APPENDIX G

Transportation Impact Analysis

Burlingame Topgolf

Transportation Impact Analysis Report

Prepared for:
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Revised November 2019

DN18-0600

FEHR PEERS

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1.0 EXECUTIVE SUMMARY

This report presents the results of the Transportation Impact Analysis (TIA) for the proposed Topgolf development ("the Project") at 250 East Anza Boulevard in Burlingame, California. The Project site is located on approximately 12.22 acres and would replace the existing Burlingame Golf Center with a 76,489 square-foot Topgolf facility. The proposed entertainment golf facility will comprise of up to a maximum 120 climate-controlled hitting bays, a four-acre outdoor outfield enclosed by netting, restaurant, bar, lounges and corporate/event meeting space, and family entertainment area with games. Vehicle access to the Project site would be provided via an existing shared access driveway from Anza Boulevard as well as a proposed access driveway from Airport Boulevard north of the Project site.

It should be noted that since preparing this Transportation Impact Analysis, the site plan has been revised to provide less bays than the analysis includes. Therefore, the results of the analysis are considered conservative.

1.1 PROJECT TRIP GENERATION

At full buildout the proposed Project is estimated to generate 1,546 net new daily trips, 26 net new AM peak hour trips (21 inbound and 5 outbound), and 160 net new PM peak hour trips (83 inbound and 77 outbound). These estimates account for the proposed Topgolf facility and removal of the existing Burlingame Golf Center. The Project trips were distributed and assigned to the transportation network and added to the Existing, Background, and Cumulative baseline traffic volumes to determine the "plus Project" conditions.

1.2 INTERSECTION LEVEL OF SERVICE ANALYSIS

1.2.1 INTERSECTION OPERATIONS

The impacts of the proposed Project to the surrounding transportation system were evaluated following the guidelines established by the City of Burlingame, the City of San Mateo, and the City/County Association of Governments (C/CAG) of San Mateo County Congestion Management Program (CMP). Intersection operations were analyzed using both the 2000 and 2010 editions of the *Highway Capacity Manual* (HCM) when applicable due to the lane configuration or signal timing of an intersection. The traffic operations at 16 study intersections (i.e. 13 signalized and 1 unsignalized intersection and 2 unsignalized project driveways) were evaluated during the weekday morning (AM) and afternoon (PM) peak hours under Existing, Background, and Cumulative Conditions with and without the Project. **Table E-1** provides a

summary of the levels of service for all study intersections and Project driveways under all scenarios. All Synchro reports can be found in **Appendix B**. **The proposed Project does not result in any significant intersection impacts.**

1.3 FREEWAY SEGMENT LEVEL OF SERVICE ANALYSIS

In addition to evaluating impacts related to intersection operations, freeway segment impacts were evaluated under Existing and Existing plus Project Conditions during the AM and PM Peak Hours at seven segments, including six along U.S. Highway 101 and one along State Route (SR) 92, constituting the study freeway segments. **The proposed Project does not result in any significant freeway segment impacts.**

1.4 OTHER TRANSPORTATION ANALYSIS

In addition to the above analyses provided for CEQA purposes, this TIA provides the following analyses for informational purposes.

1.4.1 VEHICULAR QUEUEING

Impacts from vehicular queueing for left-turning movements were reviewed at all study intersections under all scenarios. **The proposed Project does not result in any significant vehicular queueing impacts.** Reports detailing queueing outputs from Synchro can be found in **Appendix C.**

1.4.2 ON-SITE CIRCULATION AND PARKING

The proposed site plan will provide adequate vehicular, bicycle, and pedestrian connectivity through the site. The Project proposes a total of 475 parking spaces; a surplus of 93 parking stalls based on the City's parking requirements but comparable with other existing Topgolf facilities. The recommended parking supply for the Project, based on previous Topgolf parking studies, is 437 spaces for 102 bays. Therefore, the proposed 475 parking spaces exceeds the Topgolf demand.

1.4.3 MULTI-MODAL ASSESSMENT

The site plan illustrates two sidewalks across the proposed parking lot providing east/west connectivity. It is recommended that those sidewalks connect to the existing pedestrian infrastructure in the parking lot and along the driveway to Anza Boulevard. External bicycle facilities and recommended bicycle parking will encourage biking to the site. Direct transit service to the site is limited. However, the existing Burlingame-Bayside shuttle could be an attractive option for Topgolf employees arriving by BART or Caltrain during the

peak hours. Overall, the Topgolf project is not expected to substantially increase the walking, biking, or transit demand to a level where it could not be accommodated by existing or planned facilities.

1.4.4 TRANSPORTATION DEMAND MANAGEMENT

TDM strategies that reduce overall vehicle trips and encourage the use of transportation modes that reduce VMT and greenhouse gas emissions are proposed by the Project. These strategies include marketing, constrained employee parking, bicycle storage and improvements to existing, adjacent bicycle and pedestrian facilities.

1.4.5 VEHICLE MILES TRAVELED (VMT)

A preliminary assessment of the vehicle miles of travel generated by the proposed project was prepared for information and disclosure purposes only. The results indicate that the Project would contribute to an increase in VMT as the Project adds a regional entertainment use expected to attract customers from a catchment area larger than only the City of Burlingame. No determination on the significance of VMT impacts was made.

TABLE E-1: STUDY INTERSECTION LEVEL OF SERVICE SUMMARY – ALL SCENARIOS

ID	INTERSECTION	PEAK HR	EXISTING		EXISTING PLUS PROJECT			BACK-GROUND		BACKGROUND PLUS PROJECT			CUMULATIVE		CUMULATIVE PLUS PROJECT		
			DELAY	LOS	DELAY[1]	LOS[2]	IMPACT[3]	DELAY	LOS	DELAY	LOS	IMPACT	DELAY	LOS	DELAY	LOS	IMPACT
SIGNALIZED INTERSECTIONS																	
1	Old Bayshore Highway / U.S. 101	AM	33	C	33.6	C	NO	33.1	C	33.7	C	NO	38.1	D	38.1	D	NO
		PM	24.4	C	24.5	C	NO	25.3	C	25.3	C	NO	31	C	31.1	C	NO
2	Broadway, Airport Boulevard & Old Bayshore Highway	AM	**91.2**	***F***	**93.2**	***F***	NO	**93.5**	***F***	**95.4**	***F***	NO	**167.5**	***F***	**169.9**	***F***	NO
		PM	35	*D*	35	*D*	NO	39.3	*D*	39.2	*D*	NO	**100.8**	***F***	**101.1**	***F***	NO
3	Broadway / U.S. 101	AM	25.5	C	26.3	C	NO	**71.6**	**E**	**73.1**	**E**	NO	**97.1**	**F**	**98.8**	**F**	NO
		PM	13.9	B	14.2	B	NO	15.3	B	15.6	B	NO	18.8	B	19.5	B	NO
4	Broadway / Rollins Road	AM	**55.3**	***E***	**55.4**	***E***	NO	**64.3**	***E***	**64.6**	***E***	NO	**96.9**	***F***	**97.2**	***F***	NO
		PM	19.7	*B*	19.7	*B*	NO	20.3	*C*	20.4	*C*	NO	22.5	*C*	22.6	*C*	NO
5	Broadway / Carolan Avenue	AM	14.7	B	14.7	B	NO	16.7	B	16.7	B	NO	24	C	24.0	C	NO
		PM	21.3	C	21.2	C	NO	22.8	C	22.8	C	NO	27.4	C	27.4	C	NO
6	Broadway / California Drive	AM	50.2	D	50.2	D	NO	**63.8**	**E**	**64.1**	**E**	NO	**130.7**	**F**	**131**	**F**	NO
		PM	52.1	D	52.4	D	NO	**56.3**	**E**	**56.7**	**E**	NO	**89.5**	**F**	**91.3**	**F**	NO
7	Cadillac Way / Rollins Road	AM	5.8	*A*	5.8	*A*	NO	5.9	*A*	5.9	*A*	NO	6.5	*A*	6.5	*A*	NO
		PM	4.3	*A*	4.3	*A*	NO	4.3	*A*	4.3	*A*	NO	4.5	*A*	4.5	*A*	NO
8	Anza Boulevard / Airport Boulevard	AM	12.5	*B*	12.6	*B*	NO	17.9	*B*	18.1	*B*	NO	18.7	*B*	18.9	*B*	NO
		PM	15.2	*B*	15.6	*B*	NO	26.8	*C*	29.0	*C*	NO	29.6	*C*	32.2	*C*	NO
9	Airport Boulevard / U.S. 101	AM	30.6	C	30.7	C	NO	32.7	C	34.2	C	NO	**59.7**	**E**	**55.5**	**E**	NO
		PM	11.1	B	11.4	B	NO	12.6	B	12.9	B	NO	14.1	B	14.5	B	NO
10	Peninsula Avenue, Coyote Point Drive & Airport Boulevard	AM	42.1	D	40.8	D	NO	45.3	D	46.6	D	NO	**72.2**	**E**	**74.7**	**E**	NO
		PM	13.2	B	13.7	B	NO	14.8	B	15.5	B	NO	16.8	B	17.5	B	NO
11	Peninsula Avenue / Bayshore Boulevard	AM	21.8	C	21.8	C	NO	22.9	C	22.9	C	NO	29.8	C	29.9	C	NO
		PM	22.5	C	24.0	C	NO	24.3	C	26.2	C	NO	33.4	C	40.0	D	NO
12	Peninsula Avenue / Humboldt Street	AM	40	*D*	40.1	*D*	NO	45.6	*D*	45.6	*D*	NO	**65.5**	***E***	**65.6**	***E***	NO
		PM	35.5	*D*	36.1	*D*	NO	37.7	*D*	38.8	*D*	NO	48.1	*D*	48.8	*D*	NO
13	Poplar Avenue / Humboldt Street	AM	14.4	*B*	14.4	*B*	NO	15	*B*	15	*B*	NO	17.7	*B*	17.7	*B*	NO
		PM	15.3	*B*	15.4	*B*	NO	15.7	*B*	15.8	*B*	NO	20.4	*C*	20.6	*C*	NO
UNSIGNALIZED INTERSECTIONS																	
14	Poplar Avenue, Amphlett Boulevard & U.S. 101	AM	18.7	*C*	18.7	*C*	NO	18.7	*C*	18.7	*C*	NO	22.8	*C*	22.8	*C*	NO
		PM	15.1	*C*	15.1	*C*	NO	15.3	*C*	15.3	*C*	NO	17.7	*C*	17.7	*C*	NO
15	Anza Boulevard / Access 1 (Existing Driveway)	AM	9.5	*A*	9.6	*A*	NO	10.4	*B*	10.4	*B*	NO	10.5	*B*	10.5	*B*	NO
		PM	11.1	*B*	12.4	*B*	NO	15.4	*C*	19	*C*	NO	16	*C*	20.1	*C*	NO
16	Airport Boulevard / Access 2 (Proposed Driveway)	AM	N/A	N/A	14	*B*	NO	N/A	N/A	14	*B*	NO	N/A	N/A	14.9	*B*	NO
		PM	N/A	N/A	13.3	*B*	NO	N/A	N/A	13.3	*B*	NO	N/A	N/A	14.1	*B*	NO

Source: Fehr & Peers, August 2018

Notes

[1] Overall intersection average control delay expressed in seconds per vehicle for signalized intersections.

[2] LOS = Level of Service. LOS calculations conducted using the Synchro 10. *Italics* indicate that LOS was calculated using the 2010 Highway Capacity Manual methodology.

[3] Significant impact determined based on jurisdiction's impact criteria. **Bold and highlighted** indicates significant impacts.

2.0 INTRODUCTION

This report presents the results of the transportation impact analysis (TIA) by Fehr & Peers for the proposed Topgolf project on 250 East Anza Boulevard in Burlingame, California. The purpose of this TIA is to identify potentially significant adverse impacts of the proposed Project on the surrounding transportation system and to recommend mitigation measures, if needed. This TIA was conducted in accordance with the guidelines and standards of the affected government agencies, including the City of Burlingame, the City of San Mateo, and the City/County Association of Governments (C/CAG) of San Mateo County Congestion Management Program (CMP).

This chapter provides a detailed Project description and describes the study area, analysis methodologies, analysis scenarios, and significance impact criteria.

2.1 PROJECT DESCRIPTION

The 12.22-acre Project site is located on the south side of Airport Boulevard and immediately west of Anza Boulevard. The proposed Project will replace Burlingame Golf Center, an existing driving range and golf facility located on the entirety of the site. The proposed Project will consist of the following:

- A 12.22-acre Topgolf entertainment complex consisting of a maximum of 120 climate-controlled hitting bays, a 4-acre outdoor field enclosed by netting, and a 76,489 square-foot structure with a full-service restaurant, a bar, lounges, corporate/event meeting space, and a family entertainment area.
- A total of 475 parking spaces provided in surface lots.

The conceptual site plan is shown on **Figure 1.** The Project proposes two access driveways, one existing on Anza Boulevard and one proposed on Airport Boulevard.

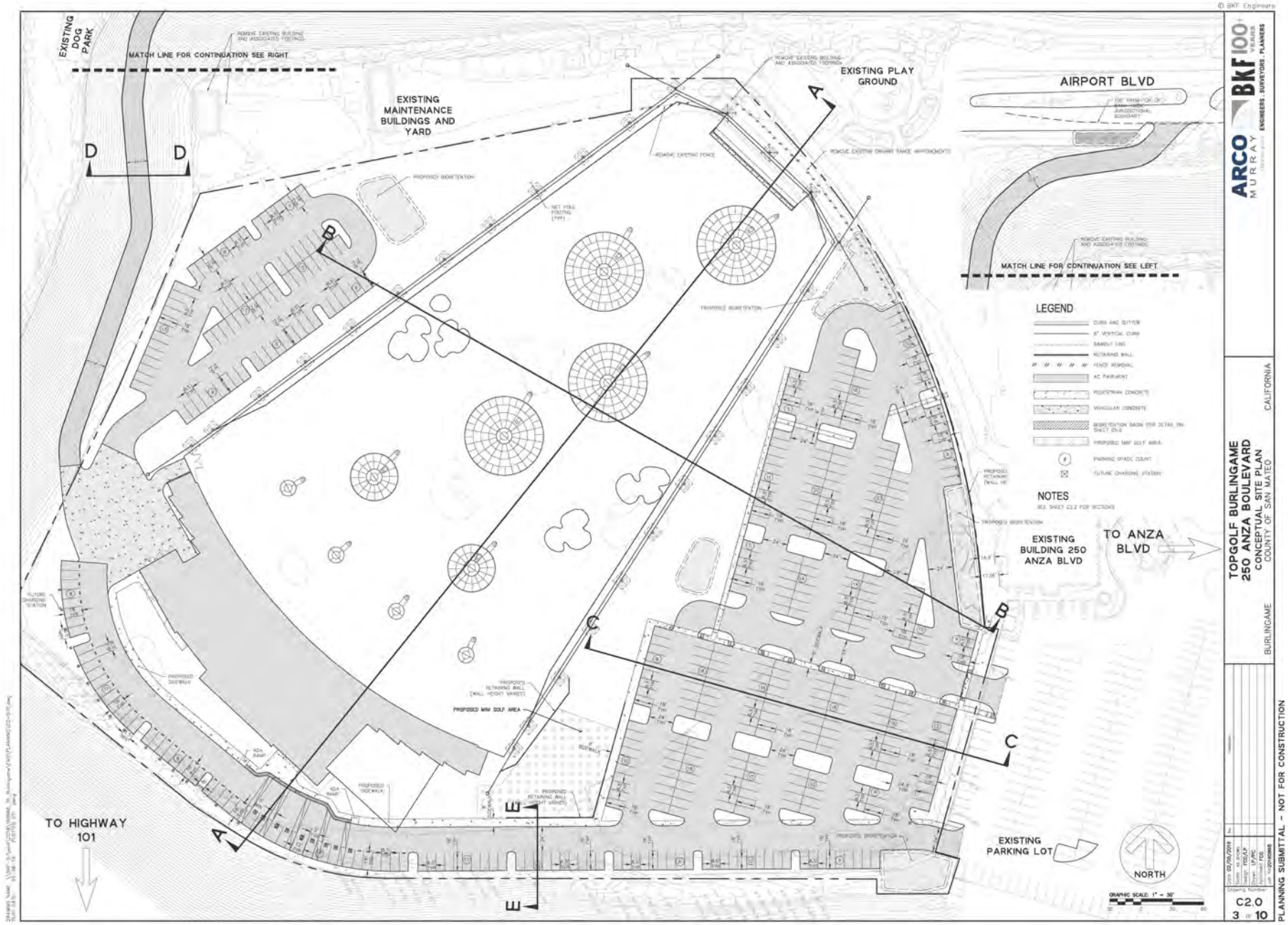


Figure 1

Site Plan

2.2 PROJECT STUDY AREA

The study area is generally bounded by Airport Boulevard to the north, Anza Boulevard to the east, U.S. 101 Expressway to the south, and Broadway to the west. Impacts are evaluated for the study intersections and freeway segments illustrated on **Figure 2**.

2.2.1 STUDY INTERSECTIONS

The study intersections in **Table 1** were selected in consultation with City of Burlingame staff.

TABLE 1: STUDY INTERSECTIONS BY JURISDICTION

ID	INTERSECTION	JURISDICTION
1	Old Bayshore Highway / U.S. 101	Caltrans
2	Broadway, Airport Boulevard & Old Bayshore Highway	Caltrans
3	Broadway / U.S. 101	Caltrans
4	Broadway / Rollins Road	City of Burlingame
5	Broadway / Carolan Avenue	City of Burlingame
6	Broadway / California Drive	City of Burlingame
7	Cadillac Way / Rollins Road	City of Burlingame
8	Anza Boulevard / Airport Boulevard	City of Burlingame
9	Airport Boulevard / U.S. 101	Caltrans
10	Peninsula Avenue, Coyote Point Drive & Airport Boulevard	City of San Mateo
11	Peninsula Avenue / Bayshore Boulevard	City of San Mateo
12	Peninsula Avenue / Humboldt Street	City of San Mateo
13	Poplar Avenue / Humboldt Street	City of San Mateo
14	Poplar Avenue, Amphlett Boulevard & U.S. 101*	Caltrans
15	Anza Boulevard / Access 1 (Existing Driveway)*	City of Burlingame
16	Airport Boulevard / Access 2 (Proposed Driveway)*	City of Burlingame

Source: Fehr & Peers, 2018
Notes:
* Unsignalized Intersection



Figure 2

Study Intersections

2.2.2 FREEWAY SEGMENTS

Freeway segments were selected in consultation with the City of Burlingame staff. The following segments were selected for analysis because a) the Project site is adjacent to U.S. 101 and b) Project access is provided via the U.S. 101 interchanges at Broadway, Anza Boulevard, Airport Boulevard (NB) and Poplar Avenue (SB):

1. U.S. 101 – I-380 to Millbrae Avenue
2. U.S. 101 – Millbrae Avenue to Broadway
3. U.S. 101 – Broadway to Peninsula Avenue
4. U.S. 101 – Peninsula Avenue to SR 92
5. U.S. 101 – SR 92 to Whipple Avenue
6. U.S. 101 – Whipple Avenue to Santa Clara County Line
7. SR 92 – I-280 to U.S. 101

2.3 ANALYSIS SCENARIOS

Roadway system operations are evaluated during the weekday morning (AM) and weekday afternoon (PM) peak hours for the following scenarios shown in **Table 2**.

TABLE 2: ANALYSIS SCENARIOS

SCENARIO	DESCRIPTION
Existing Conditions	The analysis of Existing Conditions was based on traffic counts recorded at all study intersections on May 30, 2018, as well as freeway count data extracted from July 13, 2018 to July 20, 2018. The existing conditions analysis also includes a description of key area roadways and an assessment of bicycle, pedestrian, and transit facilities and services near the site.
Existing plus Project Conditions	This traffic scenario provides an assessment of operating conditions under Existing Conditions with the addition of Project-generated traffic and transportation network infrastructure proposed by the Project. The impacts of the proposed Project on existing baseline traffic operating conditions were then identified.
Background Conditions	Future traffic forecasts without the proposed Project were developed for the Background Conditions by adding traffic from "approved but not yet constructed" developments near the Project site to the Existing Conditions traffic counts.
Background plus Project Conditions	This traffic scenario provides an assessment of operating conditions under Background Conditions with the addition of Project-generated traffic and transportation network infrastructure proposed by the Project. The impacts of the proposed Project under Background Conditions were then identified.
Cumulative Conditions	Future traffic forecasts without the proposed Project were developed for the Cumulative Conditions by forecasting future traffic by applying a one percent annual growth rate to the existing count data and adding traffic from approved and pending developments in the area.
Cumulative plus Project Conditions	This traffic scenario provides an assessment of operating conditions under Cumulative Conditions with the addition of Project-generated traffic and transportation network infrastructure proposed by the Project. The impacts of the proposed Project under Cumulative Conditions were then identified.

Source: Fehr & Peers, 2018

2.4 ANALYSIS METHODS

Intersection operations are described with the term level of service (LOS), a qualitative description of traffic flow based on such factors as speed, travel time, and delay. Six levels are defined, from LOS A, as the best operating conditions, to LOS F, or the worst operating conditions. LOS E represents "at-capacity" operations. When traffic volumes exceed the intersection capacity, stop-and-go conditions result, and operations are designated as LOS F. Overall, the determination of significance for Project impacts is based on applicable guidelines defined by the City of Burlingame, the City of San Mateo, and the City/County Association of Governments (C/CAG) of San Mateo County Congestion Management Program (CMP). Of note, there are no C/CAG CMP designated intersections included as a part of the study intersections reviewed for this analysis. The detailed standards and impact criteria presented below focuses on elements pertaining to roadway system operations.

2.4.1 DATA COLLECTION

- **Volume Data:** Traffic volume data was collected at study intersections on May 30, 2018. Freeway and ramp volume data was exported from the Caltrans Performance Measurement System (PeMS) from July 13, 2018 to July 20, 2018. Traffic volume data for the Anza Boulevard and existing driveway access intersection was collected on April 24, 2019.
- **Lane Configurations:** Existing lane configurations were determined using Google Earth as well as a field visit on July 16, 2018 to ensure the newly completed Broadway corridor and interchange were properly configured in Synchro.
- **Signal Timing:** Signal timing information was obtained from Caltrans, the City of Burlingame, and the City of San Mateo per jurisdictional oversight across the 13 signalized intersections.

2.4.2 SIGNALIZED INTERSECTION OPERATIONS

Signalized intersection operations and impacts are evaluated based on the appropriate jurisdiction's LOS standards (i.e., minimum threshold for acceptable operations). **Table 3** illustrates the LOS standards as defined by the City of Burlingame and City of San Mateo, which have study intersections for this Project.

In the City of Burlingame, acceptable LOS for signalized intersections is defined as LOS D or better during the AM/PM peak period following the intersection level of service in the *Highway Capacity Manual* (HCM) *2010* method as shown in **Table 4**. The HCM 2010 method evaluates signalized intersection operations based on average control delay for all vehicles at the intersection. This average delay can be correlated to a level of service. Four intersections used the HCM 2000 due to lane configurations or signal timing that could not be analyzed by the HCM 2010. Per the City of Burlingame's General Plan Update (2018), the City's

transportation performance measures will be changing from LOS standards to vehicle miles traveled (VMT) in the near future per guidelines from the California Office of Planning and Research. Level of service was still used to determine this Project's impacts as those municipal VMT performance measures have not been finalized. However, a discussion of impacts using the VMT approach is provided for informational purposes.

The City of San Mateo General Plan Update (2010) adopted a performance measure of mid-LOS D and an average delay of 45.0 seconds or better as acceptable. This measure was used for those study intersections located within the City of San Mateo.

TABLE 3: INTERSECTION LOS STANDARDS PER JURISDICTION

JURISDICTION	SIGNALIZED INTERSECTION LOS STANDARDS	CITATION
City of Burlingame	LOS D or better during the AM or PM peak periods.	City of Burlingame General Plan Update, page M-22 – M-23 (2018)
City of San Mateo	Mid-LOS D and an average delay of 45.0 seconds or better.	City of San Mateo General Plan Update, page 4.4-6 (2010)

Sources: Burlingame, 2018; San Mateo, 2010.

TABLE 4: SIGNALIZED INTERSECTION LEVEL OF SERIVCE DEFINTIONS

LEVEL OF SERVICE	DESCRIPTION	AVERAGE DELAY PER VEHICLE (SECONDS)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	≤ 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	55.1 to 80.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	> 80.0

Source: *Highway Capacity Manual*, Transportation Research Board, 2000.

2.4.3 UNSIGNALIZED INTERSECTION OPERATIONS

The operations of the unsignalized intersections were evaluated using HCM 2010. LOS ratings for stop-sign-controlled intersections are based on the average control delay expressed in seconds per vehicle. At two-way or side-street-controlled intersections, the average control delay is calculated for each stopped movement, not for the intersection as a whole. For approaches composed of a single lane, the control delay is computed as the average of all movements in that lane. **Table 5** summarizes the relationship between delay and LOS for unsignalized intersections.

TABLE 5: UNSIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINTIONS

LEVEL OF SERVICE	DESCRIPTION	AVERAGE DELAY PER VEHICLE (SECONDS)
A	Little or no delay.	≤ 10.0
B	Short traffic delays.	10.1 to 15.0
C	Average traffic delays.	15.1 to 25.0
D	Long traffic delays.	25.1 to 35.0
E	Very long traffic delays.	35.1 to 50.0
F	Extreme traffic delays with intersection capacity exceeded.	> 50.0

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

2.4.4 SIGNIFICANT IMPACT CRITERIA

The significant impact criteria were derived from the City of Burlingame's General Plan Draft EIR, Chapter 18. The project is determined to create a significant adverse impact on traffic conditions at a signalized or unsignalized intersection in the City if for any peak-hour:

1. Degrades the AM or PM peak hour from an acceptable LOS D (55 seconds/vehicle) or better under Existing or No Project Conditions to an unacceptable LOS E or worse under Project Conditions except when LOS E is determined by the City of Burlingame as acceptable due to costs of mitigation or when there would be other unacceptable impacts; or

2. Degrades the AM or PM peak hour operating at LOS E or F under Existing or No Project Conditions by increasing the delay per vehicle by five (5) seconds or more.

For the City of San Mateo, significant impact is defined as the following: the project is said to create a significant adverse impact on traffic conditions at a signalized intersection in the City of San Mateo if for any peak-hour:

1. The level of service at the intersection degrades from an acceptable mid-LOS D (average delay of less than 45 seconds) or better under existing conditions to an average delay of longer than 45 seconds; or

2. The level of service at the intersection has an average delay longer than 45 seconds under existing conditions and the addition of the project trips causes the average delay at the intersection to increase by four (4) or more seconds.

For unsignalized intersections, a significant impact is said to be satisfactorily mitigated when measures are implemented that would restore intersection level of service to pre-project Background or Cumulative conditions, or better.

2.4.5 FREEWAY SEGMENTS OPERATIONS

Freeway segments were analyzed following the C/CAG Congestion Management Program 2017 report findings to formulate existing conditions. Freeway segments are evaluated using the average vehicle speed per the *Highway Capacity Manual 1994* method. A freeway segment is considered to operate at an acceptable LOS if the segment operates at or better than the level of service standard identified for the study freeway segment by the C/CAG CMP. C/CAG's LOS standard for the study freeway segments is LOS E except for the following three segments which have different standards: SR 92 from I-280 to U.S. 101, which is LOS D, and U.S. 101 from Peninsula Avenue to SR 92 and Whipple Avenue to Santa Clara County Line, which are both LOS F. **Table 6** describes the freeway segment LOS method followed by C/CAG. Additionally, according to the C/CAG technical guidelines, the project's freeway impact is determined by whether project trips amount to one percent or more of that segment's capacity. The project does not do this; therefore, a more detailed freeway segment analysis was not conducted.

TABLE 6: FREEWAY SEGMENT LEVEL OF SERVICE

LEVEL OF SERVICE	AVERAGE TRAVEL SPEED[1]
A	> 65 MPH
B	≥ 65 MPH
C	≥ 64.5 MPH
D	≥ 62 MPH
E	≥ 52 MPH
F	< 52 MPH

[1]Based on free-flow speed of 65 MPH.
Sources: *Highway Capacity Manual*, Transportation Research Board, 1994.

3.0 EXISTING CONDITIONS

A comprehensive data collection effort was undertaken to identify existing transportation conditions in the vicinity of the proposed Project. The assessment of existing conditions relevant to this study includes an inventory of the street system, traffic volumes on these facilities, and operating conditions at key intersections and freeway segments. Existing public transit service and bicycle and pedestrian facilities in the Project study area are also described. Additionally, for the purposes of this TIA, Existing Conditions were established for 2018, when the City initiated the traffic analysis for the proposed Project.

3.1 EXISTING TRANSPORTATION FACILITIES

3.1.1 EXISTING STREET SYSTEM

Regional access to the site is provided via U.S. 101, while local access to the site is provided by Airport Boulevard, Anza Boulevard, Broadway, Old Bayshore Highway, and Rollins Road. These facilities are described below.

U.S. 101 is an eight-lane divided freeway that connects Burlingame with San Francisco to the north, San Jose to the south, and numerous jurisdictions in between. It provides access to major employers, hotels, shopping destinations, residential areas, and the San Francisco International Airport. Located south of the Project site, U.S. 101 is an east-west facility, transitioning to a north-south facility outside of the study area, with four general purpose travel lanes in each direction. Access to and from the Project site exists at the Broadway interchange (eastbound only), Old Bayshore Highway (westbound only), Anza Boulevard (westbound only), Airport Boulevard (westbound only), and Poplar Avenue (eastbound only).

Airport Boulevard is a 2.25 mile, east-west roadway, that is two-lanes immediately adjacent to the Project site. Extending from the Old Bayshore Highway and Broadway intersection to the Peninsula Avenue and Coyote Point Drive intersection in the City of San Mateo, Airport Boulevard provides connections to the waterfront area via three interchanges along U.S. 101. Approximately three-quarters of one mile is a four-lane divided arterial from Anza Boulevard to a bridge approximately 600 feet east of Bay View Place.

Anza Boulevard is a two- to four-lane, north-south roadway that extends 0.4 miles from U.S. 101 to the waterfront, and provides access to the Project site, as well as other hotels and office buildings along the waterfront via an interchange with westbound U.S. 101 on and off ramps. An access point to a surface parking lot that will serve the site exists between the U.S. 101 interchange and intersection with Airport Boulevard.

Broadway is a one-mile, north-south two- to six-lane divided arterial that provides access to the Project site via Airport Boulevard. Broadway extends from Vancouver Avenue to Old Bayshore Highway where it transitions to Airport Boulevard. Broadway operates as one of the main gateways into the City via the interchange with U.S. 101, which was recently reconstructed and completed as of summer 2018 and traveling southbound through the downtown core of Burlingame.

Old Bayshore Highway is a 1.33 mile, east-west four-lane arterial that parallels the edge of the San Francisco Bay and U.S. 101, extending from just north of Millbrae Avenue, adjacent to San Francisco International Airport, to the intersection with Broadway and Airport Boulevard. Old Bayshore Highway provides a connection between two interchanges with U.S. 101, as well as hotels and commercial uses along the waterfront.

Rollins Road is a three mile, two- to four-lane, east-west arterial that extends from Millbrae Avenue to the north in the City of Millbrae, to Humboldt Street to the south in the City of San Mateo. From Broadway in the City of Burlingame to the southern extent, the roadway parallels U.S. 101 as a service road providing access to residential neighborhoods between two U.S. 101 interchanges. To the west of Broadway, Rollins Road connects industrial businesses and office space with U.S. 101 interchanges at Millbrae Avenue and Broadway.

3.1.2 EXISTING TRANSIT SERVICES

This section summarizes local and regional transit connectivity in the study area, including one bus route provided by SamTrans as well as two shuttle routes. Transit systems that serve the study area and surrounding areas are illustrated in **Figure 3** and described in more detail below.

- **San Mateo County Transit District (SamTrans):** The study area is served by Route 292, which operates as an all-day, limited stop bus service in the vicinity of the Project. Route 292 operates between the Hillsdale Shopping Center in San Mateo and the Transbay Transit Center in downtown San Francisco. Weekday service is from approximately 3:55 AM to 2:30 AM the following day with 30 minutes headways for a majority of the day. Weekend service operates from approximately 4:00 AM to 2:30 AM the following day at 30-60-minute headways. The nearest bus stop is located approximately 500 feet west of the Broadway/Old Bayshore Drive/Airport Boulevard intersection, which is a 0.8 mile walk to the Project excluding the possible access drive from Airport Boulevard, which could shorten the distance if pedestrian facilities are included at that access point.
- **Caltrain Service:** Caltrain provides frequent passenger train service between San Jose and San Francisco seven days per week. During commute hours, Caltrain provides extended service to Morgan Hill and Gilroy. The closest Caltrain station is the Broadway Station, however, currently only weekend service is provided at that location with 90-minute headways from approximately 8:00 AM

to 11:40 PM. The closest Caltrain stations with weekday service are the Burlingame Station and the Millbrae Station. As a part of the Caltrain Modernization Program, the rail service will be electrified, which will provide increased service and include the reopening of the Broadway Station for weekday service. Electrification is also expected to help accommodate the increase in system ridership through more frequent and improved system operations with operations estimated to begin in 2022.

  - **Burlingame Station** is served by local and limited Caltrain trains. It is located approximately two miles southeast of the Project site and connected via the Burlingame Trolley Service. Trains that stop at the station operate at approximately 30-minute headways in both directions during peak hours, with 60-minute headways during midday. Northbound trains operate from approximately 5:30 AM to 11:35 PM and 5:20 AM to 12:35 AM the following day in the southbound direction. On weekends, service is provided at 90-minute headways from approximately 8:00 AM to 11:30 PM.

  - **Millbrae Station** is served by local, limited, and Baby Bullet Caltrain trains, as well as by Bay Area Rapid Transit (BART). The station is located approximately 2.5 miles northwest of the Project site and connected via the Burlingame Bayside Area BART & Caltrain Shuttle. Caltrain trains that stop at the station operate at approximately 15-20-minute headways in both directions during peak hours. Northbound trains operate from approximately 5:30 AM to 11:40 PM and 5:20 AM to 12:30 AM the following day in the southbound direction. On the weekends, service is provided at 90-minute headways from approximately 8:10 AM to 11:45 PM.

    BART operates regional rail service in the Bay Area, connecting between San Francisco International Airport, San Francisco to the north, and cities in the East Bay. The Millbrae Station is the southern terminus of the Richmond-Millbrae Line on weekdays before 9:00 PM and the Pittsburg/Bay Point-SFO Airport-Millbrae Line after 9:00 PM on weekdays. BART provides service from 4:00 AM to midnight on weekdays, with headways of 15-minutes on the Richmond-Millbrae Line serving the station during the peak and midday hours, and 20-minute headways on the Pittsburg/Bay Point-SFO Airport-Millbrae Line.

- **Burlingame Shuttle Service:** Trolley service from the Burlingame and Millbrae Stations is provided to destinations within the City of Burlingame.

  - **Burlingame Trolley Service** provides weekday peak-hour service between the Burlingame Caltrain Station and the San Francisco Airport Marriot Hotel. The Burlingame Trolley primarily connects the hotels east of U.S. 101 with downtown Burlingame and the station. The trolley operates between 11:50 AM to 9:45 PM at approximately 45-minute headways. The nearest trolley stop is located at the Double Tree hotel stop, which is directly adjacent to the Project site.

- **Burlingame-Bayside BART/Caltrain Shuttle Service** provides free public shuttle service between the Millbrae Transit Station and the Airport Boulevard/Bay View Place intersection in Burlingame. The shuttle stops curbside along Rollins Road, Old Bayshore Highway, and Airport Boulevard. The shuttle provides connections to the industrial and office properties along Rollins Road, as well as hotels and other destinations along the waterfront. The shuttle stops closest to the Project site are located immediately west of the Airport Boulevard and Anza Boulevard intersection along both sides of Airport – approximately 1,000 feet walking distance. Shuttle service is provided on the weekdays during peak commute hours (7:00 to 10:00 AM and 4:00 to 7:00 PM) at 20-30-minute headways and is coordinated with BART and Caltrain schedules.



Figure 3

Existing Transit Network

3.1.3 EXISTING BICYCLE FACILITIES

Bikeway planning and design in California typically relies on guidelines and design standards established by Caltrans in the *Highway Design Manual* (Chapter 1000: Bikeway Planning and Design) and other design documents. Bicycle facilities comprise paths (Class I), lanes (Class II), and routes (Class III), as described below.

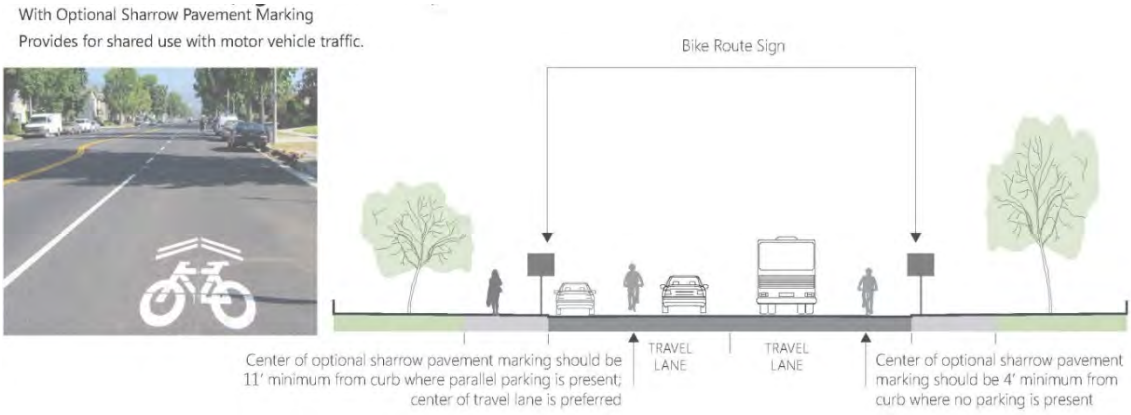
- *Class I Bikeway (Bicycle Path)* provides a completely separate right-of-way and is designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian crossflow minimized. In general, bike paths serve corridors not served by streets and highways or where sufficient right-of-way exists to allow such facilities to be constructed away from the influence of parallel streets and vehicle conflicts.



- *Class II Bikeway (Bicycle Lane)* provides a restricted right-of-way generally adjacent to the outer vehicle travel lane and is designated for the use of bicycles. These lanes have special lane markings, pavement legends, and signage. Bicycle lanes are generally four to six feet wide. Adjacent vehicle parking and vehicle/pedestrian crossflow are permitted.



- *Class III Bikeway (Bicycle Route)* are designated by signs or pavement markings (sharrows) for shared use with pedestrians or motor vehicles but have no separated bike right-of-way or lane striping. Sharrows are a type of pavement marking (bike and arrow stencil) placed to guide bicyclists to the best place to ride on the road, avoid car doors, and remind drivers to share the road with cyclists. Bike routes serve either to a) provide continuity to other bicycle facilities, or b) designate preferred routes through high demand corridors.



Existing facilities in the study area are displayed on **Figure 4**. Bicycle connectivity to the Project site includes Class I bicycle paths present east west along the waterfront between Broadway and Bay View Lane, as well as from the Project site, south of Airport Boulevard to Beach Road. A Class I bicycle path overpass across U.S. 101 was also recently completed as a part of the Broadway interchange reconstruction, which provides strong north-south bicycle connectivity from Rollins Road to the Project site via a Class III bikeway along Airport Boulevard or Class I bicycle path along the waterfront. Class II bicycle lanes are present along Old Bayshore Highway from the U.S. 101 westbound ramps to the Broadway intersection, Airport Boulevard from the Project site to canal bridge, Carolan Avenue from Broadway to Oak Grove Avenue, and Rollins Road from Millbrae Avenue to Broadway – connecting to the aforementioned overpass. And finally, Class III bikeways, or bicycle routes, exist along Old Bayshore Highway, Airport Boulevard between the proposed Project site access and Broadway, and Broadway from California Drive to Old Bayshore Highway. With the new overpass completed, a strong north-south bicycle connection exists for destinations to the south of U.S. 101, and the Project site is approximately 1,500 feet away from the entrance of the bridge to the north and east.



Figure 4

Existing Bicycle Network

3.1.4 EXISTING PEDESTRIAN FACILITIES

Pedestrian facilities consist of multiuse paths adjacent to the Project site, as well as sidewalks, crosswalks, and pedestrian signals at signalized intersections. The pedestrian environment was evaluated along the connecting roadways that directly serve the Project site, as well as adjacent roadways that connect to transit stations and/or nearby destinations in the greater study area.

Pedestrian connectivity in the vicinity of the Project site is provided by a mostly complete network of sidewalks and crosswalks that serve the adjacent commercial area along Airport Boulevard to the east. However, there is currently missing sidewalk along Airport Boulevard from Broadway to approximately 600 feet west of Anza Boulevard. Multiuse paths (Class I Bikeways) exist along the waterfront to the north of Airport Boulevard, as well as portions along the south side of Airport Boulevard from Anza Boulevard to the canal east. A sidewalk runs along the west side of Broadway from Old Bayshore Highway to Rollins Road, where it transitions to both sides of the roadway, as well as on Old Bayshore Highway along both sides. Of note, a pedestrian crossing does not exist at the westbound U.S. 101 ramp access, thus providing an incomplete segment of sidewalk that a pedestrian cannot cross to access the eastern and western segments of sidewalk along the south side of Old Bayshore Highway.

Study intersections near the Project site with pedestrian facilities are described below:

- Intersection 1: Old Bayshore Highway and U.S. 101 Ramps
    - Signalized intersection with no pedestrian crossings and sidewalk only on the north side.
- Intersection 2: Broadway, Old Bayshore Highway and Airport Boulevard
    - Signalized intersection with pedestrian crossings at all legs except for the southern leg, and sidewalks at all approaches except for the east side of Broadway.
- Intersection 8: Airport Boulevard and Anza Boulevard
    - Signalized intersection with pedestrian crossings across all legs and sidewalks at all approaches.

3.2 EXISTING INTERSECTION VOLUMES & LANE CONFIGURATIONS

The operations of the study intersections are evaluated for the highest one-hour volume during the weekday morning (7:00 to 9:00 AM) and afternoon (4:00 to 6:00 PM) peak period conditions. Existing peak hour intersection counts were collected on May 30, 2018. A summary of count data, including the new intersection turning movement counts conducted for this study can be found in **Appendix A**.

