
V/C Ratio(X)	0.86	0.84	0.84	0.46	0.90	0.91	0.83	0.76	0.76	0.68	0.47	0.47
Avail Cap(c_a), veh/h	300	534	546	144	354	327	318	453	463	386	633	621
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)	0.47	0.47	0.47	1.00	1.00	1.00	1.00	1.00	1.00	0.61	0.61	0.61
Uniform Delay (d), s/veh	46.6	43.6	43.6	43.9	39.1	39.2	43.3	34.3	34.3	35.9	24.8	24.8
Incr Delay (d2), s/veh	10.6	5.2	5.2	2.3	24.5	28.8	10.8	11.2	11.0	3.0	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	7.0	11.5	11.7	1.9	10.9	10.6	5.3	10.2	10.4	7.0	6.6	6.6
LnGrp Delay(d),s/veh	57.2	48.8	48.7	46.2	63.6	68.0	54.1	45.5	45.4	39.0	26.3	26.4
LnGrp LOS	E	D	D	D	E	E	D	D	D	D	C	C
Approach Vol, veh/h	1024			680				865			855	
Approach Delay, s/veh	50.6			63.8				47.1			30.2	
Approach LOS	D			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	26.3	30.1	12.6	31.0	16.1	40.3	19.3	24.4				
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	19.5	25.6	6.7	30.2	17.9	27.2	16.9	20.0				
Max Q Clear Time (g_c+I1), s	15.7	19.9	5.6	24.0	11.5	15.1	14.7	19.8				
Green Ext Time (p_c), s	0.5	2.0	0.5	2.5	0.2	3.5	0.1	0.1				
Intersection Summary												
HCM 2010 Ctrl Delay	47.3											
HCM 2010 LOS	D											

APPENDIX M

Horizon Year 2035 With Project HCM Analysis Sheets

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

HCM 2010 Signalized Intersection Summary
General Plan With Project AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	340	34	47	988	118	52	246	24	176	395	206
Future Volume (veh/h)	86	340	34	47	988	118	52	246	24	176	395	206
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	86	340	34	47	988	118	52	246	24	176	395	206
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	1	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	1224	122	63	1140	136	283	1227	119	472	701	596
Arrive On Green	0.06	0.38	0.38	0.04	0.36	0.36	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1774	3252	323	1774	3185	380	815	3261	315	1105	1863	1583
Grp Volume(v), veh/h	86	184	190	47	549	557	52	133	137	176	395	206
Grp Sat Flow(s),veh/h/ln	1774	1770	1806	1774	1770	1796	815	1770	1807	1105	1863	1583
Q Serve(g_s), s	3.0	4.6	4.7	1.7	18.4	18.4	3.4	3.2	3.3	8.2	10.7	5.9
Cycle Q Clear(g_c), s	3.0	4.6	4.7	1.7	18.4	18.4	14.1	3.2	3.3	11.4	10.7	5.9
Prop In Lane	1.00		0.18	1.00		0.21	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	110	666	679	63	633	643	283	666	680	472	701	596
V/C Ratio(X)	0.78	0.28	0.28	0.74	0.87	0.87	0.18	0.20	0.20	0.37	0.56	0.35
Avail Cap(c_a), veh/h	111	666	679	111	666	676	283	666	680	472	701	596
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	29.5	13.8	13.9	30.5	19.1	19.1	21.3	13.4	13.4	17.3	15.7	14.3
Incr Delay (d2), s/veh	27.0	1.0	1.0	6.2	11.4	11.4	1.4	0.7	0.7	0.4	0.9	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	2.3	2.4	2.5	0.9	10.9	11.0	0.9	1.7	1.7	2.5	5.7	2.6
LnGrp Delay(d),s/veh	56.5	14.9	14.9	36.7	30.5	30.4	22.8	14.1	14.1	17.6	16.6	14.5
LnGrp LOS	E	B	B	D	C	C	C	B	B	B	B	B
Approach Vol, veh/h		460			1153			322			777	
Approach Delay, s/veh		22.7			30.7			15.5			16.3	
Approach LOS		C			C			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	28.5		28.5	7.9	27.3		28.5				
Change Period (Y+Rc), s	4.5	* 4.5		4.5	4.0	4.5		4.5				
Max Green Setting (Gmax), s	4.0	* 24		24.0	4.0	24.0		24.0				
Max Q Clear Time (g_c+I1), s	3.7	6.7		13.4	5.0	20.4		16.1				
Green Ext Time (p_c), s	0.2	2.3		3.6	0.0	2.4		3.0				
Intersection Summary												
HCM 2010 Ctrl Delay				23.4								
HCM 2010 LOS				C								
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan With Project AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	435	82	222	1188	78	147	26	115	55	29	30
Future Volume (veh/h)	26	435	82	222	1188	78	147	26	115	55	29	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	26	435	82	222	1188	78	147	26	115	55	29	30
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	1032	193	257	1541	101	175	539	458	105	210	217
Arrive On Green	0.04	0.35	0.35	0.05	0.15	0.15	0.10	0.29	0.29	0.06	0.25	0.25
Sat Flow, veh/h	1774	2977	557	1774	3372	221	1774	1863	1583	1774	840	869
Grp Volume(v), veh/h	26	257	260	222	623	643	147	26	115	55	0	59
Grp Sat Flow(s),veh/h/ln	1774	1770	1764	1774	1770	1824	1774	1863	1583	1774	0	1709
Q Serve(g_s), s	1.7	13.3	13.5	14.9	40.6	40.7	9.8	1.2	4.6	3.6	0.0	3.2
Cycle Q Clear(g_c), s	1.7	13.3	13.5	14.9	40.6	40.7	9.8	1.2	4.6	3.6	0.0	3.2
Prop In Lane	1.00		0.32	1.00		0.12	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	69	614	612	257	809	833	175	539	458	105	0	427
V/C Ratio(X)	0.38	0.42	0.42	0.86	0.77	0.77	0.84	0.05	0.25	0.52	0.00	0.14
Avail Cap(c_a), veh/h	118	614	612	361	809	833	207	539	458	137	0	427
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	0.57	0.57	0.57	0.94	0.94	0.94	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.3	30.0	30.0	56.0	44.9	44.9	53.2	30.7	15.2	54.8	0.0	35.0
Incr Delay (d2), s/veh	4.0	2.0	2.1	9.5	4.1	4.0	22.2	0.2	1.2	4.8	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	6.8	6.9	8.0	20.8	21.5	5.9	0.6	2.1	1.9	0.0	1.6
LnGrp Delay(d),s/veh	60.2	32.0	32.1	65.5	49.0	48.9	75.4	30.9	16.5	59.5	0.0	35.6
LnGrp LOS	E	C	C	E	D	D	E	C	B	E		D
Approach Vol, veh/h		543			1488			288			114	
Approach Delay, s/veh		33.4			51.4			47.8			47.2	
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	22.0	47.0	15.9	35.1	8.7	60.2	11.2	39.8				
Change Period (Y+Rc), s	4.6	5.4	4.1	5.1	4.1	5.4	4.1	5.1				
Max Green Setting (Gmax), s	24.4	32.4	14.0	30.0	8.0	49.3	9.3	34.7				
Max Q Clear Time (g_c+10), s	10.9	15.5	11.8	5.2	3.7	42.7	5.6	6.6				
Green Ext Time (p_c), s	0.5	14.4	0.1	0.3	0.0	6.1	0.2	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			46.8									
HCM 2010 LOS			D									

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

HCM 2010 Signalized Intersection Summary
General Plan With Project AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	354	145	85	729	88	112	147	68	43	161	63
Future Volume (veh/h)	25	354	145	85	729	88	112	147	68	43	161	63
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	25	354	145	85	729	88	112	147	68	43	161	63
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	548	1806	728	675	2331	281	211	451	199	214	475	179
Arrive On Green	0.73	0.73	0.73	1.00	1.00	1.00	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	666	2464	993	895	3181	384	1152	2390	1056	1162	2517	948
Grp Volume(v), veh/h	25	253	246	85	405	412	112	107	108	43	111	113
Grp Sat Flow(s),veh/h/ln	666	1770	1687	895	1770	1795	1152	1770	1676	1162	1770	1695
Q Serve(g_s), s	1.2	5.3	5.5	0.8	0.0	0.0	11.2	6.3	6.7	4.0	6.5	6.9
Cycle Q Clear(g_c), s	1.2	5.3	5.5	6.3	0.0	0.0	18.2	6.3	6.7	10.7	6.5	6.9
Prop In Lane	1.00		0.59	1.00		0.21	1.00		0.63	1.00		0.56
Lane Grp Cap(c), veh/h	548	1297	1237	675	1297	1315	211	334	317	214	334	320
V/C Ratio(X)	0.05	0.19	0.20	0.13	0.31	0.31	0.53	0.32	0.34	0.20	0.33	0.35
Avail Cap(c_a), veh/h	548	1297	1237	675	1297	1315	419	653	619	424	653	626
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	0.68	0.68	0.68	1.00	1.00	1.00	0.74	0.74	0.74
Uniform Delay (d), s/veh	4.4	5.0	5.0	0.2	0.0	0.0	50.2	42.0	42.2	46.8	42.1	42.3
Incr Delay (d2), s/veh	0.2	0.3	0.4	0.3	0.4	0.4	1.5	0.4	0.5	0.3	0.3	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	2.7	2.7	0.2	0.2	0.2	3.7	3.1	3.2	1.3	3.2	3.3
LnGrp Delay(d),s/veh	4.6	5.3	5.4	0.5	0.4	0.4	51.7	42.4	42.7	47.1	42.5	42.7
LnGrp LOS	A	A	A	A	A	A	D	D	D	D	D	D
Approach Vol, veh/h	524			902			327			267		
Approach Delay, s/veh	5.3			0.4			45.7			43.3		
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	92.6		27.4		92.6		27.4					
Change Period (Y+Rc), s	* 4.7		* 4.7		* 4.7		* 4.7					
Max Green Setting (Gmax), s	* 66		* 44		* 66		* 44					
Max Q Clear Time (g_c+I1), s	7.5		20.2		8.3		12.7					
Green Ext Time (p_c), s	9.3		2.5		9.3		2.6					
Intersection Summary												
HCM 2010 Ctrl Delay	14.7											
HCM 2010 LOS	B											
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan With Project AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	674	268	290	759	175	224	377	112	262	1109	62
Future Volume (veh/h)	10	674	268	290	759	175	224	377	112	262	1109	62
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	674	268	290	759	175	224	377	112	262	1109	62
Adj No. of Lanes	2	2	1	2	2	0	2	2	1	2	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	1043	467	333	1054	243	306	1289	577	307	1285	575
Arrive On Green	0.02	0.29	0.29	0.10	0.37	0.37	0.09	0.36	0.36	0.09	0.36	0.36
Sat Flow, veh/h	3442	3539	1583	3442	2857	659	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	10	674	268	290	470	464	224	377	112	262	1109	62
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1721	1770	1746	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	0.4	26.1	22.6	13.1	35.9	35.9	10.0	11.9	7.6	11.8	45.7	4.1
Cycle Q Clear(g_c), s	0.4	26.1	22.6	13.1	35.9	35.9	10.0	11.9	7.6	11.8	45.7	4.1
Prop In Lane	1.00		1.00	1.00		0.38	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	77	1043	467	333	653	644	306	1289	577	307	1285	575
V/C Ratio(X)	0.13	0.65	0.57	0.87	0.72	0.72	0.73	0.29	0.19	0.85	0.86	0.11
Avail Cap(c_a), veh/h	219	1177	527	372	667	659	306	1289	577	427	1285	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	75.3	48.3	47.1	70.1	42.6	42.6	69.8	35.6	34.2	70.6	46.4	33.2
Incr Delay (d2), s/veh	0.6	1.4	2.0	16.9	4.3	4.4	7.6	0.6	0.8	8.6	7.8	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	12.9	10.1	7.0	18.3	18.1	5.1	5.9	3.4	6.0	23.7	1.9
LnGrp Delay(d),s/veh	75.9	49.7	49.0	87.0	47.0	47.0	77.4	36.1	35.0	79.2	54.2	33.6
LnGrp LOS	E	D	D	F	D	D	E	D	C	E	D	C
Approach Vol, veh/h	952				1224				713		1433	
Approach Delay, s/veh	49.8				56.5				48.9		57.9	
Approach LOS	D				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	20.1	64.2	20.3	52.6	20.3	64.0	8.6	64.3				
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	19.5	51.8	17.0	52.3	14.0	57.1	10.0	59.3				
Max Q Clear Time (g_c+1.0), s	13.8	13.9	15.1	28.1	12.0	47.7	2.4	37.9				
Green Ext Time (p_c), s	0.2	18.1	0.1	18.2	0.1	7.1	0.0	16.5				
Intersection Summary												
HCM 2010 Ctrl Delay	54.2											
HCM 2010 LOS	D											