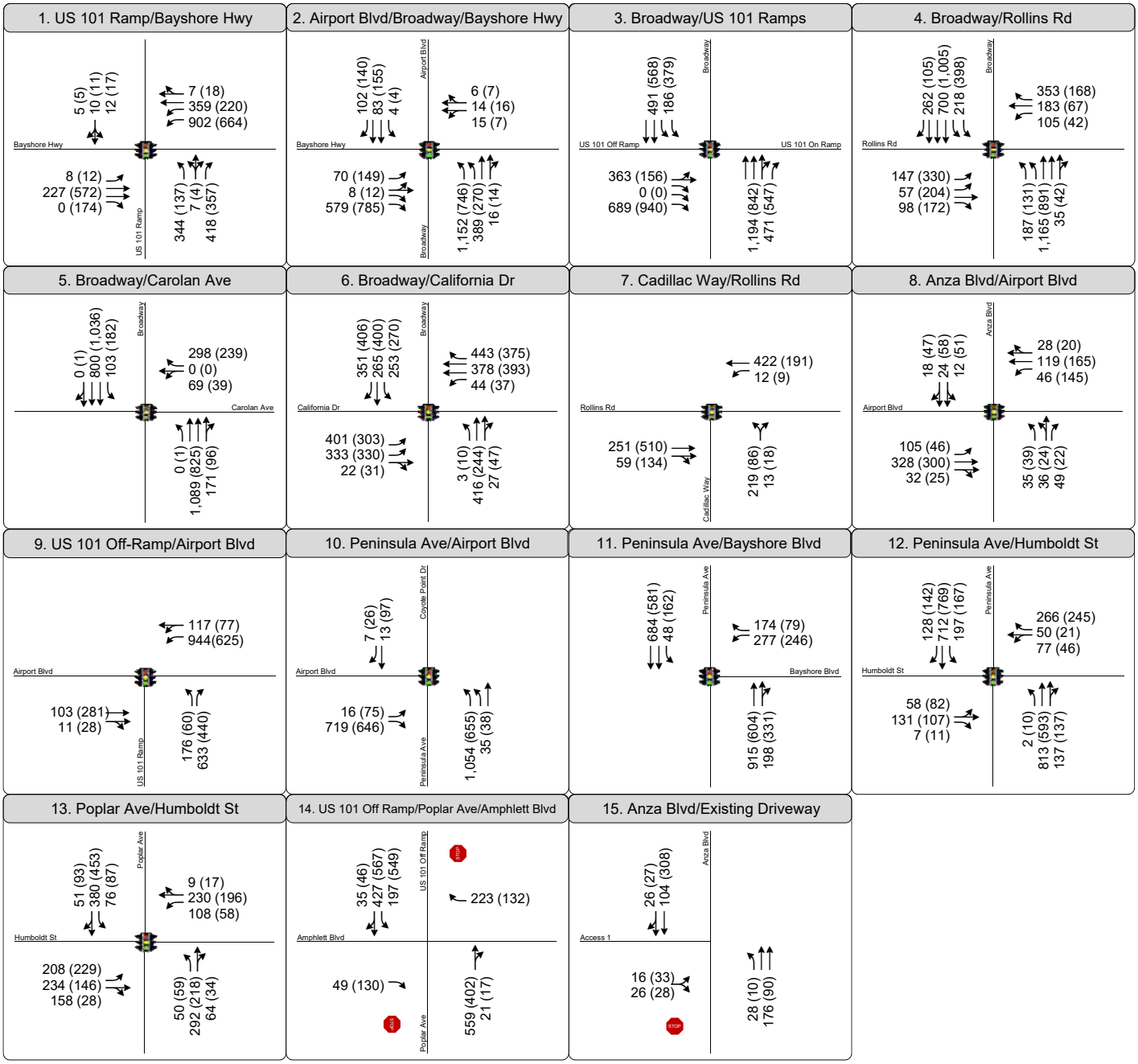
Existing lane configurations were obtained through Google Earth and on-site field observations, while signal controls were obtained from the pertinent jurisdiction. **Figure 5** presents the existing AM and PM peak-hour turning movement volumes, corresponding lane configurations, and traffic control devices. The volumes along the Broadway corridor between Old Bayshore Highway and California Drive were balanced to account for a driveway access. Therefore, those intersections do not exactly match the volumes found in **Appendix A**.

To provide the most accurate estimate of traffic impacts to Anza Boulevard and the existing driveway access, peak hour count data was collected on April 24, 2019 at that intersection. Both a high school and club lacrosse team were present when the count data was collected. To account for the higher participant and vehicular volume use of soccer practices, a growth factor was applied to reflect intersection operations during a soccer game. The growth factor was estimated based on information provided by the City regarding the average number of players and spectators that attend a soccer game. The soccer volumes were used under all with and without project scenarios.

3.3 EXISTING INTERSECTION LEVELS OF SERVICE

Existing intersection lane configurations, signal timings, and peak hour turning movement volumes were used to calculate the levels of service for the study intersections during the AM and PM peak hours for Existing Conditions. The results of the LOS analysis using Synchro 10 software for study intersections under Existing Conditions are presented in **Table 7** and the corresponding LOS calculation sheets are included in **Appendix B**.

The results of the LOS calculations indicate that two study intersections – #2 Broadway, Airport Boulevard and Old Bayshore Highway and #4 Broadway/Rollins Road – operate unacceptably under Existing Conditions during the AM peak hour.



LEGEND

- # — Study Intersection
- AM (PM) — Peak Hour Traffic Volume
- Lane Configuration
- Stop Sign
- Signalized

Figure 5

Peak Hour Traffic Volumes and Lane Configurations Existing Conditions

TABLE 7: EXISTING CONDITIONS LEVEL OF SERVICE

ID	INTERSECTION	JURISDICTION	LOS THRES-HOLD	PEAK HR	EXISTING	
					DELAY	LOS
SIGNALIZED INTERSECTIONS						
1	Old Bayshore Highway / U.S. 101	Caltrans	D	AM	33.0	C
				PM	24.4	C
2	Broadway, Airport Boulevard & Old Bayshore Highway	Caltrans	D	**AM**	**91.2**	**F**
				PM	35.0	C
3	Broadway / U.S. 101	Caltrans	D	AM	25.5	C
				PM	13.9	B
4	Broadway / Rollins Road	City of Burlingame	D	**AM**	**55.3**	**E**
				PM	19.7	B
5	Broadway / Carolan Avenue	City of Burlingame	D	AM	14.7	B
				PM	21.3	C
6	Broadway / California Drive	City of Burlingame	D	AM	50.2	D
				PM	52.1	D
7	Cadillac Way / Rollins Road	City of Burlingame	D	AM	5.8	A
				PM	4.3	A
8	Anza Boulevard / Airport Boulevard	City of Burlingame	D	AM	12.5	B
				PM	15.2	B
9	Airport Boulevard / U.S. 101	Caltrans	D	AM	30.6	C
				PM	11.1	B
10	Peninsula Avenue, Coyote Point Drive & Airport Boulevard	City of San Mateo	Mid-D	AM	42.1	D
				PM	13.2	B
11	Peninsula Avenue / Bayshore Boulevard	City of San Mateo	Mid-D	AM	19.2	B
				PM	22.5	C
12	Peninsula Avenue / Humboldt Street	City of San Mateo	Mid-D	AM	40.0	D
				PM	35.5	D
13	Poplar Avenue / Humboldt Street	City of San Mateo	Mid-D	AM	14.4	B
				PM	15.3	B
UNSIGNALIZED INTERSECTIONS						
14	Poplar Avenue, Amphlett Boulevard & U.S. 101	City of San Mateo	Mid-D	AM	18.7	C
				PM	15.1	C
15	Airport Boulevard / Access 1 (Existing Driveway)	City of Burlingame	D	AM	9.5	A
				PM	11.1	B

Source: Fehr & Peers, 2018

Notes:

[1]**Bold** indicates unacceptable operations by jurisdiction's LOS

[2]Overall intersection control delay expressed in seconds per vehicle for signalized intersections, and the most delayed direction for stop-controlled intersections

[3]LOS calculations conducted using Synchro 10.

3.4 EXISTING FREEWAY SEGMENT LEVEL OF SERVICE

Table 8 presents existing peak hour freeway segment levels of service per the C/CAG Congestion Management Program 2017 report. All segments currently operate beyond the C/CAG CMP's level of service standard.

TABLE 8: EXISTING CONDITIONS FREEWAY SEGMENT PEAK HOUR LEVEL OF SERVICE

FREEWAY SEGMENT	PEAK HOUR	LOS STANDARD	EXISTING LOS
U.S. 101 SEGMENTS			
I-380 to Millbrae Avenue	AM	E	E
	PM	E	F
Millbrae Avenue to Broadway	AM	E	E
	PM	E	F
Broadway to Peninsula Avenue	AM	E	F
	PM	E	F
Peninsula Avenue to SR 92	AM	F	F
	PM	F	F
SR 92 to Whipple Avenue	AM	E	F
	PM	E	F
Whipple Avenue to Santa Clara County Line	AM	F	F
	PM	F	F
SR-92 SEGMENTS			
I-280 to U.S. 101	AM	D	F
	PM	D	F

Source: C/CAG CMP 2017

4.0 PROJECT TRAFFIC

The number of trips expected to be generated on the study roadway system by the proposed Project is estimated using a three-step process: (1) Project trip generation, (2) trip distribution, and (3) trip assignment. The first step estimates the amount of Project-generated traffic that will be added to the roadway network. The second step estimates the direction of travel to and from the Project site. During the third step, the new trips are assigned to specific street segments and intersection turning movements. This process is described in more detail in the following sections.

4.1 TRIP GENERATION

Since Topgolf is a new and unique type of facility, the *Institute of Transportation Engineers (ITE) Trip Generation Manual* does not have rates for such a use. In order to determine the estimated trips to be generated by the Topgolf facility, traffic counts collected in August 2014 at an existing Topgolf facility located in Scottsdale, Arizona were used. Fehr & Peers collected these counts as a part of a TIA analysis for a Topgolf facility in Roseville, CA, and one recently completed in the City of San Jose. The Scottsdale Topgolf site is self-contained, meaning that it is the only use on the site; therefore, the traffic counts can easily be converted to trip generation rates for Topgolf. Both the Scottsdale and Roseville facilities have 102 hitting bays and are approximately 70,000 square feet with the same uses as what is proposed for the Burlingame location. To present a worst-case scenario, this study analyzed a potential for 120 hitting bays. Trips were projected for the proposed Topgolf based on trip generation rates for the number of hitting bays at the facility. The trip counts for the existing driving range, which were obtained using the Driving Range land use in the *ITE Trip Generation Manual (10th Edition)*, were subtracted to get the number of net new trips.

4.1.1 TRIP GENERATION CALCULATIONS

Vehicle trip rates were used to estimate the number of trips to and from the proposed Project site. The trip generation rates and the estimated new number of trips generated by the proposed Project used for the intersection analysis and other transportation analyses in this study are summarized in **Table 9**. Based on the trip generation estimates, the Project will generate 1,546 net new daily trips, including a total of 26 trips in the AM peak hour (21 inbound/5 outbound) and 160 trips in the PM peak hour (83 inbound/77 outbound) during the weekday.

TABLE 9: TOPGOLF PROJECT TRIP GENERATION

Land Use	ITE Code	Size	Units	Daily	AM Peak Hour					PM Peak Hour				
					In		Out		Total Trips	In		Out		Total Trips
					%	Trips	%	Trips		%	Trips	%	Trips	
Topgolf[1]	N/A	120	Bay	2,160	87%	32	13%	5	37	50%	108	50%	108	216
Driving Facility[2]	432	45	Tee	614	61%	11	39%	7	18	45%	25	55%	31	56
Existing Driving Range to be Removed (existing trips subtracted)				*-614*		*-11*		*-7*	*-18*		*-25*		*-31*	*-56*
Total Net New Trips				**1,546**		**21**		**5**[3]	**26**		**83**		**77**	**160**

Source: Fehr & Peers, 2018
Notes:
[1] Trip generation was estimated using existing Scottsdale Topgolf peak hour counts collected in late August 2014. The Scottsdale Topgolf facility has comparable amenities to the proposed project; however, there is an increase in hitting bays in the proposed Topgolf. Thus, trip generation rates were derived based on the number of hitting bays and using the Scottsdale Topgolf data collected.
[2] Golf driving range trip generation rates from *ITE Trip Generation Manual 10th Edition*
[3] Five trips were retained for the AM outbound peak hour as a negative number of trips was not a feasible estimate.

4.2 PROJECT TRIP DISTRIBUTION & ASSIGNMENT

The geographical distribution of trips generated by the Project is based on the C/CAG travel demand model. The model identified inbound and outbound travel patterns accessing the transportation analysis zone (TAZ), which is defined as the peninsula of land stretching from the Airport Blvd / Broadway / Old Bayshore Highway intersection, east to Airport Boulevard along the coast.

Due to the size of the study area, the distribution of the Project trips was divided into two figures for each peak period. **Figure 6** and **Figure 7** illustrate the inbound and outbound trips during the AM peak hour, while **Figure 8** and **Figure 9** illustrate the distribution during the PM peak hour. Using this trip distribution pattern, the traffic generated by the Project was assigned to the street network as well as between the two proposed driveway access points for the site. **Figure 10** shows the Project-generated peak hour traffic volumes per study intersection during the weekday AM and PM peak hours

4.2.1 PROJECT DRIVEWAY ASSUMPTIONS

The distribution and assignment of Project trips to the one existing and one proposed Project driveways were developed using the inbound and outbound distributions derived from the model. Trips between the two driveways were balanced using existing count data as well as engineering judgement. **Figure 10** shows the Project-generated peak hour traffic volumes at the two Project driveways.



STUDY AREA
OUT-BOUND TRAFFIC
IN-BOUND TRAFFIC

Figure 6
AM Project Distribution



Figure 7

AM Project Distribution cont.



STUDY AREA

OUT-BOUND TRAFFIC

IN-BOUND TRAFFIC

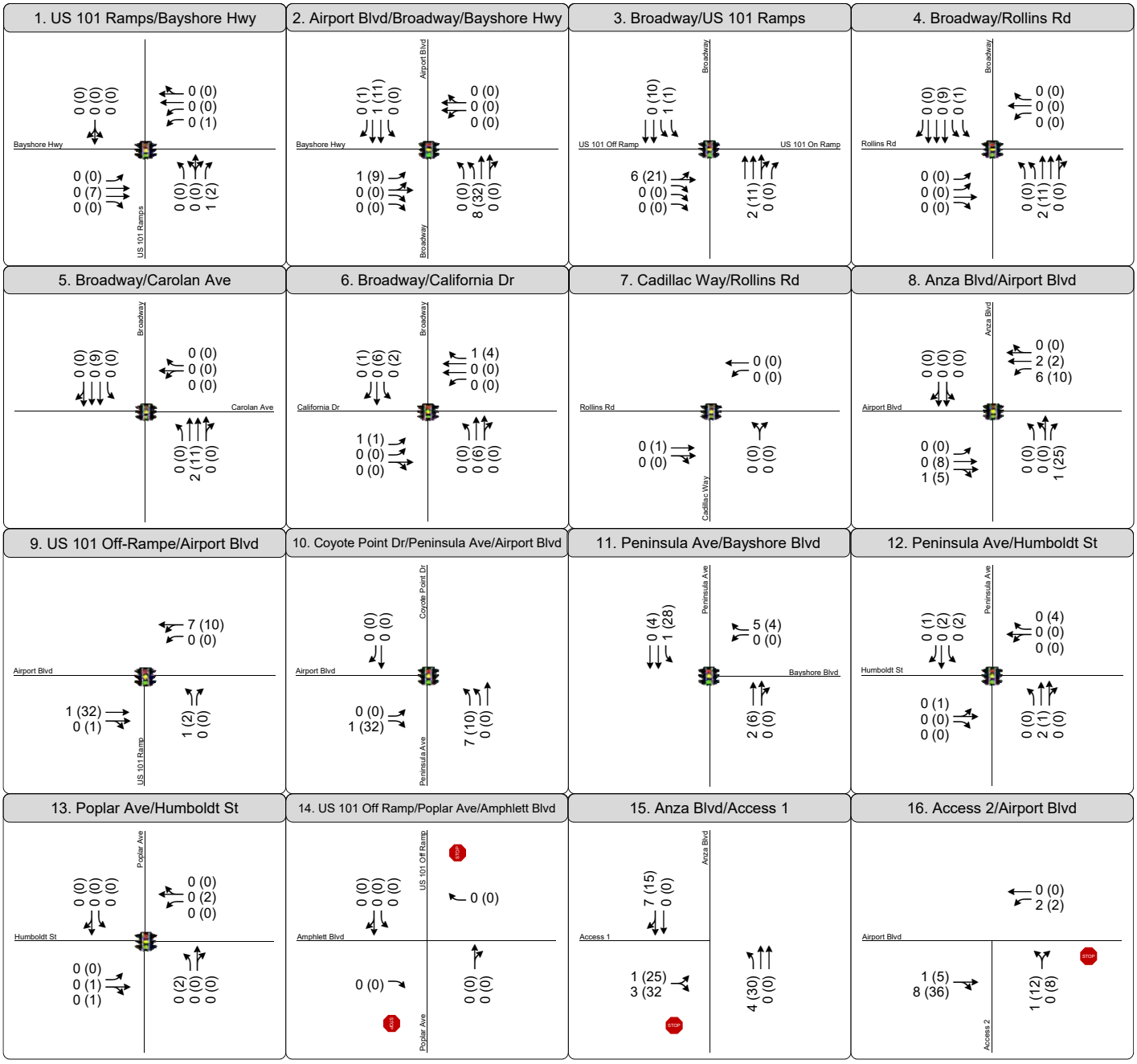
Figure 8

PM Project Distribution



Figure 9

PM Project Distribution cont.



LEGEND

- # — Study Intersection
- AM (PM) — Peak Hour Traffic Volume
- Lane Configuration
- Stop Sign
- Signalized

Figure 10

Peak Hour Traffic Volumes and Lane Configurations Project Trips

5.0 EXISTING PLUS PROJECT CONDITIONS

This chapter presents the results of the operations analysis under the Existing plus Project Conditions. Under Existing plus Project Conditions, Project traffic volumes estimated and assigned to the study intersections and roadway segments were added to existing traffic volumes.

5.1 EXISTING PLUS PROJECT INTERSECTION LEVELS OF SERVICE

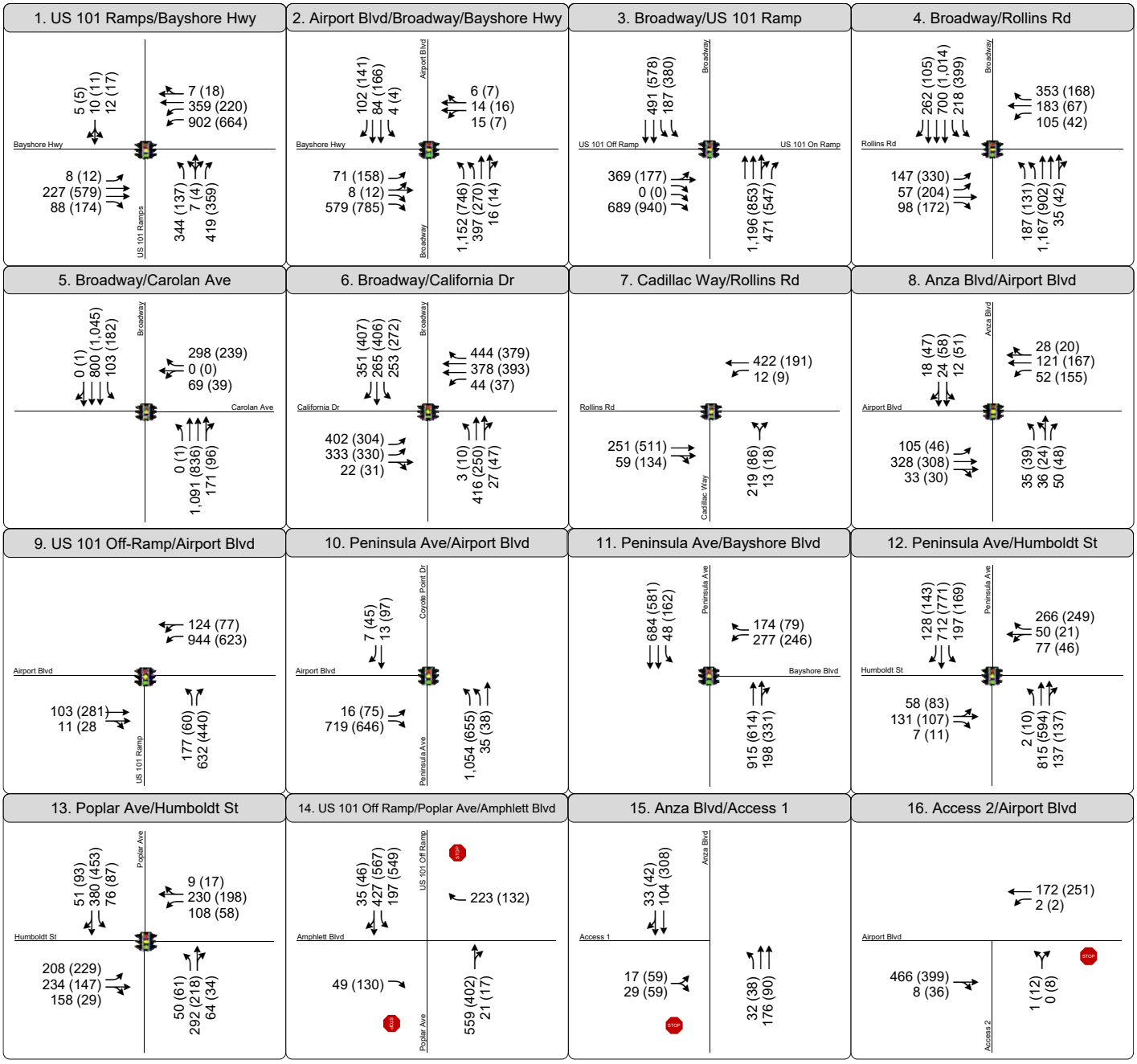
Intersection LOS was calculated with the new Project trips added by the proposed Project to evaluate the operating conditions of the intersections and identify potential impacts to the roadway system. Turning movement traffic volume and intersection lane configuration for the Existing plus Project Conditions are illustrated on **Figure 11**.

Table 10 provides the results of the intersection LOS calculations for Existing plus Project Conditions, while **Appendix B** contains the corresponding Synchro 10 reports for each intersection. The results for Existing Conditions are included for comparison purposes.

The results indicate that the two study intersections from Existing Conditions that operated unacceptably, continue to do so under plus Project Conditions during the AM peak hour. No mitigation measures are proposed as Project trips do not degrade intersection operations from acceptable to unacceptable conditions or add more than five seconds of overall delay between Existing and Existing plus Project scenarios.

5.2 LEFT-TURN QUEUEING ANALYSIS

A comparison of the 95th percentile queues for left-turn storage lanes at each study intersection was conducted to identify any adverse effects between the Existing and Existing plus Project Conditions. **It was determined that the Project does not adversely affect queues at the study intersections as queues exceed storage length capacity under Existing Conditions and do not further degrade under plus Project Conditions.** Synchro reports detailing the estimated queue lengths can be found in **Appendix C**.



LEGEND

- # — Study Intersection
- AM (PM) — Peak Hour Traffic Volume
- Lane Configuration
- Stop Sign
- Signalized

Figure 11

Peak Hour Traffic Volumes
and Lane Configurations
Existing Plus Project Conditions

TABLE 10: EXISTING PLUS PROJECT INTERSECTION LEVEL OF SERVICE

ID	INTERSECTION	LOS THRESH-HOLD[1]	PEAK HR	EXISTING		EXISTING PLUS PROJECT		
				DELAY	LOS	DELAY[2]	LOS[3]	IMPACT[4]
SIGNALIZED INTERSECTIONS								
1	Old Bayshore Highway / U.S. 101	D	AM	33.0	C	33.6	C	NO
			PM	24.4	C	24.5	C	NO
2	Broadway, Airport Boulevard & Old Bayshore Highway	D	**AM**	**91.2**	**F**	**93.2**	**F**	**NO**
			PM	35.0	C	35.0	D	NO
3	Broadway / U.S. 101	D	AM	25.5	C	26.3	C	NO
			PM	13.9	B	14.2	B	NO
4	Broadway / Rollins Road	D	AM	**55.3**	**E**	**55.4**	**E**	**NO**
			PM	19.7	B	19.7	B	NO
5	Broadway / Carolan Avenue	D	AM	14.7	B	14.7	B	NO
			PM	21.3	C	21.2	C	NO
6	Broadway / California Drive	D	AM	50.2	D	50.2	D	NO
			PM	52.1	D	52.4	D	NO
7	Cadillac Way / Rollins Road	D	AM	5.8	A	5.8	A	NO
			PM	4.3	A	4.3	A	NO
8	Anza Boulevard / Airport Boulevard	D	AM	12.5	B	12.6	B	NO
			PM	15.2	B	15.6	B	NO
9	Airport Boulevard / U.S. 101	D	AM	30.6	C	30.7	C	NO
			PM	11.1	B	11.4	B	NO
10	Peninsula Avenue, Coyote Point Drive & Airport Boulevard	Mid-D	AM	42.1	D	40.8	D	NO
			PM	13.2	B	13.7	B	NO
11	Peninsula Avenue / Bayshore Boulevard	Mid-D	AM	21.8	C	21.8	C	NO
			PM	22.5	C	24.0	C	NO
12	Peninsula Avenue / Humboldt Street	Mid-D	AM	40.0	D	40.1	D	NO
			PM	35.5	D	36.1	D	NO
13	Poplar Avenue / Humboldt Street	Mid-D	AM	14.4	B	14.4	B	NO
			PM	15.3	B	15.4	B	NO
UNSIGNALIZED INTERSECTIONS								
14	Poplar Avenue, Amphlett Boulevard & U.S. 101	Mid-D	AM	18.7	C	18.7	C	NO
			PM	15.1	C	15.1	C	NO
15	Anza Boulevard / Access 1 (Existing Driveway)	D	AM	9.5	A	9.6	A	NO
			PM	11.1	B	12.4	B	NO
16	Airport Boulevard / Access 2 (Proposed Driveway)	D	AM	N/A	N/A	14.0	B	NO
			PM	N/A	N/A	13.3	B	NO

Source: Fehr & Peers, 2018

Notes:
[1] LOS threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service). **Bold** indicates unacceptable operations by jurisdiction's LOS.
[2] Overall intersection control delay expressed in seconds per vehicle for signalized intersections, and the most delayed direction for stop controlled intersections.
[3] LOS calculations conducted using the Synchro 10.
[4] Significant impact determined based on jurisdiction's impact criteria. **Bold and highlighted** indicates significant impacts.

5.3 EXISTING PLUS PROJECT FREEWAY SEGMENTS ANALYSIS

As shown in **Table 11**, the proposed Project would not add trips greater than one percent of the freeway segment capacity during the AM and PM peak hours. Therefore, based on C/CAG's impact criteria, **the Project would have an insignificant impact at the identified freeway study segments under Existing plus Project Conditions and no further study or mitigation measures are proposed.**

TABLE 11: EXISTING PLUS PROJECT FREEWAY SEGMENT PEAK HOUR LEVEL OF SERVICE

FREEWAY SEGMENT	PEAK HOUR	CAPACITY[1]	DIREC-TION	LOS STANDARD	EXISTING LOS	% CAPACITY[2]	IMPACT[3]
U.S. 101 SEGMENTS							
I-380 to Millbrae Avenue	AM	9,200	NB	E	E	0.0%	NO
			SB	E	E	0.0%	NO
	PM	9,200	NB	E	F	0.0%	NO
			SB	E	F	0.2%	NO
Millbrae Avenue to Broadway	AM	9,200	NB	E	E	0.1%	NO
			SB	E	E	0.0%	NO
	PM	9,200	NB	E	F	0.0%	NO
			SB	E	F	0.2%	NO
Broadway to Peninsula Avenue	AM	9,200	NB	E	F	0.1%	NO
			SB	E	F	0.0%	NO
	PM	9,200	NB	E	F	0.5%	NO
			SB	E	F	0.2%	NO
Peninsula Avenue to SR 92	AM	9,200	NB	F	F	0.3%	NO
			SB	F	F	0.0%	NO
	PM	9,200	NB	F	F	0.5%	NO
			SB	F	F	0.2%	NO
SR 92 to Whipple Avenue	AM	9,200	NB	E	F	0.3%	NO
			SB	E	F	0.0%	NO
	PM	9,200	NB	E	F	0.3%	NO
			SB	E	F	0.2%	NO
Whipple Avenue to Santa Clara County Line	AM	9,200	NB	F	F	0.2%	NO
			SB	F	F	0.0%	NO
	PM	9,200	NB	F	F	0.2%	NO
			SB	F	F	0.1%	NO
SR-92 SEGMENT							
I-280 to U.S. 101	AM	4,400	EB	D	F	0.0%	NO
			WB	D	F	0.0%	NO
	PM	4,400	EB	D	F	0.0%	NO
			WB	D	F	0.0%	NO

Source: C/CAG CMP 2017 & Fehr & Peers, 2018

Notes:

[1] Per the C/CAG Traffic Level of Service Calculation Methods, capacity is defined as 2,200 vehicle per hour per lane for a four-lane freeway segment and 2,300 vehicles per hour per lane for a freeway segment with six or more lanes.

[2] Percentage of project trips compared to the capacity defined by C/CAG methodology.

[3] Impact if the proposed project increases traffic demand on the freeway segment by one or more percent of that segment's capacity.

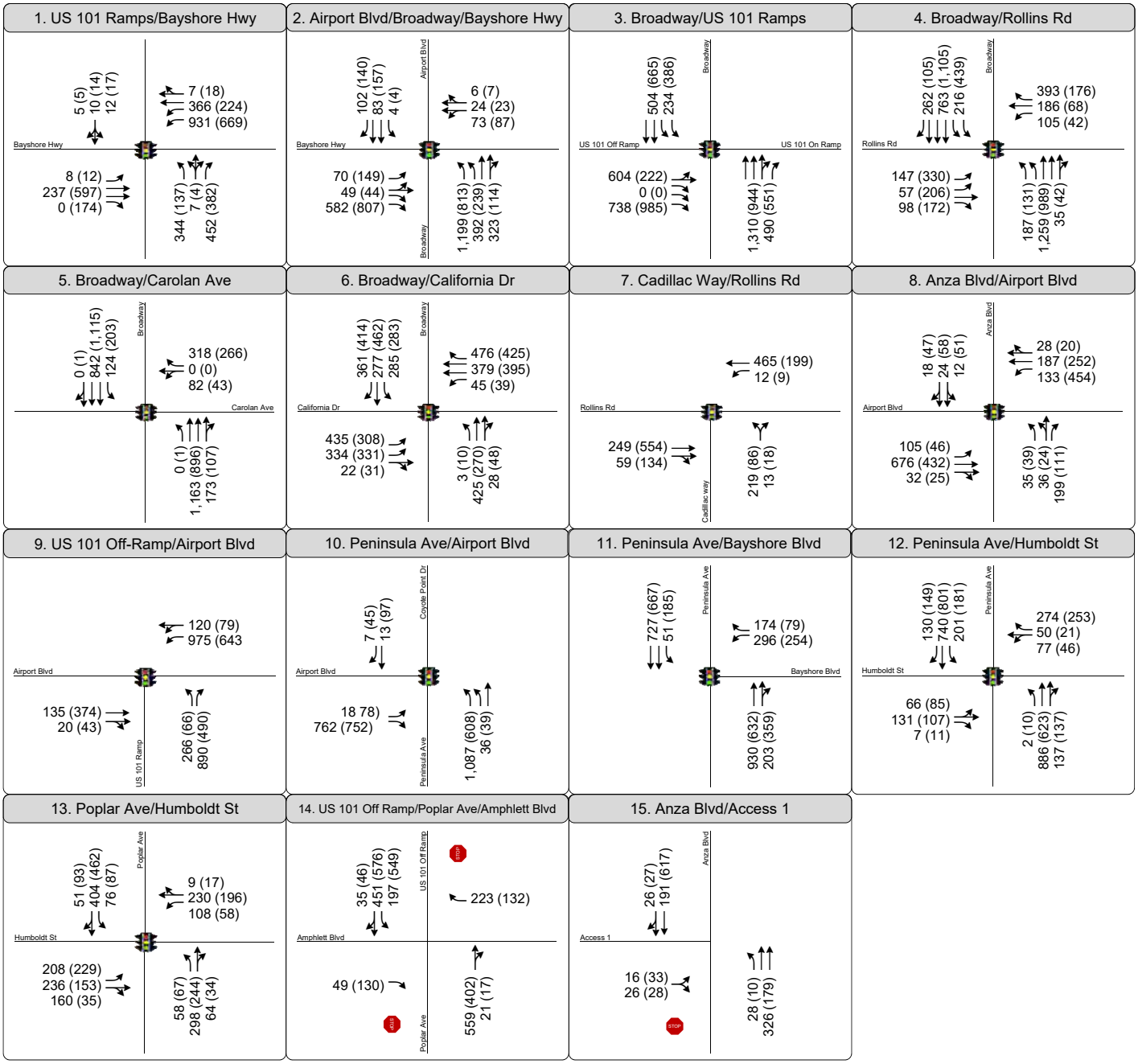
6.0 BACKGROUND CONDITIONS

The Background scenario represents conditions prior to the completion of the Project. To evaluate the potential impact of traffic generated by the proposed Project on the surrounding street system, it was necessary to first develop estimates of the Background traffic condition in the area without the Project. Traffic conditions without the Project under this scenario reflect existing traffic counts in addition to all *approved* development projects (as of August 2018) within the City of Burlingame that would utilize the roadway network under review for this Project. The approved development projects were reviewed and accepted by staff for inclusion in this study. The forecasted background baseline traffic volumes were then used to identify impacts on the roadway system. The existing roadway system and intersection geometries was used for all Background analysis. This chapter presents the results of the level of service calculations under Background Conditions with and without the Project.

6.1 BACKGROUND TRAFFIC VOLUMES

Traffic volumes for Background Conditions comprise of existing volumes plus traffic generated by "approved but not yet built" developments to account for local growth in the study area. The City of Burlingame website provided information regarding these background development projects, with those approved as of August 2018 included in the study. Traffic counts generated by approved projects were obtained from their respective traffic impact reports or, if a report was not available, estimated based on trip generation rates published in the *Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition)*.

The trips with TIA reports were distributed throughout the network based upon that available information. For projects that did have transportation analysis conducted, or a TIA report available, it was determined that the *Transportation Analysis for 619-625 California Drive Live/Work Development* completed in March 2018 would provide the most applicable trip distributions for the other approved projects. The remaining approved projects that used the distribution applied by 619-625 California Drive were all located within one-half mile of that proposed development, the Downtown area of Burlingame, and consisted of residential or office uses as well. Every trip generated from approved development projects in the City were assigned to the roadway network and included in the Background traffic volumes using the aforementioned methodologies. Trip distribution was further distilled into the study network using existing count data and engineering judgement. The estimated trips under Background Conditions at each study intersection are shown in **Figure 12**. **Appendix D** contains a list of the approved projects from the City used in the study, as well as the assumed trip generation estimates included in the Background Condition volumes.



LEGEND

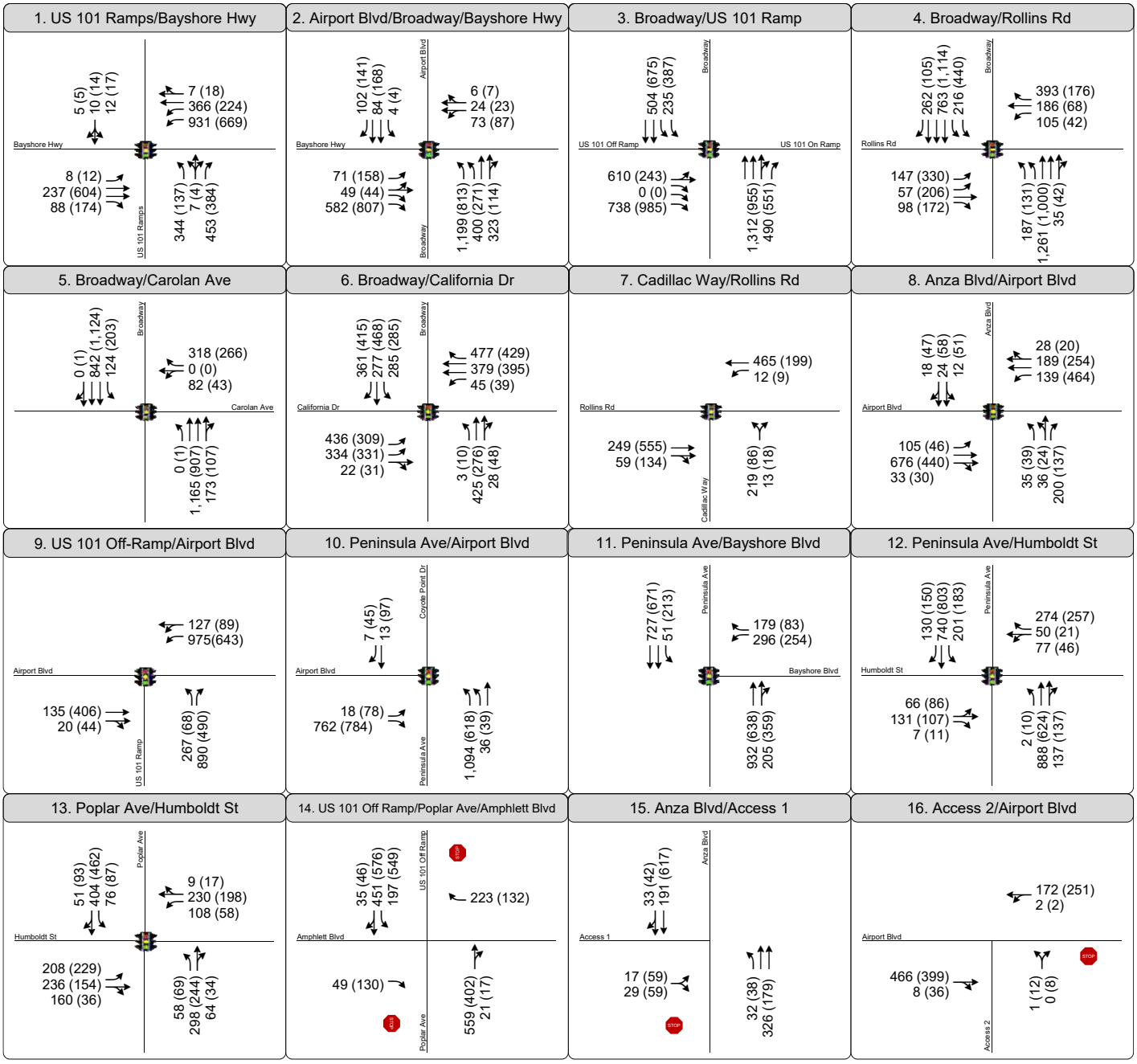
- # — Study Intersection
- AM (PM) — Peak Hour Traffic Volume
- Lane Configuration
- Stop Sign
- Signalized

Figure 12

Peak Hour Traffic Volumes and Lane Configurations Background Conditions

6.2 BACKGROUND PLUS PROJECT TRAFFIC VOLUMES

Trips generated from the proposed Project were added to the Background traffic projections to develop volumes for Background plus Project Conditions. The resulting volumes at the study intersections are shown in **Figure 13.**



LEGEND

- (#) Study Intersection
- AM (PM) Peak Hour Traffic Volume
- Lane Configuration
- Stop Sign
- Signalized

Figure 13

Peak Hour Traffic Volumes
and Lane Configurations
Background Plus Project Conditions

6.3 BACKGROUND INTERSECTION LEVELS OF SERVICE

Table 12 presents the delay and LOS calculation results for the study intersections under Background Conditions. **Appendix B** contains the corresponding calculation sheets.

Under Background Conditions, six study intersections would operate unacceptably in the AM or PM peak hours.

6.4 BACKGROUND PLUS PROJECT INTERSECTION LEVELS OF SERVICE

Table 12 presents the delay and LOS calculation results for the study intersections under Background plus Project Conditions. **Appendix B** contains the corresponding calculation sheets.

The Project has no significant impact under Background plus Project Conditions.

TABLE 12: BACKGROUND AND BACKGROUND PLUS PROJECT INTERSECTION LEVEL OF SERVICE

ID	INTERSECTION	LOS THRESH-HOLD[1]	PEAK HR	BACK-GROUND		BACKGROUND PLUS PROJECT		
				DELAY	LOS	DELAY[2]	LOS[3]	IMPACT[4]
SIGNALIZED INTERSECTIONS								
1	Old Bayshore Highway / U.S. 101	D	AM	33.1	C	33.7	C	NO
			PM	25.3	C	25.3	C	NO
2	Broadway, Airport Boulevard & Old Bayshore Highway	D	AM	**93.5**	**F**	**95.4**	**F**	**NO**
			PM	39.3	D	39.2	D	NO
3	Broadway / U.S. 101	D	AM	**71.6**	**E**	**73.1**	**E**	**NO**
			PM	15.3	B	15.6	B	NO
4	Broadway / Rollins Road	D	AM	**64.3**	**E**	**64.6**	**E**	**NO**
			PM	20.3	C	20.4	C	NO
5	Broadway / Carolan Avenue	D	AM	16.7	B	16.7	B	NO
			PM	22.8	C	22.8	C	NO
6	Broadway / California Drive	D	AM	**63.8**	**E**	**64.1**	**E**	**NO**
			PM	**56.3**	**E**	**56.7**	**E**	**NO**
7	Cadillac Way / Rollins Road	D	AM	5.9	A	5.9	A	NO
			PM	4.3	A	4.3	A	NO
8	Anza Boulevard / Airport Boulevard	D	AM	17.9	B	18.1	B	NO
			PM	26.8	C	29.0	C	NO
9	Airport Boulevard / U.S. 101	D	AM	32.7	C	34.2	C	NO
			PM	12.6	B	12.9	B	NO
10	Peninsula Avenue, Coyote Point Drive & Airport Boulevard	Mid-D	AM	**45.3**	**D**	**46.6**	**D**	**NO**
			PM	14.8	B	15.5	B	NO
11	Peninsula Avenue / Bayshore Boulevard	Mid-D	AM	22.9	C	22.9	C	NO
			PM	24.3	C	26.2	C	NO
12	Peninsula Avenue / Humboldt Street	Mid-D	AM	**45.6**	**D**	**45.6**	**D**	**NO**
			PM	37.7	D	38.8	D	NO
13	Poplar Avenue / Humboldt Street	Mid-D	AM	15.0	B	15.0	B	NO
			PM	15.7	B	15.8	B	NO
UNSIGNALIZED INTERSECTIONS								
14	Poplar Avenue, Amphlett Boulevard & U.S. 101	Mid-D	AM	18.7	C	18.7	C	NO
			PM	15.3	C	15.3	C	NO
15	Anza Boulevard / Access 1 (Existing Driveway)	D	AM	10.4	B	10.4	B	NO
			PM	15.4	C	19	C	NO
16	Airport Boulevard / Access 2 (Proposed Driveway)	D	AM	N/A	N/A	14.0	B	NO
			PM	N/A	N/A	13.3	B	NO

Source: Fehr & Peers, 2018

Notes:
[1] LOS threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service). **Bold** indicates unacceptable operations by jurisdiction's LOS.
[2] Overall intersection control delay expressed in seconds per vehicle for signalized intersections, and the most delayed direction for stop controlled intersections.
[3] LOS calculations conducted using the Synchro 10.
[4] Significant impact determined based on jurisdiction's impact criteria. **Bold and highlighted** indicates significant impacts.

6.5 LEFT-TURN QUEUEING ANALYSIS

A comparison of the 95th percentile queues for left-turn storage lanes at each study intersection was conducted to identify any adverse effects between the Background and plus Project Conditions. **It was determined that the Project does not adversely affect queues at the study intersections as queues exceed storage length capacity under Background Conditions and do not further degrade under plus Project Conditions.** Synchro reports detailing the estimated queue lengths can be found in **Appendix C**.

7.0 CUMULATIVE CONDITIONS

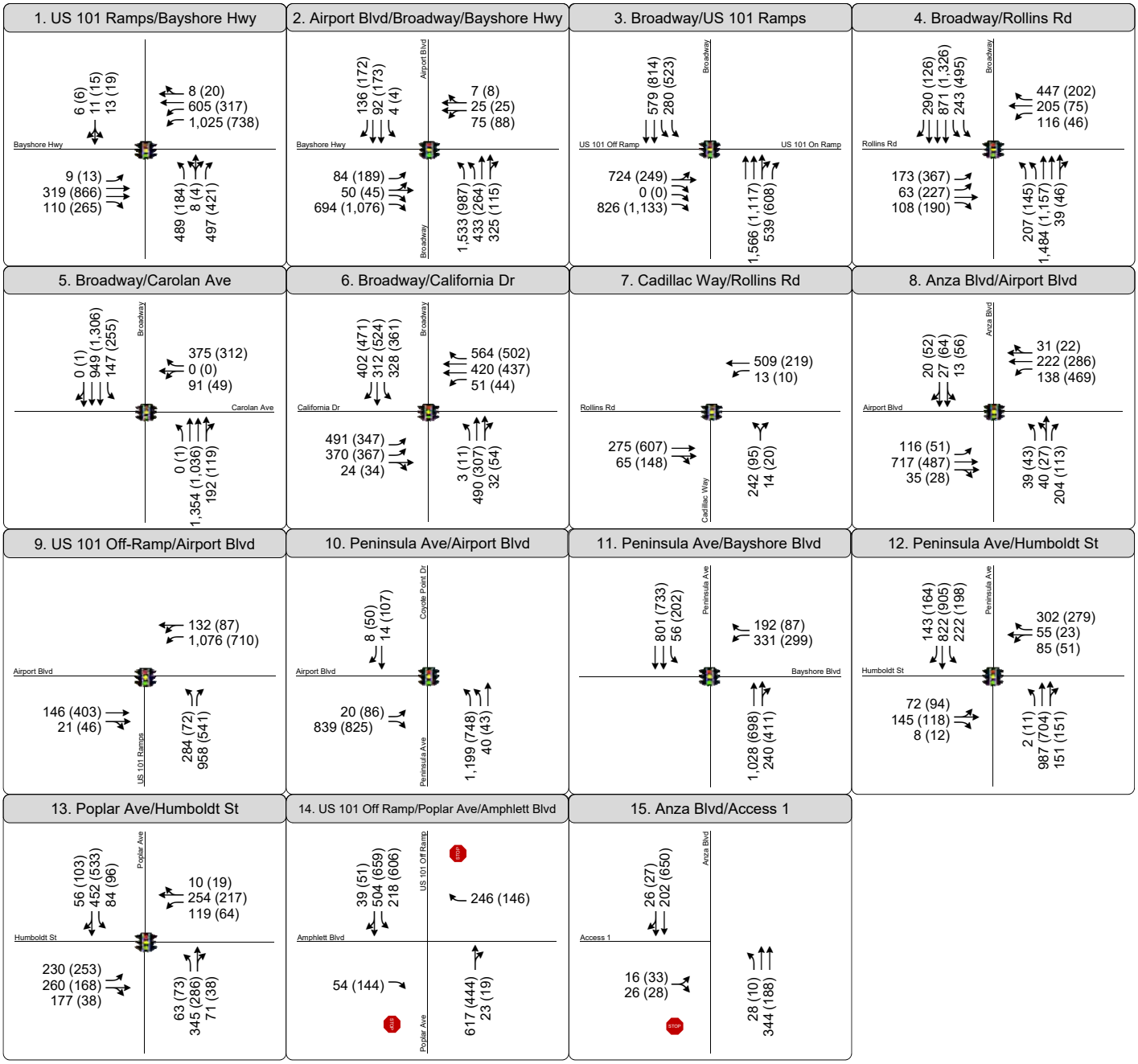
To evaluate the potential impact of traffic generated by the proposed Project on the surrounding street system in 2028, it was necessary to first develop estimates of the Cumulative traffic condition in the area without the Project. A one percent growth rate was applied to existing counts and grown to reflect estimated 2028 conditions. The growth rate, which has been used in other recent TIAs in the City of Burlingame, was provided by city staff. Traffic conditions without the Project under this scenario reflect the counts with the applied growth rate as well as both approved (identified and applied under Background Conditions) and *proposed* projects within the City of Burlingame. These conditions are referred to as the baseline condition (i.e., "no Project" conditions). The forecasted Cumulative baseline traffic volumes were then used to identify impacts on the roadway system. The existing roadway system and intersection geometries was used for all Cumulative analysis. This section presents the results of the level of service calculations under Cumulative Conditions with and without the Project.

7.1 CUMULATIVE TRAFFIC VOLUMES

In addition to the vehicle trips from "approved but not yet built" development Projects discussed in the Background section, vehicle trips from pending or proposed development projects in the study area, as of August 2018, were also estimated. Similar to the approved developments, trip generation estimates from the proposed development projects were obtained from their respective TIA reports, or estimated based on trip generation rates published in the ITE *Trip Generation, 10th Edition* when reports were not available.

The trips with TIA reports were distributed throughout the network based on the available information. Those projects that did not have a TIA report used the same methodology to distribute proposed development trips throughout the network. That method was the trip distribution found in the *Transportation Analysis for 619-625 California Drive Live/Work Development* (March 2018) as explained in Background Conditions. The estimated trips under Cumulative Conditions at each study intersection are shown in **Figure 14**.

Appendix D contains a list of pending or proposed projects from the City of Burlingame, as well as the assumed trip generation estimates for the developments that have been included in the projection of Cumulative volumes. The aforementioned approved development projects under Background Conditions were also included in this scenario.



LEGEND

- # — Study Intersection
- AM (PM) — Peak Hour Traffic Volume
- Lane Configuration
- Stop Sign
- Signalized

Figure 14

Peak Hour Traffic Volumes and Lane Configurations Cumulative Conditions

7.2 CUMULATIVE PLUS PROJECT TRAFFIC VOLUMES

Trips generated from the proposed Project were added to the Cumulative traffic projections **(Figure 14)** to develop traffic volumes for Cumulative plus Project Conditions. The resulting volumes are shown on **Figure 15.**

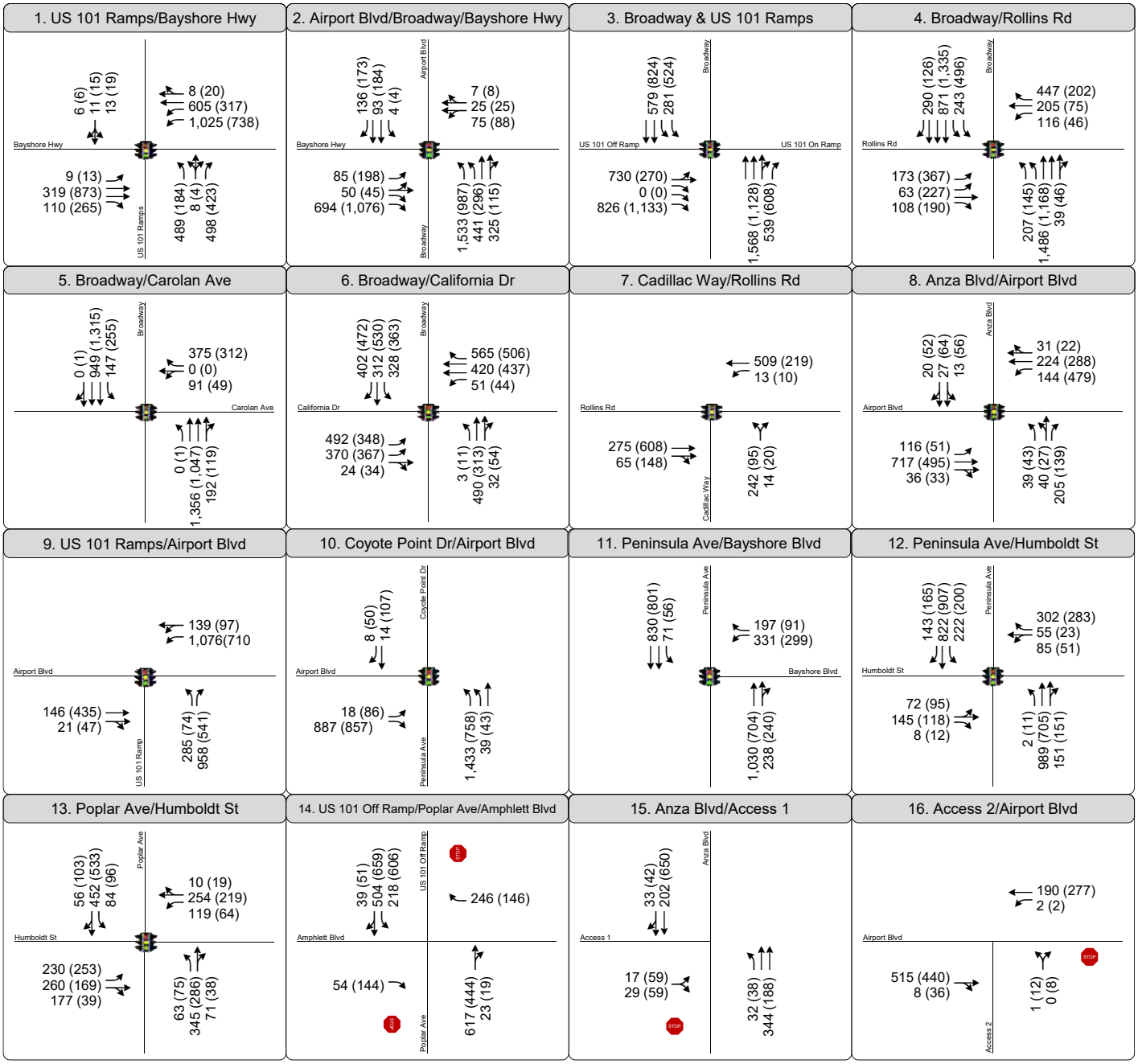


Figure 15

Peak Hour Traffic Volumes and Lane Configurations Cumulative Plus Project Conditions

7.3 CUMULATIVE INTERSECTION LEVELS OF SERVICE

Table 14 presents the delay and LOS calculation results for the study intersections under Cumulative Conditions. **Appendix B** contains the corresponding calculation sheets.

Of note, traffic flow and intersection operations along the Broadway corridor could be improved by the planned Burlingame Broadway Grade Separation Project. This project would remove the at-grade railroad crossing and improve traffic flow between the Broadway and Carolan Avenue, and Broadway and California Drive signalized intersections. Most critically, it would improve the Broadway and California Drive intersection which under Cumulative Conditions experiences significant delays.

Under Cumulative Conditions, seven study intersections would operate unacceptably in the AM and PM Peak Hours.

7.4 CUMULATIVE PLUS PROJECT INTERSECTION LEVELS OF SERVICE

Table 14 presents the delay and LOS calculation results for the study intersections under Cumulative plus Project Conditions. **Appendix B** contains the corresponding calculation sheets.

The project has no significant impacts under Cumulative plus Project Conditions.

TABLE 14: CUMULATIVE AND CUMULATIVE PLUS PROJECT INTERSECTION LEVEL OF SERVICE

ID	INTERSECTION	LOS THRESH-HOLD[1]	PEAK HR	CUMULATIVE		CUMULATIVE PLUS PROJECT		
				DELAY	LOS	DELAY[2]	LOS[3]	IMPACT[4]
SIGNALIZED INTERSECTIONS								
1	Old Bayshore Highway / U.S. 101	D	AM	38.1	D	38.1	D	NO
			PM	31.0	C	31.1	C	NO
2	Broadway, Airport Boulevard & Old Bayshore Highway	D	AM	**167.5**	**F**	**169.9**	**F**	**NO**
			PM	**100.8**	**F**	**101.1**	**F**	**NO**
3	Broadway / U.S. 101	D	AM	**97.1**	**F**	**98.8**	**F**	**NO**
			PM	18.8	B	19.5	B	NO
4	Broadway / Rollins Road	D	AM	**96.9**	**F**	**97.2**	**F**	**NO**
			PM	22.5	C	22.6	C	NO
5	Broadway / Carolan Avenue	D	AM	24.0	C	24.0	C	NO
			PM	27.4	C	27.4	C	NO
6	Broadway / California Drive	D	AM	**130.7**	**F**	**131.0**	**F**	**NO**
			PM	**89.5**	**F**	**91.3**	**F**	**NO**
7	Cadillac Way / Rollins Road	D	AM	6.5	A	6.5	A	NO
			PM	4.5	A	4.5	A	NO
8	Anza Boulevard / Airport Boulevard	D	AM	18.7	B	18.9	B	NO
			PM	29.6	C	32.2	C	NO
9	Airport Boulevard / U.S. 101	D	AM	**59.7**	**E**	**55.5**	**E**	**NO**
			PM	14.1	B	14.5	B	NO
10	Peninsula Avenue, Coyote Point Drive & Airport Boulevard	Mid-D	AM	**72.2**	**E**	**74.7**	**E**	**NO**
			PM	16.8	B	17.5	B	NO
11	Peninsula Avenue / Bayshore Boulevard	Mid-D	AM	29.8	C	29.9	C	NO
			PM	33.4	C	40.0	D	NO
12	Peninsula Avenue / Humboldt Street	Mid-D	AM	**65.5**	**E**	**65.6**	**E**	**NO**
			PM	**48.1**	**D**	**48.8**	**D**	**NO**
13	Poplar Avenue / Humboldt Street	Mid-D	AM	17.7	B	17.7	B	NO
			PM	20.4	C	20.6	C	NO
UNSIGNALIZED INTERSECTIONS								
14	Poplar Avenue, Amplett Boulevard & U.S. 101	Mid-D	AM	22.8	C	22.8	C	NO
			PM	17.7	C	17.7	C	NO
15	Anza Boulevard / Access 1 (Existing Driveway)	D	AM	10.5	B	10.5	B	NO
			PM	16	C	20.1	C	NO
16	Airport Boulevard / Access 2 (Proposed Driveway)	D	AM	N/A	N/A	14.9	B	NO
			PM	N/A	N/A	14.1	B	NO

Source: Fehr & Peers, 2018

Notes:
[1] LOS threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service). **Bold** indicates unacceptable operations by jurisdiction's LOS.
[2] Overall intersection control delay expressed in seconds per vehicle for signalized intersections, and the most delayed direction for stop controlled intersections.
[3] LOS calculations conducted using the Synchro 10.
[4] Significant impact determined based on jurisdiction's impact criteria. **Bold and highlighted** indicates significant impacts.

7.5 LEFT-TURN QUEUEING ANALYSIS

A comparison of the 95th percentile queues for left-turn storage lanes per study intersection was conducted to identify any adverse effects between the Cumulative and Cumulative plus Project Conditions. **It was determined that the Project does not adversely affect queues at the study intersections as queues exceed storage length capacity under Cumulative Conditions and do not further degrade under plus Project Conditions.** Synchro reports detailing the estimated queue lengths can be found in **Appendix C**.

8.0 ON-SITE VEHICULAR EVALUATION AND PARKING ANALYSIS

This chapter analyzes site access and internal circulation for vehicles based on the site plan prepared by BKF Engineers (**Figure 1)**. The site access and on-site circulation is considered adequate with recommended changes described below. These recommendations address on-site vehicle circulation issues to reduce driver confusion with the proposed Project.

8.1 VEHICLE ACCESS & PROJECT DRIVEWAY ASSESSMENT

Vehicular access to the site is proposed via one existing full-movement access on Anza Boulevard and a new full-movement access on Airport Boulevard, both side-street, stop-controlled.

8.1.1 PROJECT DRIVEWAY AND ANZA BOULEVARD

It is projected that the majority of vehicle trips to the Topgolf site will access the site via the existing driveway, which currently serves the existing Burlingame Golf Center, Doubletree Hotel, and Murray Soccer Field. The Anza Boulevard full-movement driveway measures approximately 34 feet wide, which includes painted, on-street bicycle lanes on both sides, one inbound lane, and one outbound lane (measured at the throat). As shown in **Table 16**, the driveway is projected to operate acceptably with the existing side-street, stop-control for all "plus Project" conditions. Outbound queue lengths were reviewed for all "plus Project" conditions to determine if the driveway to the existing small parking lot on the south side would be obstructed. The outbound drive to the parking lot is approximately 26 feet from the stop bar. The longest outbound vehicle queue is estimated to be one vehicle. Therefore, the outbound vehicles on the driveway will not obstruct the small parking lot.

8.1.2 PROJECT DRIVEWAY AND AIRPORT BOULEVARD

The proposed full-movement Project driveway at Airport Boulevard is projected to be a secondary vehicular access to the Anza Boulevard driveway. The driveway will measure approximately 24 feet wide and provide one inbound lane and one outbound lane. It is proposed that the new roadway connect to the existing parallel parking facility east of the Burlingame Wastewater Treatment facility. Traffic control will remain as a side-street, stop-control and is projected to operate acceptably for all "plus Project" conditions. Westbound to southbound left-turn vehicles will utilize the existing dedicated left-turn lane on Airport Boulevard.

TABLE 16: PROJECT DRIVEWAY INTERSECTION LEVEL OF SERVICE

ID	DRIVEWAY	CONTROL[1]	PEAK HR	EXISTING PLUS PROJECT		BACKGROUND PLUS PROJECT		CUMULATIVE PLUS PROJECT	
				DELAY[2]	LOS	DELAY	LOS	DELAY	LOS
15	Anza Boulevard / Access 1 (Existing Driveway)	SSSC	AM	9.3	A	10.3	B	10.5	B
			PM	10.7	B	10.7	B	11.0	B
16	Airport Boulevard / Access 2 (Proposed Driveway)	SSSC	AM	14.0	B	14.0	B	14.9	B
			PM	13.3	B	13.3	B	14.1	B

Source: Fehr & Peers, August 2018
[1] SSSC = side-street, stop-controlled intersection
[2] For side-street stop-controlled intersections, total control delay for the worst approach is presented.

It is recommended that adequate sight distance be provided at all Project driveways and that any future signage and/or landscaping should not obstruct a driver's view of on-coming traffic.

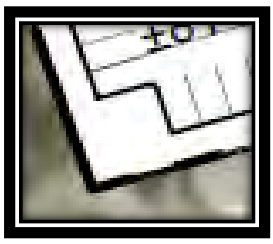
8.2 ON-SITE CIRCULATION REVIEW

The on-site circulation of the Project was reviewed in accordance with generally accepted traffic engineering standards.

8.2.1 VEHICULAR ON-SITE CIRCULATION

Generally, the proposed site plan will provide vehicle traffic with adequate connectivity through the parking areas. The interior roadway aisles accommodate two-way traffic and provide 90-degree parking spaces. The design of these aisles meets the City's standard minimum width for two-way drive aisles. The site layout also provides continuous circulation through all the parking areas with no dead-end aisles. The parking lot design includes 475 parking stalls including 9 ADA parking stalls. Overall, the on-site circulation is considered to be acceptable; however, below are some recommendations to enhance the proposed circulation:

- The parking layout should avoid and modify perpendicular parking spaces at the end of the aisles (as illustrated below) so that drivers can back in and out of the space easily and to reduce vehicle-to-vehicle conflict.



Perpendicular Parking Layout to Avoid

8.2.2 BICYCLE AND PEDESTRIAN ON-SITE CIRCULATION

The site provides adequate pedestrian circulation throughout the site, as well as between the site and surrounding pedestrian facilities. Due to the existing grade of the site, sidewalks are not proposed along the access drive to Airport Boulevard. However, pedestrians and bicyclists can access Airport Boulevard via the trail along Anza Boulevard that connects to Airport Boulevard. Overall, the on-site pedestrian circulation and access to bicycle facilities is generally considered to be acceptable; however, it is recommended that the Project provide convenient bike parking to create a pedestrian and bicycle friendly environment and to encourage bicycling by patrons and employees.

8.2.3 PARKING ASSESSMENT

This intent of the parking assessment is to determine the appropriate supply for the Project site. This chapter evaluates the number of required off-street vehicle parking spaces identified in the City of Burlingame Zoning Code versus the number of parking spaces proposed by the Project. The assessment evaluates the number of recommended parking spaces for both a 102-bay facility and a maximum 120 bay facility.

8.2.3.1 Vehicle Parking

Parking facilities for the Project are provided entirely within the site. A total of 475 parking spaces are proposed to be provided in surface lots located throughout the site.

Based on other Topgolf facilities, the majority of patrons will likely drive to the site via private automobile.

8.2.3.2 Parking requirements per City code

Per the City of Burlingame Zoning Code (Section 25.70.040), commercial recreation uses are required to provide one parking stall per 200 square feet of gross floor area. Based on the City's parking requirements and the proposed 76,489 square-foot facility, the Project is required to provide 382 parking stalls. The Project is providing 475 on-site parking stalls. This represents a surplus of 93 parking stalls but is comparable with other existing Topgolf facilities. The Project is providing 9 ADA parking stalls (7 standard and 2 van accessible), which meets the California Building Code requirement for ADA spaces.

One of the reasons using the City's parking vehicle requirements results in fewer parking spaces than the applicant feels are necessary is that the bulk of the site was considered as one category: commercial recreation. This approach does not separately evaluate and determine whether or not specific commercial uses, such as restaurants, or unique uses, such as Topgolf, have parking needs that would be different from the general commercial recreation category. Therefore, to help recommend an appropriate parking supply, parking needs for Topgolf and other types of uses that may be constructed on the site were also considered.

Since Topgolf is a new and unique type of facility, the City of Burlingame, Institute of Transportation Engineers (ITE), and the Urban Land Institute (ULI) do not have parking supply or demand rates that appropriately reflect such a use. In order to determine the parking demand for the Topgolf facility, parking occupancy surveys that Fehr & Peers collected in August 2014 at an existing Topgolf facility located in Scottsdale, Arizona were utilized. The Scottsdale Topgolf site is self-contained, meaning that it is the only use on the site; therefore, the counts can easily be converted to parking generation rates for other Topgolf sites. For consistency with the Project's trip generation approach, parking demand for the proposed Topgolf are based on the number of hitting bays at the facility.

8.2.3.3 Topgolf Parking Demand

The resulting parking rate of 3.89 spaces per hitting bay was derived from the parking occupancy data for the Topgolf in Scottsdale (see **Appendix E** for parking occupancy survey data). For conservative purposes, this parking demand rate reflects peak conditions because it reflects the maximum parking occupancy at the existing site that occurred at 7 PM on a Saturday. Using the Topgolf-specific parking demand rate, the Topgolf facility that will be part of the proposed Project is estimated to have a peak parking maximum demand of 397 spaces (based on 102 bays) or 467 spaces (based on a maximum of 120 bays).

8.2.3.4 Topgolf Parking Supply

In addition to deriving a parking demand rate for the Topgolf, a parking supply rate was also developed by increasing the Topgolf parking demand rate by 10%. Application of this factor would yield an effective supply or "cushion" of extra spaces that a parking system should have to account for operating fluctuations, vehicle maneuvering, minimizing driver frustration, and maintaining adequate traffic circulation. It is unrealistic to expect an arriving driver to find the last available parking space in a system without significant frustration and the resulting perception that parking is inadequate. Because "perception is reality", parking "demand" should include this effective supply cushion (*Parking Structure – Planning, Design, Construction and Repair,* 3rd edition (Anthony P Chrest… et al., 2001.) For the purpose of this parking analysis, a parking facility is considered to have reached its effective supply, or practical parking capacity, if 90% of the spaces are utilized. A 10% surplus is widely accepted in the parking industry as adequate cushion for parking.

The resulting recommended parking supply for the Topgolf facility is 437 spaces for 102 bays or 514 spaces for the maximum 120 bays in order to accommodate peak parking demand, circulation and operating fluctuations, and vehicle maneuvering as drivers search for available spaces. Therefore, the provided 475 spaces exceeds the peak demand for a 102-bay facility. The proposed 475 spaces would meet the peak demand for 111 bays.

9.0 MULTI-MODAL ASSESSMENT

New development projects in the City of Burlingame should encourage multi-modal travel, consistent with the goals of the City's General Plan. It is the goal of the General Plan that all development projects accommodate and encourage the use of non-automobile transportation modes to achieve Burlingame's mobility goals. In addition, the adopted Bicycle Transportation Plan establishes goals and policies to make bicycling a daily part of life in Burlingame. The Transportation Plan includes designated bike lanes where possible, as well as designated routes for both local and regional trips, to provide a complete connection through Burlingame. In order to further the goals of the City, pedestrian and bicycle facilities should be encouraged with new development projects to provide these important multimodal connections.

The Project site is somewhat insular due to elevation, waterways, the Burlingame Wastewater Treatment facility, and other existing development to the east and west. Additionally, the ingress and egress of the Topgolf building is proposed approximately 1,200 feet from the Anza Boulevard / Access 1 (Existing Driveway). Such a distance could hinder pedestrian and bicycle access due to the sheer length involved to access the site. Frequent, all-day transit service is also limited with the Burlingame-Bayside BART/Caltrain Shuttle Service serving stops at the Airport Boulevard and Anza Boulevard intersection during weekday peak hours, and the Burlingame Trolley serving a stop at the adjacent Double Tree hotel with 45-minute headways.

The following sections provide brief recommendations or areas of consideration to encourage both workers and visitors not bringing their own golfing equipment, to walk, bike, or take transit to the Project site. Furthermore, to help encourage multi-modal travel, the Project should consider the TDM strategies identified in the following chapter appropriate for this unique type of use and location.

9.1 PEDESTRIAN FACILITIES

Pedestrian facilities consist of multiuse paths adjacent to the Project site, as well as sidewalks, crosswalks, and pedestrian signals at signalized intersections (see Chapter 3 for details). To access the site, a sidewalk exists stretching from Anza Boulevard, along the west side of the existing driveway to the surface parking lot, soccer field, and Burlingame Golf Center. It is recommended that the sidewalk extend from its current terminus at the parking lot, into the proposed surface parking lot that will serve the Project. The most recent site plan illustrates two sidewalks across the proposed parking lot providing east/west connectivity.

It is recommended that those sidewalks connect to existing pedestrian infrastructure in the parking lot and along the driveway to Anza Boulevard, so a seamless connection is provided inter-site.

9.2 BICYCLE FACILITIES

Bicycle connectivity immediately around the Project site includes Class I bicycle paths east-west along both the waterfront north of Airport Boulevard, east of Anza Boulevard and south of Airport Boulevard, and along the western side of Anza Boulevard. The Class I path along Anza Boulevard provides a connection via the existing driveway to the facilities north and east of the Project site, as well as from the Project site, south of Airport Boulevard to Beach Road. Additionally, Class II bike lanes are available along portions of Airport Boulevard and Broadway to the Project site.

It is recommended that bicycle connectivity from the existing driveway be reviewed as Class II bike lanes currently exist along the driveway for approximately 300 feet. Improved connectivity could include more robust wayfinding to clearly delineate bicycle circulation through the parking lot via Anza Boulevard to Topgolf.

9.3 TRANSIT SERVICES

Direct transit service to the Project site is limited with the peak hour, weekday Burlingame-Bayside BART/Caltrain Shuttle serving bus stops at the Airport and Anza Boulevard intersection, and the Burlingame Trolley serving the adjacent Double Tree hotel at 45-minute headways. As mentioned in Chapter 3, the Burlingame-Bayside shuttle is free to the public and runs during peak travel hours on the weekdays at 20-30 minutes headways. The shuttle could be an attractive option for prospective Topgolf employees if they are arriving by BART or Caltrain via the Millbrae Station during the AM or PM peak hours.

10.0 TRANSPORTATION DEMAND MANAGEMENT (TDM) ANALYSIS

10.1 CITY OF BURLINGAME MOBILITY

The Mobility chapter in the City of Burlingame General Plan includes goals and policies that address Transportation Demand Management (TDM). The following goal and policies identify the City's TDM strategies that will be incorporated into new projects and public improvement projects.

> Goal M-5: Implement TDM strategies that reduce overall vehicle trips and encourage the use of transportation modes that reduce VMT and greenhouse gas emissions.

M-5.1: TDM Guidelines and Programs

Establish specific TDM guidelines and requirements within the Zoning Ordinance that encourage travel by a variety of modes for both individuals and employees, focusing different strategies in different parts of the community as appropriate to promote sustainability and economic development.

M-5.2: Targeted Outreach

Develop outreach materials for specific neighborhoods in the city that are suitable for increased transit ridership given their proximity to bus stops or train stations as a way to reduce drive-alone automobile trips.

10.2 TDM STRATEGIES

The following provides a set of strategies, measures, and incentives that will be implemented by Topgolf to encourage future employees to walk, bicycle, ride public transportation, carpool, or use other alternatives to driving alone when traveling to and from work.

- A display in the employee breakroom that informs new employees of transit options, bikeshare, and other available transportation modes.
- Constrained parking for employees.
- Secure bicycle storage.
- Improvements to existing, adjacent bicycle and pedestrian facilities.

11.0 VEHICLE MILES TRAVELED ANALYSIS

In response to Senate Bill 743 (SB 743), the Office of Planning and Research (OPR) has updated California Environmental Quality Act (CEQA) guidelines to include new transportation-related evaluation metrics. Draft guidelines were developed in August 2014 and updated in in January 2016 based on public comments in response to the August 2014 guidelines. OPR released final proposed Guidelines on November 27, 2017. The final proposed Guidelines include a new Section 15064.3 on VMT analysis and thresholds for land use developments. OPR also released a Technical Advisory on Evaluating Transportation Impacts in CEQA. New Guidelines section 15064.3 states that they do not take effect until January 1, 2020 unless the lead agency adopts them earlier. Neither the City of Burlingame nor the Alameda CTC has established any standards or thresholds on VMT. Therefore, the new guidelines have not yet been adopted and are not in effect at this time.

Since there are no standards in effect on VMT analysis, a preliminary assessment of the vehicle miles of travel (VMT) generated by the proposed project was prepared for information and disclosure purposes only. **No determination on the significance of VMT impacts is made in this document.**

11.1 ANALYSIS METHODS

To estimate VMT within the City of Burlingame, both without and with the Project, Fehr & Peers used the C/CAG travel demand model as well as StreetLight data. StreetLight is a data vendor that provides cell phone data that can be used to estimate average trip lengths, as well as trip origins and destinations. StreetLight data was used to establish average trip lengths to two existing Topgolf sites – one in Roseville, CA and another in Scottsdale, AZ. This data was used to estimate the total project VMT produced by those two sites. A summary of observed trip lengths to existing Topgolf sites in Roseville and Scottsdale is provided in **Table 17.**

Trips to the Roseville Topgolf average 11 miles on a weekday, with slightly longer average trip of 13 miles on the weekends. Average trip length to that location on weekdays is 35 minutes and 39 minutes on weekends. Trips to the Scottsdale facility average 10 miles on a weekday and 14 miles on average during the weekends. Average trip length to that location on weekdays is 35 minutes and 37 minutes on weekends. Both illustrate the similar trip lengths in distance and time traveled to access a Topgolf location across different regions of the country.

TABLE 17: TOPGOLF AVERAGE TRIP LENGTH SUMMARY

TOPGOLF LOCATION	WEEKDAY		WEEKEND	
	AVG. TRIP DURATION (MIN)	AVG. TRIP LENGTH (MILES)	AVG. TRIP DURATION (MIN)	AVG. TRIP LENGTH (MILES)
Roseville, CA	35	11	39	13
Scottsdale, AZ	35	10	37	14

Source: Streetlight Data, June 2018

StreetLight data was used to estimate average vehicle miles of travel for the Project. Using the C/CAG travel behavior model, all vehicular trips generated by City of Burlingame land uses were tracked across the entire regional network. Four types of trips were isolated:

- Internal-Internal (II) trips: Includes all trips that begin and end within the City of Burlingame
- Internal-External (IX) trips: Includes all trips that begin within city limits and end outside city limits.
- External-Internal (XI) trips: Includes all trips that begin outside city limits and end inside city limits.
- External-External (XX) trips: Trips that begin and end outside the City of Burlingame are not included. The City of Burlingame does not consider the VMT of the External-External trip type in the tracking or estimating of the City's annual and daily VMT.

The resulting metric is the total VMT and a summary of the average VMT per household and service population (residents and workers) without and with Project Conditions. This allows for a calculation of the net-change in VMT with the Project.

11.2 ANALYSIS RESULTS

Using origin/destination data from StreetLight Data, the absolute level of vehicle miles of travel from the two Topgolf sites was estimated, as presented in **Table 18.** Both sites resemble the proposed in the number of hitting bays as well as their self-contained site design meaning that it is the only use on the site.

TABLE 18: TOPGOLF PROJECT GENERATED VMT

TOPGOLF LOCATION	ANNUAL VMT	DAILY VMT
Roseville, CA	5,720,280	15,672
Scottsdale, AZ	4,436,940	12,156

Source: Streetlight Data, June 2018

The Project has the potential to generate approximately 12,000 to 16,000 VMT on an average daily basis, accounting for longer trip lengths and greater levels of trip generation on weekends as compared to weekdays. The data also includes everyone who may be accessing the site including patrons, employees, and deliveries. However, as noted in the Technical Advisory, "*lead agencies should analyze the effects of a retail project by assessing the change in total VMT because retail projects typically re-route travel from other retail destinations. A retail project might lead to increases or decreases in VMT, depending on previously existing retail travel patterns*". Due to Topgolf's unique use, and the very limited land use options in the C/CAG model, retail was chosen as the most applicable to analyze VMT in the model.

To assess the Project's effect on VMT, the C/CAG Model was executed for the existing scenario to devise the City of Burlingame's existing citywide VMT. The household and population data were derived from the American Community Survey (2017) and the employment data came from the Longitudinal Employer – Household Dynamics (LEHD) 2015 estimates. An estimated 450 people will be employed by the Topgolf at this location illustrating the net change in employment. The existing daily VMT for the City of Burlingame came from a select zone analysis using the C/CAG model. Results are presented in **Table 19,** which shows that existing land uses in Burlingame generate approximately 1,754,362 VMT per day.

TABLE 19: CITY OF BURLINGAME AND PLUS PROJECT VMT

SCENARIO	HOUSE-HOLDS[1]	POPUL-ATION[1]	EMPLOY-MENT[2]	DAILY VMT[3]	VMT/HH	VMT PER CAPITA[4]
WITH ROSEVILLE TOPGOLF PROJECT VMT						
Existing	12,691	30,401	37,822	1,754,362	138.24	25.72
Existing plus Project	12,691	30,401	38,272	1,770,034	139.47	25.77
Net Change	**--**	**--**	**450**	**15,672**	**1.23**	**0.05**
WITH SCOTTSDALE TOPGOLF PROJECT VMT						
Existing	12,691	30,401	37,822	1,754,362	138.24	25.72
Existing plus Project	12,691	30,401	38,272	1,766,518	139.19	25.72
Net Change	**--**	**--**	**450**	**12,156**	**0.95**	**0.00**

Source: Fehr & Peers, August 2018
1. American Community Survey (ACS) 2017
2. Longitudinal Employer – Household Dynamics (LEHD) 2015
3. City/County Association of Governments (CCAG) of San Mateo County model
4. (Population + Employment)

11.3 VMT CONCLUSIONS

Results of the VMT analysis indicate the Project would contribute to an increase in VMT as the Project adds a regional entertainment use expected to attract customers from a catchment area larger than only the City of Burlingame. **This conclusion is for information and disclosure purposes only. No determination on the significance of VMT impacts is made in this document.**

12.0 CONCLUSION

This study was undertaken to analyze the potential transportation impacts of the proposed Topgolf Project in the City of Burlingame, California. These impacts were evaluated in accordance with the level-of-service standards and impact criteria set forth by the City of Burlingame and the nearby jurisdiction of San Mateo. The study included the evaluation of traffic operations at 14 key intersections (i.e. 13 signalized and 1 unsignalized intersections) and two access driveways (existing and proposed) during the weekday morning (AM) and afternoon (PM) peak hours under Existing, Background, and Cumulative Conditions both with and without the Project. Additionally, Project impacts and recommendations for other transportation facilities, such as bicycle and pedestrian facilities, transit service, site circulation, and parking were also determined for consideration.

12.1 INTERSECTIONS

The results of the intersection operations analysis showed that the Project would not cause significant impacts at any of the study intersections under any of the scenarios.

12.2 FREEWAY SEGMENTS

Freeway segment impacts were evaluated under the Existing plus Project Condition at seven key segments along US 101 and SR 92. **The proposed Project does not significantly impact any of the freeway segments studied for this report.**

APPENDIX A: TRAFFIC COUNTS



Traffic Data Service

San Jose, CA
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tdsbay@cs.com

File Name : 1AM FINAL
Site Code : 00000001
Start Date : 5/30/2018
Page No : 1

Groups Printed- Lights - Buses - Trucks

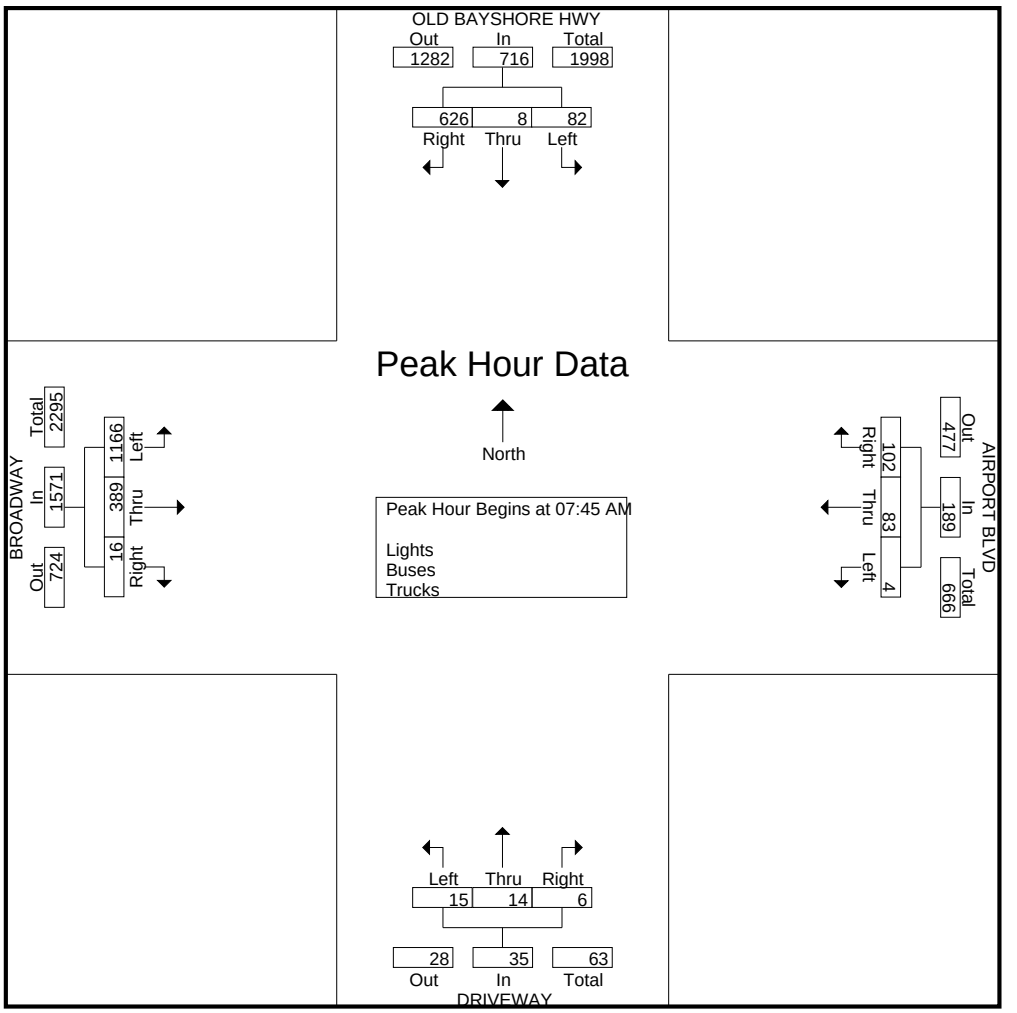
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Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	139	6	5	0	150	15	11	0	2	28	2	3	5	3	13	5	45	196	0	246	437
07:15 AM	137	2	10	3	152	15	11	2	0	28	3	5	4	1	13	5	57	269	0	331	524
07:30 AM	167	2	9	1	179	26	15	1	2	44	4	4	0	1	9	5	65	266	0	336	568
07:45 AM	170	2	17	3	192	22	29	3	1	55	1	4	4	1	10	8	78	302	0	388	645
Total	613	12	41	7	673	78	66	6	5	155	10	16	13	6	45	23	245	1033	0	1301	2174
08:00 AM	161	4	15	1	181	28	15	0	0	43	2	4	1	0	7	4	93	293	0	390	621
08:15 AM	147	1	21	0	169	33	22	0	2	57	2	1	5	0	8	2	91	289	0	382	616
08:30 AM	148	1	29	4	182	19	17	1	0	37	1	5	5	0	11	2	127	282	0	411	641
08:45 AM	158	4	10	1	173	24	17	1	0	42	3	2	2	0	7	2	100	253	0	355	577
Total	614	10	75	6	705	104	71	2	2	179	8	12	13	0	33	10	411	1117	0	1538	2455
Grand Total	1227	22	116	13	1378	182	137	8	7	334	18	28	26	6	78	33	656	2150	0	2839	4629
Apprch %	89	1.6	8.4	0.9		54.5	41	2.4	2.1		23.1	35.9	33.3	7.7		1.2	23.1	75.7	0		
Total %	26.5	0.5	2.5	0.3	29.8	3.9	3	0.2	0.2	7.2	0.4	0.6	0.6	0.1	1.7	0.7	14.2	46.4	0	61.3	
Lights	1151	19	104	13	1287	167	122	7	7	303	9	28	26	6	69	25	608	2099	0	2732	4391
% Lights	93.8	86.4	89.7	100	93.4	91.8	89.1	87.5	100	90.7	50	100	100	100	88.5	75.8	92.7	97.6	0	96.2	94.9
Buses	16	0	7	0	23	5	3	1	0	9	5	0	0	0	5	5	23	11	0	39	76
% Buses	1.3	0	6	0	1.7	2.7	2.2	12.5	0	2.7	27.8	0	0	0	6.4	15.2	3.5	0.5	0	1.4	1.6
Trucks	60	3	5	0	68	10	12	0	0	22	4	0	0	0	4	3	25	40	0	68	162
% Trucks	4.9	13.6	4.3	0	4.9	5.5	8.8	0	0	6.6	22.2	0	0	0	5.1	9.1	3.8	1.9	0	2.4	3.5

	OLD BAYSHORE HWY Southbound				AIRPORT BLVD Westbound				DRIVEWAY Northbound				BROADWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**170**	2	17	**189**	22	**29**	**3**	54	1	4	4	9	**8**	78	**302**	388	**640**
08:00 AM	161	**4**	15	180	28	15	0	43	**2**	4	1	7	4	93	293	390	620
08:15 AM	147	1	21	169	**33**	22	0	**55**	2	1	**5**	8	2	91	289	382	614
08:30 AM	148	1	**29**	178	19	17	1	37	1	**5**	5	**11**	2	**127**	282	**411**	637
Total Volume	626	8	82	716	102	83	4	189	6	14	15	35	16	389	1166	1571	2511
% App. Total	87.4	1.1	11.5		54	43.9	2.1		17.1	40	42.9		1	24.8	74.2		
PHF	.921	.500	.707	.947	.773	.716	.333	.859	.750	.700	.750	.795	.500	.766	.965	.956	.981