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

HCM 2010 Signalized Intersection Summary
General Plan With Project AM Peak Hour

	            											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	0	21	323	8	115	38	677	73	108	1654	15
Future Volume (veh/h)	12	0	21	323	8	115	38	677	73	108	1654	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	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	12	0	21	323	8	115	38	677	73	108	1654	15
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	54	0	157	338	27	388	97	1513	677	185	1688	755
Arrive On Green	0.03	0.00	0.10	0.19	0.26	0.26	0.05	0.43	0.43	0.10	0.48	0.48
Sat Flow, veh/h	1774	0	1583	1774	104	1495	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	12	0	21	323	0	123	38	677	73	108	1654	15
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1774	0	1599	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	0.8	0.0	1.4	21.1	0.0	7.2	2.4	15.8	1.6	6.8	53.7	0.4
Cycle Q Clear(g_c), s	0.8	0.0	1.4	21.1	0.0	7.2	2.4	15.8	1.6	6.8	53.7	0.4
Prop In Lane	1.00		1.00	1.00		0.93	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	54	0	157	338	0	415	97	1513	677	185	1688	755
V/C Ratio(X)	0.22	0.00	0.13	0.96	0.00	0.30	0.39	0.45	0.11	0.58	0.98	0.02
Avail Cap(c_a), veh/h	167	0	162	338	0	415	136	1513	677	224	1688	755
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	55.4	0.0	48.1	46.8	0.0	34.8	53.4	23.7	4.9	50.0	30.0	9.1
Incr Delay (d2), s/veh	0.8	0.0	0.3	36.8	0.0	0.3	1.0	1.0	0.3	1.1	17.6	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	0.4	0.0	0.6	13.8	0.0	3.2	1.2	7.9	0.8	3.4	30.3	0.2
LnGrp Delay(d),s/veh	56.1	0.0	48.4	83.7	0.0	35.0	54.4	24.7	5.2	51.1	47.6	9.2
LnGrp LOS	E		D	F		D	D	C	A	D	D	A
Approach Vol, veh/h	33			446			788			1777		
Approach Delay, s/veh	51.2			70.3			24.3			47.5		
Approach LOS	D			E			C			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.8	56.9	27.0	16.3	11.0	62.7	8.3	35.0				
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	14.8	50.0	* 22	* 12	9.0	55.8	* 11	* 23				
Max Q Clear Time (g_c+1), s	19.8	17.8	23.1	3.4	4.4	55.7	2.8	9.2				
Green Ext Time (p_c), s	0.1	6.4	0.0	0.1	0.1	0.1	0.0	0.5				
Intersection Summary												
HCM 2010 Ctrl Delay	44.9											
HCM 2010 LOS	D											
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan With Project AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	397	114	94	709	265	221	603	74	211	1156	559
Future Volume (veh/h)	138	397	114	94	709	265	221	603	74	211	1156	559
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	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	138	397	114	94	709	265	221	603	74	211	1156	559
Adj No. of Lanes	1	2	1	1	2	1	2	3	1	2	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	781	333	193	893	381	282	1716	526	312	1248	548
Arrive On Green	0.03	0.07	0.07	0.24	0.50	0.50	0.03	0.11	0.11	0.09	0.35	0.35
Sat Flow, veh/h	1774	3539	1512	1587	3539	1511	3079	5085	1559	3442	3539	1555
Grp Volume(v), veh/h	138	397	114	94	709	265	221	603	74	211	1156	559
Grp Sat Flow(s),veh/h/ln	1774	1770	1512	1587	1770	1511	1540	1695	1559	1721	1770	1555
Q Serve(g_s), s	9.3	13.0	6.3	6.1	19.9	11.2	8.6	13.2	5.1	7.1	37.7	42.3
Cycle Q Clear(g_c), s	9.3	13.0	6.3	6.1	19.9	11.2	8.6	13.2	5.1	7.1	37.7	42.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	781	333	193	893	381	282	1716	526	312	1248	548
V/C Ratio(X)	0.84	0.51	0.34	0.49	0.79	0.69	0.78	0.35	0.14	0.68	0.93	1.02
Avail Cap(c_a), veh/h	170	1062	454	193	1032	441	282	1716	526	364	1248	548
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.2	49.4	25.2	42.2	27.1	12.7	57.0	41.2	37.6	52.8	37.4	38.8
Incr Delay (d2), s/veh	24.6	0.3	0.4	0.7	3.5	3.5	12.3	0.6	0.6	2.7	13.1	43.5
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	6.4	2.7	2.7	10.1	4.9	4.1	6.3	2.3	3.5	20.6	24.7
LnGrp Delay(d),s/veh	81.9	49.7	25.6	42.9	30.7	16.2	69.3	41.7	38.2	55.5	50.4	82.3
LnGrp LOS	F	D	C	D	C	B	E	D	D	E	D	F
Approach Vol, veh/h		649			1068			898			1926	
Approach Delay, s/veh		52.3			28.2			48.2			60.2	
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	17.3	46.9	19.5	31.4	15.5	48.7	15.7	35.2				
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	* 41	10.5	* 36	11.0	42.2	11.5	35.0				
Max Q Clear Time (g_c+1.5), s	19.1	15.2	8.1	15.0	10.6	44.3	11.3	21.9				
Green Ext Time (p_c), s	1.8	3.6	1.2	2.3	0.0	0.0	0.0	3.7				
Intersection Summary												
HCM 2010 Ctrl Delay			49.2									
HCM 2010 LOS			D									
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan With Project AM Peak Hour

	            											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	312	82	68	617	101	183	682	60	126	886	166
Future Volume (veh/h)	85	312	82	68	617	101	183	682	60	126	886	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	85	312	82	68	617	101	183	682	60	126	886	166
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	125	640	165	133	712	116	343	1091	488	702	1519	680
Arrive On Green	0.14	0.46	0.46	0.15	0.47	0.47	0.03	0.10	0.10	0.41	0.86	0.86
Sat Flow, veh/h	1774	2785	721	1774	3047	498	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	85	197	197	68	358	360	183	682	60	126	886	166
Grp Sat Flow(s),veh/h/ln	1774	1770	1736	1774	1770	1775	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	5.5	9.3	9.6	4.2	21.7	21.8	6.3	22.2	3.1	2.8	8.5	2.3
Cycle Q Clear(g_c), s	5.5	9.3	9.6	4.2	21.7	21.8	6.3	22.2	3.1	2.8	8.5	2.3
Prop In Lane	1.00		0.42	1.00		0.28	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	125	406	399	133	414	415	343	1091	488	702	1519	680
V/C Ratio(X)	0.68	0.48	0.50	0.51	0.87	0.87	0.53	0.62	0.12	0.18	0.58	0.24
Avail Cap(c_a), veh/h	133	605	593	148	619	621	344	1091	488	702	1519	680
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.99	0.99	0.99	0.83	0.83	0.83	0.95	0.95	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.2	27.5	27.6	49.0	30.3	30.3	55.3	47.2	22.6	29.1	5.5	5.0
Incr Delay (d2), s/veh	9.5	0.3	0.4	0.9	4.8	4.9	0.8	2.6	0.5	0.0	1.6	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	8.0	4.5	4.5	2.1	11.1	11.2	3.0	11.3	1.4	1.3	4.3	1.0
LnGrp Delay(d),s/veh	59.7	27.8	27.9	50.0	35.0	35.2	56.1	49.8	23.1	29.2	7.1	5.9
LnGrp LOS	E	C	C	D	D	D	E	D	C	C	A	A
Approach Vol, veh/h	479			786			925			1178		
Approach Delay, s/veh	33.5			36.4			49.3			9.3		
Approach LOS	C			D			D			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	31.0	43.5	13.5	32.1	16.5	58.0	13.0	32.6				
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	* 37	10.0	41.0	12.0	37.0	9.0	42.0				
Max Q Clear Time (g_c+14.8), s	14.8	24.2	6.2	11.6	8.3	10.5	7.5	23.8				
Green Ext Time (p_c), s	1.2	2.6	0.0	4.7	0.1	4.9	0.0	4.2				
Intersection Summary												
HCM 2010 Ctrl Delay	30.1											
HCM 2010 LOS	C											
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan With 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	343	1289	244	181	678	0	0	928	122
Future Volume (veh/h)	0	0	0	343	1289	244	181	678	0	0	928	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				343	1289	244	181	678	0	0	928	122
Adj No. of Lanes				1	3	1	2	2	0	0	2	1
Peak Hour Factor				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				530	1669	473	524	2131	0	0	1389	621
Arrive On Green				0.30	0.30	0.30	0.30	1.00	0.00	0.00	0.13	0.13
Sat Flow, veh/h				1774	5588	1583	3442	3632	0	0	3632	1583
Grp Volume(v), veh/h				343	1289	244	181	678	0	0	928	122
Grp Sat Flow(s),veh/h/ln				1774	1863	1583	1721	1770	0	0	1770	1583
Q Serve(g_s), s				20.2	25.2	15.3	4.9	0.0	0.0	0.0	30.0	8.3
Cycle Q Clear(g_c), s				20.2	25.2	15.3	4.9	0.0	0.0	0.0	30.0	8.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				530	1669	473	524	2131	0	0	1389	621
V/C Ratio(X)				0.65	0.77	0.52	0.35	0.32	0.00	0.00	0.67	0.20
Avail Cap(c_a), veh/h				650	2049	581	524	2131	0	0	1389	621
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	0.33	0.33
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.76	0.76
Uniform Delay (d), s/veh				36.6	38.4	34.9	37.1	0.0	0.0	0.0	44.8	35.3
Incr Delay (d2), s/veh				1.3	1.4	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	13.9	2.3	0.1	0.0	0.0	15.1	3.7
LnGrp Delay(d),s/veh				37.9	39.7	35.5	37.4	0.4	0.0	0.0	46.7	35.9
LnGrp LOS				D	D	D	D	A			D	D
Approach Vol, veh/h				1876			859			1050		
Approach Delay, s/veh				38.8			8.2			45.5		
Approach LOS				D			A			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		79.2		40.8	25.2	54.0						
Change Period (Y+Rc), s		6.9		5.0	6.9	* 6.9						
Max Green Setting (Gmax), s		64.1		44.0	11.9	* 47						
Max Q Clear Time (g_c+I1), s		2.0		27.2	6.9	32.0						
Green Ext Time (p_c), s		4.7		8.6	2.0	5.1						
Intersection Summary												
HCM 2010 Ctrl Delay				33.7								
HCM 2010 LOS				C								
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan With Project AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	382	161	92	616	39	162	174	79	102	361	209
Future Volume (veh/h)	93	382	161	92	616	39	162	174	79	102	361	209
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	93	382	161	92	616	39	162	174	79	102	361	209
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	297	734	305	312	1045	66	232	728	317	129	533	303
Arrive On Green	0.17	0.30	0.30	0.18	0.31	0.31	0.13	0.30	0.30	0.07	0.25	0.25
Sat Flow, veh/h	1774	2439	1014	1774	3381	214	1774	2401	1047	1774	2175	1239
Grp Volume(v), veh/h	93	276	267	92	322	333	162	126	127	102	293	277
Grp Sat Flow(s),veh/h/ln	1774	1770	1684	1774	1770	1825	1774	1770	1678	1774	1770	1644
Q Serve(g_s), s	5.5	15.5	15.8	5.4	18.4	18.5	10.5	6.4	6.8	6.8	17.9	18.4
Cycle Q Clear(g_c), s	5.5	15.5	15.8	5.4	18.4	18.5	10.5	6.4	6.8	6.8	17.9	18.4
Prop In Lane	1.00		0.60	1.00		0.12	1.00		0.62	1.00		0.75
Lane Grp Cap(c), veh/h	297	532	507	312	547	564	232	537	509	129	434	403
V/C Ratio(X)	0.31	0.52	0.53	0.29	0.59	0.59	0.70	0.24	0.25	0.79	0.67	0.69
Avail Cap(c_a), veh/h	297	532	507	312	547	564	324	537	509	220	434	403
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	0.32	0.32	0.32	0.94	0.94	0.94	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	34.7	34.9	43.0	35.0	35.0	49.9	31.4	31.5	54.8	41.0	41.1
Incr Delay (d2), s/veh	0.2	3.6	3.9	0.1	1.5	1.5	1.3	1.0	1.1	4.1	8.2	9.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	8.1	7.9	2.7	9.3	9.6	5.2	3.3	3.3	3.5	9.8	9.4
LnGrp Delay(d),s/veh	44.1	38.3	38.8	43.0	36.5	36.5	51.2	32.3	32.6	58.9	49.1	50.4
LnGrp LOS	D	D	D	D	D	D	D	C	C	E	D	D
Approach Vol, veh/h	636			747			415			672		
Approach Delay, s/veh	39.3			37.3			39.8			51.1		
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	25.2	41.0	19.8	34.0	24.2	42.0	12.8	41.0				
Change Period (Y+Rc), s	4.1	4.9	4.1	4.6	4.1	4.9	4.1	4.6				
Max Green Setting (Gmax), s	14.9	36.1	21.9	29.4	13.9	37.1	14.9	36.4				
Max Q Clear Time (g_c+1), s	17.4	17.8	12.5	20.4	7.5	20.5	8.8	8.8				
Green Ext Time (p_c), s	0.1	2.0	0.3	1.6	0.1	2.3	0.2	0.9				
Intersection Summary												
HCM 2010 Ctrl Delay			42.0									
HCM 2010 LOS			D									