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Site Code : 00000001
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Groups Printed- Bikes

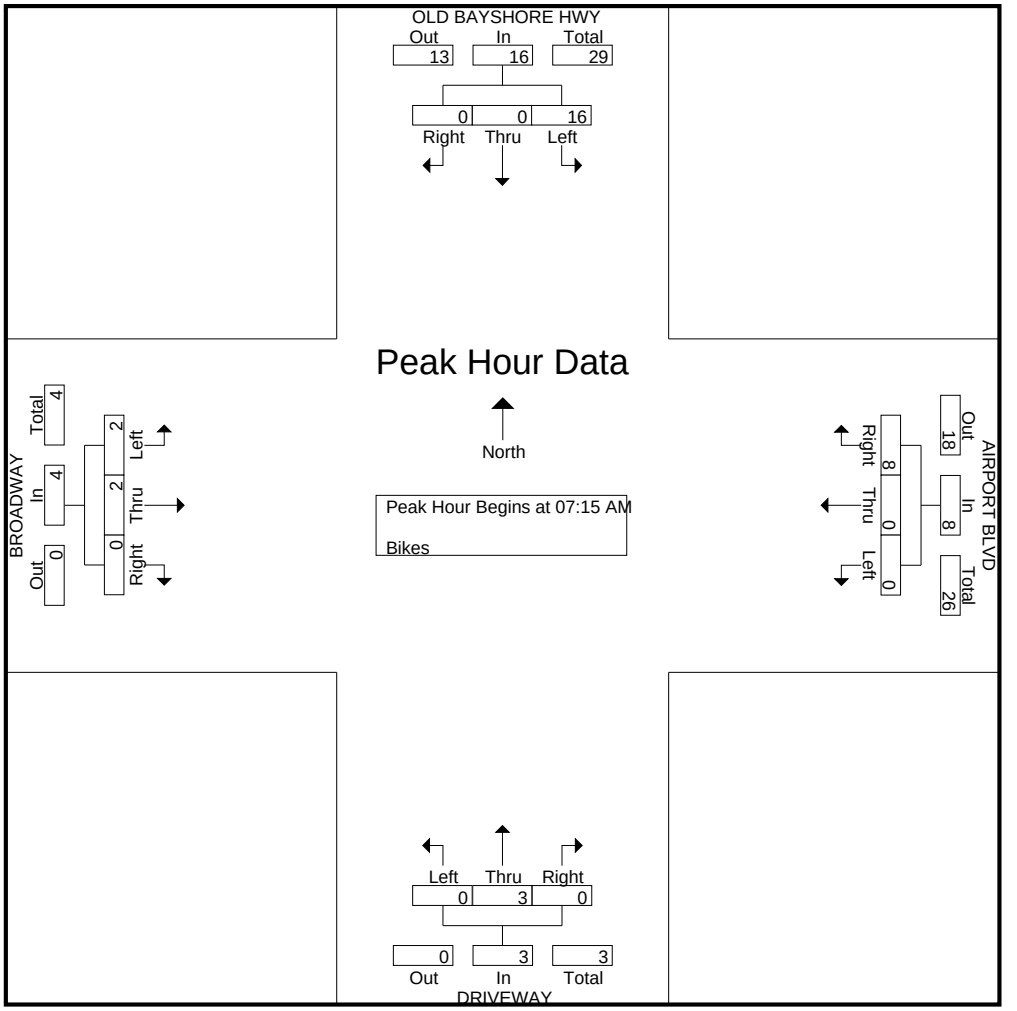
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Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	5	0	5	3	0	0	0	3	0	1	0	0	1	0	0	0	0	0	9
07:30 AM	0	0	7	0	7	3	0	0	0	3	0	2	0	0	2	0	1	0	0	1	13
07:45 AM	0	0	3	0	3	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	5
Total	0	0	15	0	15	7	0	0	0	7	0	3	0	0	3	0	1	1	0	2	27
08:00 AM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	1	1	0	2	4
08:15 AM	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0	0	1	1	0	2	5
08:30 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	3
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	2	0	2	3	1	0	0	4	0	0	0	0	0	0	3	4	0	7	13
Grand Total	0	0	17	0	17	10	1	0	0	11	0	3	0	0	3	0	4	5	0	9	40
Apprch %	0	0	100	0		90.9	9.1	0	0		0	100	0	0		0	44.4	55.6	0		
Total %	0	0	42.5	0	42.5	25	2.5	0	0	27.5	0	7.5	0	0	7.5	0	10	12.5	0	22.5	

	OLD BAYSHORE HWY Southbound				AIRPORT BLVD Westbound				DRIVEWAY Northbound				BROADWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	5	5	**3**	0	0	**3**	0	1	0	1	0	0	0	0	9
07:30 AM	0	0	**7**	**7**	3	0	0	3	0	**2**	0	**2**	0	**1**	0	1	**13**
07:45 AM	0	0	3	3	1	0	0	1	0	0	0	0	0	0	**1**	1	5
08:00 AM	0	0	1	1	1	0	0	1	0	0	0	0	0	1	1	**2**	4
Total Volume	0	0	16	16	8	0	0	8	0	3	0	3	0	2	2	4	31
% App. Total	0	0	100		100	0	0		0	100	0		0	50	50		
PHF	.000	.000	.571	.571	.667	.000	.000	.667	.000	.375	.000	.375	.000	.500	.500	.500	.596

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Site Code : 00000001
Start Date : 5/30/2018
Page No : 1

Groups Printed- Lights - Buses - Trucks

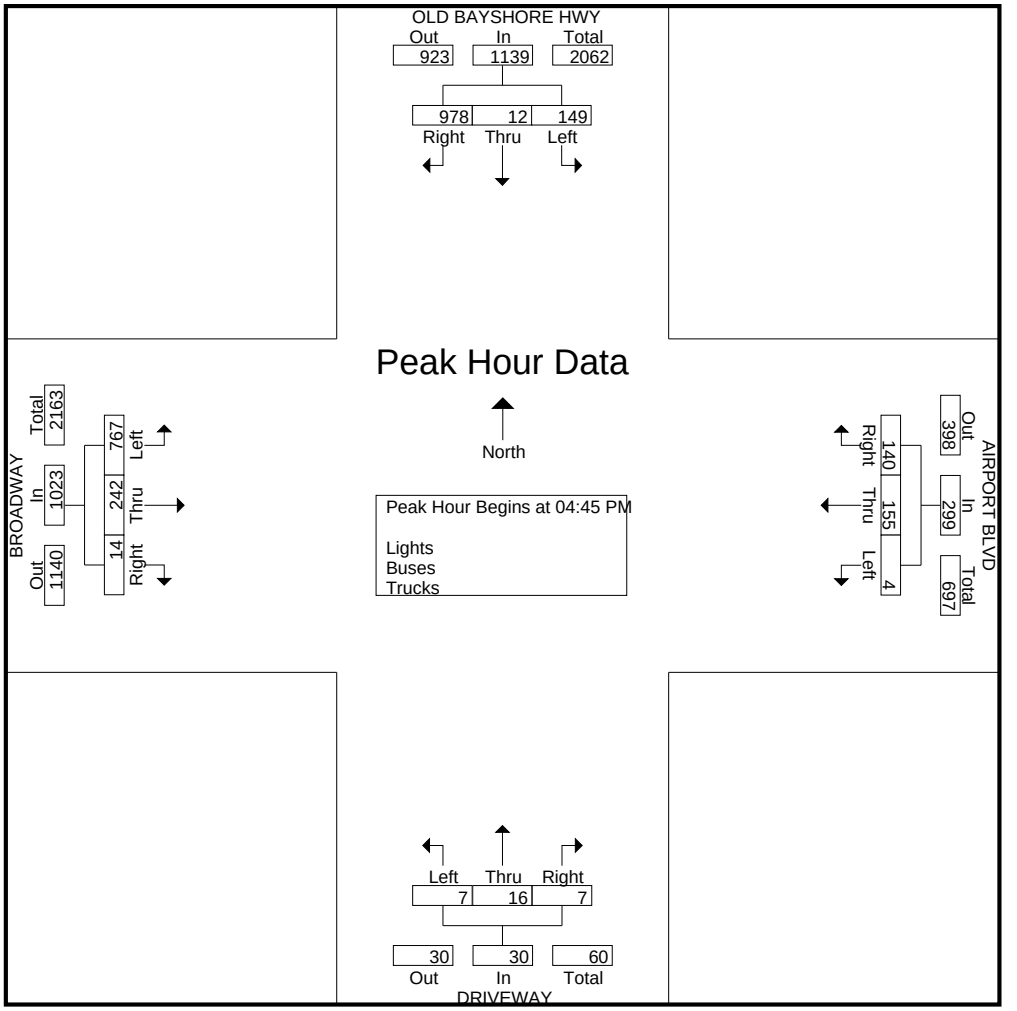
	OLD BAYSHORE HWY Southbound					AIRPORT BLVD Westbound					DRIVEWAY Northbound					BROADWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	205	0	33	3	241	20	37	1	2	60	2	4	4	4	14	3	53	174	0	230	545
04:15 PM	206	1	29	0	236	28	34	0	0	62	1	4	2	2	9	5	53	211	0	269	576
04:30 PM	248	0	29	2	279	28	31	1	2	62	3	3	6	0	12	6	58	176	0	240	593
04:45 PM	207	2	32	3	244	30	47	1	2	80	2	5	3	2	12	3	74	205	0	282	618
Total	866	3	123	8	1000	106	149	3	6	264	8	16	15	8	47	17	238	766	0	1021	2332
05:00 PM	271	2	48	1	322	42	39	1	2	84	2	2	0	0	4	5	64	218	0	287	697
05:15 PM	233	5	34	8	280	31	30	0	7	68	1	4	2	1	8	3	58	190	0	251	607
05:30 PM	267	3	35	1	306	37	39	2	2	80	2	5	2	1	10	3	46	154	0	203	599
05:45 PM	255	4	45	3	307	30	33	0	0	63	0	2	5	0	7	3	56	178	0	237	614
Total	1026	14	162	13	1215	140	141	3	11	295	5	13	9	2	29	14	224	740	0	978	2517
Grand Total	1892	17	285	21	2215	246	290	6	17	559	13	29	24	10	76	31	462	1506	0	1999	4849
Apprch %	85.4	0.8	12.9	0.9		44	51.9	1.1	3		17.1	38.2	31.6	13.2		1.6	23.1	75.3	0		
Total %	39	0.4	5.9	0.4	45.7	5.1	6	0.1	0.4	11.5	0.3	0.6	0.5	0.2	1.6	0.6	9.5	31.1	0	41.2	
Lights	1861	15	281	21	2178	233	281	5	17	536	12	29	23	10	74	24	412	1483	0	1919	4707
% Lights	98.4	88.2	98.6	100	98.3	94.7	96.9	83.3	100	95.9	92.3	100	95.8	100	97.4	77.4	89.2	98.5	0	96	97.1
Buses	5	2	2	0	9	7	4	0	0	11	1	0	0	0	1	7	37	4	0	48	69
% Buses	0.3	11.8	0.7	0	0.4	2.8	1.4	0	0	2	7.7	0	0	0	1.3	22.6	8	0.3	0	2.4	1.4
Trucks	26	0	2	0	28	6	5	1	0	12	0	0	1	0	1	0	13	19	0	32	73
% Trucks	1.4	0	0.7	0	1.3	2.4	1.7	16.7	0	2.1	0	0	4.2	0	1.3	0	2.8	1.3	0	1.6	1.5

	OLD BAYSHORE HWY Southbound				AIRPORT BLVD Westbound				DRIVEWAY Northbound				BROADWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	207	2	32	241	30	**47**	1	78	**2**	**5**	**3**	**10**	3	**74**	205	282	611
05:00 PM	**271**	2	**48**	**321**	**42**	39	1	**82**	2	2	0	4	**5**	64	**218**	**287**	**694**
05:15 PM	233	**5**	34	272	31	30	0	61	1	4	2	7	3	58	190	251	591
05:30 PM	267	3	35	305	37	39	**2**	78	2	5	2	9	3	46	154	203	595
Total Volume	978	12	149	1139	140	155	4	299	7	16	7	30	14	242	767	1023	2491
% App. Total	85.9	1.1	13.1		46.8	51.8	1.3		23.3	53.3	23.3		1.4	23.7	75		
PHF	.902	.600	.776	.887	.833	.824	.500	.912	.875	.800	.583	.750	.700	.818	.880	.891	.897

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Groups Printed- Bikes

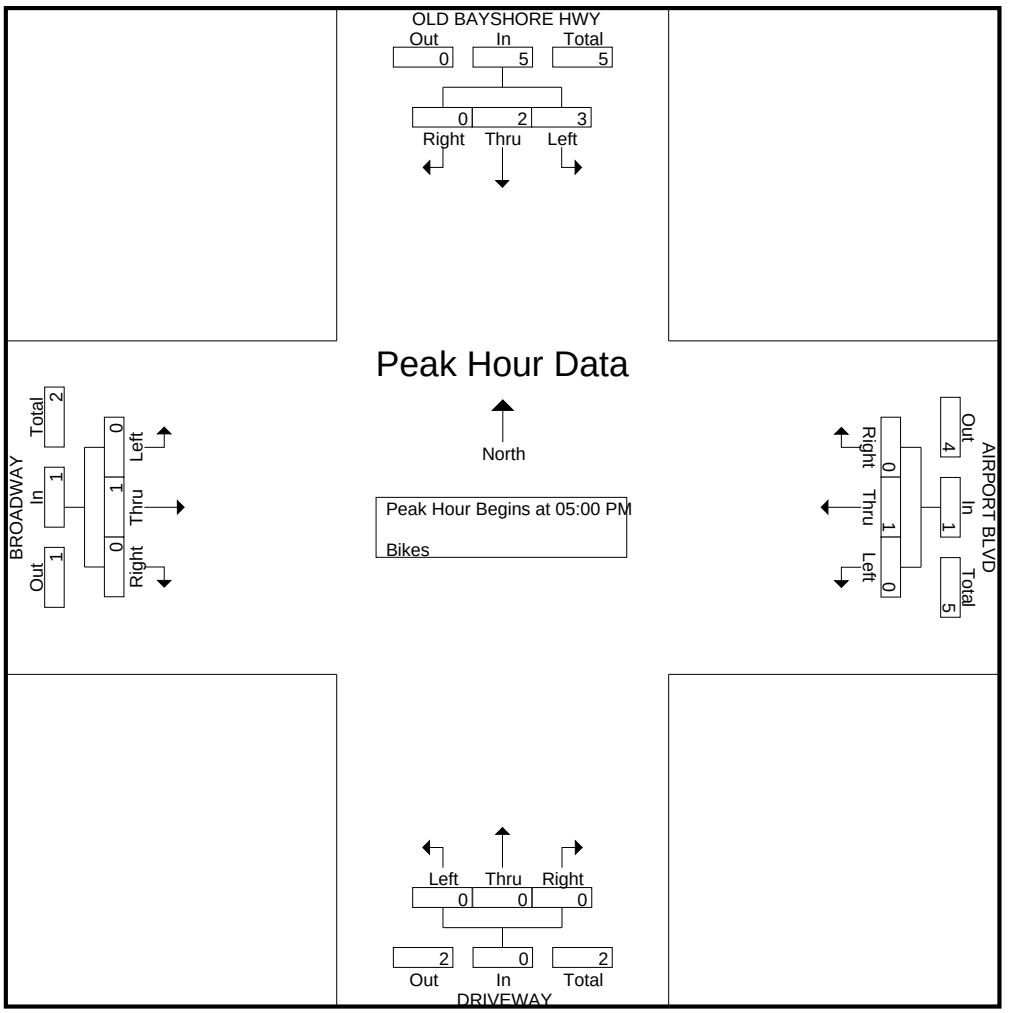
	OLD BAYSHORE HWY Southbound					AIRPORT BLVD Westbound					DRIVEWAY Northbound					BROADWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:45 PM	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	4
Total	0	2	3	0	5	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	7
Grand Total	1	2	5	0	8	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	10
Apprch %	12.5	25	62.5	0		0	100	0	0		0	0	0	0		0	100	0	0		
Total %	10	20	50	0	80	0	10	0	0	10	0	0	0	0	0	0	10	0	0	10	

	OLD BAYSHORE HWY Southbound				AIRPORT BLVD Westbound				DRIVEWAY Northbound				BROADWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	**2**	**2**	0	0	0	0	0	0	0	0	0	0	0	0	2
05:45 PM	0	**2**	0	2	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**	**4**
Total Volume	0	2	3	5	0	1	0	1	0	0	0	0	0	1	0	1	7
% App. Total	0	40	60		0	100	0		0	0	0		0	100	0		
PHF	.000	.250	.375	.625	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.438

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Groups Printed- Lights - Buses - Trucks

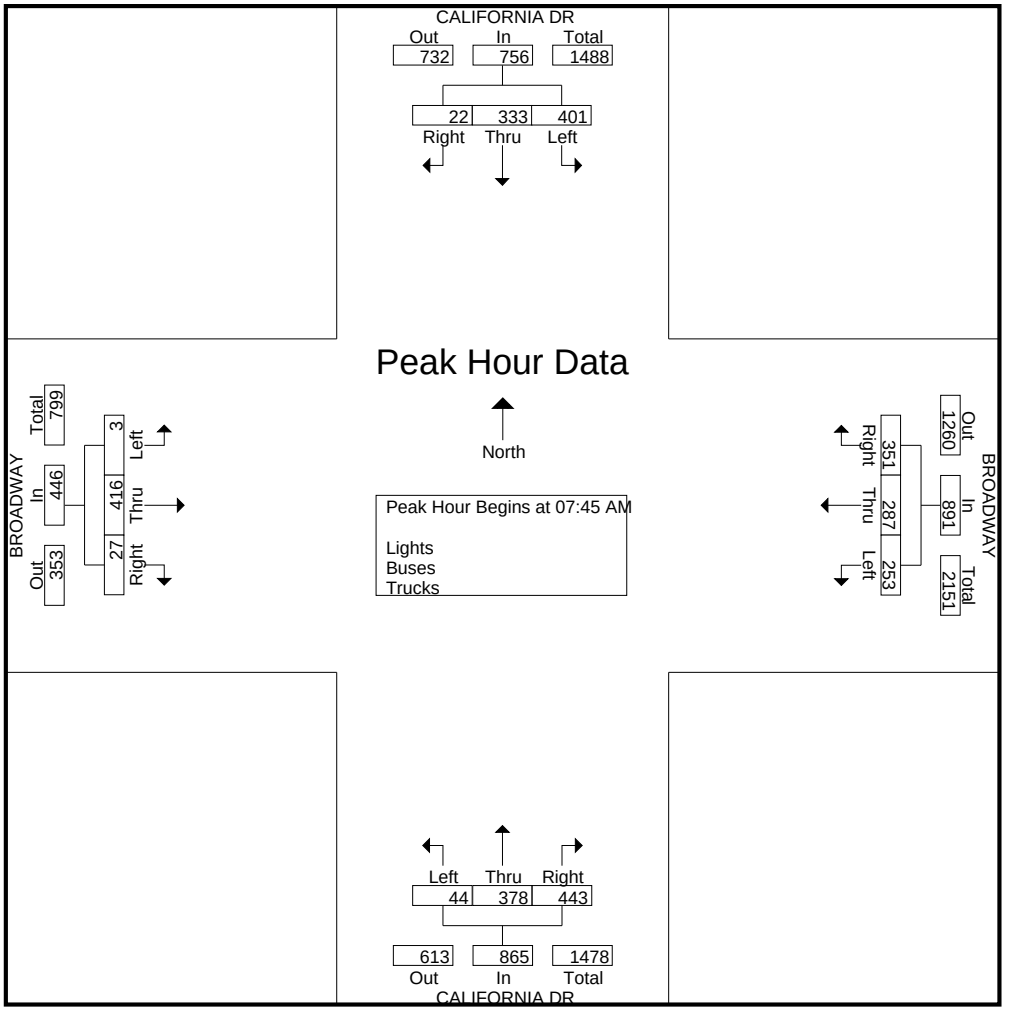
	CALIFORNIA DR Southbound					BROADWAY Westbound					CALIFORNIA DR Northbound					BROADWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	6	35	39	3	83	34	46	67	0	147	109	35	5	0	149	2	78	0	1	81	460
07:15 AM	2	40	61	4	107	50	56	35	1	142	118	45	9	5	177	3	75	0	2	80	506
07:30 AM	2	71	84	2	159	72	71	74	1	218	101	71	7	4	183	6	99	0	3	108	668
07:45 AM	3	79	109	2	193	107	72	67	2	248	113	101	10	6	230	10	109	0	5	124	795
Total	13	225	293	11	542	263	245	243	4	755	441	252	31	15	739	21	361	0	11	393	2429
08:00 AM	5	74	98	3	180	90	75	72	2	239	121	120	16	5	262	6	93	1	2	102	783
08:15 AM	8	90	111	1	210	83	79	50	2	214	90	85	9	9	193	4	94	2	2	102	719
08:30 AM	6	90	83	0	179	71	61	64	4	200	119	72	9	6	206	7	120	0	0	127	712
08:45 AM	7	74	105	9	195	68	82	68	3	221	98	70	14	4	186	3	96	2	2	103	705
Total	26	328	397	13	764	312	297	254	11	874	428	347	48	24	847	20	403	5	6	434	2919
Grand Total	39	553	690	24	1306	575	542	497	15	1629	869	599	79	39	1586	41	764	5	17	827	5348
Apprch %	3	42.3	52.8	1.8		35.3	33.3	30.5	0.9		54.8	37.8	5	2.5		5	92.4	0.6	2.1		
Total %	0.7	10.3	12.9	0.4	24.4	10.8	10.1	9.3	0.3	30.5	16.2	11.2	1.5	0.7	29.7	0.8	14.3	0.1	0.3	15.5	
Lights	39	544	688	24	1295	552	534	472	15	1573	851	584	76	39	1550	41	757	5	17	820	5238
% Lights	100	98.4	99.7	100	99.2	96	98.5	95	100	96.6	97.9	97.5	96.2	100	97.7	100	99.1	100	100	99.2	97.9
Buses	0	6	1	0	7	3	1	6	0	10	6	10	0	0	16	0	0	0	0	0	33
% Buses	0	1.1	0.1	0	0.5	0.5	0.2	1.2	0	0.6	0.7	1.7	0	0	1	0	0	0	0	0	0.6
Trucks	0	3	1	0	4	20	7	19	0	46	12	5	3	0	20	0	7	0	0	7	77
% Trucks	0	0.5	0.1	0	0.3	3.5	1.3	3.8	0	2.8	1.4	0.8	3.8	0	1.3	0	0.9	0	0	0.8	1.4

	CALIFORNIA DR Southbound				BROADWAY Westbound				CALIFORNIA DR Northbound				BROADWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	3	79	109	191	**107**	72	67	**246**	113	101	10	224	**10**	109	0	119	**780**
08:00 AM	5	74	98	177	90	75	**72**	237	**121**	**120**	**16**	**257**	6	93	1	100	771
08:15 AM	**8**	**90**	**111**	**209**	83	**79**	50	212	90	85	9	184	4	94	**2**	100	705
08:30 AM	6	90	83	179	71	61	64	196	119	72	9	200	7	**120**	0	**127**	702
Total Volume	22	333	401	756	351	287	253	891	443	378	44	865	27	416	3	446	2958
% App. Total	2.9	44	53		39.4	32.2	28.4		51.2	43.7	5.1		6.1	93.3	0.7		
PHF	.688	.925	.903	.904	.820	.908	.878	.905	.915	.788	.688	.841	.675	.867	.375	.878	.948

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Groups Printed- Bikes

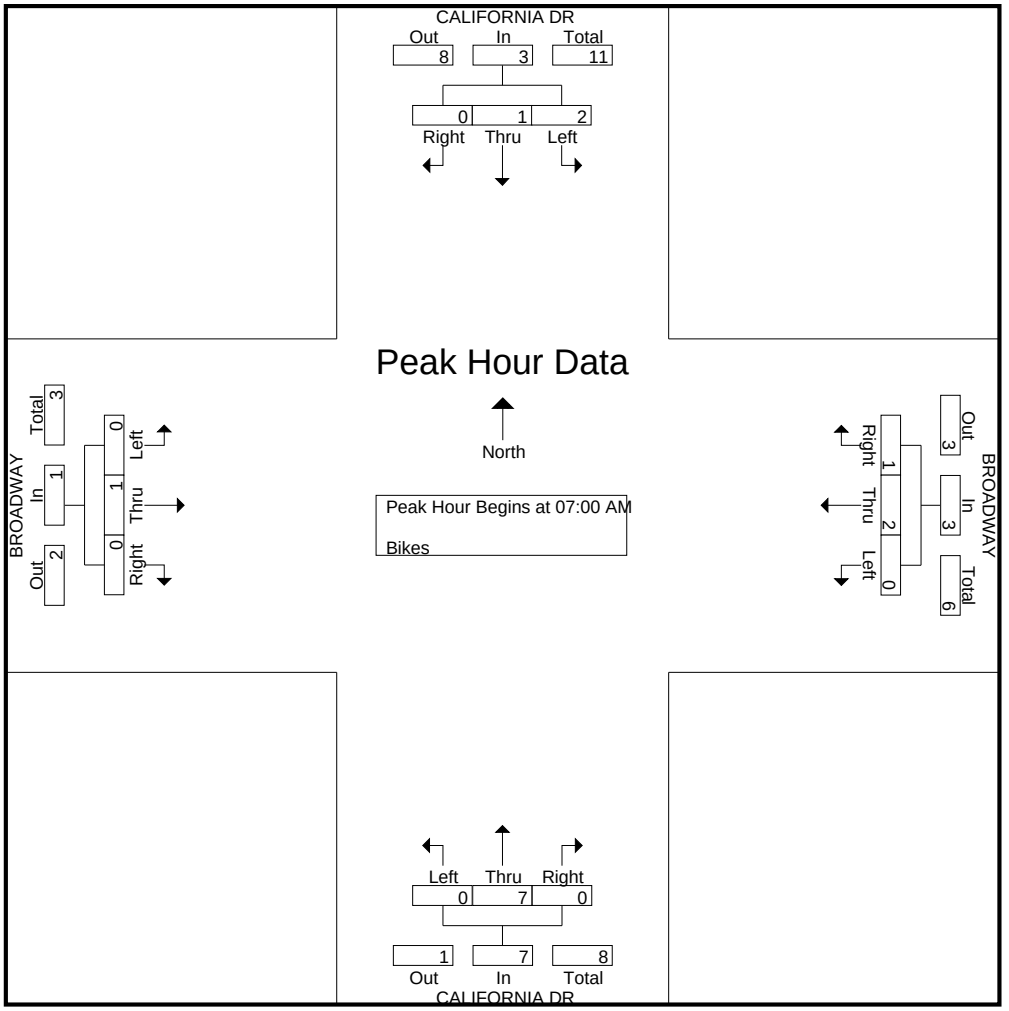
	CALIFORNIA DR Southbound					BROADWAY Westbound					CALIFORNIA DR Northbound					BROADWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	1	0	0	1	0	2	0	0	2	0	2	0	0	2	0	0	0	0	0	5
07:15 AM	0	0	0	0	0	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	4
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
07:45 AM	0	0	2	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
Total	0	1	2	0	3	1	2	0	0	3	0	7	0	0	7	0	1	0	0	1	14
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
08:15 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
08:30 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
08:45 AM	0	2	0	0	2	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	4
Total	0	4	1	0	5	0	2	0	0	2	0	1	0	0	1	0	2	0	0	2	10
Grand Total	0	5	3	0	8	1	4	0	0	5	0	8	0	0	8	0	3	0	0	3	24
Apprch %	0	62.5	37.5	0		20	80	0	0		0	100	0	0		0	100	0	0		
Total %	0	20.8	12.5	0	33.3	4.2	16.7	0	0	20.8	0	33.3	0	0	33.3	0	12.5	0	0	12.5	

	CALIFORNIA DR Southbound				BROADWAY Westbound				CALIFORNIA DR Northbound				BROADWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	**1**	0	1	0	**2**	0	**2**	0	2	0	2	0	0	0	0	**5**
07:15 AM	0	0	0	0	**1**	0	0	1	0	**3**	0	**3**	0	0	0	0	4
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**	1
07:45 AM	0	0	**2**	**2**	0	0	0	0	0	2	0	2	0	0	0	0	4
Total Volume	0	1	2	3	1	2	0	3	0	7	0	7	0	1	0	1	14
% App. Total	0	33.3	66.7		33.3	66.7	0		0	100	0		0	100	0		
PHF	.000	.250	.250	.375	.250	.250	.000	.375	.000	.583	.000	.583	.000	.250	.000	.250	.700

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Groups Printed- Lights - Buses - Trucks

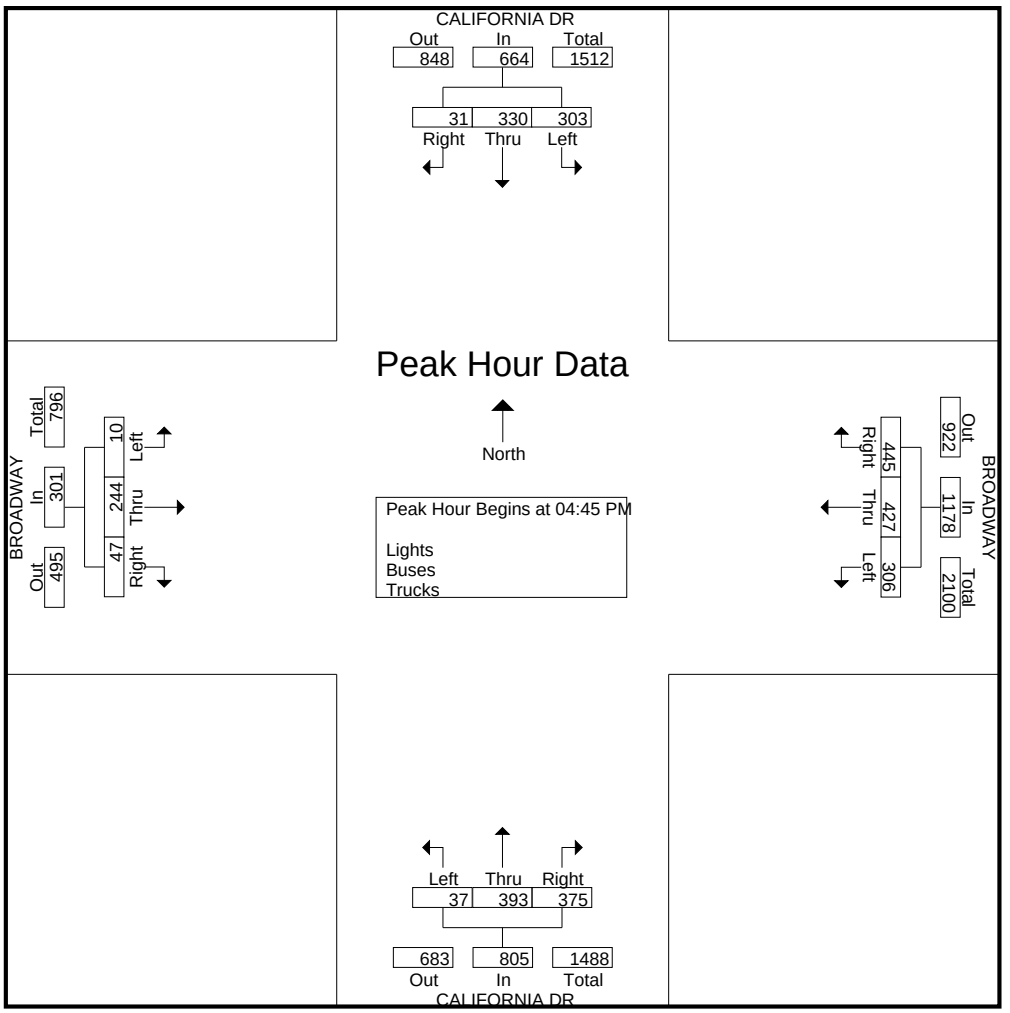
	CALIFORNIA DR Southbound					BROADWAY Westbound					CALIFORNIA DR Northbound					BROADWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	8	75	77	4	164	65	83	83	1	232	91	97	6	7	201	12	59	6	6	83	680
04:15 PM	11	67	74	1	153	85	84	86	1	256	108	58	12	8	186	11	48	4	1	64	659
04:30 PM	8	60	83	0	151	79	105	81	0	265	108	65	9	8	190	17	70	1	1	89	695
04:45 PM	4	89	83	0	176	100	106	77	2	285	100	97	10	2	209	10	52	7	1	70	740
Total	31	291	317	5	644	329	378	327	4	1038	407	317	37	25	786	50	229	18	9	306	2774
05:00 PM	8	67	66	8	149	114	117	80	2	313	94	83	4	7	188	11	82	2	1	96	746
05:15 PM	12	86	82	4	184	111	100	63	2	276	92	117	11	4	224	16	49	1	2	68	752
05:30 PM	7	88	72	6	173	120	104	86	2	312	89	96	12	10	207	10	61	0	4	75	767
05:45 PM	8	62	42	4	116	105	133	88	0	326	74	101	3	11	189	9	75	6	2	92	723
Total	35	303	262	22	622	450	454	317	6	1227	349	397	30	32	808	46	267	9	9	331	2988
Grand Total	66	594	579	27	1266	779	832	644	10	2265	756	714	67	57	1594	96	496	27	18	637	5762
Apprch %	5.2	46.9	45.7	2.1		34.4	36.7	28.4	0.4		47.4	44.8	4.2	3.6		15.1	77.9	4.2	2.8		
Total %	1.1	10.3	10	0.5	22	13.5	14.4	11.2	0.2	39.3	13.1	12.4	1.2	1	27.7	1.7	8.6	0.5	0.3	11.1	
Lights	63	586	563	27	1239	771	822	633	10	2236	742	706	64	57	1569	94	489	27	18	628	5672
% Lights	95.5	98.7	97.2	100	97.9	99	98.8	98.3	100	98.7	98.1	98.9	95.5	100	98.4	97.9	98.6	100	100	98.6	98.4
Buses	2	4	3	0	9	1	2	7	0	10	4	4	1	0	9	0	0	0	0	0	28
% Buses	3	0.7	0.5	0	0.7	0.1	0.2	1.1	0	0.4	0.5	0.6	1.5	0	0.6	0	0	0	0	0	0.5
Trucks	1	4	13	0	18	7	8	4	0	19	10	4	2	0	16	2	7	0	0	9	62
% Trucks	1.5	0.7	2.2	0	1.4	0.9	1	0.6	0	0.8	1.3	0.6	3	0	1	2.1	1.4	0	0	1.4	1.1

	CALIFORNIA DR Southbound				BROADWAY Westbound				CALIFORNIA DR Northbound				BROADWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	4	**89**	**83**	176	100	106	77	283	**100**	97	10	207	10	52	**7**	69	735
05:00 PM	8	67	66	141	114	**117**	80	**311**	94	83	4	181	11	**82**	2	**95**	728
05:15 PM	**12**	86	82	**180**	111	100	63	274	92	**117**	11	**220**	**16**	49	1	66	740
05:30 PM	7	88	72	167	**120**	104	**86**	310	89	96	**12**	197	10	61	0	71	**745**
Total Volume	31	330	303	664	445	427	306	1178	375	393	37	805	47	244	10	301	2948
% App. Total	4.7	49.7	45.6		37.8	36.2	26		46.6	48.8	4.6		15.6	81.1	3.3		
PHF	.646	.927	.913	.922	.927	.912	.890	.947	.938	.840	.771	.915	.734	.744	.357	.792	.989

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Groups Printed- Bikes

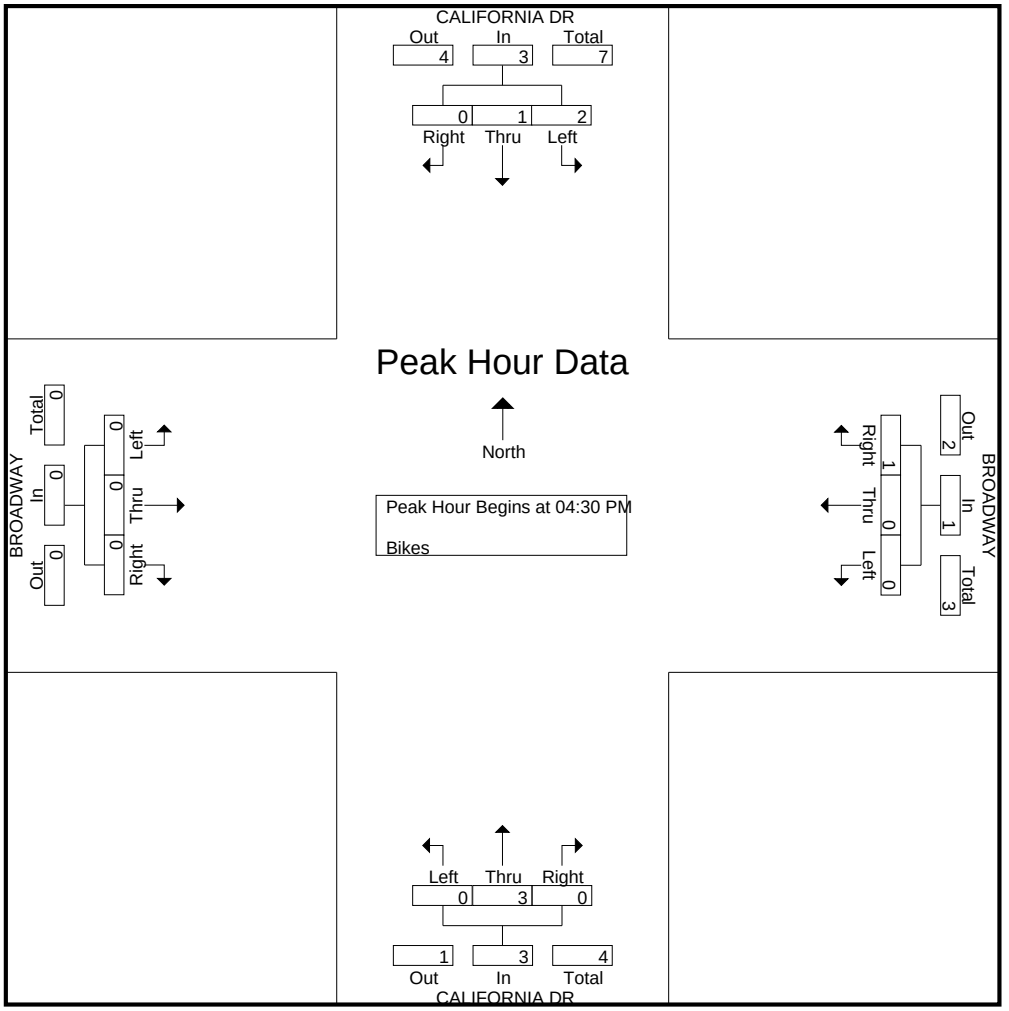
	CALIFORNIA DR Southbound					BROADWAY Westbound					CALIFORNIA DR Northbound					BROADWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
04:45 PM	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total	0	0	1	0	1	2	1	0	0	3	0	2	0	0	2	0	0	0	0	0	6
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	1	1	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
05:45 PM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
Total	0	1	2	0	3	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	6
Grand Total	0	1	3	0	4	3	1	0	0	4	0	4	0	0	4	0	0	0	0	0	12
Apprch %	0	25	75	0		75	25	0	0		0	100	0	0		0	0	0	0		
Total %	0	8.3	25	0	33.3	25	8.3	0	0	33.3	0	33.3	0	0	33.3	0	0	0	0	0	

	CALIFORNIA DR Southbound				BROADWAY Westbound				CALIFORNIA DR Northbound				BROADWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	**1**	0	0	**1**	0	**1**	0	**1**	0	0	0	0	2
04:45 PM	0	0	**1**	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	**1**	1	**2**	0	0	0	0	0	1	0	1	0	0	0	0	**3**
Total Volume	0	1	2	3	1	0	0	1	0	3	0	3	0	0	0	0	7
% App. Total	0	33.3	66.7		100	0	0		0	100	0		0	0	0		
PHF	.000	.250	.500	.375	.250	.000	.000	.250	.000	.750	.000	.750	.000	.000	.000	.000	.583

Traffic Data Service

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File Name : 2PM FINAL
Site Code : 00000002
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Traffic Data Service

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File Name : 3AM FINAL
Site Code : 00000003
Start Date : 5/30/2018
Page No : 1