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

HCM 2010 Signalized Intersection Summary
General Plan With Project AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	340	118	75	602	124	97	274	66	106	398	77
Future Volume (veh/h)	64	340	118	75	602	124	97	274	66	106	398	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	64	340	118	75	602	124	97	274	66	106	398	77
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	246	1106	378	109	1009	207	128	748	177	157	830	159
Arrive On Green	0.28	0.85	0.85	0.06	0.34	0.34	0.14	0.53	0.53	0.09	0.28	0.28
Sat Flow, veh/h	1774	2591	885	1774	2925	601	1774	2841	673	1774	2964	569
Grp Volume(v), veh/h	64	230	228	75	364	362	97	169	171	106	236	239
Grp Sat Flow(s),veh/h/ln	1774	1770	1707	1774	1770	1757	1774	1770	1744	1774	1770	1762
Q Serve(g_s), s	3.4	3.1	3.2	5.0	20.3	20.4	6.3	6.7	6.9	6.9	13.3	13.5
Cycle Q Clear(g_c), s	3.4	3.1	3.2	5.0	20.3	20.4	6.3	6.7	6.9	6.9	13.3	13.5
Prop In Lane	1.00		0.52	1.00		0.34	1.00		0.39	1.00		0.32
Lane Grp Cap(c), veh/h	246	755	728	109	611	606	128	466	459	157	495	493
V/C Ratio(X)	0.26	0.31	0.31	0.69	0.60	0.60	0.76	0.36	0.37	0.67	0.48	0.48
Avail Cap(c_a), veh/h	246	755	728	205	611	606	205	466	459	235	495	493
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	0.36	0.36	0.36	0.99	0.99	0.99	0.79	0.79	0.79
Uniform Delay (d), s/veh	38.5	5.3	5.3	55.2	32.4	32.4	50.4	22.5	22.6	53.0	35.9	36.0
Incr Delay (d2), s/veh	0.2	1.0	1.0	1.1	1.6	1.6	3.4	2.2	2.3	1.5	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	1.6	1.6	1.6	2.5	10.2	10.1	3.2	3.5	3.6	3.5	6.9	6.9
LnGrp Delay(d),s/veh	38.7	6.2	6.3	56.3	34.0	34.0	53.8	24.7	24.8	54.5	38.5	38.6
LnGrp LOS	D	A	A	E	C	C	D	C	C	D	D	D
Approach Vol, veh/h		522			801			437			581	
Approach Delay, s/veh		10.3			36.1			31.2			41.5	
Approach LOS		B			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	14.7	38.0	11.4	55.8	12.7	40.0	21.3	46.0				
Change Period (Y+Rc), s	4.1	6.4	4.1	4.6	4.1	6.4	4.6	* 4.6				
Max Green Setting (Gmax), s	15.9	31.6	13.9	39.4	13.9	33.6	11.9	* 41				
Max Q Clear Time (g_c+1), s	19.9	8.9	7.0	5.2	8.3	15.5	5.4	22.4				
Green Ext Time (p_c), s	0.2	1.2	0.0	1.8	0.1	1.6	0.1	2.7				
Intersection Summary												
HCM 2010 Ctrl Delay				30.7								
HCM 2010 LOS				C								
Notes												

SEC CCP/Mission TIA
11: Escondido Blvd & Woodward

HCM 2010 Signalized Intersection Summary
General Plan With Project AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔		↔		↔	↔	
Traffic Volume (veh/h)	12	2	25	75	1	76	3	360	57	70	497	6
Future Volume (veh/h)	12	2	25	75	1	76	3	360	57	70	497	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	1900	1863	1863	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	12	2	25	75	1	76	3	360	57	70	497	6
Adj No. of Lanes	0	1	0	0	1	1	0	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	104	26	93	265	3	152	62	974	152	584	2641	32
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.32	0.32	0.32	0.33	0.74	0.74
Sat Flow, veh/h	267	275	968	1520	29	1583	5	2997	468	1774	3582	43
Grp Volume(v), veh/h	39	0	0	76	0	76	223	0	197	70	245	258
Grp Sat Flow(s),veh/h/ln	1511	0	0	1549	0	1583	1857	0	1613	1774	1770	1855
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	5.6	1.7	2.5	2.5
Cycle Q Clear(g_c), s	2.4	0.0	0.0	2.4	0.0	2.7	5.5	0.0	5.6	1.7	2.5	2.5
Prop In Lane	0.31		0.64	0.99		1.00	0.01		0.29	1.00		0.02
Lane Grp Cap(c), veh/h	223	0	0	268	0	152	664	0	524	584	1305	1368
V/C Ratio(X)	0.17	0.00	0.00	0.28	0.00	0.50	0.34	0.00	0.38	0.12	0.19	0.19
Avail Cap(c_a), veh/h	630	0	0	631	0	567	664	0	524	584	1305	1368
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	25.1	0.0	0.0	25.6	0.0	25.8	15.5	0.0	15.6	14.1	2.4	2.4
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	1.0	1.4	0.0	2.0	0.0	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	0.6	0.0	0.0	1.2	0.0	1.2	3.0	0.0	2.8	0.8	1.3	1.4
LnGrp Delay(d),s/veh	25.2	0.0	0.0	25.8	0.0	26.7	16.9	0.0	17.6	14.1	2.7	2.7
LnGrp LOS	C			C		C	B		B	B	A	A
Approach Vol, veh/h	39			152			420			573		
Approach Delay, s/veh	25.2			26.3			17.2			4.1		
Approach LOS	C			C			B			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	24.7	24.5		10.8		49.2		10.8				
Change Period (Y+Rc), s	5.0	* 5		* 5		5.0		5.0				
Max Green Setting (Gmax), s	5.0	* 20		* 22		28.5		21.5				
Max Q Clear Time (g_c+1.3), s	13.7	7.6		4.4		4.5		4.7				
Green Ext Time (p_c), s	0.4	1.9		0.5		3.0		0.5				
Intersection Summary												
HCM 2010 Ctrl Delay	12.3											
HCM 2010 LOS	B											
Notes												

SEC CCP/Mission TIA
12: Broadway & Mission Ave

HCM 2010 Signalized Intersection Summary
General Plan With Project AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	265	109	86	577	324	141	603	44	192	848	142
Future Volume (veh/h)	122	265	109	86	577	324	141	603	44	192	848	142
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	122	265	109	86	577	324	141	603	44	192	848	142
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	140	699	280	110	583	327	177	964	70	225	955	160
Arrive On Green	0.08	0.28	0.28	0.06	0.27	0.27	0.10	0.29	0.29	0.13	0.31	0.31
Sat Flow, veh/h	1774	2468	989	1774	2188	1228	1774	3346	244	1774	3035	508
Grp Volume(v), veh/h	122	188	186	86	467	434	141	319	328	192	495	495
Grp Sat Flow(s),veh/h/ln	1774	1770	1688	1774	1770	1646	1774	1770	1820	1774	1770	1773
Q Serve(g_s), s	5.1	6.4	6.7	3.6	19.7	19.7	5.8	11.7	11.8	7.9	19.9	19.9
Cycle Q Clear(g_c), s	5.1	6.4	6.7	3.6	19.7	19.7	5.8	11.7	11.8	7.9	19.9	19.9
Prop In Lane	1.00		0.59	1.00		0.75	1.00		0.13	1.00		0.29
Lane Grp Cap(c), veh/h	140	501	478	110	472	439	177	510	524	225	557	558
V/C Ratio(X)	0.87	0.38	0.39	0.78	0.99	0.99	0.79	0.63	0.63	0.85	0.89	0.89
Avail Cap(c_a), veh/h	140	501	478	121	472	439	177	510	524	225	557	558
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	21.6	21.6	34.7	27.4	27.4	33.0	23.2	23.2	32.1	24.4	24.4
Incr Delay (d2), s/veh	41.5	0.5	0.5	25.5	38.4	40.1	21.6	5.7	5.6	26.0	18.7	18.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	3.2	3.2	2.5	14.6	13.8	3.9	6.5	6.7	5.5	12.5	12.5
LnGrp Delay(d),s/veh	75.7	22.0	22.2	60.2	65.8	67.5	54.6	28.9	28.8	58.1	43.1	43.1
LnGrp LOS	E	C	C	E	E	E	D	C	C	E	D	D
Approach Vol, veh/h	496			987			788			1182		
Approach Delay, s/veh	35.3			66.1			33.4			45.6		
Approach LOS	D			E			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	26.1	9.2	25.7	12.0	28.1	10.4	24.5				
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	21.6	5.1	20.8	7.5	23.6	5.9	20.0				
Max Q Clear Time (g_c+1.9), s	19.5	13.8	5.6	8.7	7.8	21.9	7.1	21.7				
Green Ext Time (p_c), s	0.0	2.6	0.0	2.0	0.0	1.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	47.2											
HCM 2010 LOS	D											

SEC CCP/Mission TIA
13: Broadway & Washington Ave

HCM 2010 Signalized Intersection Summary
General Plan With Project AM Peak Hour

	           											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	299	72	77	629	244	94	351	24	196	632	89
Future Volume (veh/h)	92	299	72	77	629	244	94	351	24	196	632	89
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	299	72	77	629	244	94	351	24	196	632	89
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	118	794	188	99	670	260	120	994	68	226	1108	156
Arrive On Green	0.07	0.28	0.28	0.06	0.27	0.27	0.07	0.30	0.30	0.13	0.36	0.36
Sat Flow, veh/h	1774	2840	673	1774	2495	967	1774	3363	229	1774	3117	438
Grp Volume(v), veh/h	92	185	186	77	446	427	94	184	191	196	358	363
Grp Sat Flow(s),veh/h/ln	1774	1770	1744	1774	1770	1692	1774	1770	1822	1774	1770	1785
Q Serve(g_s), s	3.8	6.2	6.4	3.2	18.3	18.4	3.9	6.1	6.1	8.1	12.2	12.2
Cycle Q Clear(g_c), s	3.8	6.2	6.4	3.2	18.3	18.4	3.9	6.1	6.1	8.1	12.2	12.2
Prop In Lane	1.00		0.39	1.00		0.57	1.00		0.13	1.00		0.25
Lane Grp Cap(c), veh/h	118	495	487	99	475	455	120	523	539	226	629	634
V/C Ratio(X)	0.78	0.37	0.38	0.78	0.94	0.94	0.78	0.35	0.35	0.87	0.57	0.57
Avail Cap(c_a), veh/h	131	495	487	122	475	455	155	523	539	226	629	634
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	21.6	21.6	34.7	26.6	26.6	34.1	20.6	20.6	31.8	19.4	19.4
Incr Delay (d2), s/veh	23.6	0.5	0.5	22.6	26.5	27.5	17.4	1.9	1.8	27.7	3.7	3.7
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	2.6	3.1	3.2	2.2	12.4	12.0	2.5	3.2	3.4	5.7	6.5	6.6
LnGrp Delay(d),s/veh	57.8	22.0	22.1	57.3	53.2	54.2	51.5	22.5	22.5	59.6	23.1	23.1
LnGrp LOS	E	C	C	E	D	D	D	C	C	E	C	C
Approach Vol, veh/h	463			950			469			917		
Approach Delay, s/veh	29.2			53.9			28.3			30.9		
Approach LOS	C			D			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.0	26.5	8.6	25.3	9.5	31.0	9.4	24.5				
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	5.1	20.4	6.5	25.0	5.5	20.0				
Max Q Clear Time (g_c+10), s	10.1	8.1	5.2	8.4	5.9	14.2	5.8	20.4				
Green Ext Time (p_c), s	0.0	1.7	0.0	1.9	0.0	3.7	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			38.0									
HCM 2010 LOS			D									

Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	86	1078	70	0	1075
Future Vol, veh/h	0	86	1078	70	0	1075
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	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	86	1078	70	0	1075
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	539	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	487	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	487	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	14	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT			
Capacity (veh/h)	-	-	487	-		
HCM Lane V/C Ratio	-	-	0.177	-		
HCM Control Delay (s)	-	-	14	-		
HCM Lane LOS	-	-	B	-		
HCM 95th %tile Q(veh)	-	-	0.6	-		

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑		↑
Traffic Vol, veh/h	646	82	0	1043	0	65
Future Vol, veh/h	646	82	0	1043	0	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	646	82	0	1043	0	65
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	364
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	-	0	633
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	633
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		11.3	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	633	-	-	-		
HCM Lane V/C Ratio	0.103	-	-	-		
HCM Control Delay (s)	11.3	-	-	-		
HCM Lane LOS	B	-	-	-		
HCM 95th %tile Q(veh)	0.3	-	-	-		

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

HCM 2010 Signalized Intersection Summary
General Plan With Project PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	247	883	113	73	643	219	67	544	58	113	259	75
Future Volume (veh/h)	247	883	113	73	643	219	67	544	58	113	259	75
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	883	113	73	643	219	67	544	58	113	259	75
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	1	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	280	1405	180	151	978	333	309	1082	115	235	624	530
Arrive On Green	0.16	0.44	0.44	0.17	0.75	0.75	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1774	3157	404	1774	2594	883	1042	3228	343	814	1863	1583
Grp Volume(v), veh/h	247	495	501	73	439	423	67	298	304	113	259	75
Grp Sat Flow(s),veh/h/ln	1774	1770	1791	1774	1770	1707	1042	1770	1802	814	1863	1583
Q Serve(g_s), s	13.6	21.6	21.6	3.7	12.1	12.1	5.3	13.4	13.5	12.9	10.7	3.3
Cycle Q Clear(g_c), s	13.6	21.6	21.6	3.7	12.1	12.1	16.0	13.4	13.5	26.4	10.7	3.3
Prop In Lane	1.00		0.23	1.00		0.52	1.00		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	280	787	797	151	667	644	309	593	604	235	624	530
V/C Ratio(X)	0.88	0.63	0.63	0.48	0.66	0.66	0.22	0.50	0.50	0.48	0.42	0.14
Avail Cap(c_a), veh/h	373	787	797	160	667	644	309	593	604	235	624	530
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	0.77	0.77	0.77	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.2	21.4	21.4	39.5	9.1	9.1	31.9	26.6	26.6	37.2	25.7	23.2
Incr Delay (d2), s/veh	14.4	3.8	3.7	0.7	1.9	2.0	1.6	3.0	3.0	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	7.8	11.3	11.4	1.9	6.0	5.8	1.7	7.0	7.2	3.0	5.6	1.5
LnGrp Delay(d),s/veh	55.6	25.2	25.1	40.2	11.1	11.2	33.5	29.6	29.6	38.3	26.0	23.3
LnGrp LOS	E	C	C	D	B	B	C	C	C	D	C	C
Approach Vol, veh/h		1243			935			669			447	
Approach Delay, s/veh		31.2			13.4			30.0			28.7	
Approach LOS		C			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	13.0	49.0		38.0	19.8	42.2		38.0				
Change Period (Y+Rc), s	4.5	* 4.5		4.5	4.0	4.5		4.5				
Max Green Setting (Gmax), s	9.0	* 45		33.5	21.0	32.5		33.5				
Max Q Clear Time (g_c+I1), s	5.7	23.6		28.4	15.6	14.1		18.0				
Green Ext Time (p_c), s	0.1	7.7		2.4	0.2	6.3		4.8				
Intersection Summary												
HCM 2010 Ctrl Delay				25.5								
HCM 2010 LOS				C								
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan With Project PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	978	92	114	700	106	105	46	217	170	53	24
Future Volume (veh/h)	36	978	92	114	700	106	105	46	217	170	53	24
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	978	92	114	700	106	105	46	217	170	53	24
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	129	1124	106	141	1058	160	148	505	429	201	366	166
Arrive On Green	0.05	0.23	0.23	0.08	0.34	0.34	0.08	0.27	0.27	0.11	0.30	0.30
Sat Flow, veh/h	1774	3270	308	1774	3083	467	1774	1863	1583	1774	1215	550
Grp Volume(v), veh/h	36	529	541	114	402	404	105	46	217	170	0	77
Grp Sat Flow(s),veh/h/ln	1774	1770	1808	1774	1770	1780	1774	1863	1583	1774	0	1766
Q Serve(g_s), s	2.0	28.8	28.8	6.3	19.3	19.3	5.8	1.8	8.8	9.4	0.0	3.2
Cycle Q Clear(g_c), s	2.0	28.8	28.8	6.3	19.3	19.3	5.8	1.8	8.8	9.4	0.0	3.2
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	129	608	622	141	607	611	148	505	429	201	0	531
V/C Ratio(X)	0.28	0.87	0.87	0.81	0.66	0.66	0.71	0.09	0.51	0.84	0.00	0.14
Avail Cap(c_a), veh/h	142	608	622	149	607	611	158	505	429	211	0	531
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.75	0.75	0.75	0.86	0.86	0.86	0.91	0.91	0.91	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.1	36.3	36.3	45.3	27.9	27.9	44.6	27.2	17.7	43.5	0.0	25.5
Incr Delay (d2), s/veh	1.1	12.2	12.0	23.3	4.8	4.8	12.4	0.3	3.8	25.3	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	16.2	16.5	4.0	10.2	10.3	3.3	1.0	4.3	6.0	0.0	1.6
LnGrp Delay(d),s/veh	46.1	48.5	48.3	68.6	32.7	32.7	57.0	27.6	21.5	68.8	0.0	26.1
LnGrp LOS	D	D	D	E	C	C	E	C	C	E		C
Approach Vol, veh/h	1106			920			368			247		
Approach Delay, s/veh	48.4			37.2			32.4			55.5		
Approach LOS	D			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	12.6	39.8	12.4	35.2	12.7	39.7	15.4	32.2				
Change Period (Y+Rc), s	4.6	5.4	4.1	5.1	5.4	* 5.4	4.1	5.1				
Max Green Setting (Gmax), s	33.4	33.4	8.9	30.1	8.0	* 34	11.9	27.1				
Max Q Clear Time (g_c+1.0), s	10.3	30.8	7.8	5.2	4.0	21.3	11.4	10.8				
Green Ext Time (p_c), s	0.0	2.1	0.1	0.4	3.1	6.7	0.1	1.0				
Intersection Summary												
HCM 2010 Ctrl Delay	42.9											
HCM 2010 LOS	D											
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan With Project PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	893	190	80	511	100	128	212	175	72	209	25
Future Volume (veh/h)	70	893	190	80	511	100	128	212	175	72	209	25
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	70	893	190	80	511	100	128	212	175	72	209	25
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	508	1603	341	322	1630	318	384	504	396	307	852	101
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	807	2905	618	519	2955	576	1142	1887	1483	992	3189	377
Grp Volume(v), veh/h	70	544	539	80	305	306	128	198	189	72	115	119
Grp Sat Flow(s),veh/h/ln	807	1770	1754	519	1770	1761	1142	1770	1601	992	1770	1796
Q Serve(g_s), s	2.7	10.3	10.3	6.1	4.8	4.9	5.1	4.8	5.1	3.4	2.6	2.7
Cycle Q Clear(g_c), s	7.6	10.3	10.3	16.4	4.8	4.9	7.8	4.8	5.1	8.5	2.6	2.7
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	508	976	967	322	976	972	384	473	428	307	473	480
V/C Ratio(X)	0.14	0.56	0.56	0.25	0.31	0.31	0.33	0.42	0.44	0.23	0.24	0.25
Avail Cap(c_a), veh/h	508	976	967	322	976	972	674	922	834	558	922	935
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	8.4	7.5	7.5	12.8	6.3	6.3	18.0	15.7	15.8	19.3	14.9	14.9
Incr Delay (d2), s/veh	0.6	2.3	2.3	1.8	0.8	0.8	0.4	0.4	0.5	0.3	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	0.7	5.6	5.6	1.0	2.5	2.5	1.6	2.4	2.3	0.9	1.3	1.3
LnGrp Delay(d),s/veh	8.9	9.8	9.8	14.7	7.1	7.2	18.4	16.1	16.3	19.6	15.1	15.1
LnGrp LOS	A	A	A	B	A	A	B	B	B	B	B	B
Approach Vol, veh/h	1153			691			515			306		
Approach Delay, s/veh	9.8			8.0			16.8			16.2		
Approach LOS	A			A			B			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	33.3		18.5		33.3		18.5					
Change Period (Y+Rc), s	* 4.7		* 4.7		* 4.7		* 4.7					
Max Green Setting (Gmax), s	* 29		* 27		* 29		* 27					
Max Q Clear Time (g_c+I1), s	12.3		9.8		18.4		10.5					
Green Ext Time (p_c), s	9.3		3.4		6.7		3.4					
Intersection Summary												
HCM 2010 Ctrl Delay				11.4								
HCM 2010 LOS				B								
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan With Project PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		 	 		 	 		 	 	
Traffic Volume (veh/h)	49	941	202	160	658	193	403	857	339	202	247	30
Future Volume (veh/h)	49	941	202	160	658	193	403	857	339	202	247	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	49	941	202	160	658	193	403	857	339	202	247	30
Adj No. of Lanes	2	2	1	2	2	0	2	2	1	2	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	249	991	443	325	816	239	459	953	426	425	911	408
Arrive On Green	0.07	0.28	0.28	0.09	0.30	0.30	0.13	0.27	0.27	0.12	0.26	0.26
Sat Flow, veh/h	3442	3539	1583	3442	2701	792	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	49	941	202	160	431	420	403	857	339	202	247	30
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1721	1770	1723	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	1.4	27.3	11.0	4.6	23.6	23.6	12.1	24.5	20.9	5.7	5.8	1.5
Cycle Q Clear(g_c), s	1.4	27.3	11.0	4.6	23.6	23.6	12.1	24.5	20.9	5.7	5.8	1.5
Prop In Lane	1.00		1.00	1.00		0.46	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	249	991	443	325	535	520	459	953	426	425	911	408
V/C Ratio(X)	0.20	0.95	0.46	0.49	0.81	0.81	0.88	0.90	0.80	0.47	0.27	0.07
Avail Cap(c_a), veh/h	328	992	444	328	535	520	459	953	426	427	911	408
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	45.8	37.0	31.2	45.1	33.8	33.8	44.6	37.0	35.6	42.8	31.1	29.5
Incr Delay (d2), s/veh	0.3	17.8	1.3	0.4	9.5	9.8	16.7	13.1	14.2	0.3	0.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	15.8	5.0	2.2	12.9	12.6	6.8	13.6	10.8	2.7	2.9	0.7
LnGrp Delay(d),s/veh	46.0	54.9	32.4	45.5	43.3	43.6	61.2	50.1	49.8	43.1	31.8	29.8
LnGrp LOS	D	D	C	D	D	D	E	D	D	D	C	C
Approach Vol, veh/h	1192				1011		1599				479	
Approach Delay, s/veh	50.7				43.8		52.8				36.4	
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	19.1	35.1	15.0	35.7	20.3	33.9	12.7	38.0				
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	28.2	10.0	29.4	14.0	27.0	10.0	29.4				
Max Q Clear Time (g_c+1), s	17.5	26.5	6.6	29.3	14.1	7.8	3.4	25.6				
Green Ext Time (p_c), s	0.2	1.4	0.1	0.0	0.0	10.2	0.0	3.5				
Intersection Summary												
HCM 2010 Ctrl Delay			48.3									
HCM 2010 LOS			D									

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

HCM 2010 Signalized Intersection Summary
General Plan With Project PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	1	16	125	2	261	28	1362	151	42	664	6
Future Volume (veh/h)	23	1	16	125	2	261	28	1362	151	42	664	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	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	23	1	16	125	2	261	28	1362	151	42	664	6
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	12	196	218	2	313	111	1507	674	131	1549	693
Arrive On Green	0.05	0.13	0.13	0.12	0.20	0.20	0.06	0.43	0.43	0.07	0.44	0.44
Sat Flow, veh/h	1774	94	1503	1774	12	1573	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	23	0	17	125	0	263	28	1362	151	42	664	6
Grp Sat Flow(s),veh/h/ln	1774	0	1597	1774	0	1585	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	1.1	0.0	0.8	5.6	0.0	13.5	1.3	30.4	2.8	1.9	11.0	0.1
Cycle Q Clear(g_c), s	1.1	0.0	0.8	5.6	0.0	13.5	1.3	30.4	2.8	1.9	11.0	0.1
Prop In Lane	1.00		0.94	1.00		0.99	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	96	0	209	218	0	316	111	1507	674	131	1549	693
V/C Ratio(X)	0.24	0.00	0.08	0.57	0.00	0.83	0.25	0.90	0.22	0.32	0.43	0.01
Avail Cap(c_a), veh/h	230	0	226	230	0	316	188	1507	674	209	1549	693
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	38.4	0.0	32.4	35.1	0.0	32.6	37.9	22.7	4.6	37.2	16.5	5.9
Incr Delay (d2), s/veh	0.5	0.0	0.1	1.8	0.0	16.7	0.4	9.2	0.8	0.5	0.9	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	0.5	0.0	0.4	2.8	0.0	7.4	0.6	16.7	2.1	1.0	5.5	0.1
LnGrp Delay(d),s/veh	38.9	0.0	32.5	36.8	0.0	49.3	38.3	32.0	5.4	37.7	17.4	5.9
LnGrp LOS	D		C	D		D	D	C	A	D	B	A
Approach Vol, veh/h	40					388		1541		712		
Approach Delay, s/veh	36.2					45.3		29.5		18.5		
Approach LOS	D					D		C		B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.9	43.0	15.1	15.8	9.9	44.0	9.3	21.6				
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	10.0	36.1	* 11	* 12	9.0	37.1	* 11	* 12				
Max Q Clear Time (g_c+13.9), s	13.9	32.4	7.6	2.8	3.3	13.0	3.1	15.5				
Green Ext Time (p_c), s	0.0	3.0	0.0	0.1	0.0	5.5	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	28.9											
HCM 2010 LOS	C											
Notes												