Groups Printed- Lights - Buses - Trucks

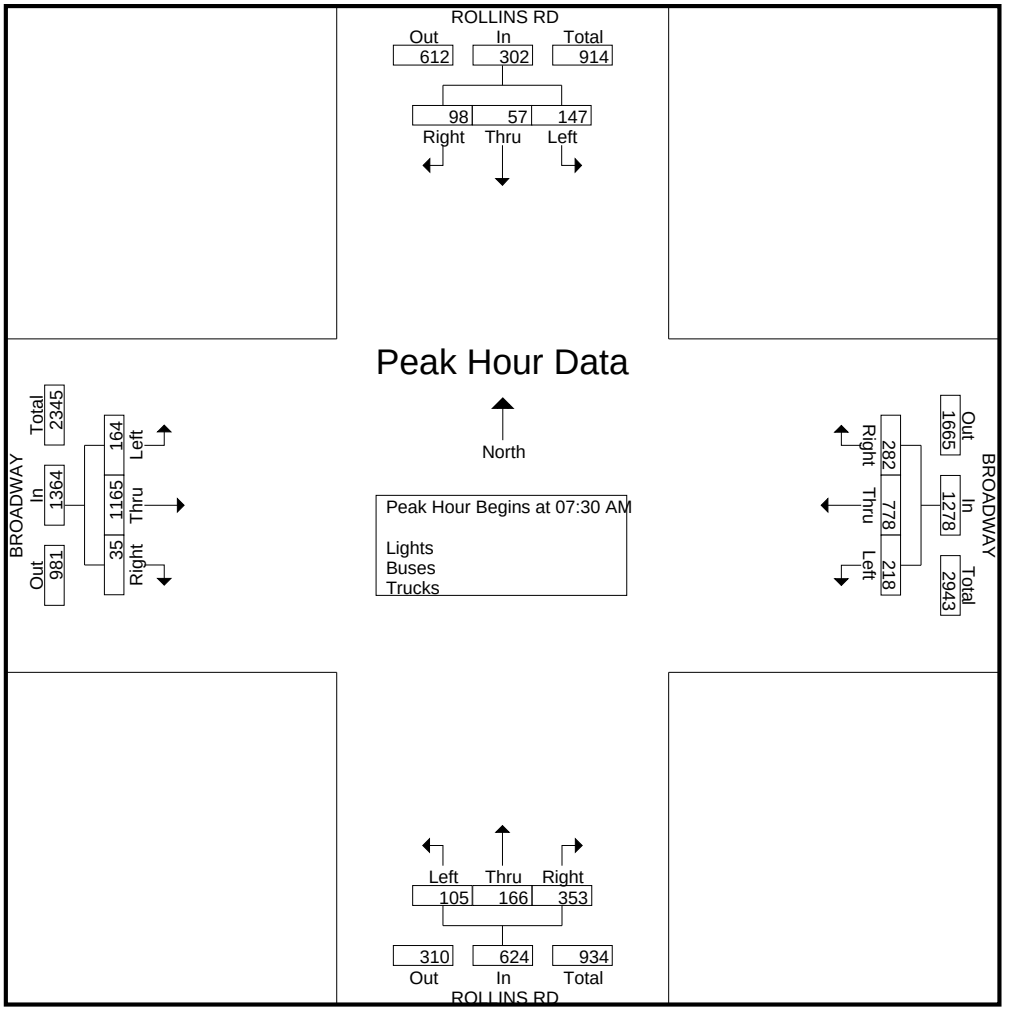
	ROLLINS RD Southbound					BROADWAY Westbound					ROLLINS RD Northbound					BROADWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	12	10	24	0	46	65	140	22	1	228	73	23	8	0	104	0	218	46	0	264	642
07:15 AM	10	10	30	3	53	67	166	40	0	273	73	26	10	0	109	0	286	23	0	309	744
07:30 AM	22	19	37	4	82	68	201	50	0	319	100	32	12	0	144	2	260	51	0	313	858
07:45 AM	20	19	34	2	75	86	194	64	0	344	85	60	40	0	185	12	280	43	1	336	940
Total	64	58	125	9	256	286	701	176	1	1164	331	141	70	0	542	14	1044	163	1	1222	3184
08:00 AM	28	12	37	0	77	58	184	45	0	287	89	44	29	0	162	13	324	36	1	374	900
08:15 AM	28	7	39	0	74	70	199	59	0	328	79	30	24	0	133	8	301	34	0	343	878
08:30 AM	20	13	27	1	61	66	163	48	0	277	84	32	12	0	128	10	301	45	1	357	823
08:45 AM	20	12	42	4	78	63	212	61	0	336	64	30	13	0	107	12	276	46	1	335	856
Total	96	44	145	5	290	257	758	213	0	1228	316	136	78	0	530	43	1202	161	3	1409	3457
Grand Total	160	102	270	14	546	543	1459	389	1	2392	647	277	148	0	1072	57	2246	324	4	2631	6641
Apprch %	29.3	18.7	49.5	2.6		22.7	61	16.3	0		60.4	25.8	13.8	0		2.2	85.4	12.3	0.2		
Total %	2.4	1.5	4.1	0.2	8.2	8.2	22	5.9	0	36	9.7	4.2	2.2	0	16.1	0.9	33.8	4.9	0.1	39.6	
Lights	153	96	235	14	498	522	1409	383	0	2314	635	275	147	0	1057	57	2217	320	4	2598	6467
% Lights	95.6	94.1	87	100	91.2	96.1	96.6	98.5	0	96.7	98.1	99.3	99.3	0	98.6	100	98.7	98.8	100	98.7	97.4
Buses	0	0	7	0	7	0	10	1	0	11	0	1	0	0	1	0	8	0	0	8	27
% Buses	0	0	2.6	0	1.3	0	0.7	0.3	0	0.5	0	0.4	0	0	0.1	0	0.4	0	0	0.3	0.4
Trucks	7	6	28	0	41	21	40	5	1	67	12	1	1	0	14	0	21	4	0	25	147
% Trucks	4.4	5.9	10.4	0	7.5	3.9	2.7	1.3	100	2.8	1.9	0.4	0.7	0	1.3	0	0.9	1.2	0	1	2.2

	ROLLINS RD Southbound				BROADWAY Westbound				ROLLINS RD Northbound				BROADWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	22	**19**	37	**78**	68	**201**	50	319	**100**	32	12	144	2	260	**51**	313	854
07:45 AM	20	19	34	73	**86**	194	**64**	**344**	85	**60**	**40**	**185**	12	280	43	335	**937**
08:00 AM	**28**	12	37	77	58	184	45	287	89	44	29	162	**13**	**324**	36	**373**	899
08:15 AM	28	7	**39**	74	70	199	59	328	79	30	24	133	8	301	34	343	878
Total Volume	98	57	147	302	282	778	218	1278	353	166	105	624	35	1165	164	1364	3568
% App. Total	32.5	18.9	48.7		22.1	60.9	17.1		56.6	26.6	16.8		2.6	85.4	12		
PHF	.875	.750	.942	.968	.820	.968	.852	.929	.883	.692	.656	.843	.673	.899	.804	.914	.952

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Groups Printed- Bikes

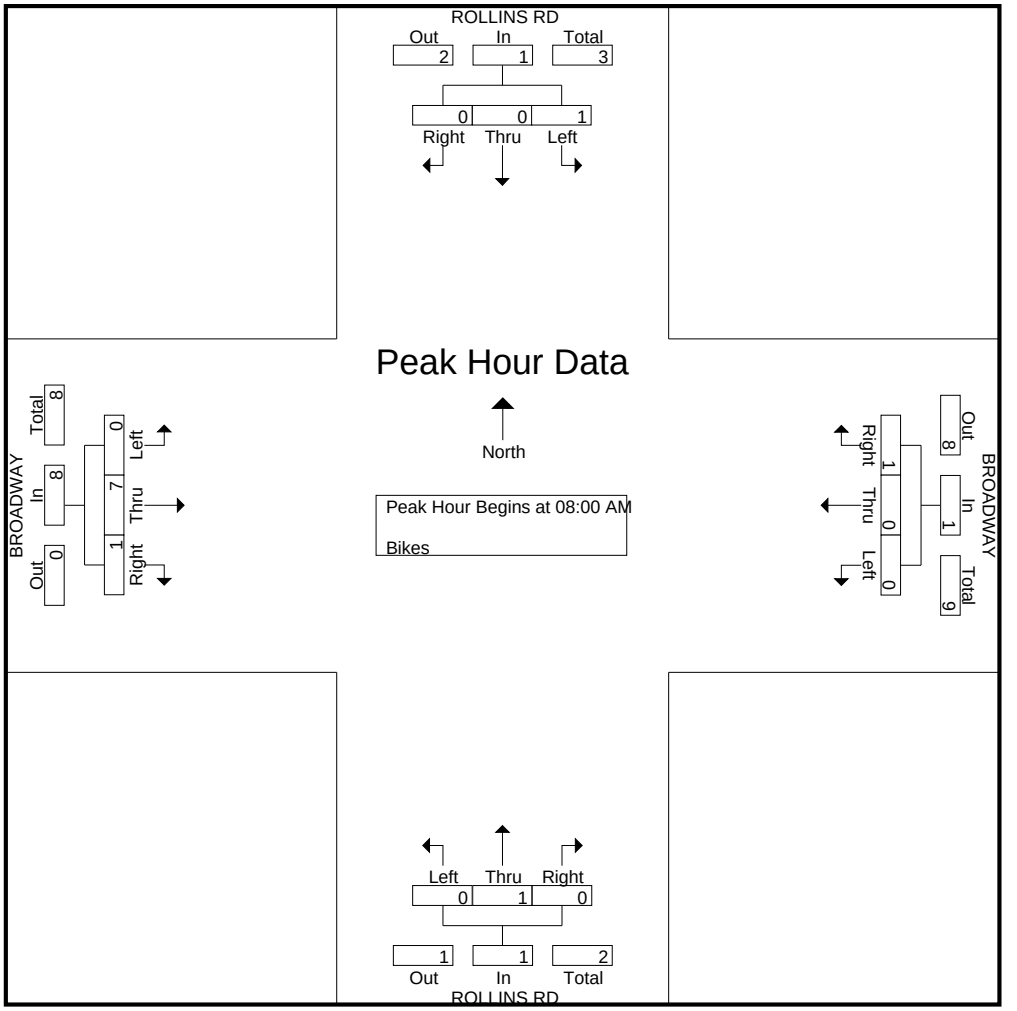
	ROLLINS RD Southbound					BROADWAY Westbound					ROLLINS RD Northbound					BROADWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	3
08:15 AM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	3	0	0	3	5
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	1	0	1	1	0	0	0	1	0	1	0	0	1	1	7	0	0	8	11
Grand Total	0	0	1	0	1	1	0	0	0	1	0	1	0	0	1	1	7	0	0	8	11
Apprch %	0	0	100	0		100	0	0	0		0	100	0	0		12.5	87.5	0	0		
Total %	0	0	9.1	0	9.1	9.1	0	0	0	9.1	0	9.1	0	0	9.1	9.1	63.6	0	0	72.7	

	ROLLINS RD Southbound				BROADWAY Westbound				ROLLINS RD Northbound				BROADWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	**1**	**1**	0	0	0	0	0	0	0	0	**1**	1	0	2	3
08:15 AM	0	0	0	0	**1**	0	0	**1**	0	**1**	0	**1**	0	**3**	0	**3**	**5**
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	1	1	1	0	0	1	0	1	0	1	1	7	0	8	11
% App. Total	0	0	100		100	0	0		0	100	0		12.5	87.5	0		
PHF	.000	.000	.250	.250	.250	.000	.000	.250	.000	.250	.000	.250	.250	.583	.000	.667	.550

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File Name : 3PM FINAL
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Groups Printed- Lights - Buses - Trucks

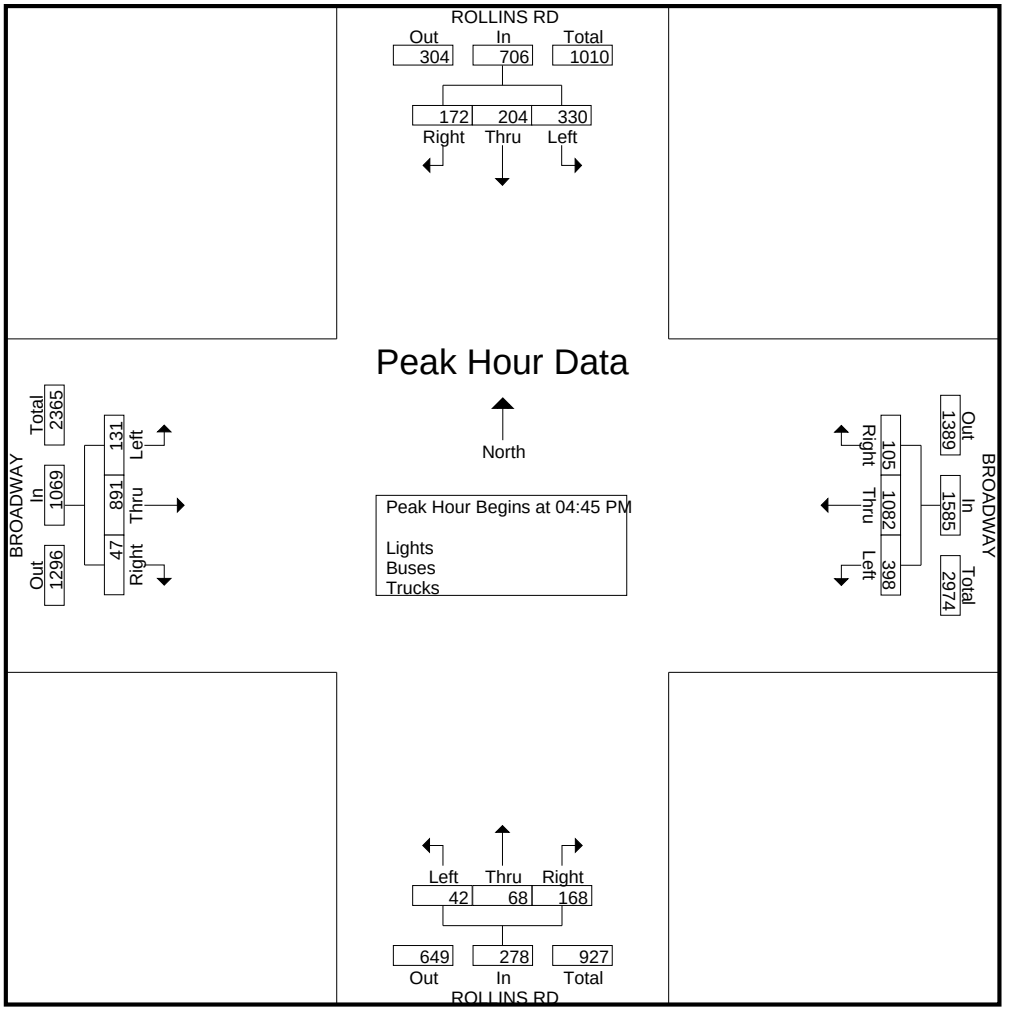
	ROLLINS RD Southbound					BROADWAY Westbound					ROLLINS RD Northbound					BROADWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	38	25	74	1	138	24	224	65	0	313	56	13	16	0	85	9	231	35	0	275	811
04:15 PM	29	31	67	0	127	33	228	79	0	340	38	17	14	0	69	6	244	20	0	270	806
04:30 PM	44	37	97	4	182	30	236	88	0	354	50	14	8	0	72	13	220	38	0	271	879
04:45 PM	39	33	87	0	159	22	275	111	0	408	44	15	5	0	64	9	232	35	0	276	907
Total	150	126	325	5	606	109	963	343	0	1415	188	59	43	0	290	37	927	128	0	1092	3403
05:00 PM	42	54	99	2	197	28	261	77	0	366	40	13	18	0	71	5	213	28	2	248	882
05:15 PM	48	64	83	4	199	24	248	114	0	386	44	27	10	0	81	19	230	36	2	287	953
05:30 PM	43	53	61	2	159	31	298	96	0	425	40	13	9	0	62	14	216	32	0	262	908
05:45 PM	36	47	66	2	151	25	313	124	0	462	41	11	7	0	59	8	197	22	0	227	899
Total	169	218	309	10	706	108	1120	411	0	1639	165	64	44	0	273	46	856	118	4	1024	3642
Grand Total	319	344	634	15	1312	217	2083	754	0	3054	353	123	87	0	563	83	1783	246	4	2116	7045
Apprch %	24.3	26.2	48.3	1.1		7.1	68.2	24.7	0		62.7	21.8	15.5	0		3.9	84.3	11.6	0.2		
Total %	4.5	4.9	9	0.2	18.6	3.1	29.6	10.7	0	43.3	5	1.7	1.2	0	8	1.2	25.3	3.5	0.1	30	
Lights	317	343	612	15	1287	202	2060	754	0	3016	350	119	86	0	555	83	1749	242	4	2078	6936
% Lights	99.4	99.7	96.5	100	98.1	93.1	98.9	100	0	98.8	99.2	96.7	98.9	0	98.6	100	98.1	98.4	100	98.2	98.5
Buses	0	0	6	0	6	0	9	0	0	9	0	1	0	0	1	0	5	0	0	5	21
% Buses	0	0	0.9	0	0.5	0	0.4	0	0	0.3	0	0.8	0	0	0.2	0	0.3	0	0	0.2	0.3
Trucks	2	1	16	0	19	15	14	0	0	29	3	3	1	0	7	0	29	4	0	33	88
% Trucks	0.6	0.3	2.5	0	1.4	6.9	0.7	0	0	0.9	0.8	2.4	1.1	0	1.2	0	1.6	1.6	0	1.6	1.2

	ROLLINS RD Southbound				BROADWAY Westbound				ROLLINS RD Northbound				BROADWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	39	33	87	159	22	275	111	408	**44**	15	5	64	9	**232**	35	276	907
05:00 PM	42	54	**99**	**195**	28	261	77	366	40	13	**18**	71	5	213	28	246	878
05:15 PM	**48**	**64**	83	195	24	248	**114**	386	44	**27**	10	**81**	**19**	230	**36**	**285**	**947**
05:30 PM	43	53	61	157	**31**	**298**	96	**425**	40	13	9	62	14	216	32	262	906
Total Volume	172	204	330	706	105	1082	398	1585	168	68	42	278	47	891	131	1069	3638
% App. Total	24.4	28.9	46.7		6.6	68.3	25.1		60.4	24.5	15.1		4.4	83.3	12.3		
PHF	.896	.797	.833	.905	.847	.908	.873	.932	.955	.630	.583	.858	.618	.960	.910	.938	.960

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File Name : 3PM FINAL
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Groups Printed- Bikes

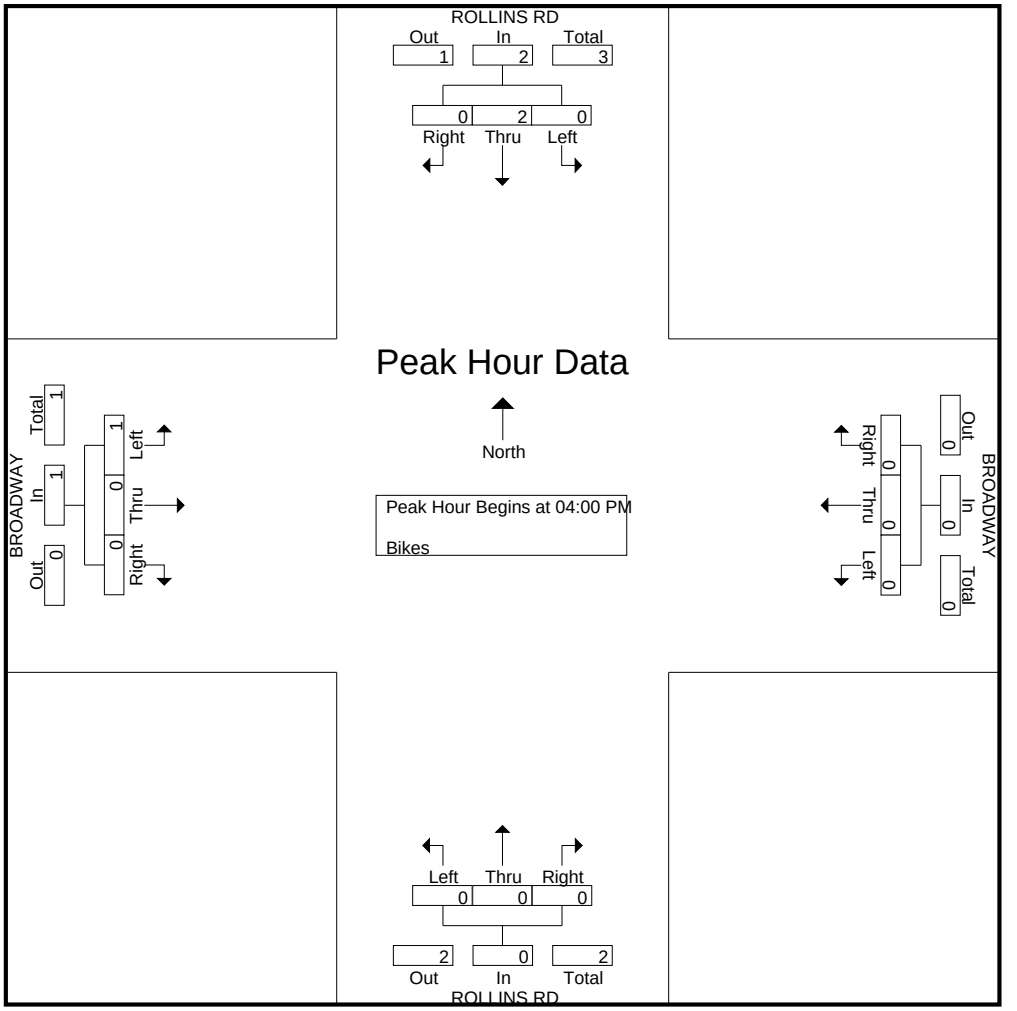
	ROLLINS RD Southbound					BROADWAY Westbound					ROLLINS RD Northbound					BROADWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	3
Grand Total	0	2	1	0	3	0	2	0	0	2	0	0	0	0	0	0	0	1	0	1	6
Apprch %	0	66.7	33.3	0		0	100	0	0		0	0	0	0		0	0	100	0		
Total %	0	33.3	16.7	0	50	0	33.3	0	0	33.3	0	0	0	0	0	0	0	16.7	0	16.7	

	ROLLINS RD Southbound				BROADWAY Westbound				ROLLINS RD Northbound				BROADWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	**1**	**1**
04:15 PM	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	0	0	0	0	0	1	1	3
% App. Total	0	100	0		0	0	0		0	0	0		0	0	100		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.750

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File Name : 5AM FINAL
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Groups Printed- Lights - Buses - Trucks

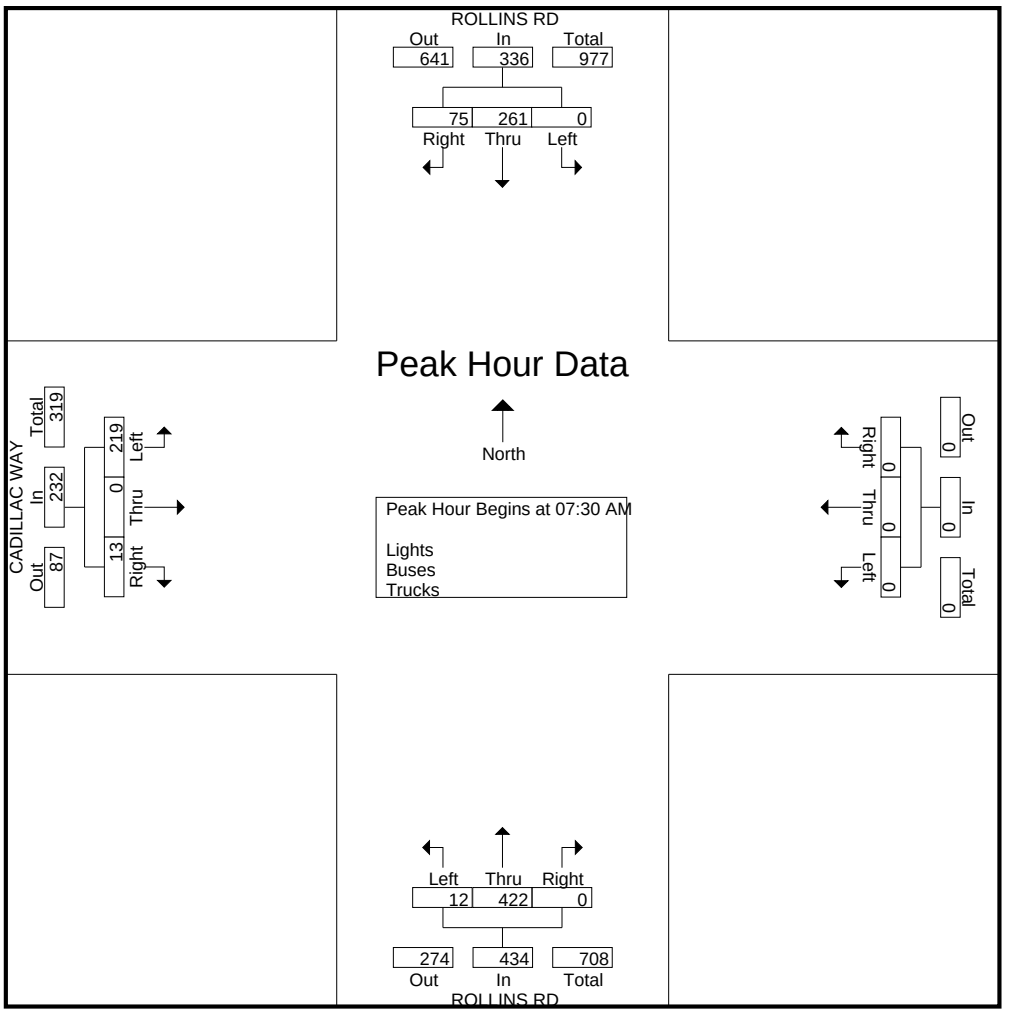
	ROLLINS RD Southbound					Westbound					ROLLINS RD Northbound					CADILLAC WAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	11	35	0	0	46	0	0	0	0	0	0	75	4	1	80	0	0	30	0	30	156
07:15 AM	13	41	0	0	54	0	0	0	0	0	0	85	2	8	95	2	0	26	1	29	178
07:30 AM	23	75	0	0	98	0	0	0	0	0	0	101	2	3	106	2	0	52	0	54	258
07:45 AM	20	76	0	0	96	0	0	0	0	0	0	124	4	3	131	3	0	63	0	66	293
Total	67	227	0	0	294	0	0	0	0	0	0	385	12	15	412	7	0	171	1	179	885
08:00 AM	17	58	0	0	75	0	0	0	0	0	0	112	1	2	115	3	0	54	2	59	249
08:15 AM	15	52	0	0	67	0	0	0	0	0	0	85	5	1	91	5	0	50	3	58	216
08:30 AM	14	56	0	0	70	0	0	0	0	0	0	72	4	1	77	1	0	49	0	50	197
08:45 AM	17	61	0	0	78	0	0	0	0	0	0	72	3	2	77	10	0	41	1	52	207
Total	63	227	0	0	290	0	0	0	0	0	0	341	13	6	360	19	0	194	6	219	869
Grand Total	130	454	0	0	584	0	0	0	0	0	0	726	25	21	772	26	0	365	7	398	1754
Apprch %	22.3	77.7	0	0		0	0	0	0		0	94	3.2	2.7		6.5	0	91.7	1.8		
Total %	7.4	25.9	0	0	33.3	0	0	0	0	0	0	41.4	1.4	1.2	44	1.5	0	20.8	0.4	22.7	
Lights	126	441	0	0	567	0	0	0	0	0	0	712	23	21	756	26	0	356	7	389	1712
% Lights	96.9	97.1	0	0	97.1	0	0	0	0	0	0	98.1	92	100	97.9	100	0	97.5	100	97.7	97.6
Buses	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
% Buses	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0	0	0	0.1
Trucks	4	13	0	0	17	0	0	0	0	0	0	13	2	0	15	0	0	9	0	9	41
% Trucks	3.1	2.9	0	0	2.9	0	0	0	0	0	0	1.8	8	0	1.9	0	0	2.5	0	2.3	2.3

	ROLLINS RD Southbound				Westbound				ROLLINS RD Northbound				CADILLAC WAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**23**	75	0	**98**	0	0	0	0	0	101	2	103	2	0	52	54	255
07:45 AM	20	**76**	0	96	0	0	0	0	0	**124**	4	**128**	3	0	**63**	**66**	**290**
08:00 AM	17	58	0	75	0	0	0	0	0	112	1	113	3	0	54	57	245
08:15 AM	15	52	0	67	0	0	0	0	0	85	**5**	90	**5**	0	50	55	212
Total Volume	75	261	0	336	0	0	0	0	0	422	12	434	13	0	219	232	1002
% App. Total	22.3	77.7	0		0	0	0		0	97.2	2.8		5.6	0	94.4		
PHF	.815	.859	.000	.857	.000	.000	.000	.000	.000	.851	.600	.848	.650	.000	.869	.879	.864

Traffic Data Service

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Groups Printed- Bikes

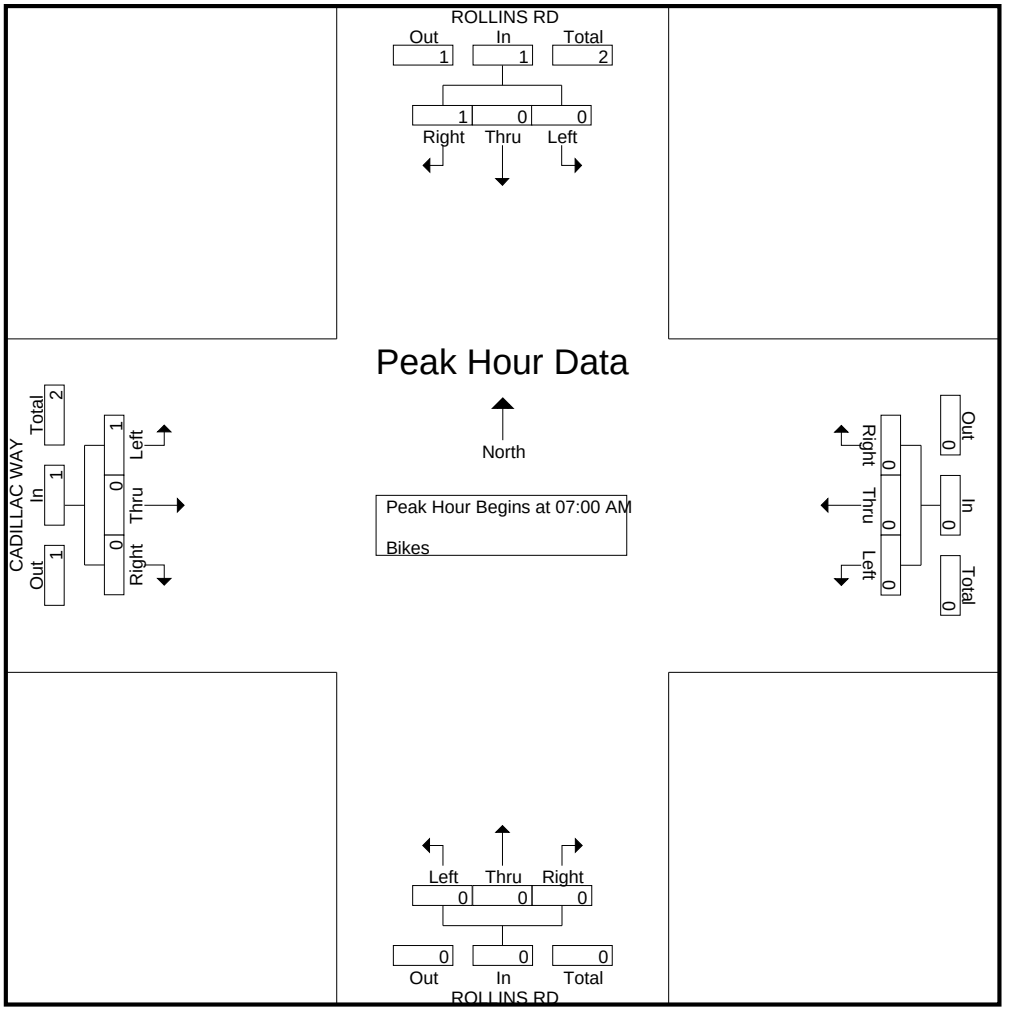
	ROLLINS RD Southbound					Westbound					ROLLINS RD Northbound					CADILLAC WAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Grand Total	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	3
Apprch %	100	0	0	0		0	0	0	0		0	0	0	0		0	0	100	0		
Total %	33.3	0	0	0	33.3	0	0	0	0	0	0	0	0	0	0	0	0	66.7	0	66.7	

	ROLLINS RD Southbound				Westbound				ROLLINS RD Northbound				CADILLAC WAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	**1**	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	**1**
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	**1**	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
% App. Total	100	0	0		0	0	0		0	0	0		0	0	100		
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.500

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Groups Printed- Lights - Buses - Trucks

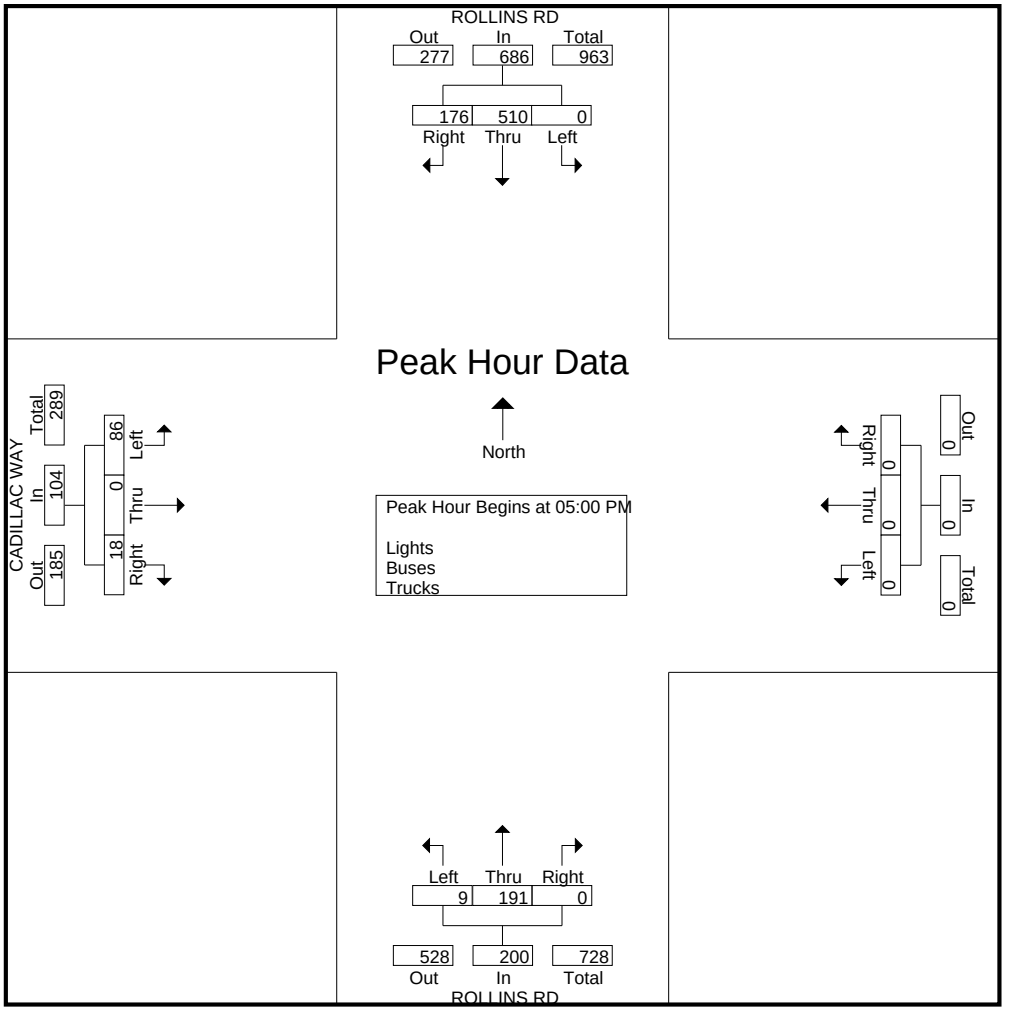
	ROLLINS RD Southbound					Westbound					ROLLINS RD Northbound					CADILLAC WAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	20	84	0	0	104	0	0	0	0	0	0	65	2	2	69	2	0	19	2	23	196
04:15 PM	29	86	0	0	115	0	0	0	0	0	0	44	4	2	50	2	0	21	1	24	189
04:30 PM	19	107	0	0	126	0	0	0	0	0	0	51	0	1	52	6	0	25	1	32	210
04:45 PM	40	105	0	0	145	0	0	0	0	0	0	42	2	1	45	1	0	21	2	24	214
Total	108	382	0	0	490	0	0	0	0	0	0	202	8	6	216	11	0	86	6	103	809
05:00 PM	30	109	0	0	139	0	0	0	0	0	0	45	1	8	54	1	0	27	2	30	223
05:15 PM	49	149	0	0	198	0	0	0	0	0	0	63	2	4	69	5	0	20	2	27	294
05:30 PM	50	114	0	0	164	0	0	0	0	0	0	46	5	3	54	7	0	19	0	26	244
05:45 PM	47	138	0	0	185	0	0	0	0	0	0	37	1	12	50	5	0	20	0	25	260
Total	176	510	0	0	686	0	0	0	0	0	0	191	9	27	227	18	0	86	4	108	1021
Grand Total	284	892	0	0	1176	0	0	0	0	0	0	393	17	33	443	29	0	172	10	211	1830
Apprch %	24.1	75.9	0	0		0	0	0	0		0	88.7	3.8	7.4		13.7	0	81.5	4.7		
Total %	15.5	48.7	0	0	64.3	0	0	0	0	0	0	21.5	0.9	1.8	24.2	1.6	0	9.4	0.5	11.5	
Lights	284	888	0	0	1172	0	0	0	0	0	0	387	17	33	437	28	0	172	10	210	1819
% Lights	100	99.6	0	0	99.7	0	0	0	0	0	0	98.5	100	100	98.6	96.6	0	100	100	99.5	99.4
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	0	4	0	0	4	0	0	0	0	0	0	6	0	0	6	1	0	0	0	1	11
% Trucks	0	0.4	0	0	0.3	0	0	0	0	0	0	1.5	0	0	1.4	3.4	0	0	0	0.5	0.6

	ROLLINS RD Southbound				Westbound				ROLLINS RD Northbound				CADILLAC WAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	30	109	0	139	0	0	0	0	0	45	1	46	1	0	**27**	**28**	213
05:15 PM	49	**149**	0	**198**	0	0	0	0	0	**63**	2	**65**	5	0	20	25	**288**
05:30 PM	**50**	114	0	164	0	0	0	0	0	46	**5**	51	**7**	0	19	26	241
05:45 PM	47	138	0	185	0	0	0	0	0	37	1	38	5	0	20	25	248
Total Volume	176	510	0	686	0	0	0	0	0	191	9	200	18	0	86	104	990
% App. Total	25.7	74.3	0		0	0	0		0	95.5	4.5		17.3	0	82.7		
PHF	.880	.856	.000	.866	.000	.000	.000	.000	.000	.758	.450	.769	.643	.000	.796	.929	.859

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Groups Printed- Bikes

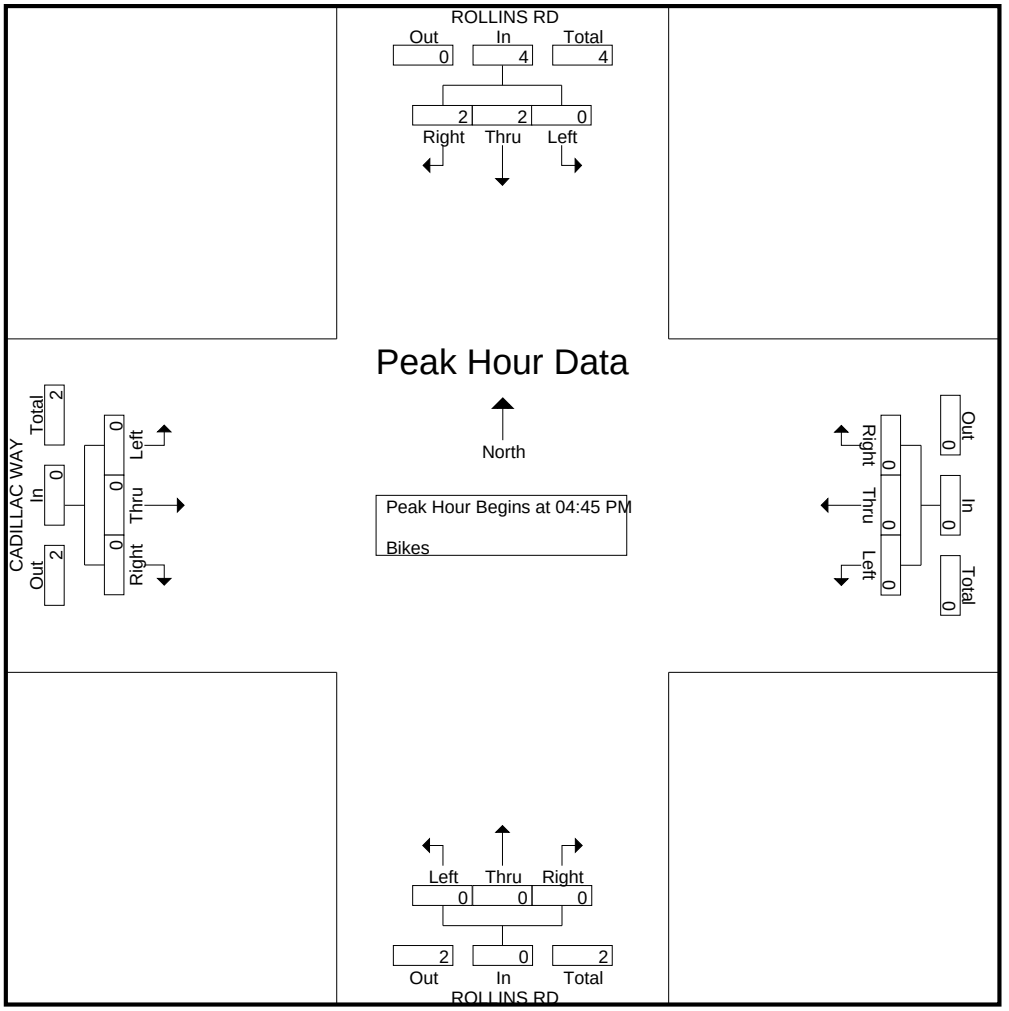
	ROLLINS RD Southbound					Westbound					ROLLINS RD Northbound					CADILLAC WAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	2	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Grand Total	4	2	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Apprch %	66.7	33.3	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %	66.7	33.3	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

	ROLLINS RD Southbound				Westbound				ROLLINS RD Northbound				CADILLAC WAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	**1**	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	1	**2**	0	**3**	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Total Volume	2	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
% App. Total	50	50	0		0	0	0		0	0	0		0	0	0		
PHF	.500	.250	.000	.333	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.333

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Groups Printed- Lights - Buses - Trucks