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	302	928	158	103	444	352	174	1150	88	239	615	261
Future Volume (veh/h)	302	928	158	103	444	352	174	1150	88	239	615	261
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		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	302	928	158	103	444	352	174	1150	88	239	615	261
Adj No. of Lanes	1	2	1	1	2	1	2	3	1	2	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	297	1057	456	184	887	379	275	1625	498	281	1158	509
Arrive On Green	0.17	0.30	0.30	0.12	0.25	0.25	0.09	0.32	0.32	0.08	0.33	0.33
Sat Flow, veh/h	1774	3539	1526	1587	3539	1510	3079	5085	1559	3442	3539	1555
Grp Volume(v), veh/h	302	928	158	103	444	352	174	1150	88	239	615	261
Grp Sat Flow(s),veh/h/ln	1774	1770	1526	1587	1770	1510	1540	1695	1559	1721	1770	1555
Q Serve(g_s), s	20.5	30.6	7.6	7.5	13.2	21.5	6.7	24.4	5.0	8.4	17.4	16.6
Cycle Q Clear(g_c), s	20.5	30.6	7.6	7.5	13.2	21.5	6.7	24.4	5.0	8.4	17.4	16.6
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	297	1057	456	184	887	379	275	1625	498	281	1158	509
V/C Ratio(X)	1.02	0.88	0.35	0.56	0.50	0.93	0.63	0.71	0.18	0.85	0.53	0.51
Avail Cap(c_a), veh/h	297	1221	526	184	1010	431	276	1625	498	281	1158	509
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	51.1	40.9	19.6	51.3	39.4	26.5	53.9	36.7	30.1	55.6	33.6	33.4
Incr Delay (d2), s/veh	57.1	6.5	0.3	2.3	0.3	24.5	3.5	2.6	0.8	20.5	1.7	3.7
Initial Q Delay(d3),s/veh	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.7	15.9	3.8	3.4	6.5	11.5	3.0	11.8	2.2	4.8	8.7	7.7
LnGrp Delay(d),s/veh	108.2	47.4	19.9	53.6	39.7	51.0	57.4	39.3	30.9	76.1	35.3	37.0
LnGrp LOS	F	D	B	D	D	D	E	D	C	E	D	D
Approach Vol, veh/h	1388			899			1412			1115		
Approach Delay, s/veh	57.5			45.7			41.0			44.5		
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	16.4	45.6	19.1	41.5	15.5	46.5	25.0	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	10.0	* 39	13.2	* 42	11.0	38.2	20.5	35.0				
Max Q Clear Time (g_c+1.0), s	10.4	26.4	9.5	32.6	8.7	19.4	22.5	23.5				
Green Ext Time (p_c), s	0.0	5.7	1.4	4.1	0.1	4.4	0.0	2.7				
Intersection Summary												
HCM 2010 Ctrl Delay				47.4								
HCM 2010 LOS				D								
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan With Project PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	204	813	112	93	391	159	209	1067	201	165	658	99
Future Volume (veh/h)	204	813	112	93	391	159	209	1067	201	165	658	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	1863	1863	1863	1863
Adj Flow Rate, veh/h	204	813	112	93	391	159	209	1067	201	165	658	99
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	966	133	146	676	272	358	1153	516	316	1171	524
Arrive On Green	0.12	0.31	0.31	0.08	0.27	0.27	0.10	0.33	0.33	0.09	0.33	0.33
Sat Flow, veh/h	1774	3126	431	1774	2467	990	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	204	460	465	93	279	271	209	1067	201	165	658	99
Grp Sat Flow(s),veh/h/ln	1774	1770	1787	1774	1770	1688	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	13.2	28.0	28.0	5.8	15.6	16.0	6.7	33.5	8.3	5.3	17.6	5.1
Cycle Q Clear(g_c), s	13.2	28.0	28.0	5.8	15.6	16.0	6.7	33.5	8.3	5.3	17.6	5.1
Prop In Lane	1.00		0.24	1.00		0.59	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	547	552	146	485	463	358	1153	516	316	1171	524
V/C Ratio(X)	0.98	0.84	0.84	0.64	0.58	0.59	0.58	0.93	0.39	0.52	0.56	0.19
Avail Cap(c_a), veh/h	208	698	704	156	645	616	389	1153	516	359	1171	524
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	50.7	37.2	37.2	51.2	36.0	36.1	49.2	37.5	16.3	49.9	31.7	27.5
Incr Delay (d2), s/veh	56.6	6.0	6.0	5.4	0.4	0.4	1.0	13.8	2.2	0.5	2.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	14.6	14.7	3.1	7.7	7.5	3.2	18.5	4.6	2.5	8.9	2.4
LnGrp Delay(d),s/veh	107.3	43.2	43.1	56.6	36.4	36.6	50.3	51.3	18.5	50.4	33.6	28.3
LnGrp LOS	F	D	D	E	D	D	D	D	B	D	C	C
Approach Vol, veh/h	1129			643			1477			922		
Approach Delay, s/veh	54.8			39.4			46.7			36.0		
Approach LOS	D			D			D			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.1	44.0	14.0	40.1	16.5	44.6	18.0	36.1				
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	* 38	10.1	45.4	13.0	36.5	13.5	42.0				
Max Q Clear Time (g_c+17.3)	17.3	35.5	7.8	30.0	8.7	19.6	15.2	18.0				
Green Ext Time (p_c), s	0.3	1.2	0.0	5.6	0.1	3.2	0.0	6.5				
Intersection Summary												
HCM 2010 Ctrl Delay	45.4											
HCM 2010 LOS	D											
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan With 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	215	971	276	203	1246	0	0	714	128
Future Volume (veh/h)	0	0	0	215	971	276	203	1246	0	0	714	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				215	971	276	203	1246	0	0	714	128
Adj No. of Lanes				1	3	1	2	2	0	0	2	1
Peak Hour Factor				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				442	1392	395	798	2236	0	0	1171	524
Arrive On Green				0.25	0.25	0.25	0.46	1.00	0.00	0.00	0.33	0.33
Sat Flow, veh/h				1774	5588	1583	3442	3632	0	0	3632	1583
Grp Volume(v), veh/h				215	971	276	203	1246	0	0	714	128
Grp Sat Flow(s),veh/h/ln				1774	1863	1583	1721	1770	0	0	1770	1583
Q Serve(g_s), s				10.4	15.8	15.9	3.6	0.0	0.0	0.0	16.9	5.9
Cycle Q Clear(g_c), s				10.4	15.8	15.9	3.6	0.0	0.0	0.0	16.9	5.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				442	1392	395	798	2236	0	0	1171	524
V/C Ratio(X)				0.49	0.70	0.70	0.25	0.56	0.00	0.00	0.61	0.24
Avail Cap(c_a), veh/h				692	2179	617	798	2236	0	0	1171	524
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.79	0.79
Uniform Delay (d), s/veh				32.1	34.1	34.1	21.6	0.0	0.0	0.0	28.0	24.3
Incr Delay (d2), s/veh				0.6	0.5	1.7	0.1	1.0	0.0	0.0	1.9	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				5.2	8.2	13.5	1.7	0.3	0.0	0.0	8.5	2.7
LnGrp Delay(d),s/veh				32.7	34.6	35.8	21.7	1.0	0.0	0.0	29.9	25.2
LnGrp LOS				C	C	D	C	A			C	C
Approach Vol, veh/h				1462			1449			842		
Approach Delay, s/veh				34.5			3.9			29.2		
Approach LOS				C			A			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		70.1		29.9	30.1	40.0						
Change Period (Y+Rc), s		6.9		5.0	6.9	* 6.9						
Max Green Setting (Gmax), s		49.1		39.0	10.9	* 33						
Max Q Clear Time (g_c+l1), s		2.0		17.9	5.6	18.9						
Green Ext Time (p_c), s		10.6		7.1	3.4	3.7						
Intersection Summary												
HCM 2010 Ctrl Delay				21.5								
HCM 2010 LOS				C								
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan With Project PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	805	181	125	478	67	230	404	191	98	241	151
Future Volume (veh/h)	158	805	181	125	478	67	230	404	191	98	241	151
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	158	805	181	125	478	67	230	404	191	98	241	151
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	190	930	209	153	920	128	262	793	370	133	552	333
Arrive On Green	0.11	0.32	0.32	0.09	0.30	0.30	0.15	0.34	0.34	0.07	0.26	0.26
Sat Flow, veh/h	1774	2873	646	1774	3120	435	1774	2344	1095	1774	2124	1282
Grp Volume(v), veh/h	158	496	490	125	270	275	230	304	291	98	199	193
Grp Sat Flow(s),veh/h/ln	1774	1770	1749	1774	1770	1786	1774	1770	1669	1774	1770	1636
Q Serve(g_s), s	8.7	26.3	26.3	6.9	12.7	12.8	12.7	13.7	14.0	5.4	9.4	9.9
Cycle Q Clear(g_c), s	8.7	26.3	26.3	6.9	12.7	12.8	12.7	13.7	14.0	5.4	9.4	9.9
Prop In Lane	1.00		0.37	1.00		0.24	1.00		0.66	1.00		0.78
Lane Grp Cap(c), veh/h	190	573	566	153	522	527	262	598	564	133	460	425
V/C Ratio(X)	0.83	0.87	0.87	0.81	0.52	0.52	0.88	0.51	0.52	0.74	0.43	0.45
Avail Cap(c_a), veh/h	193	573	566	158	522	527	282	598	564	215	460	425
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	0.57	0.57	0.57	0.79	0.79	0.79	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.8	31.8	31.8	44.9	29.3	29.4	41.7	26.4	26.5	45.3	30.9	31.0
Incr Delay (d2), s/veh	23.6	16.0	16.2	15.4	2.1	2.1	18.9	2.4	2.6	3.0	3.0	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	5.5	15.4	15.2	4.1	6.5	6.6	7.6	7.1	6.8	2.8	5.0	4.9
LnGrp Delay(d),s/veh	67.4	47.8	48.0	60.3	31.4	31.5	60.6	28.9	29.2	48.3	33.8	34.5
LnGrp LOS	E	D	D	E	C	C	E	C	C	D	C	C
Approach Vol, veh/h	1144			670			825			490		
Approach Delay, s/veh	50.6			36.8			37.8			37.0		
Approach LOS	D			D			D			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.7	37.3	19.4	30.6	15.6	34.4	11.6	38.4				
Change Period (Y+Rc), s	4.1	4.9	4.6	* 4.6	4.9	* 4.9	4.1	4.6				
Max Green Setting (Gmax), s	31.5	31.5	15.9	* 26	10.9	* 30	12.1	29.8				
Max Q Clear Time (g_c+1/9), s	28.3	28.3	14.7	11.9	10.7	14.8	7.4	16.0				
Green Ext Time (p_c), s	0.0	1.5	0.1	1.3	0.0	1.8	0.0	2.3				
Intersection Summary												
HCM 2010 Ctrl Delay	42.1											
HCM 2010 LOS	D											
Notes												

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

HCM 2010 Signalized Intersection Summary
General Plan With Project PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	823	148	134	424	120	133	439	153	127	293	50
Future Volume (veh/h)	131	823	148	134	424	120	133	439	153	127	293	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	131	823	148	134	424	120	133	439	153	127	293	50
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	220	974	175	163	787	221	160	723	250	156	911	154
Arrive On Green	0.12	0.33	0.33	0.09	0.29	0.29	0.18	0.56	0.56	0.09	0.30	0.30
Sat Flow, veh/h	1774	2998	539	1774	2731	766	1774	2583	892	1774	3031	511
Grp Volume(v), veh/h	131	486	485	134	273	271	133	300	292	127	170	173
Grp Sat Flow(s),veh/h/ln	1774	1770	1768	1774	1770	1728	1774	1770	1705	1774	1770	1773
Q Serve(g_s), s	7.0	25.5	25.5	7.4	13.0	13.2	7.2	11.3	11.5	7.0	7.4	7.6
Cycle Q Clear(g_c), s	7.0	25.5	25.5	7.4	13.0	13.2	7.2	11.3	11.5	7.0	7.4	7.6
Prop In Lane	1.00		0.31	1.00		0.44	1.00		0.52	1.00		0.29
Lane Grp Cap(c), veh/h	220	575	575	163	510	498	160	495	477	156	532	533
V/C Ratio(X)	0.59	0.84	0.84	0.82	0.54	0.54	0.83	0.60	0.61	0.82	0.32	0.33
Avail Cap(c_a), veh/h	261	575	575	197	510	498	172	495	477	165	532	533
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)	0.62	0.62	0.62	0.47	0.47	0.47	0.95	0.95	0.95	0.85	0.85	0.85
Uniform Delay (d), s/veh	41.4	31.4	31.4	44.6	30.0	30.1	40.3	18.3	18.4	44.8	27.0	27.1
Incr Delay (d2), s/veh	0.6	9.3	9.3	8.7	1.9	2.0	23.5	5.1	5.5	20.2	1.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	13.9	13.9	4.0	6.6	6.6	4.6	6.0	5.9	4.3	3.8	3.9
LnGrp Delay(d),s/veh	42.0	40.7	40.7	53.3	31.9	32.0	63.8	23.4	23.9	65.0	28.4	28.5
LnGrp LOS	D	D	D	D	C	C	E	C	C	E	C	C
Approach Vol, veh/h	1102			678			725			470		
Approach Delay, s/veh	40.8			36.2			31.0			38.3		
Approach LOS	D			D			C			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.2	34.4	13.3	37.1	13.1	36.5	17.0	33.4				
Change Period (Y+Rc), s	6.4	* 6.4	4.1	4.6	4.1	6.4	4.6	* 4.6				
Max Green Setting (Gmax), s	28	* 28	11.1	32.4	9.7	27.6	14.7	* 29				
Max Q Clear Time (g_c+1.0), s	13.5	13.5	9.4	27.5	9.2	9.6	9.0	15.2				
Green Ext Time (p_c), s	0.0	2.0	0.0	2.0	0.0	1.3	2.3	1.8				
Intersection Summary												
HCM 2010 Ctrl Delay				37.0								
HCM 2010 LOS				D								
Notes												

SEC CCP/Mission TIA
11: Escondido Blvd & Woodward

HCM 2010 Signalized Intersection Summary
General Plan With 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	13	74	0	97	1	635	89	78	490	16
Future Volume (veh/h)	8	1	13	74	0	97	1	635	89	78	490	16
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	13	74	0	97	1	635	89	78	490	16
Adj No. of Lanes	0	1	0	0	1	1	0	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	23	62	195	0	132	36	1436	201	526	2856	93
Arrive On Green	0.08	0.08	0.08	0.08	0.00	0.08	0.47	0.47	0.47	0.30	0.82	0.82
Sat Flow, veh/h	240	275	744	1473	0	1583	1	3055	427	1774	3498	114
Grp Volume(v), veh/h	22	0	0	74	0	97	387	0	338	78	248	258
Grp Sat Flow(s),veh/h/ln	259	0	0	1473	0	1583	1862	0	1620	1774	1770	1843
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	14.0	3.2	3.0	3.0
Cycle Q Clear(g_c), s	4.6	0.0	0.0	4.6	0.0	6.0	13.9	0.0	14.0	3.2	3.0	3.0
Prop In Lane	0.36		0.59	1.00		1.00	0.00		0.26	1.00		0.06
Lane Grp Cap(c), veh/h	154	0	0	195	0	132	911	0	761	526	1445	1504
V/C Ratio(X)	0.14	0.00	0.00	0.38	0.00	0.73	0.42	0.00	0.44	0.15	0.17	0.17
Avail Cap(c_a), veh/h	407	0	0	427	0	396	911	0	761	526	1445	1504
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	42.6	0.0	0.0	44.1	0.0	44.7	17.7	0.0	17.7	25.9	2.0	2.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.5	0.0	2.9	1.5	0.0	1.9	0.0	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	0.6	0.0	0.0	2.0	0.0	2.7	7.5	0.0	6.6	1.6	1.5	1.6
LnGrp Delay(d),s/veh	42.7	0.0	0.0	44.6	0.0	47.6	19.2	0.0	19.6	25.9	2.2	2.2
LnGrp LOS	D			D		D	B		B	C	A	A
Approach Vol, veh/h	22			171			725			584		
Approach Delay, s/veh	42.7			46.3			19.4			5.4		
Approach LOS	D			D			B			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	34.6	52.0		13.4		86.6		13.4				
Change Period (Y+Rc), s	5.0	* 5		* 5		5.0		5.0				
Max Green Setting (Gmax), s	14.0	* 47		* 26		65.0		25.0				
Max Q Clear Time (g_c+1.2), s	15.2	16.0		6.6		5.0		8.0				
Green Ext Time (p_c), s	2.0	4.8		0.4		3.2		0.4				
Intersection Summary												
HCM 2010 Ctrl Delay	17.3											
HCM 2010 LOS	B											
Notes												

SEC CCP/Mission TIA
12: Broadway & Mission Ave

HCM 2010 Signalized Intersection Summary
General Plan With Project PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	699	186	105	420	202	176	879	151	245	710	95
Future Volume (veh/h)	210	699	186	105	420	202	176	879	151	245	710	95
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	210	699	186	105	420	202	176	879	151	245	710	95
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	221	749	199	132	514	245	253	934	160	258	980	131
Arrive On Green	0.12	0.27	0.27	0.07	0.22	0.22	0.14	0.31	0.31	0.15	0.31	0.31
Sat Flow, veh/h	1774	2767	736	1774	2329	1108	1774	3022	519	1774	3139	420
Grp Volume(v), veh/h	210	447	438	105	318	304	176	515	515	245	400	405
Grp Sat Flow(s),veh/h/ln	1774	1770	1733	1774	1770	1667	1774	1770	1771	1774	1770	1789
Q Serve(g_s), s	10.6	22.2	22.2	5.2	15.4	15.6	8.5	25.5	25.5	12.3	18.1	18.1
Cycle Q Clear(g_c), s	10.6	22.2	22.2	5.2	15.4	15.6	8.5	25.5	25.5	12.3	18.1	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	221	479	469	132	391	368	253	547	548	258	553	558
V/C Ratio(X)	0.95	0.93	0.93	0.80	0.81	0.83	0.70	0.94	0.94	0.95	0.72	0.73
Avail Cap(c_a), veh/h	221	482	472	132	393	370	253	547	548	258	553	558
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)	0.39	0.39	0.39	1.00	1.00	1.00	0.60	0.60	0.60	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.1	32.0	32.0	41.0	33.3	33.4	36.7	30.3	30.3	38.1	27.5	27.5
Incr Delay (d2), s/veh	26.3	12.8	13.1	27.6	12.3	14.1	4.9	18.5	18.5	42.1	8.0	8.0
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	6.8	12.5	12.3	3.6	8.8	8.6	4.5	15.2	15.3	9.1	10.0	10.1
LnGrp Delay(d),s/veh	65.4	44.8	45.1	68.6	45.6	47.5	41.7	48.8	48.8	80.2	35.5	35.5
LnGrp LOS	E	D	D	E	D	D	D	D	D	F	D	D
Approach Vol, veh/h	1095			727			1206			1050		
Approach Delay, s/veh	48.9			49.7			47.7			45.9		
Approach LOS	D			D			D			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.6	32.3	11.2	28.9	17.3	32.6	15.7	24.4				
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	13.1	27.7	6.7	24.5	12.7	28.1	11.2	20.0				
Max Q Clear Time (g_c+14.3), s	14.3	27.5	7.2	24.2	10.5	20.1	12.6	17.6				
Green Ext Time (p_c), s	0.0	0.1	0.0	0.2	1.4	3.0	0.0	1.0				
Intersection Summary												
HCM 2010 Ctrl Delay			47.9									
HCM 2010 LOS			D									

SEC CCP/Mission TIA
13: Broadway & Washington Ave

HCM 2010 Signalized Intersection Summary
General Plan With Project PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	738	75	67	390	232	178	633	60	264	471	120
Future Volume (veh/h)	226	738	75	67	390	232	178	633	60	264	471	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	226	738	75	67	390	232	178	633	60	264	471	120
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	262	871	88	140	430	252	212	837	79	384	987	250
Arrive On Green	0.05	0.09	0.09	0.08	0.20	0.20	0.12	0.26	0.26	0.22	0.35	0.35
Sat Flow, veh/h	1774	3245	330	1774	2148	1262	1774	3268	309	1774	2799	708
Grp Volume(v), veh/h	226	402	411	67	320	302	178	342	351	264	297	294
Grp Sat Flow(s),veh/h/ln	1774	1770	1805	1774	1770	1640	1774	1770	1808	1774	1770	1738
Q Serve(g_s), s	12.7	22.4	22.4	3.6	17.7	18.0	9.8	17.8	17.9	13.7	13.0	13.2
Cycle Q Clear(g_c), s	12.7	22.4	22.4	3.6	17.7	18.0	9.8	17.8	17.9	13.7	13.0	13.2
Prop In Lane	1.00		0.18	1.00		0.77	1.00		0.17	1.00		0.41
Lane Grp Cap(c), veh/h	262	475	485	140	354	328	212	453	463	384	624	613
V/C Ratio(X)	0.86	0.85	0.85	0.48	0.91	0.92	0.84	0.76	0.76	0.69	0.48	0.48
Avail Cap(c_a), veh/h	300	534	545	140	354	328	318	453	463	384	624	613
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)	0.45	0.45	0.45	1.00	1.00	1.00	1.00	1.00	1.00	0.59	0.59	0.59
Uniform Delay (d), s/veh	46.6	43.5	43.6	44.1	39.1	39.2	43.1	34.3	34.3	36.1	25.2	25.2
Incr Delay (d2), s/veh	10.2	5.4	5.3	2.5	25.8	30.0	11.8	11.2	11.0	3.1	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	7.0	11.7	11.9	1.9	11.2	10.9	5.5	10.2	10.4	7.0	6.6	6.6
LnGrp Delay(d),s/veh	56.8	48.9	48.9	46.6	64.9	69.2	54.9	45.5	45.4	39.1	26.7	26.8
LnGrp LOS	E	D	D	D	E	E	D	D	D	D	C	C
Approach Vol, veh/h	1039			689			871			855		
Approach Delay, s/veh	50.6			65.0			47.4			30.6		
Approach LOS	D			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	26.1	30.1	12.4	31.3	16.5	39.8	19.3	24.5				
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	19.5	25.6	6.7	30.2	17.9	27.2	16.9	20.0				
Max Q Clear Time (g_c+1.5), s	19.9	19.9	5.6	24.4	11.8	15.2	14.7	20.0				
Green Ext Time (p_c), s	0.5	2.0	0.5	2.4	0.2	3.5	0.1	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	47.7											
HCM 2010 LOS	D											

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	96	1358	87	0	872
Future Vol, veh/h	0	96	1358	87	0	872
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	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	96	1358	87	0	872
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	679	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	394	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	394	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	17.1		0		0	
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT			
Capacity (veh/h)	-	- 394	-			
HCM Lane V/C Ratio	-	- 0.244	-			
HCM Control Delay (s)	-	- 17.1	-			
HCM Lane LOS	-	- C	-			
HCM 95th %tile Q(veh)	-	- 0.9	-			

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑		↑
Traffic Vol, veh/h	1176	96	0	870	0	78
Future Vol, veh/h	1176	96	0	870	0	78
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	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1176	96	0	870	0	78
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	636
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	-	0	421
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	421
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		15.5	
HCM LOS					C	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	421	-	-	-		
HCM Lane V/C Ratio	0.185	-	-	-		
HCM Control Delay (s)	15.5	-	-	-		
HCM Lane LOS	C	-	-	-		
HCM 95th %tile Q(veh)	0.7	-	-	-		

APPENDIX N

Horizon Year 2035 With Project With Improvements HCM Analysis Sheets

HCM 2010 Signalized Intersection Summary

2: Quince St & Mission Ave

04/30/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	435	82	222	1188	78	147	26	115	55	29	30
Future Volume (veh/h)	26	435	82	222	1188	78	147	26	115	55	29	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	26	435	82	222	1188	78	147	26	115	55	29	30
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	1044	196	249	1541	101	175	539	458	105	210	217
Arrive On Green	0.04	0.35	0.35	0.28	0.91	0.91	0.10	0.29	0.29	0.06	0.25	0.25
Sat Flow, veh/h	1774	2977	557	1774	3372	221	1774	1863	1583	1774	840	869
Grp Volume(v), veh/h	26	257	260	222	623	643	147	26	115	55	0	59
Grp Sat Flow(s),veh/h/ln	1774	1770	1764	1774	1770	1824	1774	1863	1583	1774	0	1709
Q Serve(g_s), s	1.7	13.3	13.4	14.4	12.3	12.4	9.8	1.2	4.6	3.6	0.0	3.2
Cycle Q Clear(g_c), s	1.7	13.3	13.4	14.4	12.3	12.4	9.8	1.2	4.6	3.6	0.0	3.2
Prop In Lane	1.00		0.32	1.00		0.12	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	69	621	619	249	809	833	175	539	458	105	0	427
V/C Ratio(X)	0.38	0.41	0.42	0.89	0.77	0.77	0.84	0.05	0.25	0.52	0.00	0.14
Avail Cap(c_a), veh/h	118	621	619	361	809	833	207	539	458	137	0	427
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	0.57	0.57	0.57	0.94	0.94	0.94	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.3	29.6	29.6	42.2	3.3	3.3	53.2	30.7	15.5	54.8	0.0	35.0
Incr Delay (d2), s/veh	4.0	2.0	2.0	11.6	4.1	4.0	22.2	0.2	1.2	4.8	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	6.8	6.9	7.8	6.1	6.3	5.9	0.6	2.2	1.9	0.0	1.6
LnGrp Delay(d),s/veh	60.2	31.5	31.6	53.9	7.4	7.3	75.4	30.9	16.7	59.5	0.0	35.6
LnGrp LOS	E	C	C	D	A	A	E	C	B	E		D
Approach Vol, veh/h		543			1488			288			114	
Approach Delay, s/veh		33.0			14.3			47.9			47.2	
Approach LOS		C			B			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	21.5	47.5	15.9	35.1	8.7	60.2	11.2	39.8				
Change Period (Y+Rc), s	4.6	5.4	4.1	5.1	4.1	5.4	4.1	5.1				
Max Green Setting (Gmax), s	24.4	32.4	14.0	30.0	8.0	49.3	9.3	34.7				
Max Q Clear Time (g_c+I1), s	16.4	15.4	11.8	5.2	3.7	14.4	5.6	6.6				
Green Ext Time (p_c), s	0.5	14.5	0.1	0.3	0.0	26.6	0.2	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay				24.0								
HCM 2010 LOS				C								