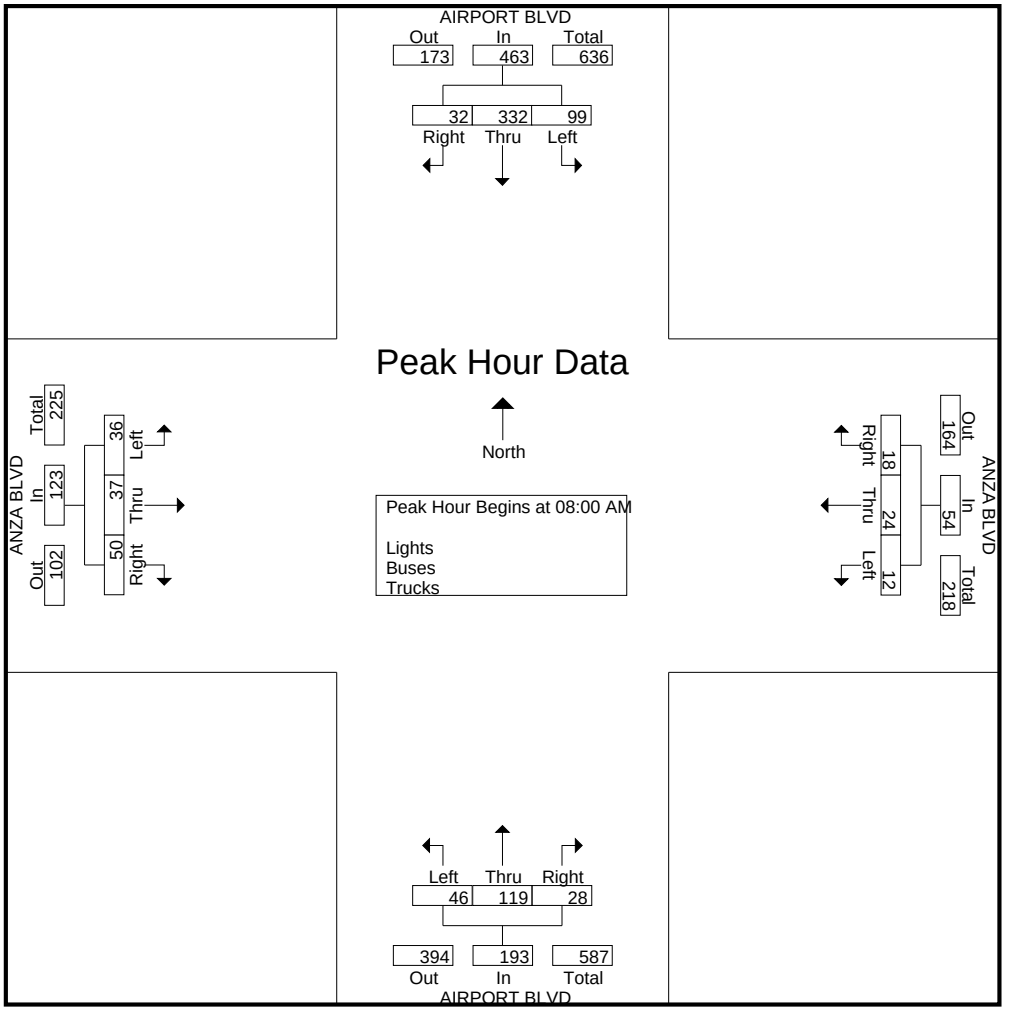
	AIRPORT BLVD Southbound					ANZA BLVD Westbound					AIRPORT BLVD Northbound					ANZA BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	5	37	5	0	47	2	4	3	0	9	2	9	11	0	22	11	7	11	3	32	110
07:15 AM	5	54	9	2	70	8	5	5	3	21	2	16	11	0	29	12	9	6	3	30	150
07:30 AM	6	42	18	1	67	3	4	2	1	10	7	28	14	0	49	6	8	8	2	24	150
07:45 AM	9	73	18	1	101	10	11	3	3	27	4	32	17	0	53	9	10	5	1	25	206
Total	25	206	50	4	285	23	24	13	7	67	15	85	53	0	153	38	34	30	9	111	616
08:00 AM	13	71	15	1	100	4	3	4	0	11	5	31	16	0	52	13	9	3	2	27	190
08:15 AM	4	81	25	0	110	7	10	2	1	20	7	40	4	0	51	7	9	11	2	29	210
08:30 AM	9	97	29	2	137	5	5	4	0	14	9	22	12	1	44	17	9	12	3	41	236
08:45 AM	6	83	30	1	120	2	6	2	0	10	7	26	14	4	51	13	10	10	3	36	217
Total	32	332	99	4	467	18	24	12	1	55	28	119	46	5	198	50	37	36	10	133	853
Grand Total	57	538	149	8	752	41	48	25	8	122	43	204	99	5	351	88	71	66	19	244	1469
Apprch %	7.6	71.5	19.8	1.1		33.6	39.3	20.5	6.6		12.3	58.1	28.2	1.4		36.1	29.1	27	7.8		
Total %	3.9	36.6	10.1	0.5	51.2	2.8	3.3	1.7	0.5	8.3	2.9	13.9	6.7	0.3	23.9	6	4.8	4.5	1.3	16.6	
Lights	49	487	146	8	690	41	40	23	8	112	36	181	74	3	294	79	71	60	19	229	1325
% Lights	86	90.5	98	100	91.8	100	83.3	92	100	91.8	83.7	88.7	74.7	60	83.8	89.8	100	90.9	100	93.9	90.2
Buses	2	17	2	0	21	0	3	0	0	3	3	5	17	0	25	0	0	4	0	4	53
% Buses	3.5	3.2	1.3	0	2.8	0	6.2	0	0	2.5	7	2.5	17.2	0	7.1	0	0	6.1	0	1.6	3.6
Trucks	6	34	1	0	41	0	5	2	0	7	4	18	8	2	32	9	0	2	0	11	91
% Trucks	10.5	6.3	0.7	0	5.5	0	10.4	8	0	5.7	9.3	8.8	8.1	40	9.1	10.2	0	3	0	4.5	6.2

	AIRPORT BLVD Southbound				ANZA BLVD Westbound				AIRPORT BLVD Northbound				ANZA BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	**13**	71	15	99	4	3	**4**	11	5	31	**16**	**52**	13	9	3	25	187
08:15 AM	4	81	25	110	**7**	**10**	2	**19**	7	**40**	4	51	7	9	11	27	207
08:30 AM	9	**97**	29	**135**	5	5	4	14	**9**	22	12	43	**17**	9	**12**	**38**	**230**
08:45 AM	6	83	**30**	119	2	6	2	10	7	26	14	47	13	**10**	10	33	209
Total Volume	32	332	99	463	18	24	12	54	28	119	46	193	50	37	36	123	833
% App. Total	6.9	71.7	21.4		33.3	44.4	22.2		14.5	61.7	23.8		40.7	30.1	29.3		
PHF	.615	.856	.825	.857	.643	.600	.750	.711	.778	.744	.719	.928	.735	.925	.750	.809	.905

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Traffic Data Service

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(408) 622-4787
tdsbay@cs.com

File Name : 6AM FINAL
Site Code : 00000006
Start Date : 5/30/2018
Page No : 1

Groups Printed- Bikes

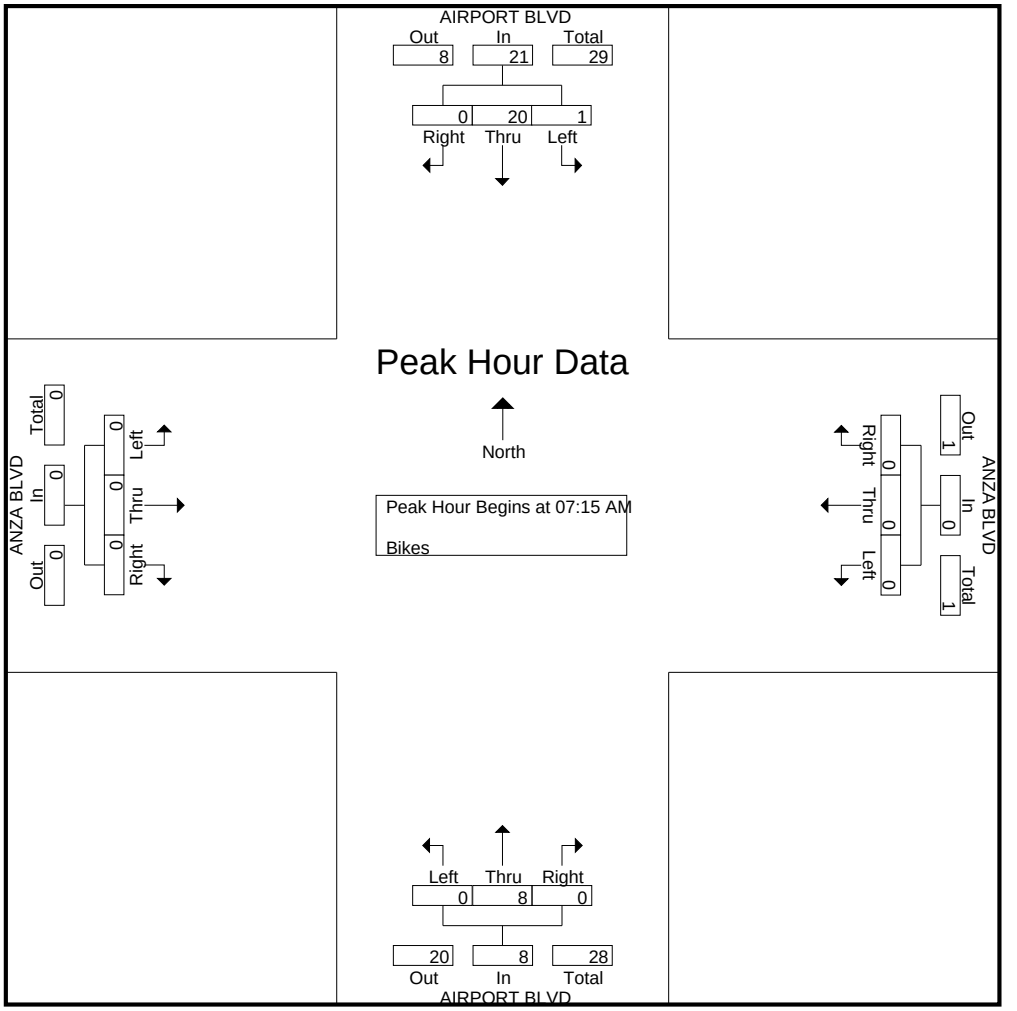
	AIRPORT BLVD Southbound					ANZA BLVD Westbound					AIRPORT BLVD Northbound					ANZA BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15 AM	0	7	0	0	7	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	9
07:30 AM	0	8	0	0	8	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	9
07:45 AM	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	6
Total	0	19	0	0	19	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	25
08:00 AM	0	2	1	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5
08:15 AM	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
08:30 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
08:45 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	3	2	0	6	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	10
Grand Total	1	22	2	0	25	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	35
Apprch %	4	88	8	0		0	0	0	0		0	100	0	0		0	0	0	0		
Total %	2.9	62.9	5.7	0	71.4	0	0	0	0	0	0	28.6	0	0	28.6	0	0	0	0	0	

	AIRPORT BLVD Southbound				ANZA BLVD Westbound				AIRPORT BLVD Northbound				ANZA BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	7	0	7	0	0	0	0	0	2	0	2	0	0	0	0	**9**
07:30 AM	0	**8**	0	**8**	0	0	0	0	0	1	0	1	0	0	0	0	9
07:45 AM	0	3	0	3	0	0	0	0	0	**3**	0	**3**	0	0	0	0	6
08:00 AM	0	2	**1**	3	0	0	0	0	0	2	0	2	0	0	0	0	5
Total Volume	0	20	1	21	0	0	0	0	0	8	0	8	0	0	0	0	29
% App. Total	0	95.2	4.8		0	0	0		0	100	0		0	0	0		
PHF	.000	.625	.250	.656	.000	.000	.000	.000	.000	.667	.000	.667	.000	.000	.000	.000	.806

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Traffic Data Service

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File Name : 6PM FINAL
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Groups Printed- Lights - Buses - Trucks

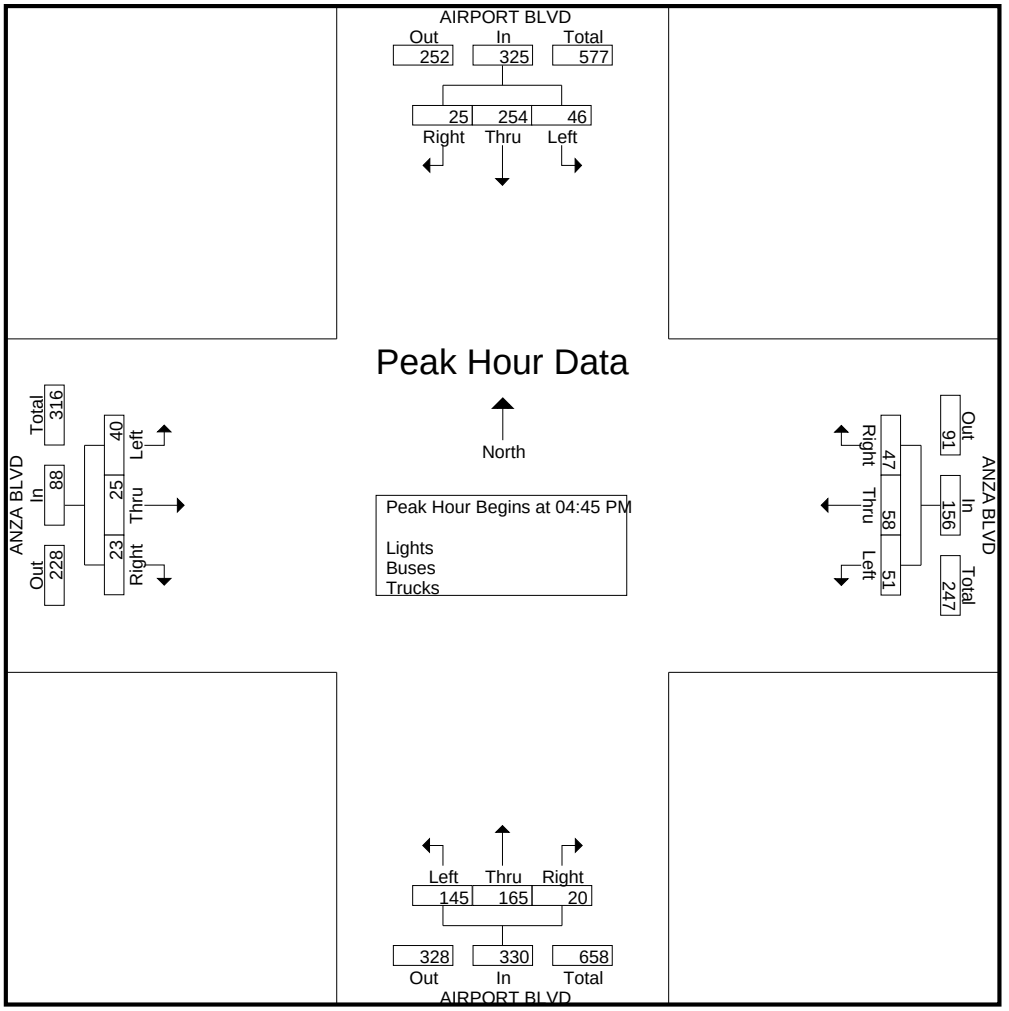
	AIRPORT BLVD Southbound					ANZA BLVD Westbound					AIRPORT BLVD Northbound					ANZA BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	6	72	13	0	91	9	2	6	1	18	5	35	56	2	98	9	6	14	2	31	238
04:15 PM	5	55	9	0	69	18	12	7	0	37	4	30	36	4	74	10	5	11	1	27	207
04:30 PM	5	56	11	2	74	13	15	10	2	40	5	31	38	5	79	6	3	7	3	19	212
04:45 PM	9	53	13	1	76	14	19	10	4	47	2	34	25	5	66	8	8	16	2	34	223
Total	25	236	46	3	310	54	48	33	7	142	16	130	155	16	317	33	22	48	8	111	880
05:00 PM	6	88	14	0	108	11	17	11	0	39	9	44	50	0	103	4	4	13	0	21	271
05:15 PM	4	67	8	0	79	9	10	10	0	29	7	40	41	1	89	4	3	6	2	15	212
05:30 PM	6	46	11	0	63	13	12	20	1	46	2	47	29	13	91	7	10	5	0	22	222
05:45 PM	5	69	8	0	82	12	13	12	0	37	5	35	26	0	66	4	6	11	0	21	206
Total	21	270	41	0	332	45	52	53	1	151	23	166	146	14	349	19	23	35	2	79	911
Grand Total	46	506	87	3	642	99	100	86	8	293	39	296	301	30	666	52	45	83	10	190	1791
Apprch %	7.2	78.8	13.6	0.5		33.8	34.1	29.4	2.7		5.9	44.4	45.2	4.5		27.4	23.7	43.7	5.3		
Total %	2.6	28.3	4.9	0.2	35.8	5.5	5.6	4.8	0.4	16.4	2.2	16.5	16.8	1.7	37.2	2.9	2.5	4.6	0.6	10.6	
Lights	43	464	81	3	591	95	88	84	8	275	27	278	281	30	616	50	45	80	10	185	1667
% Lights	93.5	91.7	93.1	100	92.1	96	88	97.7	100	93.9	69.2	93.9	93.4	100	92.5	96.2	100	96.4	100	97.4	93.1
Buses	3	27	4	0	34	3	5	2	0	10	4	7	15	0	26	1	0	2	0	3	73
% Buses	6.5	5.3	4.6	0	5.3	3	5	2.3	0	3.4	10.3	2.4	5	0	3.9	1.9	0	2.4	0	1.6	4.1
Trucks	0	15	2	0	17	1	7	0	0	8	8	11	5	0	24	1	0	1	0	2	51
% Trucks	0	3	2.3	0	2.6	1	7	0	0	2.7	20.5	3.7	1.7	0	3.6	1.9	0	1.2	0	1.1	2.8

	AIRPORT BLVD Southbound				ANZA BLVD Westbound				AIRPORT BLVD Northbound				ANZA BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**9**	53	13	75	**14**	**19**	10	43	2	34	25	61	**8**	8	**16**	**32**	211
05:00 PM	6	**88**	**14**	**108**	11	17	11	39	**9**	44	**50**	**103**	4	4	13	21	**271**
05:15 PM	4	67	8	79	9	10	10	29	7	40	41	88	4	3	6	13	209
05:30 PM	6	46	11	63	13	12	**20**	**45**	2	**47**	29	78	7	**10**	5	22	208
Total Volume	25	254	46	325	47	58	51	156	20	165	145	330	23	25	40	88	899
% App. Total	7.7	78.2	14.2		30.1	37.2	32.7		6.1	50	43.9		26.1	28.4	45.5		
PHF	.694	.722	.821	.752	.839	.763	.638	.867	.556	.878	.725	.801	.719	.625	.625	.688	.829

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Groups Printed- Bikes

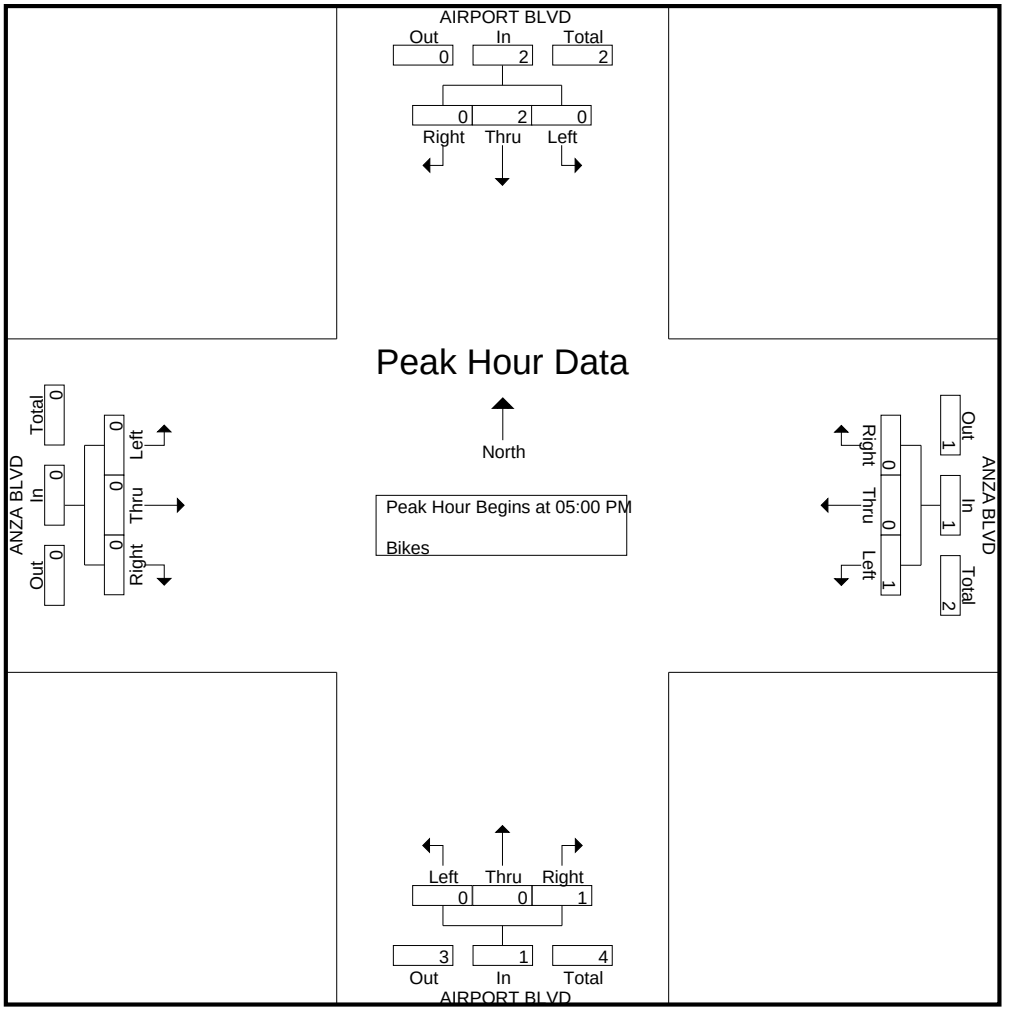
	AIRPORT BLVD Southbound					ANZA BLVD Westbound					AIRPORT BLVD Northbound					ANZA BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
05:30 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:45 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	2	0	0	2	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	4
Grand Total	0	4	0	0	4	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	6
Apprch %	0	100	0	0		0	0	100	0		100	0	0	0		0	0	0	0		
Total %	0	66.7	0	0	66.7	0	0	16.7	0	16.7	16.7	0	0	0	16.7	0	0	0	0	0	

	AIRPORT BLVD Southbound				ANZA BLVD Westbound				AIRPORT BLVD Northbound				ANZA BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	**1**	0	0	**1**	0	0	0	0	1
05:30 PM	0	**2**	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0	**2**
05:45 PM	0	0	0	0	0	0	**1**	**1**	0	0	0	0	0	0	0	0	1
Total Volume	0	2	0	2	0	0	1	1	1	0	0	1	0	0	0	0	4
% App. Total	0	100	0		0	0	100		100	0	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.250	.250	.250	.000	.000	.250	.000	.000	.000	.000	.500

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Groups Printed- Lights - Buses - Trucks

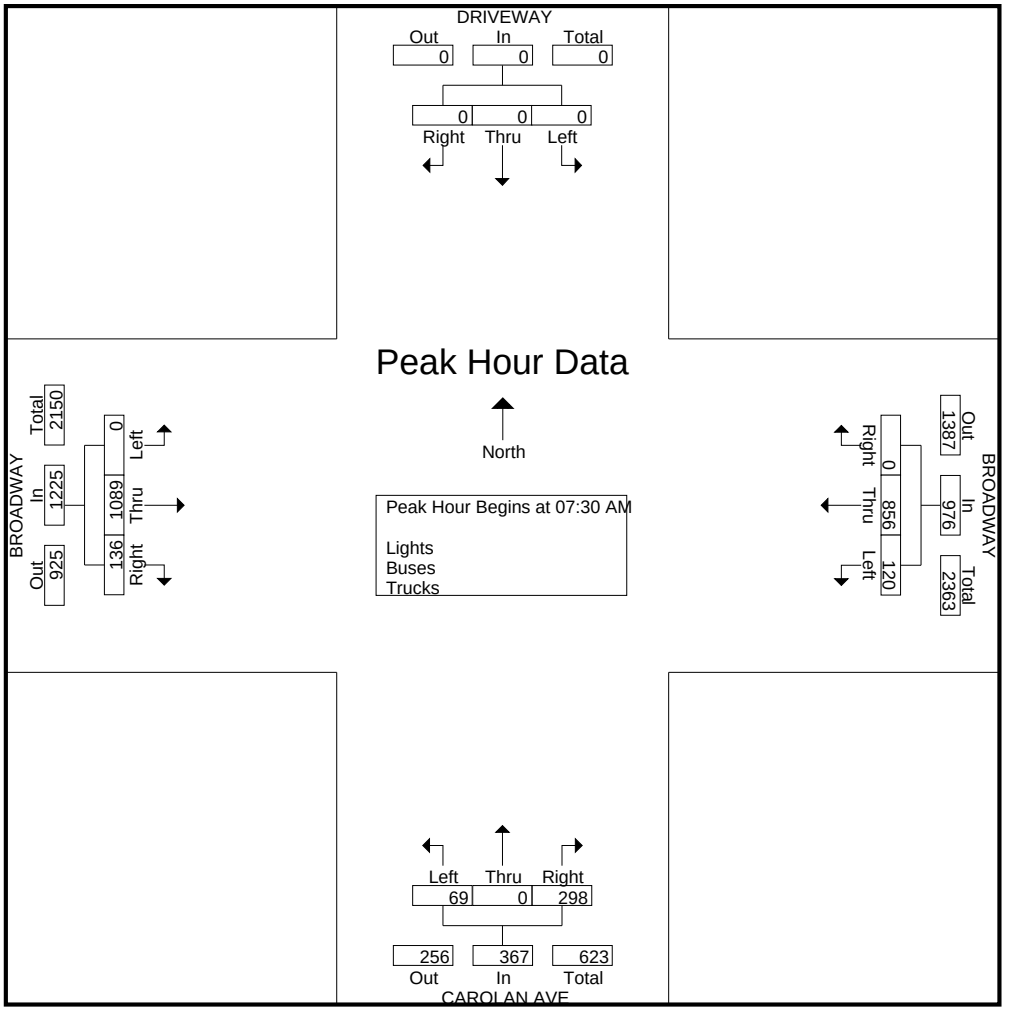
	DRIVEWAY Southbound					BROADWAY Westbound					CAROLAN AVE Northbound					BROADWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	3	3	0	151	18	0	169	60	0	4	4	68	4	217	0	0	221	461
07:15 AM	0	0	0	4	4	0	148	28	0	176	62	0	7	9	78	10	238	0	0	248	506
07:30 AM	0	0	0	2	2	0	205	36	0	241	90	0	11	4	105	44	237	0	0	281	629
07:45 AM	0	0	0	2	2	0	240	21	0	261	63	0	22	7	92	55	277	0	0	332	687
Total	0	0	0	11	11	0	744	103	0	847	275	0	44	24	343	113	969	0	0	1082	2283
08:00 AM	0	0	0	2	2	0	216	29	2	247	88	0	20	6	114	18	294	0	0	312	675
08:15 AM	0	0	0	0	0	0	195	34	0	229	57	0	16	7	80	19	281	0	0	300	609
08:30 AM	0	0	0	1	1	0	169	22	1	192	71	0	14	4	89	25	286	0	0	311	593
08:45 AM	0	0	0	6	6	0	199	46	2	247	75	0	14	7	96	43	260	0	0	303	652
Total	0	0	0	9	9	0	779	131	5	915	291	0	64	24	379	105	1121	0	0	1226	2529
Grand Total	0	0	0	20	20	0	1523	234	5	1762	566	0	108	48	722	218	2090	0	0	2308	4812
Apprch %	0	0	0	100		0	86.4	13.3	0.3		78.4	0	15	6.6		9.4	90.6	0	0		
Total %	0	0	0	0.4	0.4	0	31.7	4.9	0.1	36.6	11.8	0	2.2	1	15	4.5	43.4	0	0	48	
Lights	0	0	0	20	20	0	1461	225	5	1691	558	0	103	48	709	217	2059	0	0	2276	4696
% Lights	0	0	0	100	100	0	95.9	96.2	100	96	98.6	0	95.4	100	98.2	99.5	98.5	0	0	98.6	97.6
Buses	0	0	0	0	0	0	7	2	0	9	1	0	2	0	3	0	7	0	0	7	19
% Buses	0	0	0	0	0	0	0.5	0.9	0	0.5	0.2	0	1.9	0	0.4	0	0.3	0	0	0.3	0.4
Trucks	0	0	0	0	0	0	55	7	0	62	7	0	3	0	10	1	24	0	0	25	97
% Trucks	0	0	0	0	0	0	3.6	3	0	3.5	1.2	0	2.8	0	1.4	0.5	1.1	0	0	1.1	2

	DRIVEWAY Southbound				BROADWAY Westbound				CAROLAN AVE Northbound				BROADWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	205	**36**	241	**90**	0	11	101	44	237	0	281	623
07:45 AM	0	0	0	0	0	**240**	21	**261**	63	0	**22**	85	**55**	277	0	**332**	**678**
08:00 AM	0	0	0	0	0	216	29	245	88	0	20	**108**	18	**294**	0	312	665
08:15 AM	0	0	0	0	0	195	34	229	57	0	16	73	19	281	0	300	602
Total Volume	0	0	0	0	0	856	120	976	298	0	69	367	136	1089	0	1225	2568
% App. Total	0	0	0		0	87.7	12.3		81.2	0	18.8		11.1	88.9	0		
PHF	.000	.000	.000	.000	.000	.892	.833	.935	.828	.000	.784	.850	.618	.926	.000	.922	.947

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Groups Printed- Bikes

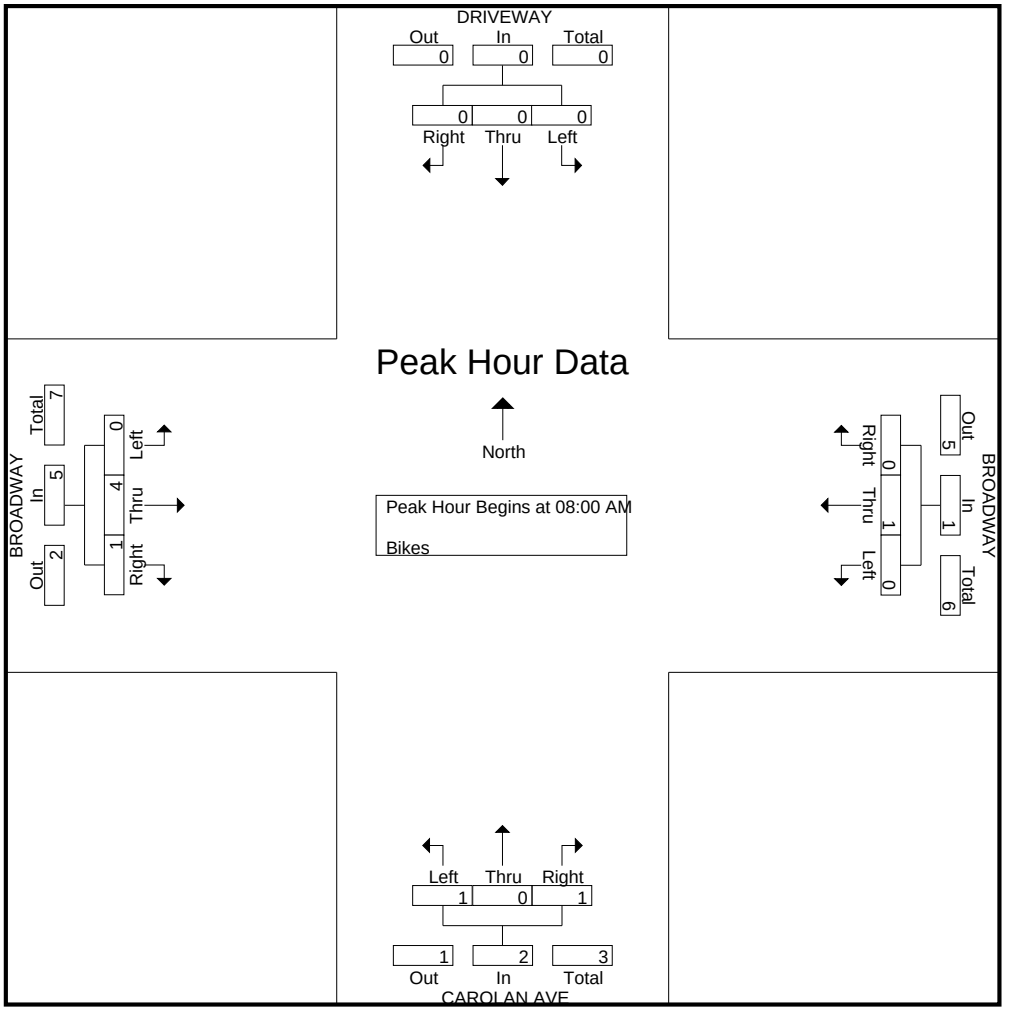
	DRIVEWAY Southbound					BROADWAY Westbound					CAROLAN AVE Northbound					BROADWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2
Total	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	1	2	0	0	3	5
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	1	1	0	0	2	4
Total	0	0	0	0	0	0	1	0	0	1	1	0	1	0	2	1	4	0	0	5	8
Grand Total	0	0	0	0	0	0	1	0	0	1	1	0	3	0	4	2	6	0	0	8	13
Apprch %	0	0	0	0		0	100	0	0		25	0	75	0		25	75	0	0		
Total %	0	0	0	0	0	0	7.7	0	0	7.7	7.7	0	23.1	0	30.8	15.4	46.2	0	0	61.5	

	DRIVEWAY Southbound				BROADWAY Westbound				CAROLAN AVE Northbound				BROADWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	0	**2**	2
08:30 AM	0	0	0	0	0	0	0	0	**1**	0	0	**1**	0	0	0	0	1
08:45 AM	0	0	0	0	0	**1**	0	**1**	0	0	**1**	1	**1**	1	0	2	**4**
Total Volume	0	0	0	0	0	1	0	1	1	0	1	2	1	4	0	5	8
% App. Total	0	0	0		0	100	0		50	0	50		20	80	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.250	.000	.250	.500	.250	.500	.000	.625	.500

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Groups Printed- Lights - Buses - Trucks

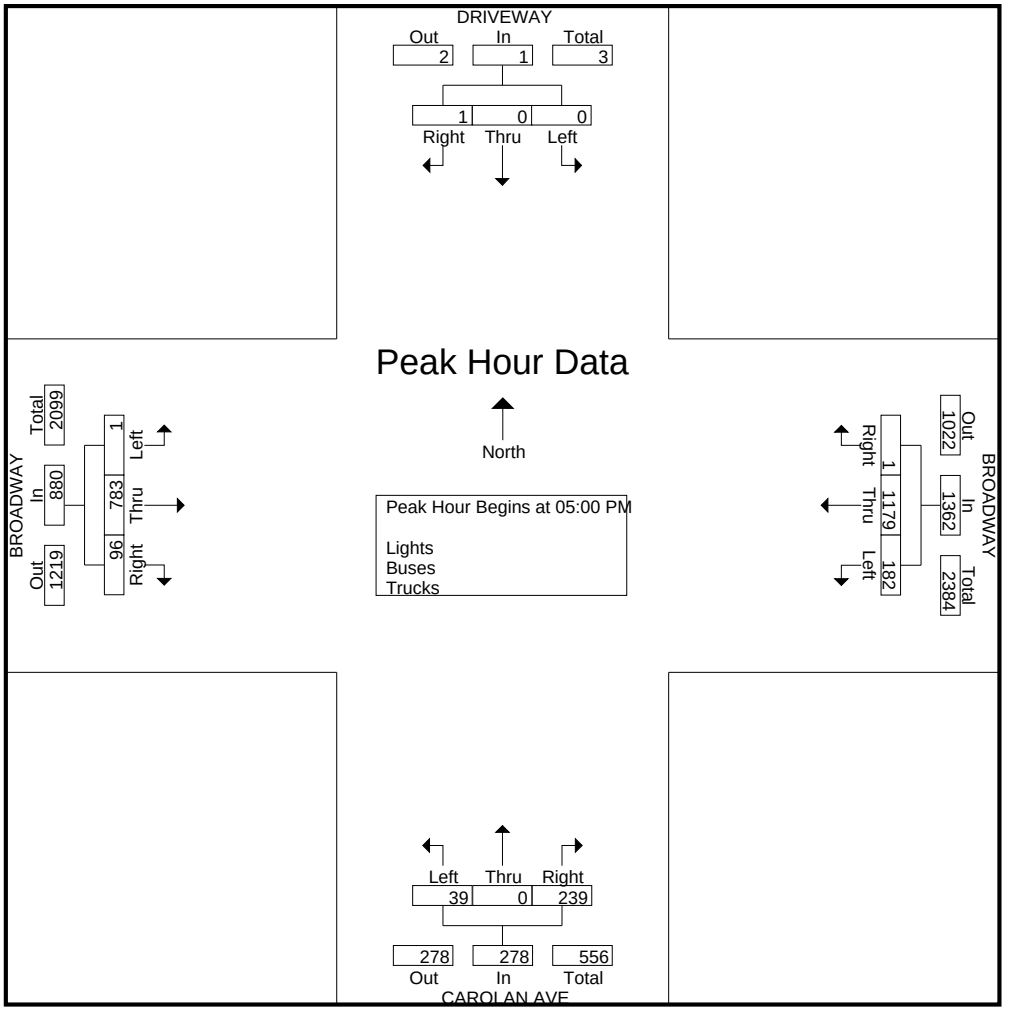
	DRIVEWAY Southbound					BROADWAY Westbound					CAROLAN AVE Northbound					BROADWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	8	8	0	226	40	3	269	48	0	11	4	63	17	218	1	0	236	576
04:15 PM	0	0	0	1	1	2	234	35	0	271	47	0	14	3	64	21	212	1	0	234	570
04:30 PM	0	0	0	1	1	1	253	33	1	288	47	0	8	3	58	18	230	1	0	249	596
04:45 PM	0	0	0	3	3	0	278	40	0	318	54	0	12	3	69	21	216	0	0	237	627
Total	0	0	0	13	13	3	991	148	4	1146	196	0	45	13	254	77	876	3	0	956	2369
05:00 PM	1	0	0	8	9	0	292	48	0	340	64	0	10	7	81	25	208	0	0	233	663
05:15 PM	0	0	0	6	6	1	256	43	2	302	64	0	9	5	78	21	208	0	0	229	615
05:30 PM	0	0	0	4	4	0	304	42	0	346	61	0	12	4	77	31	183	1	0	215	642
05:45 PM	0	0	0	4	4	0	327	49	1	377	50	0	8	3	61	19	184	0	0	203	645
Total	1	0	0	22	23	1	1179	182	3	1365	239	0	39	19	297	96	783	1	0	880	2565
Grand Total	1	0	0	35	36	4	2170	330	7	2511	435	0	84	32	551	173	1659	4	0	1836	4934
Apprch %	2.8	0	0	97.2		0.2	86.4	13.1	0.3		78.9	0	15.2	5.8		9.4	90.4	0.2	0		
Total %	0	0	0	0.7	0.7	0.1	44	6.7	0.1	50.9	8.8	0	1.7	0.6	11.2	3.5	33.6	0.1	0	37.2	
Lights	1	0	0	35	36	4	2147	327	7	2485	428	0	81	32	541	171	1626	4	0	1801	4863
% Lights	100	0	0	100	100	100	98.9	99.1	100	99	98.4	0	96.4	100	98.2	98.8	98	100	0	98.1	98.6
Buses	0	0	0	0	0	0	9	0	0	9	0	0	1	0	1	0	6	0	0	6	16
% Buses	0	0	0	0	0	0	0.4	0	0	0.4	0	0	1.2	0	0.2	0	0.4	0	0	0.3	0.3
Trucks	0	0	0	0	0	0	14	3	0	17	7	0	2	0	9	2	27	0	0	29	55
% Trucks	0	0	0	0	0	0	0.6	0.9	0	0.7	1.6	0	2.4	0	1.6	1.2	1.6	0	0	1.6	1.1

	DRIVEWAY Southbound				BROADWAY Westbound				CAROLAN AVE Northbound				BROADWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**1**	0	0	**1**	0	292	48	340	**64**	0	10	**74**	25	**208**	0	**233**	**648**
05:15 PM	0	0	0	0	**1**	256	43	300	64	0	9	73	21	208	0	229	602
05:30 PM	0	0	0	0	0	304	42	346	61	0	**12**	73	**31**	183	**1**	215	634
05:45 PM	0	0	0	0	0	**327**	**49**	**376**	50	0	8	58	19	184	0	203	637
Total Volume	1	0	0	1	1	1179	182	1362	239	0	39	278	96	783	1	880	2521
% App. Total	100	0	0		0.1	86.6	13.4		86	0	14		10.9	89	0.1		
PHF	.250	.000	.000	.250	.250	.901	.929	.906	.934	.000	.813	.939	.774	.941	.250	.944	.973

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Groups Printed- Bikes

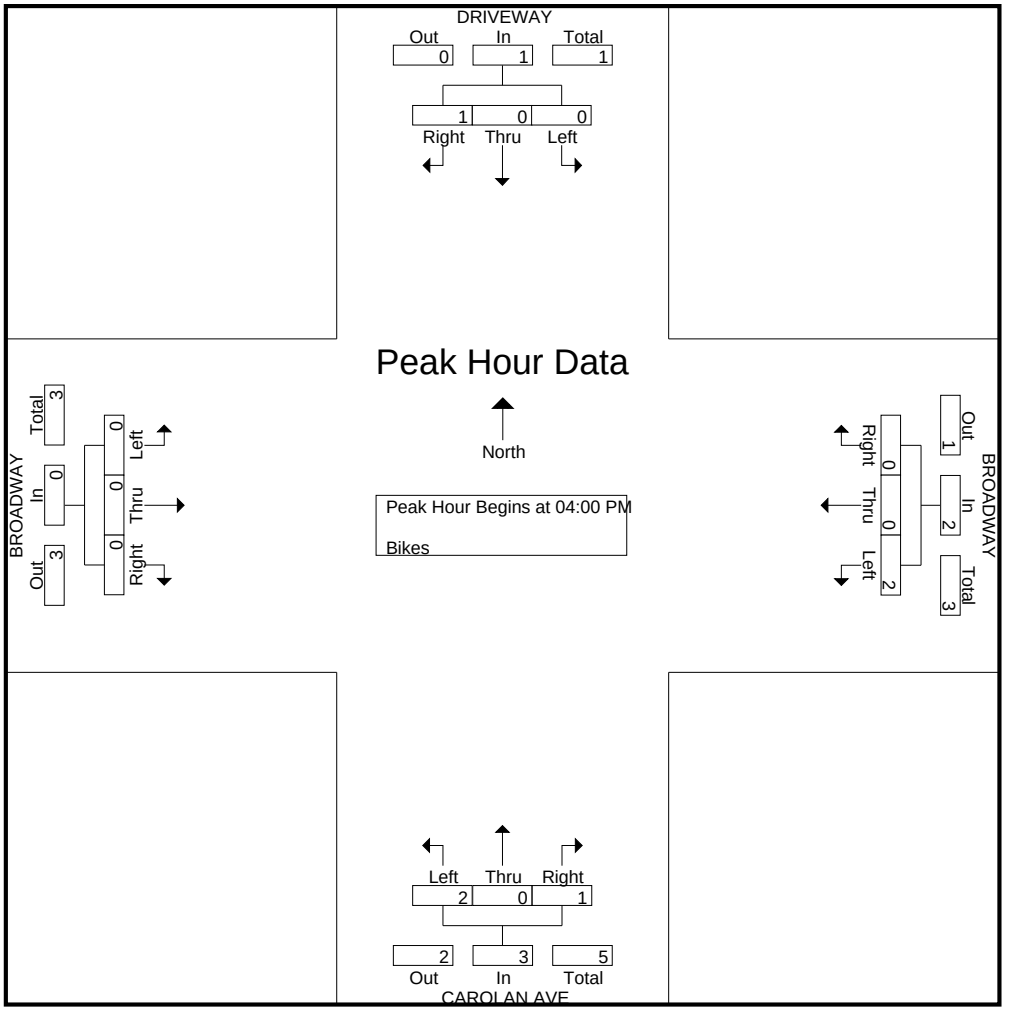
	DRIVEWAY Southbound					BROADWAY Westbound					CAROLAN AVE Northbound					BROADWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	1	0	1	1	0	1	0	2	0	0	0	0	0	3
04:15 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	0	1	0	0	2	0	2	1	0	2	0	3	0	0	0	0	0	6
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	1	0	0	0	1	0	0	2	0	2	1	0	2	0	3	0	0	0	0	0	6
Apprch %	100	0	0	0		0	0	100	0		33.3	0	66.7	0		0	0	0	0		
Total %	16.7	0	0	0	16.7	0	0	33.3	0	33.3	16.7	0	33.3	0	50	0	0	0	0	0	