HCM 2010 Signalized Intersection Summary

6: Centre City Pkwy & Mission Ave

04/30/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	397	114	94	709	265	221	603	74	211	1156	559
Future Volume (veh/h)	138	397	114	94	709	265	221	603	74	211	1156	559
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	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	138	397	114	94	709	265	221	603	74	211	1156	559
Adj No. of Lanes	2	2	1	2	2	1	2	3	1	2	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	780	333	318	895	382	282	1822	559	300	1308	575
Arrive On Green	0.02	0.07	0.07	0.21	0.51	0.51	0.18	0.72	0.72	0.09	0.37	0.37
Sat Flow, veh/h	3442	3539	1512	3079	3539	1511	3079	5085	1559	3442	3539	1556
Grp Volume(v), veh/h	138	397	114	94	709	265	221	603	74	211	1156	559
Grp Sat Flow(s),veh/h/ln	1721	1770	1512	1540	1770	1511	1540	1695	1559	1721	1770	1556
Q Serve(g_s), s	4.8	13.0	6.3	3.1	19.8	11.2	8.2	5.3	1.8	7.2	36.7	42.4
Cycle Q Clear(g_c), s	4.8	13.0	6.3	3.1	19.8	11.2	8.2	5.3	1.8	7.2	36.7	42.4
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	256	780	333	318	895	382	282	1822	559	300	1308	575
V/C Ratio(X)	0.54	0.51	0.34	0.30	0.79	0.69	0.78	0.33	0.13	0.70	0.88	0.97
Avail Cap(c_a), veh/h	258	1032	441	318	1032	441	295	1822	559	364	1308	575
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.5	49.4	25.1	43.9	27.1	12.8	47.9	11.7	11.2	53.3	35.4	37.2
Incr Delay (d2), s/veh	1.1	0.3	0.4	0.2	3.5	3.4	11.1	0.5	0.5	3.2	8.9	31.3
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	6.4	2.7	1.3	9.9	4.9	3.9	2.4	0.8	3.5	19.4	23.1
LnGrp Delay(d),s/veh	57.6	49.7	25.5	44.1	30.6	16.3	59.0	12.1	11.7	56.4	44.3	68.5
LnGrp LOS	E	D	C	D	C	B	E	B	B	E	D	E
Approach Vol, veh/h		649			1068			898			1926	
Approach Delay, s/veh		47.1			28.2			23.6			52.7	
Approach LOS		D			C			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.8	49.4	17.3	31.4	15.5	50.8	13.4	35.2				
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	12.7	* 43	9.0	* 35	11.5	44.2	9.0	35.0				
Max Q Clear Time (g_c+I1), s	9.2	7.3	5.1	15.0	10.2	44.4	6.8	21.8				
Green Ext Time (p_c), s	1.3	3.8	1.9	2.3	0.1	0.0	0.0	3.8				
Intersection Summary												
HCM 2010 Ctrl Delay			40.4									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary

9: Escondido Blvd & Mission Ave

04/30/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	382	161	92	616	39	162	174	79	102	361	209
Future Volume (veh/h)	93	382	161	92	616	39	162	174	79	102	361	209
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	93	382	161	92	616	39	162	174	79	102	361	209
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	297	774	322	297	1073	68	217	708	309	129	533	303
Arrive On Green	0.17	0.32	0.32	0.17	0.32	0.32	0.12	0.29	0.29	0.07	0.25	0.25
Sat Flow, veh/h	1774	2439	1014	1774	3381	214	1774	2401	1047	1774	2175	1239
Grp Volume(v), veh/h	93	276	267	92	322	333	162	126	127	102	293	277
Grp Sat Flow(s),veh/h/ln	1774	1770	1684	1774	1770	1825	1774	1770	1678	1774	1770	1644
Q Serve(g_s), s	5.5	15.1	15.5	5.5	18.2	18.3	10.6	6.5	6.9	6.8	17.9	18.4
Cycle Q Clear(g_c), s	5.5	15.1	15.5	5.5	18.2	18.3	10.6	6.5	6.9	6.8	17.9	18.4
Prop In Lane	1.00		0.60	1.00		0.12	1.00		0.62	1.00		0.75
Lane Grp Cap(c), veh/h	297	562	535	297	562	579	217	522	495	129	434	403
V/C Ratio(X)	0.31	0.49	0.50	0.31	0.57	0.57	0.75	0.24	0.26	0.79	0.67	0.69
Avail Cap(c_a), veh/h	297	562	535	297	562	579	309	522	495	220	434	403
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	0.32	0.32	0.32	0.94	0.94	0.94	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	33.1	33.2	43.9	34.2	34.2	50.8	32.1	32.3	54.8	41.0	41.1
Incr Delay (d2), s/veh	0.2	3.0	3.3	0.1	1.4	1.3	2.8	1.0	1.2	4.1	8.2	9.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	7.8	7.7	2.7	9.1	9.4	5.3	3.3	3.4	3.5	9.8	9.4
LnGrp Delay(d),s/veh	44.1	36.2	36.5	43.9	35.5	35.5	53.6	33.1	33.4	58.9	49.1	50.4
LnGrp LOS	D	D	D	D	D	D	D	C	C	E	D	D
Approach Vol, veh/h		636			747			415			672	
Approach Delay, s/veh		37.5			36.6			41.2			51.1	
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	24.2	43.0	18.8	34.0	24.2	43.0	12.8	40.0				
Change Period (Y+Rc), s	4.1	4.9	4.1	4.6	4.1	4.9	4.1	4.6				
Max Green Setting (Gmax), s	13.9	38.1	20.9	29.4	13.9	38.1	14.9	35.4				
Max Q Clear Time (g_c+I1), s	7.5	17.5	12.6	20.4	7.5	20.3	8.8	8.9				
Green Ext Time (p_c), s	0.1	2.0	0.2	1.6	0.1	2.3	0.2	0.9				
Intersection Summary												
HCM 2010 Ctrl Delay				41.5								
HCM 2010 LOS				D								

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)	85	312	82	68	617	101	183	682	60	126	886	166
Future Volume (veh/h)	85	312	82	68	617	101	183	682	60	126	886	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	85	312	82	68	617	101	183	682	60	126	886	166
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	125	640	165	133	712	116	343	1091	488	702	1519	680
Arrive On Green	0.14	0.46	0.46	0.15	0.47	0.47	0.03	0.10	0.10	0.27	0.57	0.57
Sat Flow, veh/h	1774	2785	721	1774	3047	498	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	85	197	197	68	358	360	183	682	60	126	886	166
Grp Sat Flow(s),veh/h/ln	1774	1770	1736	1774	1770	1775	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	5.5	9.3	9.6	4.2	21.7	21.8	6.3	22.2	3.1	3.4	19.3	6.3
Cycle Q Clear(g_c), s	5.5	9.3	9.6	4.2	21.7	21.8	6.3	22.2	3.1	3.4	19.3	6.3
Prop In Lane	1.00		0.42	1.00		0.28	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	125	406	399	133	414	415	343	1091	488	702	1519	680
V/C Ratio(X)	0.68	0.48	0.50	0.51	0.87	0.87	0.53	0.62	0.12	0.18	0.58	0.24
Avail Cap(c_a), veh/h	133	605	593	148	619	621	344	1091	488	702	1519	680
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	0.33	0.33	0.33	1.33	1.33	1.33
Upstream Filter(I)	0.99	0.99	0.99	0.83	0.83	0.83	0.95	0.95	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.2	27.5	27.6	49.0	30.3	30.3	55.3	47.2	22.6	36.0	18.8	16.0
Incr Delay (d2), s/veh	9.5	0.3	0.4	0.9	4.8	4.9	0.8	2.6	0.5	0.0	1.6	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	3.0	4.5	4.5	2.1	11.1	11.2	3.0	11.3	1.4	1.6	9.7	2.9
LnGrp Delay(d),s/veh	59.7	27.8	27.9	50.0	35.0	35.2	56.1	49.8	23.1	36.1	20.5	16.9
LnGrp LOS	E	C	C	D	D	D	E	D	C	D	C	B
Approach Vol, veh/h		479			786			925			1178	
Approach Delay, s/veh		33.5			36.4			49.3			21.7	
Approach LOS		C			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	31.0	43.5	13.5	32.1	16.5	58.0	13.0	32.6				
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	* 37	10.0	41.0	12.0	37.0	9.0	42.0				
Max Q Clear Time (g_c+I1), s	5.4	24.2	6.2	11.6	8.3	21.3	7.5	23.8				
Green Ext Time (p_c), s	1.1	2.6	0.0	4.7	0.1	4.3	0.0	4.2				
Intersection Summary												
HCM 2010 Ctrl Delay			34.4									
HCM 2010 LOS			C									
Notes												

HCM 2010 Signalized Intersection Summary

2: Quince St & Mission Ave

04/30/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	978	92	114	700	106	105	46	217	170	53	24
Future Volume (veh/h)	36	978	92	114	700	106	105	46	217	170	53	24
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	978	92	114	700	106	105	46	217	170	53	24
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	1343	126	141	1264	191	132	421	358	220	335	152
Arrive On Green	0.07	0.41	0.41	0.03	0.14	0.14	0.07	0.23	0.23	0.12	0.28	0.28
Sat Flow, veh/h	1774	3270	308	1774	3083	467	1774	1863	1583	1774	1215	550
Grp Volume(v), veh/h	36	529	541	114	402	404	105	46	217	170	0	77
Grp Sat Flow(s),veh/h/ln	1774	1770	1808	1774	1770	1780	1774	1863	1583	1774	0	1766
Q Serve(g_s), s	2.3	30.2	30.2	7.7	25.4	25.5	7.0	2.4	11.7	11.1	0.0	4.0
Cycle Q Clear(g_c), s	2.3	30.2	30.2	7.7	25.4	25.5	7.0	2.4	11.7	11.1	0.0	4.0
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	130	726	742	141	726	730	132	421	358	220	0	487
V/C Ratio(X)	0.28	0.73	0.73	0.81	0.55	0.55	0.80	0.11	0.61	0.77	0.00	0.16
Avail Cap(c_a), veh/h	130	726	742	183	726	730	161	421	358	250	0	487
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.75	0.75	0.75	0.89	0.89	0.89	0.91	0.91	0.91	1.00	0.00	1.00
Uniform Delay (d), s/veh	52.6	29.7	29.7	57.5	41.6	41.6	54.7	36.9	26.2	50.9	0.0	32.9
Incr Delay (d2), s/veh	1.0	4.8	4.7	17.6	2.7	2.7	19.4	0.5	6.8	12.9	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	15.7	16.0	4.5	13.0	13.1	4.2	1.3	5.8	6.3	0.0	2.0
LnGrp Delay(d),s/veh	53.6	34.5	34.4	75.2	44.3	44.3	74.1	37.3	33.0	63.8	0.0	33.6
LnGrp LOS	D	C	C	E	D	D	E	D	C	E		C
Approach Vol, veh/h		1106			920			368			247	
Approach Delay, s/veh		35.1			48.1			45.3			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	14.1	54.7	13.0	38.2	14.2	54.6	19.0	32.2				
Change Period (Y+Rc), s	4.6	5.4	4.1	5.1	5.4	* 5.4	4.1	5.1				
Max Green Setting (Gmax), s	12.4	44.4	10.9	33.1	8.1	* 49	16.9	27.1				
Max Q Clear Time (g_c+I1), s	9.7	32.2	9.0	6.0	4.3	27.5	13.1	13.7				
Green Ext Time (p_c), s	0.1	8.3	0.2	0.4	1.4	9.2	0.4	0.9				
Intersection Summary												
HCM 2010 Ctrl Delay			42.9									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary

6: Centre City Pkwy & Mission Ave

04/30/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 		 	  		 	 	
Traffic Volume (veh/h)	302	928	158	103	444	352	174	1150	88	239	615	261
Future Volume (veh/h)	302	928	158	103	444	352	174	1150	88	239	615	261
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		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	302	928	158	103	444	352	174	1150	88	239	615	261
Adj No. of Lanes	2	2	1	1	2	1	2	3	1	2	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	1061	457	136	1004	430	281	1509	462	299	1090	479
Arrive On Green	0.03	0.10	0.10	0.14	0.47	0.47	0.09	0.30	0.30	0.09	0.31	0.31
Sat Flow, veh/h	3442	3539	1526	1587	3539	1517	3079	5085	1558	3442	3539	1554
Grp Volume(v), veh/h	302	928	158	103	444	352	174	1150	88	239	615	261
Grp Sat Flow(s),veh/h/ln	1721	1770	1526	1587	1770	1517	1540	1695	1558	1721	1770	1554
Q Serve(g_s), s	10.5	31.0	8.1	7.5	10.0	16.5	6.5	24.7	5.1	8.2	17.5	16.8
Cycle Q Clear(g_c), s	10.5	31.0	8.1	7.5	10.0	16.5	6.5	24.7	5.1	8.2	17.5	16.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	363	1061	457	136	1004	430	281	1509	462	299	1090	479
V/C Ratio(X)	0.83	0.87	0.35	0.76	0.44	0.82	0.62	0.76	0.19	0.80	0.56	0.55
Avail Cap(c_a), veh/h	445	1153	497	165	1065	456	316	1509	462	359	1090	479
HCM Platoon Ratio	0.33	0.33	0.33	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.61	0.61	0.61	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.9	51.8	20.9	50.2	25.3	13.7	52.5	38.4	31.5	53.8	34.8	34.5
Incr Delay (d2), s/veh	5.7	4.5	0.2	11.3	0.2	10.3	1.8	3.7	0.9	8.5	2.1	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	5.3	15.9	3.4	3.7	4.9	7.9	2.8	12.0	2.3	4.2	8.9	7.8
LnGrp Delay(d),s/veh	62.6	56.3	21.1	61.5	25.5	24.0	54.3	42.1	32.4	62.3	36.9	39.0
LnGrp LOS	E	E	C	E	C	C	D	D	C	E	D	D
Approach Vol, veh/h	1388				899				1412			
Approach Delay, s/veh	53.7				29.1				43.0			
Approach LOS	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	16.8	42.0	15.2	40.9	15.5	43.4	17.2	38.9				
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	12.5	* 36	12.5	* 39	12.3	35.8	15.5	36.1				
Max Q Clear Time (g_c+I1), s	10.2	26.7	9.5	33.0	8.5	19.5	12.5	18.5				
Green Ext Time (p_c), s	0.2	4.5	1.2	2.9	0.1	4.2	0.2	3.3				
Intersection Summary												
HCM 2010 Ctrl Delay	43.4											
HCM 2010 LOS	D											
Notes												