	DRIVEWAY Southbound				BROADWAY Westbound				CAROLAN AVE Northbound				BROADWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	**1**	**1**	**1**	0	**1**	**2**	0	0	0	0	**3**
04:15 PM	**1**	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total Volume	1	0	0	1	0	0	2	2	1	0	2	3	0	0	0	0	6
% App. Total	100	0	0		0	0	100		33.3	0	66.7		0	0	0		
PHF	.250	.000	.000	.250	.000	.000	.500	.500	.250	.000	.500	.375	.000	.000	.000	.000	.500

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Groups Printed- Lights - Buses - Trucks

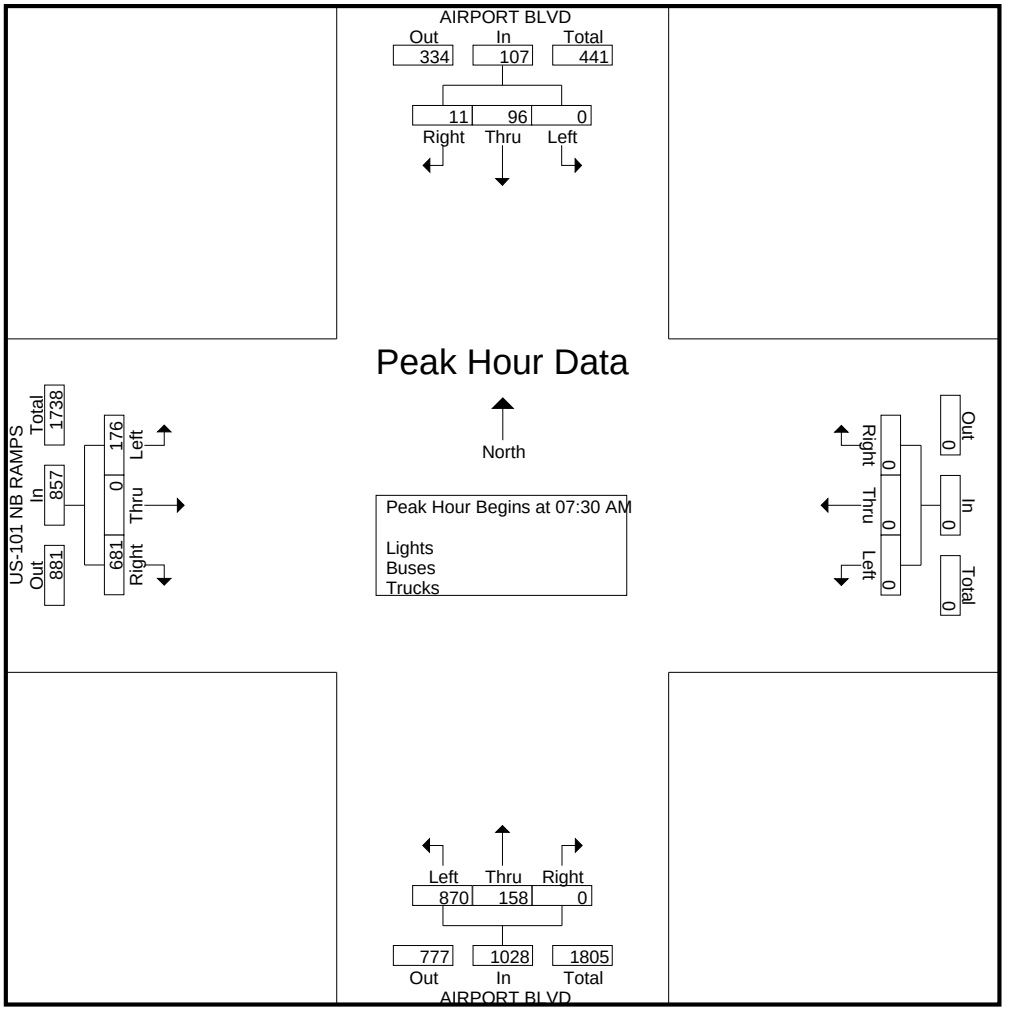
	AIRPORT BLVD Southbound					Westbound					AIRPORT BLVD Northbound					US-101 NB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	6	17	0	0	23	0	0	0	0	0	0	16	179	0	195	84	0	23	0	107	325
07:15 AM	4	32	0	0	36	0	0	0	0	0	0	22	210	0	232	107	0	43	0	150	418
07:30 AM	4	23	0	0	27	0	0	0	0	0	0	27	223	0	250	204	0	42	0	246	523
07:45 AM	1	24	0	0	25	0	0	0	0	0	0	41	208	0	249	212	0	44	0	256	530
Total	15	96	0	0	111	0	0	0	0	0	0	106	820	0	926	607	0	152	0	759	1796
08:00 AM	3	27	0	0	30	0	0	0	0	0	0	43	229	0	272	145	0	42	0	187	489
08:15 AM	3	22	0	0	25	0	0	0	0	0	0	47	210	0	257	120	0	48	0	168	450
08:30 AM	1	38	0	0	39	0	0	0	0	0	0	40	193	0	233	116	0	44	0	160	432
08:45 AM	2	25	0	0	27	0	0	0	0	0	0	38	157	0	195	146	0	49	0	195	417
Total	9	112	0	0	121	0	0	0	0	0	0	168	789	0	957	527	0	183	0	710	1788
Grand Total	24	208	0	0	232	0	0	0	0	0	0	274	1609	0	1883	1134	0	335	0	1469	3584
Apprch %	10.3	89.7	0	0		0	0	0	0		0	14.6	85.4	0		77.2	0	22.8	0		
Total %	0.7	5.8	0	0	6.5	0	0	0	0	0	0	7.6	44.9	0	52.5	31.6	0	9.3	0	41	
Lights	15	182	0	0	197	0	0	0	0	0	0	270	1586	0	1856	1090	0	321	0	1411	3464
% Lights	62.5	87.5	0	0	84.9	0	0	0	0	0	0	98.5	98.6	0	98.6	96.1	0	95.8	0	96.1	96.7
Buses	0	0	0	0	0	0	0	0	0	0	0	3	9	0	12	5	0	2	0	7	19
% Buses	0	0	0	0	0	0	0	0	0	0	0	1.1	0.6	0	0.6	0.4	0	0.6	0	0.5	0.5
Trucks	9	26	0	0	35	0	0	0	0	0	0	1	14	0	15	39	0	12	0	51	101
% Trucks	37.5	12.5	0	0	15.1	0	0	0	0	0	0	0.4	0.9	0	0.8	3.4	0	3.6	0	3.5	2.8

	AIRPORT BLVD Southbound				Westbound				AIRPORT BLVD Northbound				US-101 NB RAMPS Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**4**	23	0	27	0	0	0	0	0	27	223	250	204	0	42	246	523
07:45 AM	1	24	0	25	0	0	0	0	0	41	208	249	**212**	0	44	**256**	**530**
08:00 AM	3	**27**	0	**30**	0	0	0	0	0	43	**229**	**272**	145	0	42	187	489
08:15 AM	3	22	0	25	0	0	0	0	0	**47**	210	257	120	0	**48**	168	450
Total Volume	11	96	0	107	0	0	0	0	0	158	870	1028	681	0	176	857	1992
% App. Total	10.3	89.7	0		0	0	0		0	15.4	84.6		79.5	0	20.5		
PHF	.688	.889	.000	.892	.000	.000	.000	.000	.000	.840	.950	.945	.803	.000	.917	.837	.940

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Groups Printed- Bikes

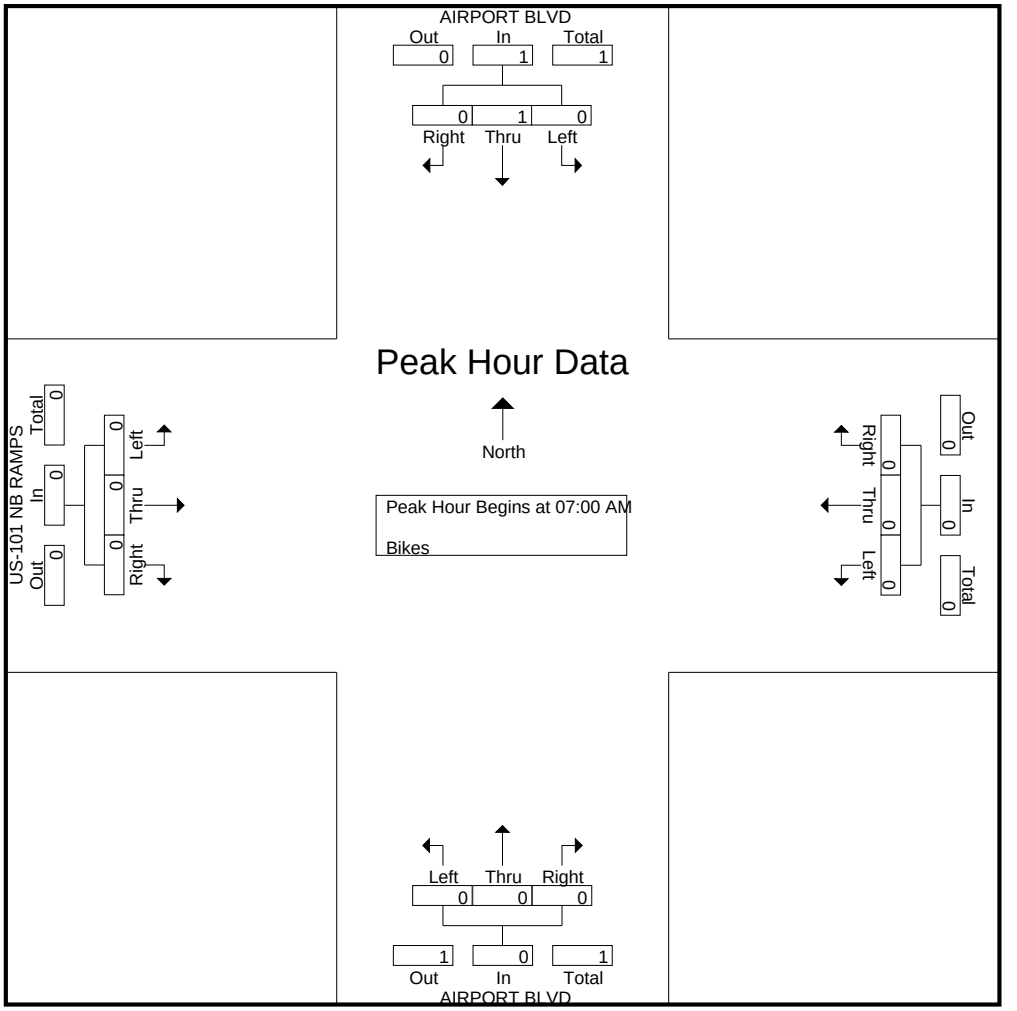
	AIRPORT BLVD Southbound					Westbound					AIRPORT BLVD Northbound					US-101 NB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Apprch %	0	100	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %	0	100	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

	AIRPORT BLVD Southbound				Westbound				AIRPORT BLVD Northbound				US-101 NB RAMPS Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	**1**
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250

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Groups Printed- Lights - Buses - Trucks

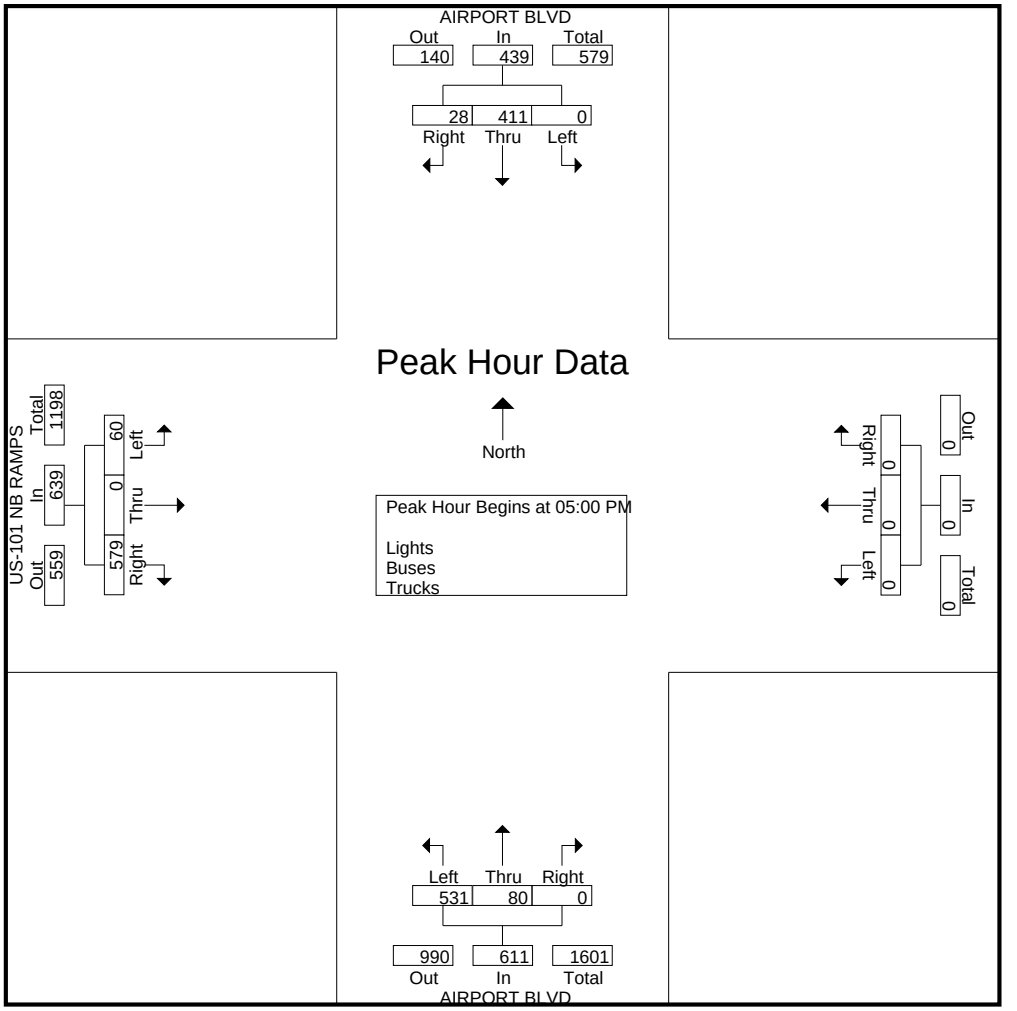
	AIRPORT BLVD Southbound					Westbound					AIRPORT BLVD Northbound					US-101 NB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	17	90	0	0	107	0	0	0	0	0	0	20	112	0	132	138	0	17	0	155	394
04:15 PM	13	96	0	0	109	0	0	0	0	0	0	24	129	0	153	124	0	10	0	134	396
04:30 PM	11	82	0	0	93	0	0	0	0	0	0	15	136	0	151	128	0	15	0	143	387
04:45 PM	13	89	0	0	102	0	0	0	0	0	0	20	106	0	126	120	0	14	0	134	362
Total	54	357	0	0	411	0	0	0	0	0	0	79	483	0	562	510	0	56	0	566	1539
05:00 PM	11	119	0	0	130	0	0	0	0	0	0	24	160	0	184	145	0	19	0	164	478
05:15 PM	3	98	0	0	101	0	0	0	0	0	0	23	122	0	145	152	0	15	0	167	413
05:30 PM	11	115	0	0	126	0	0	0	0	0	0	22	129	0	151	128	0	14	0	142	419
05:45 PM	3	79	0	0	82	0	0	0	0	0	0	11	120	0	131	154	0	12	0	166	379
Total	28	411	0	0	439	0	0	0	0	0	0	80	531	0	611	579	0	60	0	639	1689
Grand Total	82	768	0	0	850	0	0	0	0	0	0	159	1014	0	1173	1089	0	116	0	1205	3228
Apprch %	9.6	90.4	0	0		0	0	0	0		0	13.6	86.4	0		90.4	0	9.6	0		
Total %	2.5	23.8	0	0	26.3	0	0	0	0	0	0	4.9	31.4	0	36.3	33.7	0	3.6	0	37.3	
Lights	80	762	0	0	842	0	0	0	0	0	0	158	1004	0	1162	1083	0	101	0	1184	3188
% Lights	97.6	99.2	0	0	99.1	0	0	0	0	0	0	99.4	99	0	99.1	99.4	0	87.1	0	98.3	98.8
Buses	0	2	0	0	2	0	0	0	0	0	0	0	1	0	1	0	0	2	0	2	5
% Buses	0	0.3	0	0	0.2	0	0	0	0	0	0	0	0.1	0	0.1	0	0	1.7	0	0.2	0.2
Trucks	2	4	0	0	6	0	0	0	0	0	0	1	9	0	10	6	0	13	0	19	35
% Trucks	2.4	0.5	0	0	0.7	0	0	0	0	0	0	0.6	0.9	0	0.9	0.6	0	11.2	0	1.6	1.1

	AIRPORT BLVD Southbound				Westbound				AIRPORT BLVD Northbound				US-101 NB RAMPS Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**11**	**119**	0	**130**	0	0	0	0	0	**24**	**160**	**184**	145	0	**19**	164	**478**
05:15 PM	3	98	0	101	0	0	0	0	0	23	122	145	152	0	15	**167**	413
05:30 PM	11	115	0	126	0	0	0	0	0	22	129	151	128	0	14	142	419
05:45 PM	3	79	0	82	0	0	0	0	0	11	120	131	**154**	0	12	166	379
Total Volume	28	411	0	439	0	0	0	0	0	80	531	611	579	0	60	639	1689
% App. Total	6.4	93.6	0		0	0	0		0	13.1	86.9		90.6	0	9.4		
PHF	.636	.863	.000	.844	.000	.000	.000	.000	.000	.833	.830	.830	.940	.000	.789	.957	.883

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File Name : 8PM FINAL
Site Code : 00000008
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Traffic Data Service

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Groups Printed- Bikes

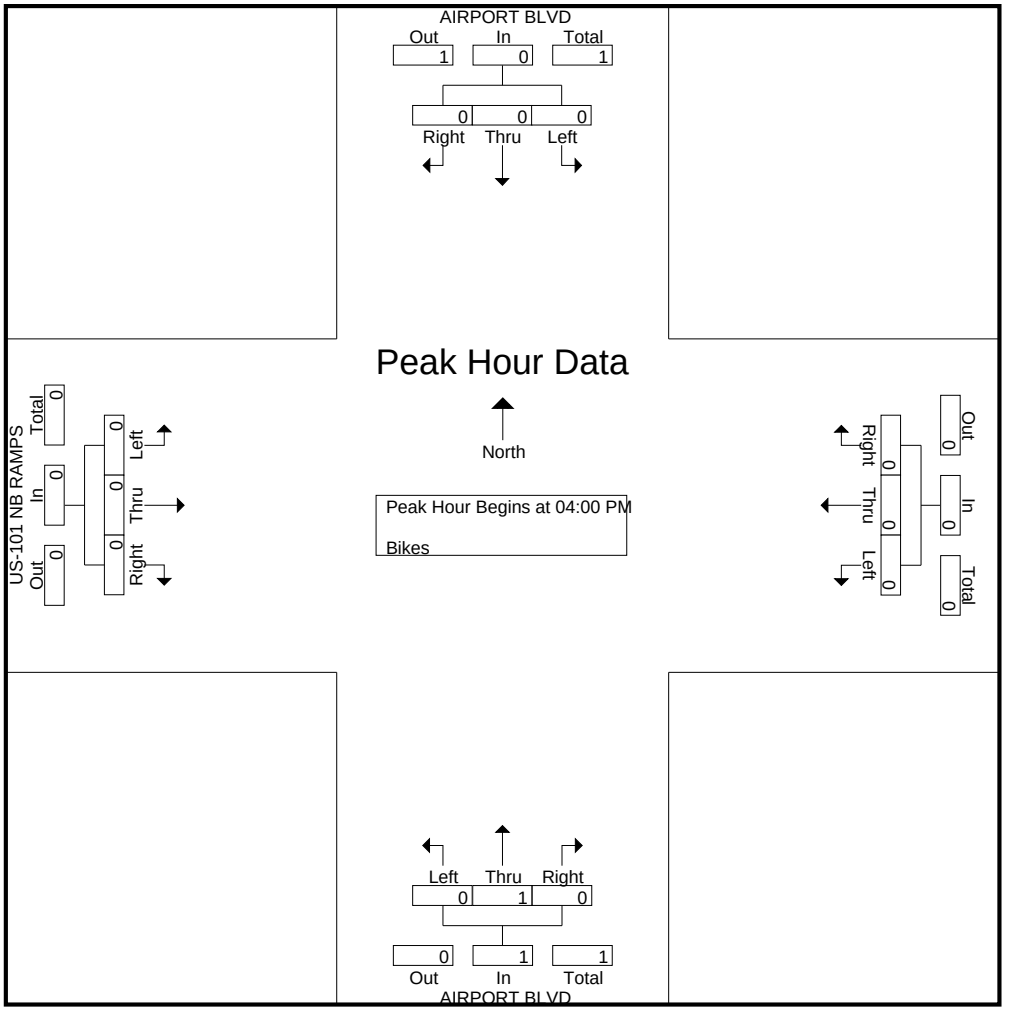
	AIRPORT BLVD Southbound					Westbound					AIRPORT BLVD Northbound					US-101 NB RAMPS Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Apprch %	0	100	0	0		0	0	0	0		0	100	0	0		0	0	0	0		
Total %	0	50	0	0	50	0	0	0	0	0	0	50	0	0	50	0	0	0	0	0	

	AIRPORT BLVD Southbound				Westbound				AIRPORT BLVD Northbound				US-101 NB RAMPS Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0	**1**
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
% App. Total	0	0	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.250

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Groups Printed- Lights - Buses - Trucks

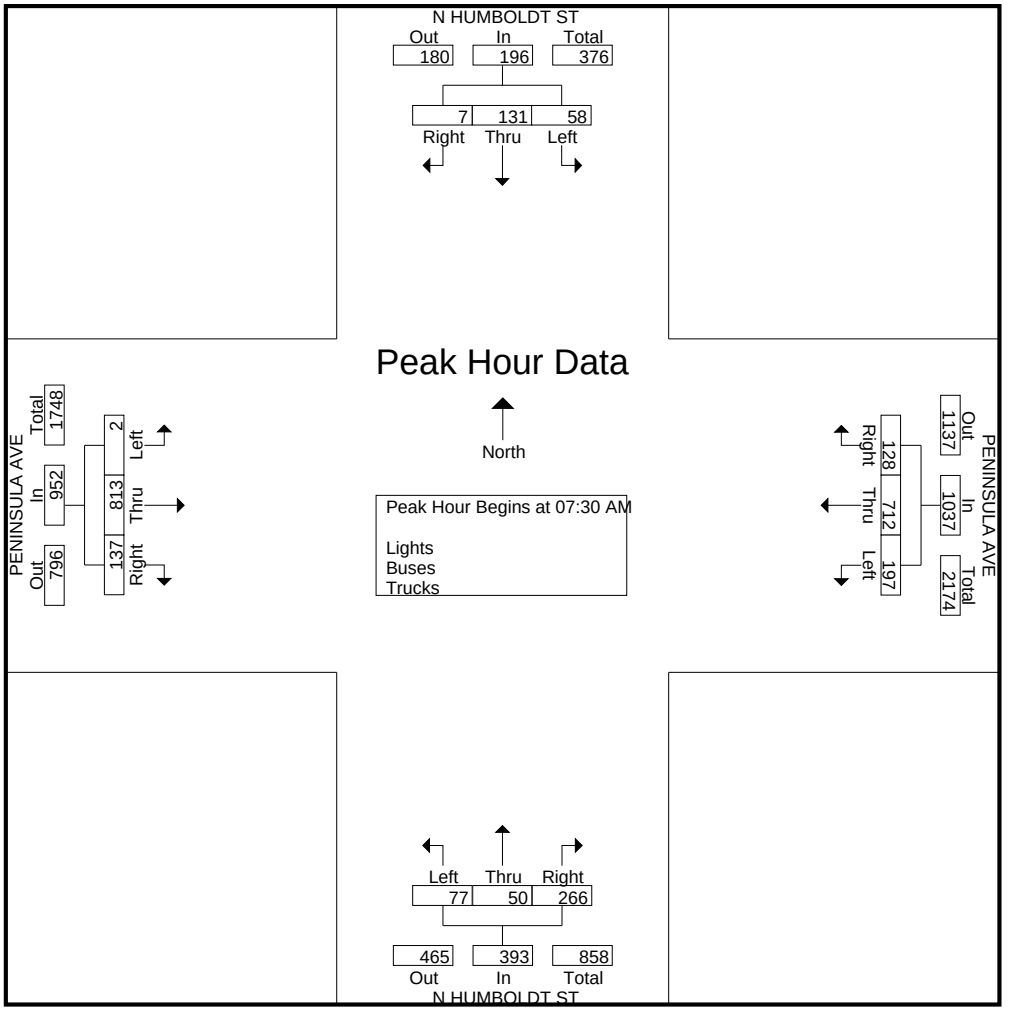
	N HUMBOLDT ST Southbound					PENINSULA AVE Westbound					N HUMBOLDT ST Northbound					PENINSULA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	24	9	3	36	18	88	14	0	120	56	6	9	0	71	26	131	2	2	161	388
07:15 AM	1	28	11	1	41	29	137	25	0	191	67	9	11	3	90	18	158	1	3	180	502
07:30 AM	3	24	6	4	37	28	210	54	0	292	65	11	23	3	102	26	193	1	4	224	655
07:45 AM	1	44	14	5	64	47	208	75	0	330	61	11	19	1	92	39	210	1	3	253	739
Total	5	120	40	13	178	122	643	168	0	933	249	37	62	7	355	109	692	5	12	818	2284
08:00 AM	3	31	24	4	62	27	149	45	0	221	89	14	19	1	123	34	218	0	8	260	666
08:15 AM	0	32	14	1	47	26	145	23	0	194	51	14	16	1	82	38	192	0	1	231	554
08:30 AM	1	31	14	1	47	16	159	20	1	196	59	7	12	1	79	43	170	0	3	216	538
08:45 AM	2	30	6	0	38	35	142	22	0	199	56	10	17	4	87	43	144	0	3	190	514
Total	6	124	58	6	194	104	595	110	1	810	255	45	64	7	371	158	724	0	15	897	2272
Grand Total	11	244	98	19	372	226	1238	278	1	1743	504	82	126	14	726	267	1416	5	27	1715	4556
Apprch %	3	65.6	26.3	5.1		13	71	15.9	0.1		69.4	11.3	17.4	1.9		15.6	82.6	0.3	1.6		
Total %	0.2	5.4	2.2	0.4	8.2	5	27.2	6.1	0	38.3	11.1	1.8	2.8	0.3	15.9	5.9	31.1	0.1	0.6	37.6	
Lights	11	236	96	19	362	222	1186	263	1	1672	488	79	124	14	705	259	1401	5	27	1692	4431
% Lights	100	96.7	98	100	97.3	98.2	95.8	94.6	100	95.9	96.8	96.3	98.4	100	97.1	97	98.9	100	100	98.7	97.3
Buses	0	2	1	0	3	1	9	5	0	15	9	1	1	0	11	5	5	0	0	10	39
% Buses	0	0.8	1	0	0.8	0.4	0.7	1.8	0	0.9	1.8	1.2	0.8	0	1.5	1.9	0.4	0	0	0.6	0.9
Trucks	0	6	1	0	7	3	43	10	0	56	7	2	1	0	10	3	10	0	0	13	86
% Trucks	0	2.5	1	0	1.9	1.3	3.5	3.6	0	3.2	1.4	2.4	0.8	0	1.4	1.1	0.7	0	0	0.8	1.9

	N HUMBOLDT ST Southbound				PENINSULA AVE Westbound				N HUMBOLDT ST Northbound				PENINSULA AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**3**	24	6	33	28	**210**	54	292	65	11	**23**	99	26	193	**1**	220	644
07:45 AM	1	**44**	14	**59**	**47**	208	**75**	**330**	61	11	19	91	**39**	210	1	250	**730**
08:00 AM	3	31	**24**	58	27	149	45	221	**89**	**14**	19	**122**	34	**218**	0	**252**	653
08:15 AM	0	32	14	46	26	145	23	194	51	14	16	81	38	192	0	230	551
Total Volume	7	131	58	196	128	712	197	1037	266	50	77	393	137	813	2	952	2578
% App. Total	3.6	66.8	29.6		12.3	68.7	19		67.7	12.7	19.6		14.4	85.4	0.2		
PHF	.583	.744	.604	.831	.681	.848	.657	.786	.747	.893	.837	.805	.878	.932	.500	.944	.883

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Groups Printed- Bikes

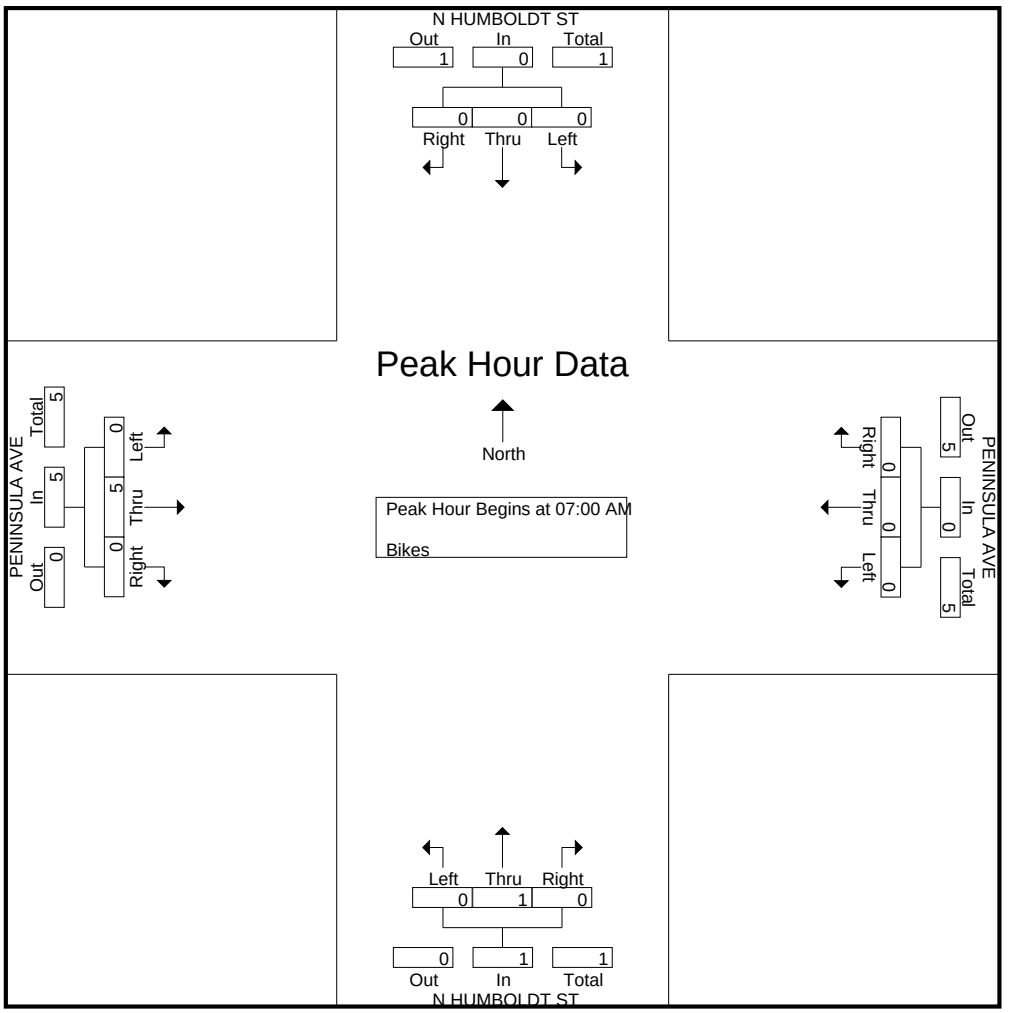
	N HUMBOLDT ST Southbound					PENINSULA AVE Westbound					N HUMBOLDT ST Northbound					PENINSULA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	5	0	0	5	6
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	2	0	0	2	4
Grand Total	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	0	7	0	0	7	10
Apprch %	0	0	0	0		0	0	0	0		33.3	66.7	0	0		0	100	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	10	20	0	0	30	0	70	0	0	70	

	N HUMBOLDT ST Southbound				PENINSULA AVE Westbound				N HUMBOLDT ST Northbound				PENINSULA AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	0	**2**	**2**
07:30 AM	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	1	0	1	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	5	0	5	6
% App. Total	0	0	0		0	0	0		0	100	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.625	.000	.625	.750

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Groups Printed- Lights - Buses - Trucks

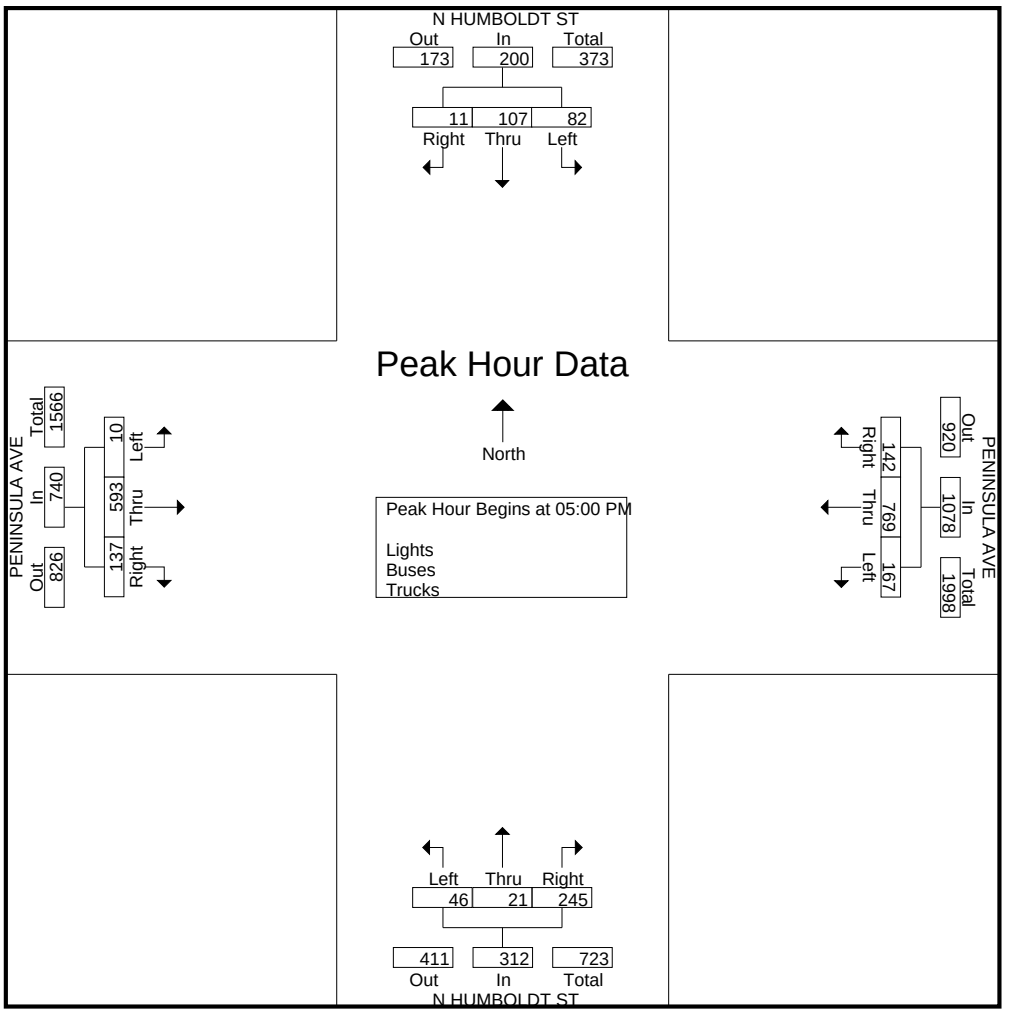
	N HUMBOLDT ST Southbound					PENINSULA AVE Westbound					N HUMBOLDT ST Northbound					PENINSULA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	2	27	28	5	62	30	156	41	0	227	37	7	13	6	63	33	127	2	5	167	519
04:15 PM	1	18	29	0	48	21	165	49	0	235	39	10	10	4	63	40	150	1	1	192	538
04:30 PM	8	21	19	0	48	20	170	34	0	224	53	5	10	3	71	45	151	0	1	197	540
04:45 PM	6	18	17	3	44	31	189	45	0	265	42	12	20	1	75	27	127	1	6	161	545
Total	17	84	93	8	202	102	680	169	0	951	171	34	53	14	272	145	555	4	13	717	2142
05:00 PM	2	27	17	1	47	38	191	46	0	275	68	4	11	6	89	27	179	1	1	208	619
05:15 PM	3	19	25	3	50	35	206	22	0	263	67	6	10	1	84	35	119	5	4	163	560
05:30 PM	6	35	23	1	65	36	182	60	0	278	58	4	8	0	70	39	145	2	2	188	601
05:45 PM	0	26	17	0	43	33	190	39	0	262	52	7	17	0	76	36	150	2	0	188	569
Total	11	107	82	5	205	142	769	167	0	1078	245	21	46	7	319	137	593	10	7	747	2349
Grand Total	28	191	175	13	407	244	1449	336	0	2029	416	55	99	21	591	282	1148	14	20	1464	4491
Apprch %	6.9	46.9	43	3.2		12	71.4	16.6	0		70.4	9.3	16.8	3.6		19.3	78.4	1	1.4		
Total %	0.6	4.3	3.9	0.3	9.1	5.4	32.3	7.5	0	45.2	9.3	1.2	2.2	0.5	13.2	6.3	25.6	0.3	0.4	32.6	
Lights	26	189	171	13	399	243	1440	335	0	2018	415	55	99	21	590	276	1128	12	20	1436	4443
% Lights	92.9	99	97.7	100	98	99.6	99.4	99.7	0	99.5	99.8	100	100	100	99.8	97.9	98.3	85.7	100	98.1	98.9
Buses	1	0	1	0	2	0	3	0	0	3	1	0	0	0	1	2	0	0	0	2	8
% Buses	3.6	0	0.6	0	0.5	0	0.2	0	0	0.1	0.2	0	0	0	0.2	0.7	0	0	0	0.1	0.2
Trucks	1	2	3	0	6	1	6	1	0	8	0	0	0	0	0	4	20	2	0	26	40
% Trucks	3.6	1	1.7	0	1.5	0.4	0.4	0.3	0	0.4	0	0	0	0	0	1.4	1.7	14.3	0	1.8	0.9

	N HUMBOLDT ST Southbound				PENINSULA AVE Westbound				N HUMBOLDT ST Northbound				PENINSULA AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	2	27	17	46	**38**	191	46	275	**68**	4	11	**83**	27	**179**	1	**207**	**611**
05:15 PM	3	19	**25**	47	35	**206**	22	263	67	6	10	83	35	119	**5**	159	552
05:30 PM	**6**	**35**	23	**64**	36	182	**60**	**278**	58	4	8	70	**39**	145	2	186	598
05:45 PM	0	26	17	43	33	190	39	262	52	**7**	**17**	76	36	150	2	188	569
Total Volume	11	107	82	200	142	769	167	1078	245	21	46	312	137	593	10	740	2330
% App. Total	5.5	53.5	41		13.2	71.3	15.5		78.5	6.7	14.7		18.5	80.1	1.4		
PHF	.458	.764	.820	.781	.934	.933	.696	.969	.901	.750	.676	.940	.878	.828	.500	.894	.953

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Groups Printed- Bikes

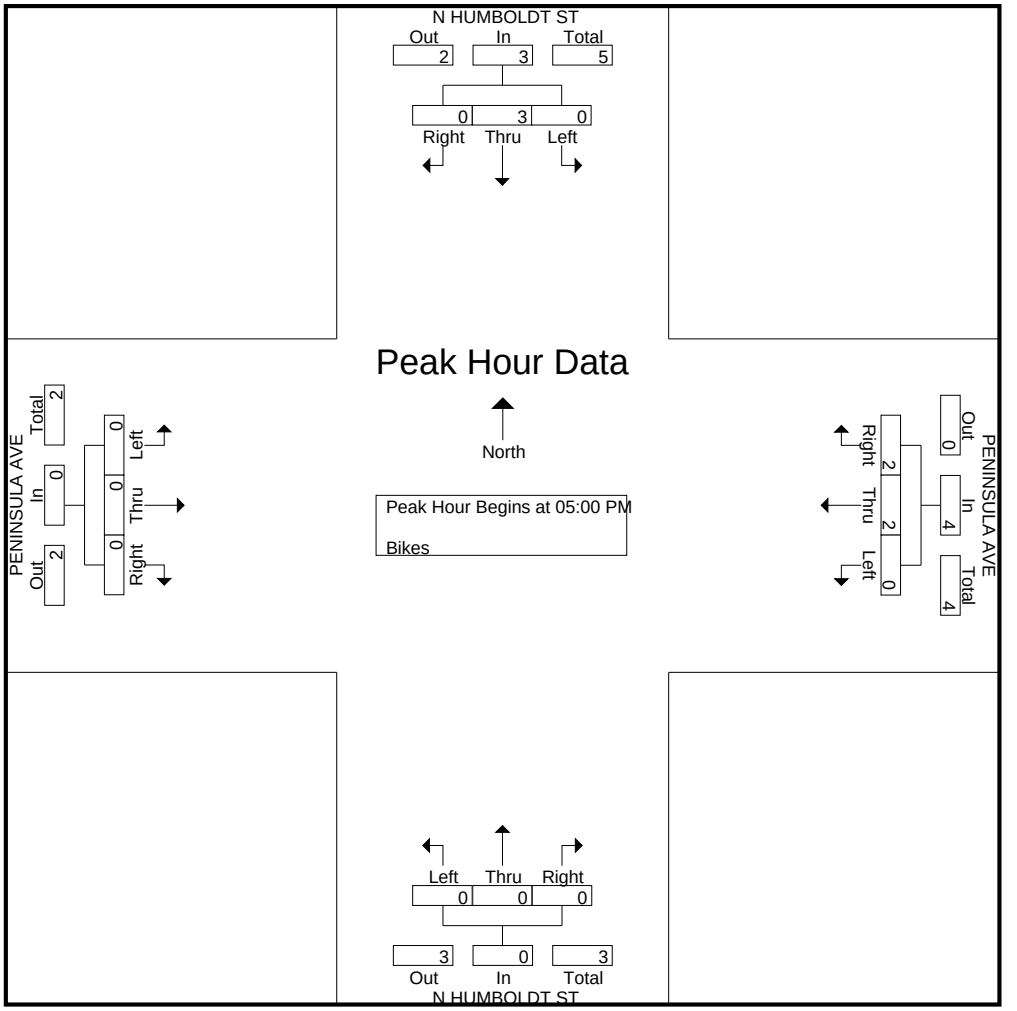
	N HUMBOLDT ST Southbound					PENINSULA AVE Westbound					N HUMBOLDT ST Northbound					PENINSULA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	2
05:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	1	0	0	1	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	3
05:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	3	0	0	3	2	2	0	0	4	0	0	0	0	0	0	0	0	0	0	7
Grand Total	0	3	0	0	3	3	2	0	0	5	0	0	0	0	0	0	1	0	0	1	9
Apprch %	0	100	0	0		60	40	0	0		0	0	0	0		0	100	0	0		
Total %	0	33.3	0	0	33.3	33.3	22.2	0	0	55.6	0	0	0	0	0	0	11.1	0	0	11.1	