HCM 2010 Signalized Intersection Summary

9: Escondido Blvd & Mission Ave

04/30/2017

																
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR				
Lane Configurations																
Traffic Volume (veh/h)	158	805	181	125	478	67	230	404	191	98	241	151				
Future Volume (veh/h)	158	805	181	125	478	67	230	404	191	98	241	151				
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	158	805	181	125	478	67	230	404	191	98	241	151				
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0				
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2				
Cap, veh/h	324	1149	258	151	923	129	260	700	327	122	460	278				
Arrive On Green	0.18	0.40	0.40	0.08	0.30	0.30	0.15	0.30	0.30	0.07	0.22	0.22				
Sat Flow, veh/h	1774	2873	646	1774	3120	435	1774	2344	1095	1774	2124	1282				
Grp Volume(v), veh/h	158	496	490	125	270	275	230	304	291	98	199	193				
Grp Sat Flow(s),veh/h/ln	1774	1770	1749	1774	1770	1786	1774	1770	1669	1774	1770	1636				
Q Serve(g_s), s	9.6	28.0	28.0	8.3	15.2	15.4	15.3	17.4	17.8	6.5	11.9	12.5				
Cycle Q Clear(g_c), s	9.6	28.0	28.0	8.3	15.2	15.4	15.3	17.4	17.8	6.5	11.9	12.5				
Prop In Lane	1.00		0.37	1.00		0.24	1.00		0.66	1.00		0.78				
Lane Grp Cap(c), veh/h	324	708	699	151	524	528	260	529	499	122	383	355				
V/C Ratio(X)	0.49	0.70	0.70	0.83	0.52	0.52	0.88	0.57	0.58	0.80	0.52	0.54				
Avail Cap(c_a), veh/h	324	708	699	191	524	528	324	529	499	197	383	355				
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	0.57	0.57	0.57	0.79	0.79	0.79	1.00	1.00	1.00				
Uniform Delay (d), s/veh	44.0	30.0	30.0	54.0	35.1	35.2	50.2	35.6	35.7	55.1	41.5	41.7				
Incr Delay (d2), s/veh	0.4	5.7	5.8	10.7	2.1	2.1	15.0	3.5	3.9	4.6	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	4.7	14.8	14.6	4.5	7.7	7.9	8.6	9.0	8.7	3.4	6.3	6.3				
LnGrp Delay(d),s/veh	44.4	35.7	35.8	64.7	37.2	37.3	65.2	39.2	39.6	59.7	46.5	47.6				
LnGrp LOS	D	D	D	E	D	D	E	D	D	E	D	D				
Approach Vol, veh/h	1144				670				825							
Approach Delay, s/veh	37.0				42.4				46.6							
Approach LOS	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	14.3	52.9	22.2	30.6	26.8	40.4	12.3	40.5								
Change Period (Y+Rc), s	4.1	4.9	4.6	* 4.6	4.9	* 4.9	4.1	4.6								
Max Green Setting (Gmax), s	12.9	41.5	21.9	* 26	18.9	* 36	13.3	34.6								
Max Q Clear Time (g_c+I1), s	10.3	30.0	17.3	14.5	11.6	17.4	8.5	19.8								
Green Ext Time (p_c), s	0.0	3.5	0.4	1.2	2.8	1.9	0.0	2.4								
Intersection Summary																
HCM 2010 Ctrl Delay	42.6															
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)	204	813	112	93	391	159	209	1067	201	165	658	99
Future Volume (veh/h)	204	813	112	93	391	159	209	1067	201	165	658	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	1863	1863	1863	1863
Adj Flow Rate, veh/h	204	813	112	93	391	159	209	1067	201	165	658	99
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	966	133	146	676	272	358	1153	516	316	1171	524
Arrive On Green	0.12	0.31	0.31	0.08	0.27	0.27	0.10	0.33	0.33	0.09	0.33	0.33
Sat Flow, veh/h	1774	3126	431	1774	2467	990	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	204	460	465	93	279	271	209	1067	201	165	658	99
Grp Sat Flow(s),veh/h/ln	1774	1770	1787	1774	1770	1688	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	13.2	28.0	28.0	5.8	15.6	16.0	6.7	33.5	8.3	5.3	17.6	5.1
Cycle Q Clear(g_c), s	13.2	28.0	28.0	5.8	15.6	16.0	6.7	33.5	8.3	5.3	17.6	5.1
Prop In Lane	1.00		0.24	1.00		0.59	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	547	552	146	485	463	358	1153	516	316	1171	524
V/C Ratio(X)	0.98	0.84	0.84	0.64	0.58	0.59	0.58	0.93	0.39	0.52	0.56	0.19
Avail Cap(c_a), veh/h	208	698	704	156	645	616	389	1153	516	359	1171	524
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	50.7	37.2	37.2	51.2	36.0	36.1	49.2	37.5	16.3	49.9	31.7	27.5
Incr Delay (d2), s/veh	56.6	6.0	6.0	5.4	0.4	0.4	1.0	13.8	2.2	0.5	2.0	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	9.7	14.6	14.7	3.1	7.7	7.5	3.2	18.5	4.6	2.5	8.9	2.4
LnGrp Delay(d),s/veh	107.3	43.2	43.1	56.6	36.4	36.6	50.3	51.3	18.5	50.4	33.6	28.3
LnGrp LOS	F	D	D	E	D	D	D	D	B	D	C	C
Approach Vol, veh/h	1129				643				1477			
Approach Delay, s/veh	54.8				39.4				46.7			
Approach LOS	D				D				D			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.1	44.0	14.0	40.1	16.5	44.6	18.0	36.1				
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	* 38	10.1	45.4	13.0	36.5	13.5	42.0				
Max Q Clear Time (g_c+I1), s	7.3	35.5	7.8	30.0	8.7	19.6	15.2	18.0				
Green Ext Time (p_c), s	0.3	1.2	0.0	5.6	0.1	3.2	0.0	6.5				
Intersection Summary												
HCM 2010 Ctrl Delay	45.4											
HCM 2010 LOS	D											
Notes												

APPENDIX O
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.

Queues

4: Centre City Pkwy & El Norte Pkwy

04/30/2017



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	10	674	268	290	934	224	377	112	262	1109	62
v/c Ratio	0.04	0.71	0.47	0.82	0.73	0.71	0.29	0.17	0.73	0.83	0.09
Control Delay	72.0	54.8	13.4	87.0	45.5	81.6	37.5	4.2	79.4	51.2	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	72.0	54.8	13.4	87.0	45.5	81.6	37.5	4.2	79.4	51.2	0.3
Queue Length 50th (ft)	5	324	45	145	387	112	139	0	131	523	0
Queue Length 95th (ft)	16	394	128	#232	542	#184	213	33	192	#705	0
Internal Link Dist (ft)		626			387		1496			507	
Turn Bay Length (ft)	150			100		250		200	225		225
Base Capacity (vph)	226	1217	681	384	1362	316	1287	659	440	1329	676
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	0.04	0.55	0.39	0.76	0.69	0.71	0.29	0.17	0.60	0.83	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

04/30/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	138	397	114	94	709	265	221	603	74	211	1156	559
v/c Ratio	0.54	0.57	0.26	0.22	0.77	0.50	0.76	0.30	0.11	0.58	0.82	0.74
Control Delay	69.5	57.0	18.5	30.8	27.4	5.8	58.2	16.8	0.5	58.1	38.7	25.6
Queue Delay	0.0	0.0	0.0	0.0	0.3	0.0	1.6	0.0	0.0	0.0	0.0	0.1
Total Delay	69.5	57.0	18.5	30.8	27.7	5.8	59.8	16.8	0.5	58.1	38.7	25.7
Queue Length 50th (ft)	58	156	28	18	143	11	77	128	3	81	437	239
Queue Length 95th (ft)	93	201	75	m55	174	41	#137	102	m0	122	#543	396
Internal Link Dist (ft)		505			173			213			925	
Turn Bay Length (ft)	250		75	100		125	250		150	300		150
Base Capacity (vph)	257	1032	568	424	1032	570	294	1979	704	363	1415	755
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	57	0	15	0	0	0	0	7
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.38	0.20	0.22	0.73	0.46	0.79	0.30	0.11	0.58	0.82	0.75

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

04/30/2017



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	85	394	68	718	183	682	60	126	886	166
v/c Ratio	0.64	0.42	0.46	0.82	0.52	0.47	0.08	0.37	0.62	0.22
Control Delay	69.3	34.3	63.2	31.4	45.2	18.9	2.8	74.8	50.9	21.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.3	34.3	63.2	31.4	45.2	18.9	2.8	74.8	50.9	21.7
Queue Length 50th (ft)	66	134	36	283	69	206	6	53	371	67
Queue Length 95th (ft)	#129	174	84	356	108	295	26	m70	447	m98
Internal Link Dist (ft)		596		568		1927			946	
Turn Bay Length (ft)	250		165		350		250	325		375
Base Capacity (vph)	132	1191	147	1223	355	1445	713	343	1433	739
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	0.64	0.33	0.46	0.59	0.52	0.47	0.08	0.37	0.62	0.22

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

04/30/2017



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	49	941	202	160	851	403	857	339	202	247	30
v/c Ratio	0.15	0.95	0.34	0.49	0.79	0.88	0.90	0.56	0.48	0.27	0.06
Control Delay	44.9	56.7	5.9	50.6	39.1	66.5	51.1	13.4	47.0	32.1	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	44.9	56.7	5.9	50.6	39.1	66.5	51.1	13.4	47.0	32.1	0.2
Queue Length 50th (ft)	15	326	0	53	274	139	292	49	65	70	0
Queue Length 95th (ft)	34	#455	53	87	#380	#222	#406	137	103	104	0
Internal Link Dist (ft)		626			387		1496			507	
Turn Bay Length (ft)	150			100		250		200	225		225
Base Capacity (vph)	326	990	588	326	1080	457	950	605	425	910	519
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	0.15	0.95	0.34	0.49	0.79	0.88	0.90	0.56	0.48	0.27	0.06

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

04/30/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	302	928	158	103	444	352	174	1150	88	239	615	261
v/c Ratio	0.76	0.86	0.27	0.70	0.44	0.60	0.59	0.69	0.14	0.67	0.52	0.38
Control Delay	42.3	32.8	3.5	65.2	25.7	15.8	60.6	38.3	0.5	61.7	34.9	7.0
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	42.3	32.8	3.5	65.2	25.7	15.8	60.6	38.3	0.5	61.7	34.9	7.0
Queue Length 50th (ft)	95	396	23	85	175	164	68	291	0	93	206	11
Queue Length 95th (ft)	m138	449	m26	m#141	232	90	105	351	0	137	273	76
Internal Link Dist (ft)		505			173			213			925	
Turn Bay Length (ft)	250		75	125		125	250		150	300		150
Base Capacity (vph)	443	1153	615	164	1064	609	314	1668	619	357	1189	681
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	0.68	0.80	0.26	0.63	0.42	0.58	0.55	0.69	0.14	0.67	0.52	0.38

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

04/30/2017



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	204	925	93	550	209	1067	201	165	658	99
v/c Ratio	0.98	0.86	0.60	0.56	0.56	0.92	0.32	0.46	0.58	0.17
Control Delay	110.0	45.7	69.2	34.0	56.5	52.0	9.5	54.5	35.9	6.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	110.0	45.7	69.2	34.0	56.5	52.0	9.5	54.5	35.9	6.9
Queue Length 50th (ft)	154	333	68	165	77	401	20	60	212	0
Queue Length 95th (ft)	#339	412	#149	220	126	#610	83	103	309	41
Internal Link Dist (ft)		596		568		1927			946	
Turn Bay Length (ft)	250		165		350		250	325		375
Base Capacity (vph)	208	1382	155	1272	388	1155	625	358	1144	578
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	0.98	0.67	0.60	0.43	0.54	0.92	0.32	0.46	0.58	0.17

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.