	N HUMBOLDT ST Southbound				PENINSULA AVE Westbound				N HUMBOLDT ST Northbound				PENINSULA AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	**1**	0	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	1	0	1	1	**1**	0	**2**	0	0	0	0	0	0	0	0	**3**
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	**2**	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	3	0	3	2	2	0	4	0	0	0	0	0	0	0	0	7
% App. Total	0	100	0		50	50	0		0	0	0		0	0	0		
PHF	.000	.375	.000	.375	.500	.500	.000	.500	.000	.000	.000	.000	.000	.000	.000	.000	.583

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File Name : 10AM FINAL
Site Code : 00000010
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Groups Printed- Lights - Buses - Trucks

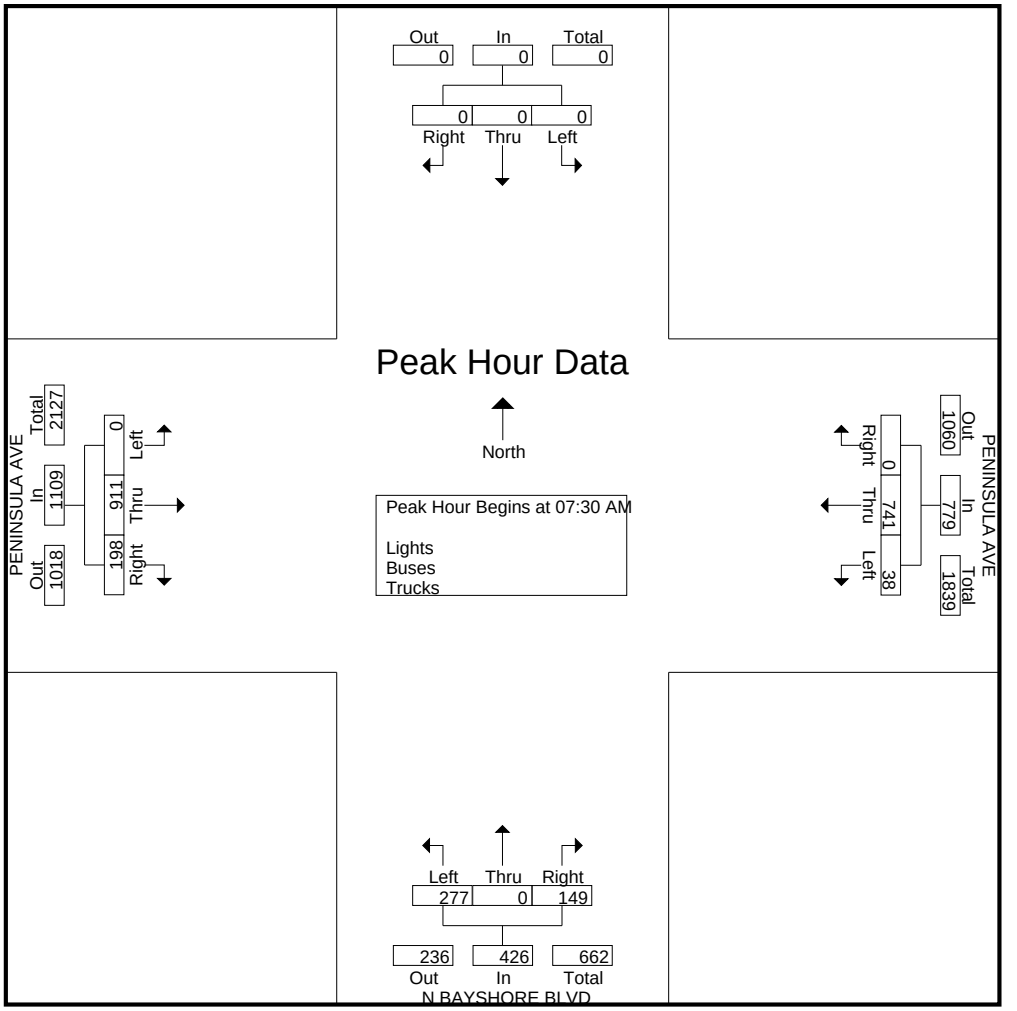
	Southbound					PENINSULA AVE Westbound					N BAYSHORE BLVD Northbound					PENINSULA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	90	1	0	91	29	0	25	1	55	13	181	0	0	194	340
07:15 AM	0	0	0	0	0	0	122	9	0	131	23	0	57	4	84	22	210	0	0	232	447
07:30 AM	0	0	0	0	0	0	207	10	0	217	35	0	85	0	120	25	230	0	0	255	592
07:45 AM	0	0	0	0	0	0	223	11	0	234	39	0	95	2	136	61	208	0	0	269	639
Total	0	0	0	0	0	0	642	31	0	673	126	0	262	7	395	121	829	0	0	950	2018
08:00 AM	0	0	0	0	0	0	168	12	0	180	38	0	52	0	90	69	243	0	0	312	582
08:15 AM	0	0	0	0	0	0	143	5	0	148	37	0	45	0	82	43	230	0	0	273	503
08:30 AM	0	0	0	0	0	0	140	15	0	155	39	0	44	0	83	31	202	0	1	234	472
08:45 AM	0	0	0	0	0	0	157	6	0	163	33	0	35	0	68	22	169	0	2	193	424
Total	0	0	0	0	0	0	608	38	0	646	147	0	176	0	323	165	844	0	3	1012	1981
Grand Total	0	0	0	0	0	0	1250	69	0	1319	273	0	438	7	718	286	1673	0	3	1962	3999
Apprch %	0	0	0	0		0	94.8	5.2	0		38	0	61	1		14.6	85.3	0	0.2		
Total %	0	0	0	0	0	0	31.3	1.7	0	33	6.8	0	11	0.2	18	7.2	41.8	0	0.1	49.1	
Lights	0	0	0	0	0	0	1193	64	0	1257	269	0	421	7	697	277	1639	0	3	1919	3873
% Lights	0	0	0	0	0	0	95.4	92.8	0	95.3	98.5	0	96.1	100	97.1	96.9	98	0	100	97.8	96.8
Buses	0	0	0	0	0	0	5	0	0	5	1	0	9	0	10	4	12	0	0	16	31
% Buses	0	0	0	0	0	0	0.4	0	0	0.4	0.4	0	2.1	0	1.4	1.4	0.7	0	0	0.8	0.8
Trucks	0	0	0	0	0	0	52	5	0	57	3	0	8	0	11	5	22	0	0	27	95
% Trucks	0	0	0	0	0	0	4.2	7.2	0	4.3	1.1	0	1.8	0	1.5	1.7	1.3	0	0	1.4	2.4

	Southbound				PENINSULA AVE Westbound				N BAYSHORE BLVD Northbound				PENINSULA AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	207	10	217	35	0	85	120	25	230	0	255	592
07:45 AM	0	0	0	0	0	**223**	11	**234**	**39**	0	**95**	**134**	61	208	0	269	**637**
08:00 AM	0	0	0	0	0	168	**12**	180	38	0	52	90	**69**	**243**	0	**312**	582
08:15 AM	0	0	0	0	0	143	5	148	37	0	45	82	43	230	0	273	503
Total Volume	0	0	0	0	0	741	38	779	149	0	277	426	198	911	0	1109	2314
% App. Total	0	0	0		0	95.1	4.9		35	0	65		17.9	82.1	0		
PHF	.000	.000	.000	.000	.000	.831	.792	.832	.955	.000	.729	.795	.717	.937	.000	.889	.908

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Groups Printed- Bikes

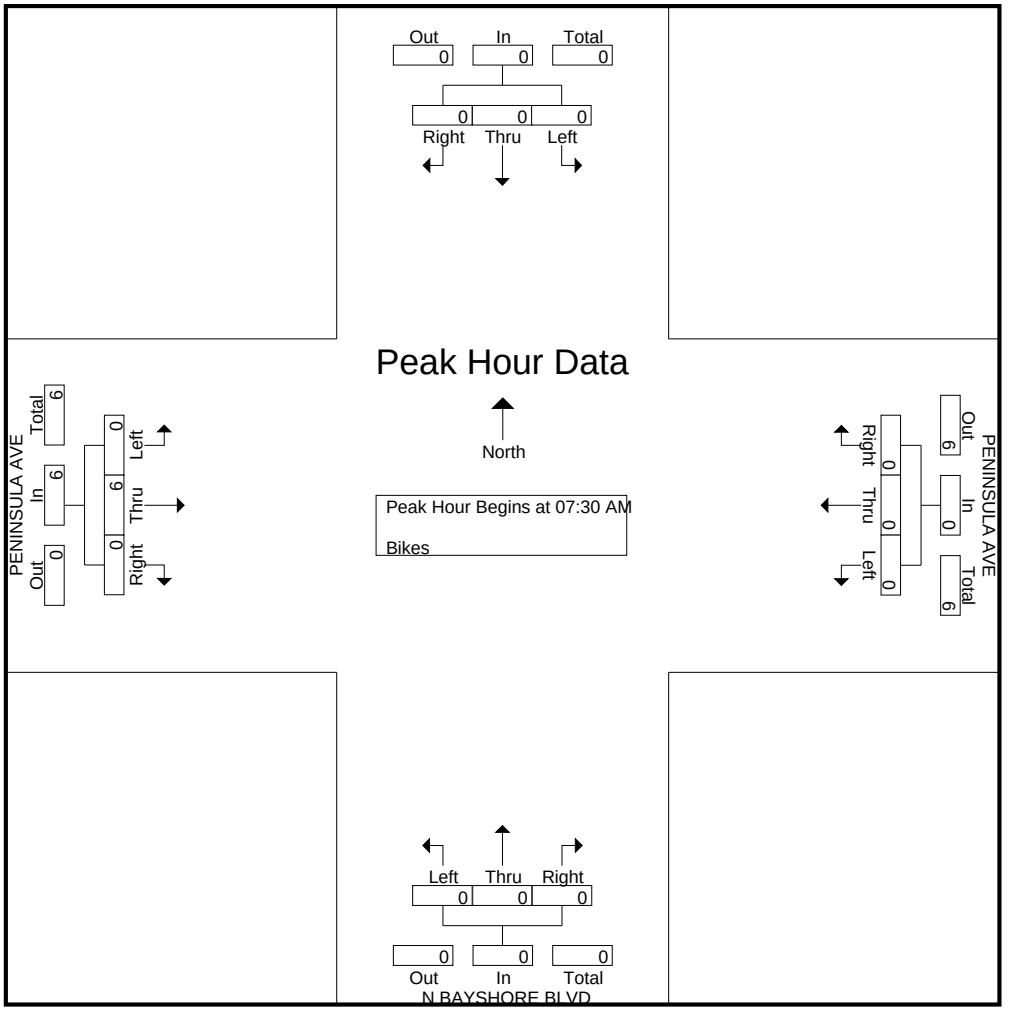
	Southbound					PENINSULA AVE Westbound					N BAYSHORE BLVD Northbound					PENINSULA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	4
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	5
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	9	9
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	100	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	100	

	Southbound				PENINSULA AVE Westbound				N BAYSHORE BLVD Northbound				PENINSULA AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	0	**2**	**2**
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	6
% App. Total	0	0	0		0	0	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.750	.000	.750	.750

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Traffic Data Service

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Groups Printed- Lights - Buses - Trucks

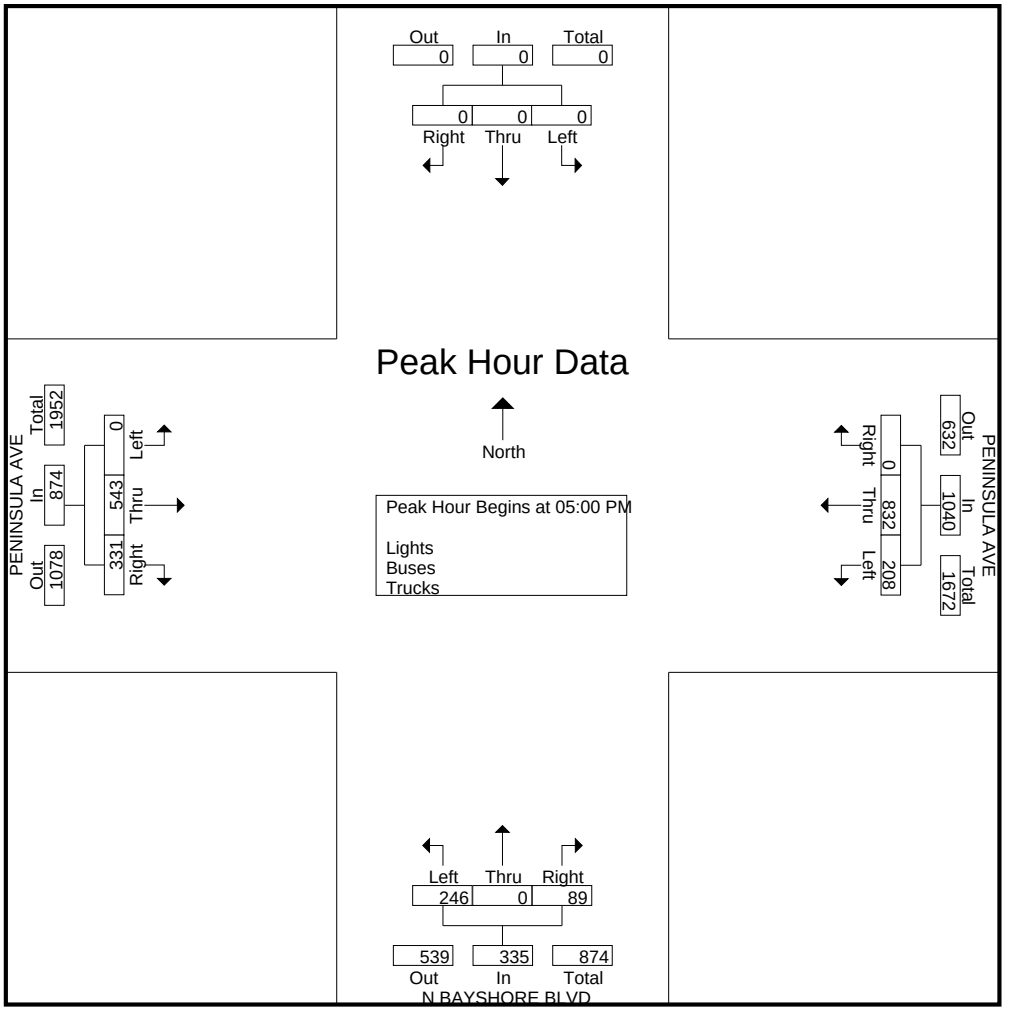
	Southbound					PENINSULA AVE Westbound					N BAYSHORE BLVD Northbound					PENINSULA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	191	48	0	239	7	0	36	0	43	51	120	0	0	171	453
04:15 PM	0	0	0	0	0	0	173	44	0	217	18	0	54	0	72	70	154	0	1	225	514
04:30 PM	0	0	0	0	0	0	166	35	0	201	20	0	47	0	67	68	150	0	1	219	487
04:45 PM	0	0	0	0	0	0	196	57	0	253	23	0	62	0	85	67	110	0	0	177	515
Total	0	0	0	0	0	0	726	184	0	910	68	0	199	0	267	256	534	0	2	792	1969
05:00 PM	0	0	0	0	0	0	222	61	0	283	29	0	57	0	86	88	171	0	0	259	628
05:15 PM	0	0	0	0	0	0	208	54	0	262	17	0	60	0	77	77	130	0	2	209	548
05:30 PM	0	0	0	0	0	0	200	48	0	248	28	0	67	0	95	82	119	0	2	203	546
05:45 PM	0	0	0	0	0	0	202	45	0	247	15	0	62	0	77	84	123	0	0	207	531
Total	0	0	0	0	0	0	832	208	0	1040	89	0	246	0	335	331	543	0	4	878	2253
Grand Total	0	0	0	0	0	0	1558	392	0	1950	157	0	445	0	602	587	1077	0	6	1670	4222
Apprch %	0	0	0	0		0	79.9	20.1	0		26.1	0	73.9	0		35.1	64.5	0	0.4		
Total %	0	0	0	0	0	0	36.9	9.3	0	46.2	3.7	0	10.5	0	14.3	13.9	25.5	0	0.1	39.6	
Lights	0	0	0	0	0	0	1551	387	0	1938	157	0	438	0	595	572	1069	0	6	1647	4180
% Lights	0	0	0	0	0	0	99.6	98.7	0	99.4	100	0	98.4	0	98.8	97.4	99.3	0	100	98.6	99
Buses	0	0	0	0	0	0	0	2	0	2	0	0	2	0	2	4	1	0	0	5	9
% Buses	0	0	0	0	0	0	0	0.5	0	0.1	0	0	0.4	0	0.3	0.7	0.1	0	0	0.3	0.2
Trucks	0	0	0	0	0	0	7	3	0	10	0	0	5	0	5	11	7	0	0	18	33
% Trucks	0	0	0	0	0	0	0.4	0.8	0	0.5	0	0	1.1	0	0.8	1.9	0.6	0	0	1.1	0.8

	Southbound				PENINSULA AVE Westbound				N BAYSHORE BLVD Northbound				PENINSULA AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	**222**	**61**	**283**	**29**	0	57	86	**88**	**171**	0	**259**	**628**
05:15 PM	0	0	0	0	0	208	54	262	17	0	60	77	77	130	0	207	546
05:30 PM	0	0	0	0	0	200	48	248	28	0	**67**	**95**	82	119	0	201	544
05:45 PM	0	0	0	0	0	202	45	247	15	0	62	77	84	123	0	207	531
Total Volume	0	0	0	0	0	832	208	1040	89	0	246	335	331	543	0	874	2249
% App. Total	0	0	0		0	80	20		26.6	0	73.4		37.9	62.1	0		
PHF	.000	.000	.000	.000	.000	.937	.852	.919	.767	.000	.918	.882	.940	.794	.000	.844	.895

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Groups Printed- Bikes

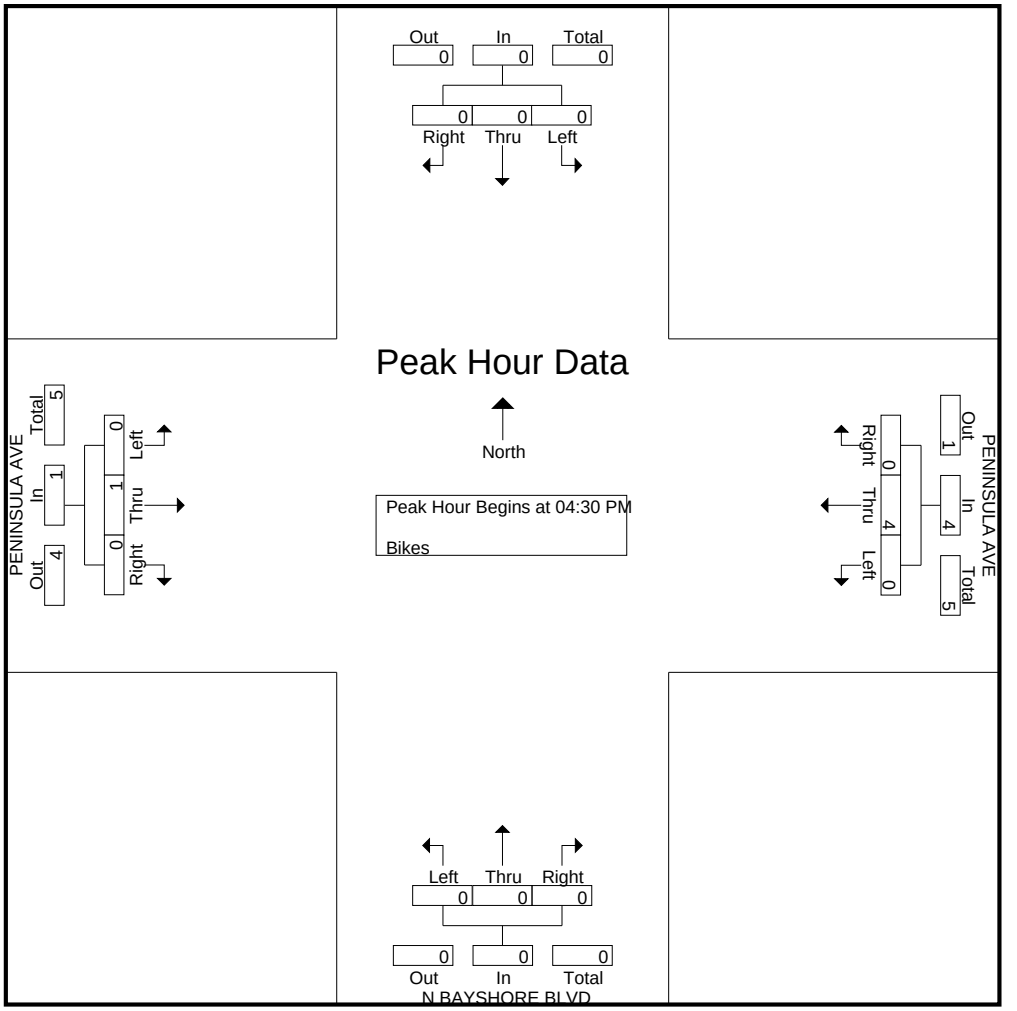
	Southbound					PENINSULA AVE Westbound					N BAYSHORE BLVD Northbound					PENINSULA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	3
05:30 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	5
Grand Total	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	1	0	0	1	8
Apprch %	0	0	0	0		0	100	0	0		0	0	0	0		0	100	0	0		
Total %	0	0	0	0	0	0	87.5	0	0	87.5	0	0	0	0	0	0	12.5	0	0	12.5	

	Southbound				PENINSULA AVE Westbound				N BAYSHORE BLVD Northbound				PENINSULA AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	**1**	0	**1**	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	**3**	0	**3**	0	0	0	0	0	0	0	0	**3**
Total Volume	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.333	.000	.333	.000	.000	.000	.000	.000	.250	.000	.250	.417

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Traffic Data Service

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File Name : 11AM FINAL
Site Code : 00000011
Start Date : 5/31/2018
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Groups Printed- Lights - Buses - Trucks

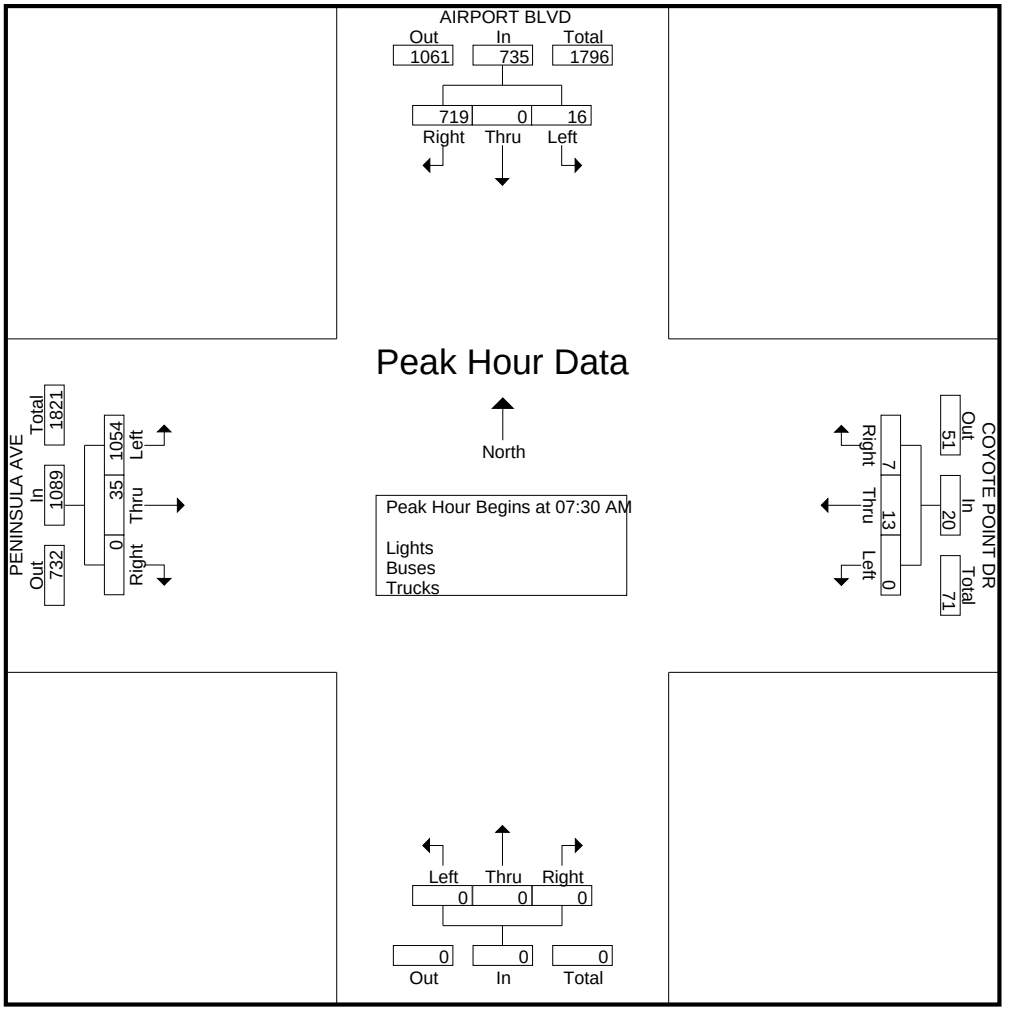
	AIRPORT BLVD Southbound					COYOTE POINT DR Westbound					Northbound					PENINSULA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	90	0	1	8	99	0	1	0	0	1	0	0	0	0	0	0	4	214	0	218	318
07:15 AM	123	0	4	2	129	1	3	0	0	4	0	0	0	0	0	0	5	231	1	237	370
07:30 AM	152	0	1	4	157	2	2	0	0	4	0	0	0	0	0	0	8	256	0	264	425
07:45 AM	263	0	5	4	272	3	6	0	0	9	0	0	0	0	0	0	10	262	0	272	553
Total	628	0	11	18	657	6	12	0	0	18	0	0	0	0	0	0	27	963	1	991	1666
08:00 AM	164	0	5	2	171	1	4	0	0	5	0	0	0	0	0	0	8	278	0	286	462
08:15 AM	140	0	5	5	150	1	1	0	0	2	0	0	0	0	0	0	9	258	0	267	419
08:30 AM	136	0	4	1	141	2	6	0	0	8	0	0	0	0	0	0	12	216	0	228	377
08:45 AM	135	0	4	3	142	1	3	0	0	4	0	0	0	0	0	0	14	213	0	227	373
Total	575	0	18	11	604	5	14	0	0	19	0	0	0	0	0	0	43	965	0	1008	1631
Grand Total	1203	0	29	29	1261	11	26	0	0	37	0	0	0	0	0	0	70	1928	1	1999	3297
Apprch %	95.4	0	2.3	2.3		29.7	70.3	0	0		0	0	0	0		0	3.5	96.4	0.1		
Total %	36.5	0	0.9	0.9	38.2	0.3	0.8	0	0	1.1	0	0	0	0	0	0	2.1	58.5	0	60.6	
Lights	1149	0	27	29	1205	10	23	0	0	33	0	0	0	0	0	0	68	1891	1	1960	3198
% Lights	95.5	0	93.1	100	95.6	90.9	88.5	0	0	89.2	0	0	0	0	0	0	97.1	98.1	100	98	97
Buses	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	14	0	14	21
% Buses	0.6	0	0	0	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0.7	0	0.7	0.6
Trucks	47	0	2	0	49	1	3	0	0	4	0	0	0	0	0	0	2	23	0	25	78
% Trucks	3.9	0	6.9	0	3.9	9.1	11.5	0	0	10.8	0	0	0	0	0	0	2.9	1.2	0	1.3	2.4

	AIRPORT BLVD Southbound				COYOTE POINT DR Westbound				Northbound				PENINSULA AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	152	0	1	153	2	2	0	4	0	0	0	0	0	8	256	264	421
07:45 AM	**263**	0	**5**	**268**	**3**	**6**	0	**9**	0	0	0	0	0	**10**	262	272	**549**
08:00 AM	164	0	5	169	1	4	0	5	0	0	0	0	0	8	**278**	**286**	460
08:15 AM	140	0	5	145	1	1	0	2	0	0	0	0	0	9	258	267	414
Total Volume	719	0	16	735	7	13	0	20	0	0	0	0	0	35	1054	1089	1844
% App. Total	97.8	0	2.2		35	65	0		0	0	0		0	3.2	96.8		
PHF	.683	.000	.800	.686	.583	.542	.000	.556	.000	.000	.000	.000	.000	.875	.948	.952	.840

Traffic Data Service

San Jose, CA
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File Name : 11AM FINAL
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Groups Printed- Bikes

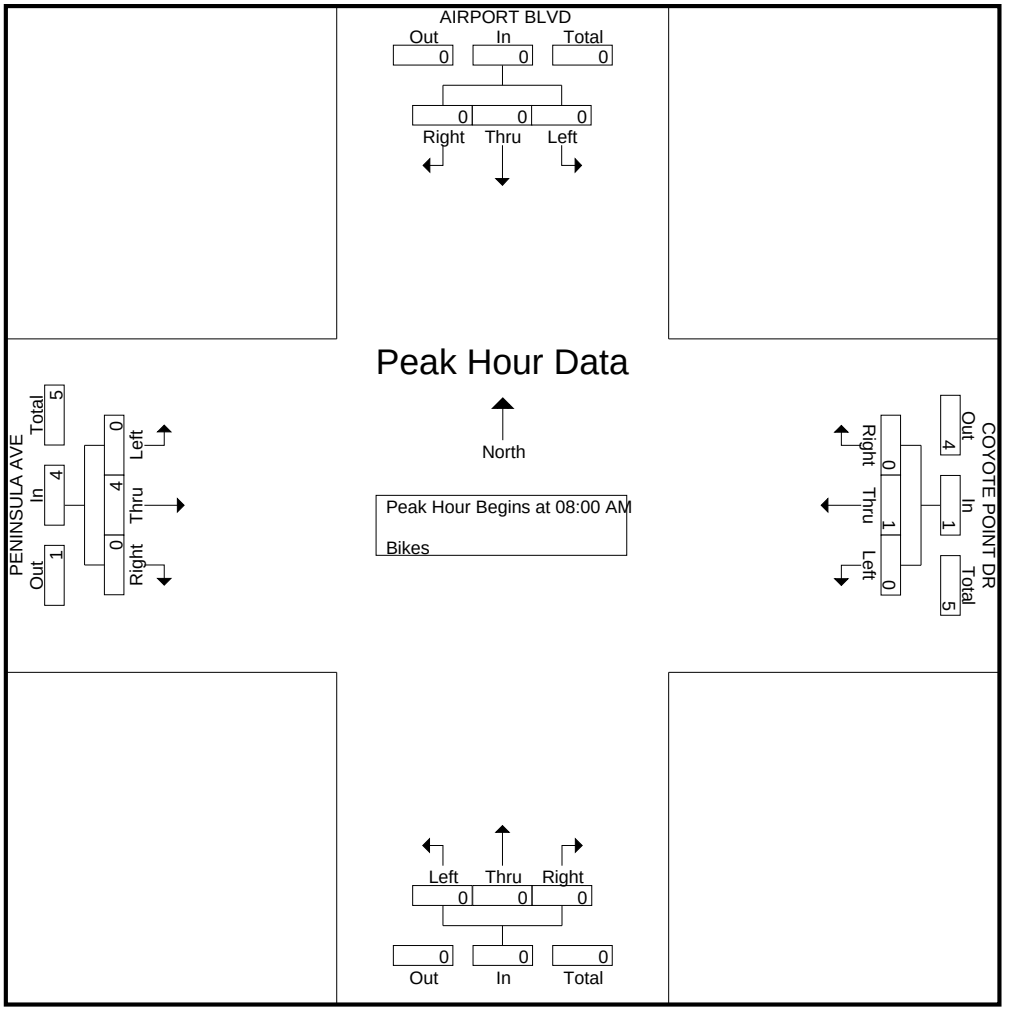
	AIRPORT BLVD Southbound					COYOTE POINT DR Westbound					Northbound					PENINSULA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
08:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	5
Grand Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	5
Apprch %	0	0	0	0		0	100	0	0		0	0	0	0		0	100	0	0		
Total %	0	0	0	0	0	0	20	0	0	20	0	0	0	0	0	0	80	0	0	80	

	AIRPORT BLVD Southbound				COYOTE POINT DR Westbound				Northbound				PENINSULA AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	0	**2**	**2**
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.500	.000	.500	.625

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Groups Printed- Lights - Buses - Trucks

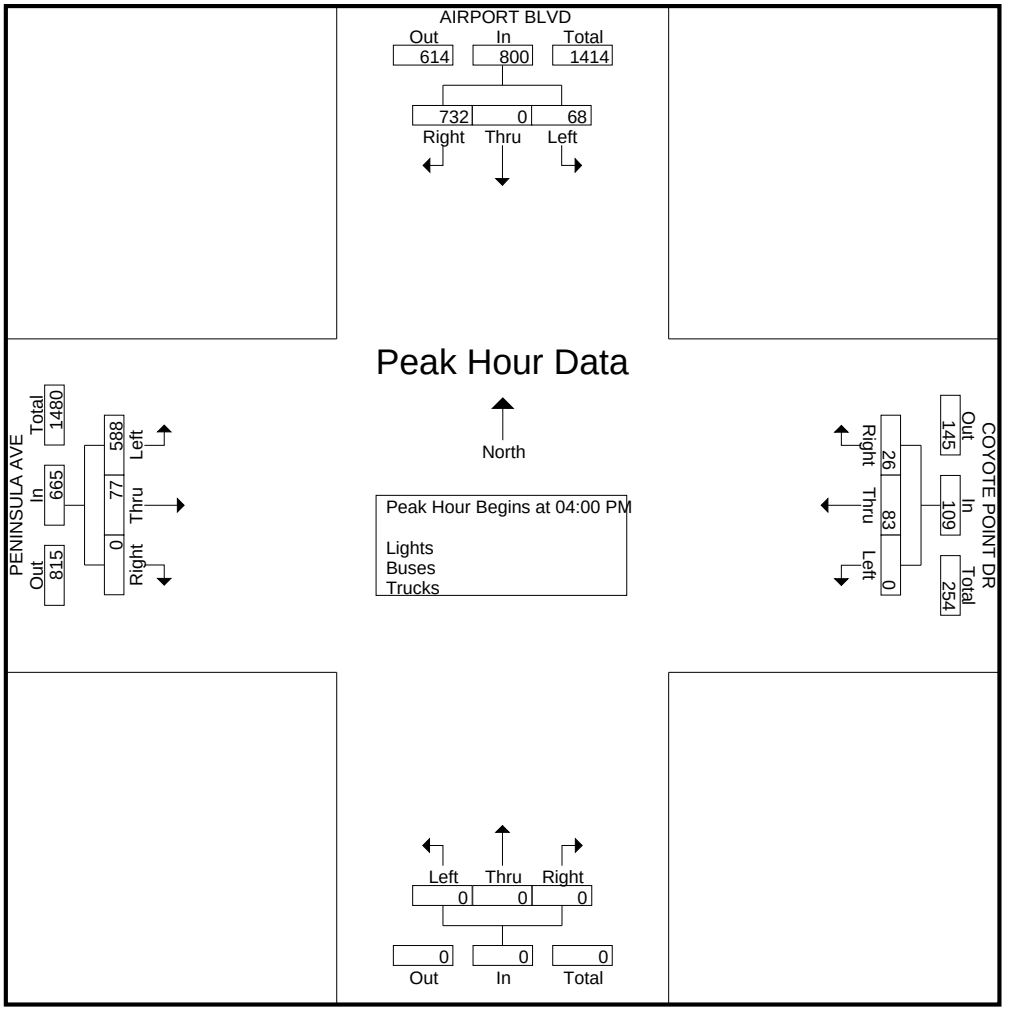
	AIRPORT BLVD Southbound					COYOTE POINT DR Westbound					Northbound					PENINSULA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	181	0	27	1	209	8	24	0	0	32	0	0	0	0	0	0	13	130	4	147	388
04:15 PM	189	0	15	5	209	9	16	0	0	25	0	0	0	0	0	0	29	146	0	175	409
04:30 PM	178	0	14	5	197	7	23	0	0	30	0	0	0	0	0	0	16	148	0	164	391
04:45 PM	184	0	12	0	196	2	20	0	0	22	0	0	0	0	0	0	19	164	0	183	401
Total	732	0	68	11	811	26	83	0	0	109	0	0	0	0	0	0	77	588	4	669	1589
05:00 PM	164	0	6	2	172	17	9	0	0	26	0	0	0	0	0	0	12	151	0	163	361
05:15 PM	160	0	13	5	178	9	22	0	0	31	0	0	0	0	0	0	5	155	0	160	369
05:30 PM	146	0	31	0	177	11	34	0	0	45	0	0	0	0	0	0	8	178	0	186	408
05:45 PM	176	0	25	4	205	8	32	0	0	40	0	0	0	0	0	0	13	171	1	185	430
Total	646	0	75	11	732	45	97	0	0	142	0	0	0	0	0	0	38	655	1	694	1568
Grand Total	1378	0	143	22	1543	71	180	0	0	251	0	0	0	0	0	0	115	1243	5	1363	3157
Apprch %	89.3	0	9.3	1.4		28.3	71.7	0	0		0	0	0	0		0	8.4	91.2	0.4		
Total %	43.6	0	4.5	0.7	48.9	2.2	5.7	0	0	8	0	0	0	0	0	0	3.6	39.4	0.2	43.2	
Lights	1362	0	142	22	1526	70	179	0	0	249	0	0	0	0	0	0	115	1229	5	1349	3124
% Lights	98.8	0	99.3	100	98.9	98.6	99.4	0	0	99.2	0	0	0	0	0	0	100	98.9	100	99	99
Buses	4	0	0	0	4	0	1	0	0	1	0	0	0	0	0	0	0	3	0	3	8
% Buses	0.3	0	0	0	0.3	0	0.6	0	0	0.4	0	0	0	0	0	0	0	0.2	0	0.2	0.3
Trucks	12	0	1	0	13	1	0	0	0	1	0	0	0	0	0	0	0	11	0	11	25
% Trucks	0.9	0	0.7	0	0.8	1.4	0	0	0	0.4	0	0	0	0	0	0	0	0.9	0	0.8	0.8

	AIRPORT BLVD Southbound				COYOTE POINT DR Westbound				Northbound				PENINSULA AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	181	0	**27**	**208**	8	**24**	0	**32**	0	0	0	0	0	13	130	143	383
04:15 PM	**189**	0	15	204	**9**	16	0	25	0	0	0	0	0	**29**	146	175	**404**
04:30 PM	178	0	14	192	7	23	0	30	0	0	0	0	0	16	148	164	386
04:45 PM	184	0	12	196	2	20	0	22	0	0	0	0	0	19	**164**	**183**	401
Total Volume	732	0	68	800	26	83	0	109	0	0	0	0	0	77	588	665	1574
% App. Total	91.5	0	8.5		23.9	76.1	0		0	0	0		0	11.6	88.4		
PHF	.968	.000	.630	.962	.722	.865	.000	.852	.000	.000	.000	.000	.000	.664	.896	.908	.974

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File Name : 11PM FINAL
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Groups Printed- Bikes

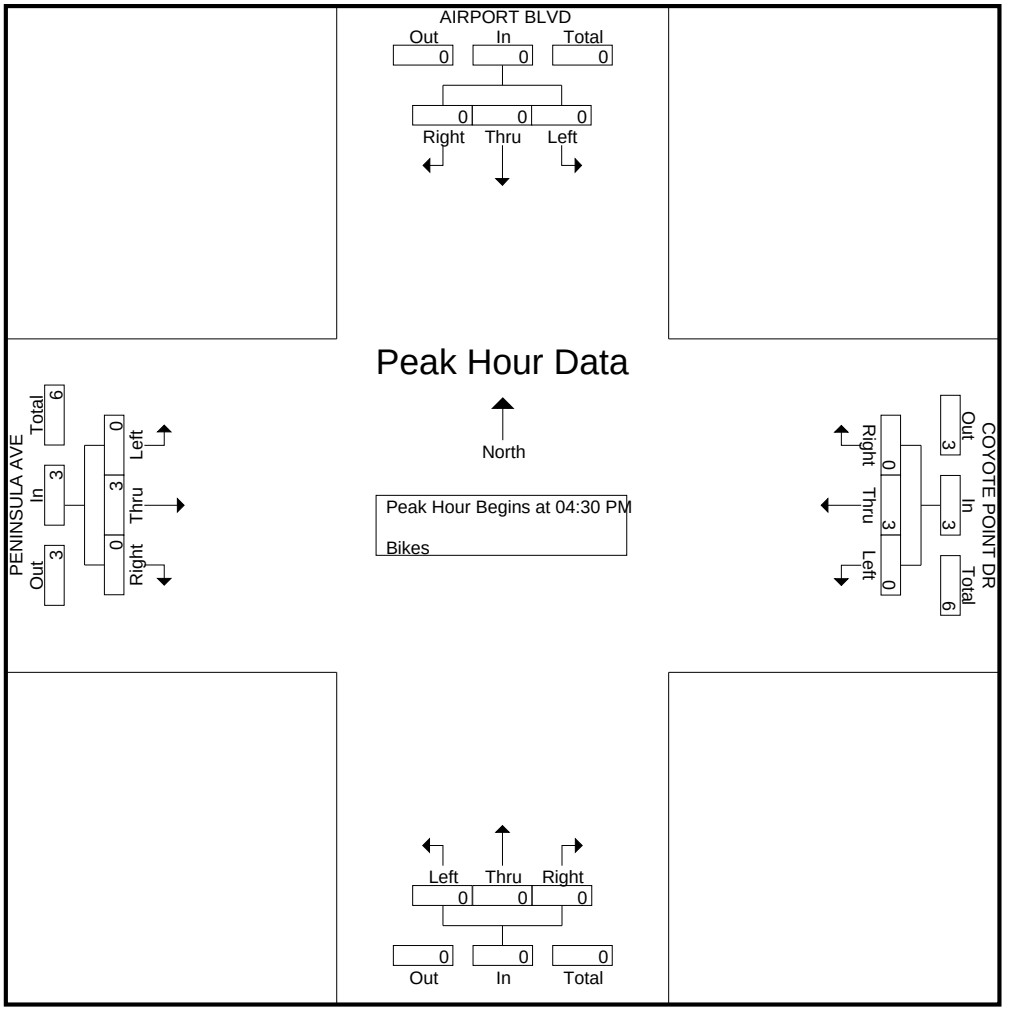
	AIRPORT BLVD Southbound					COYOTE POINT DR Westbound					Northbound					PENINSULA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
Total	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	5
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
05:30 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3
Grand Total	2	0	0	0	2	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	8
Apprch %	100	0	0	0		0	100	0	0		0	0	0	0		0	100	0	0		
Total %	25	0	0	0	25	0	37.5	0	0	37.5	0	0	0	0	0	0	37.5	0	0	37.5	

	AIRPORT BLVD Southbound				COYOTE POINT DR Westbound				Northbound				PENINSULA AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	**2**	0	**2**	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	**2**	0	**2**	**3**
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.000	.000	.000	.375	.000	.375	.500

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Traffic Data Service

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File Name : 12AM FINAL
Site Code : 00000012
Start Date : 5/30/2018
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Groups Printed- Lights - Buses - Trucks

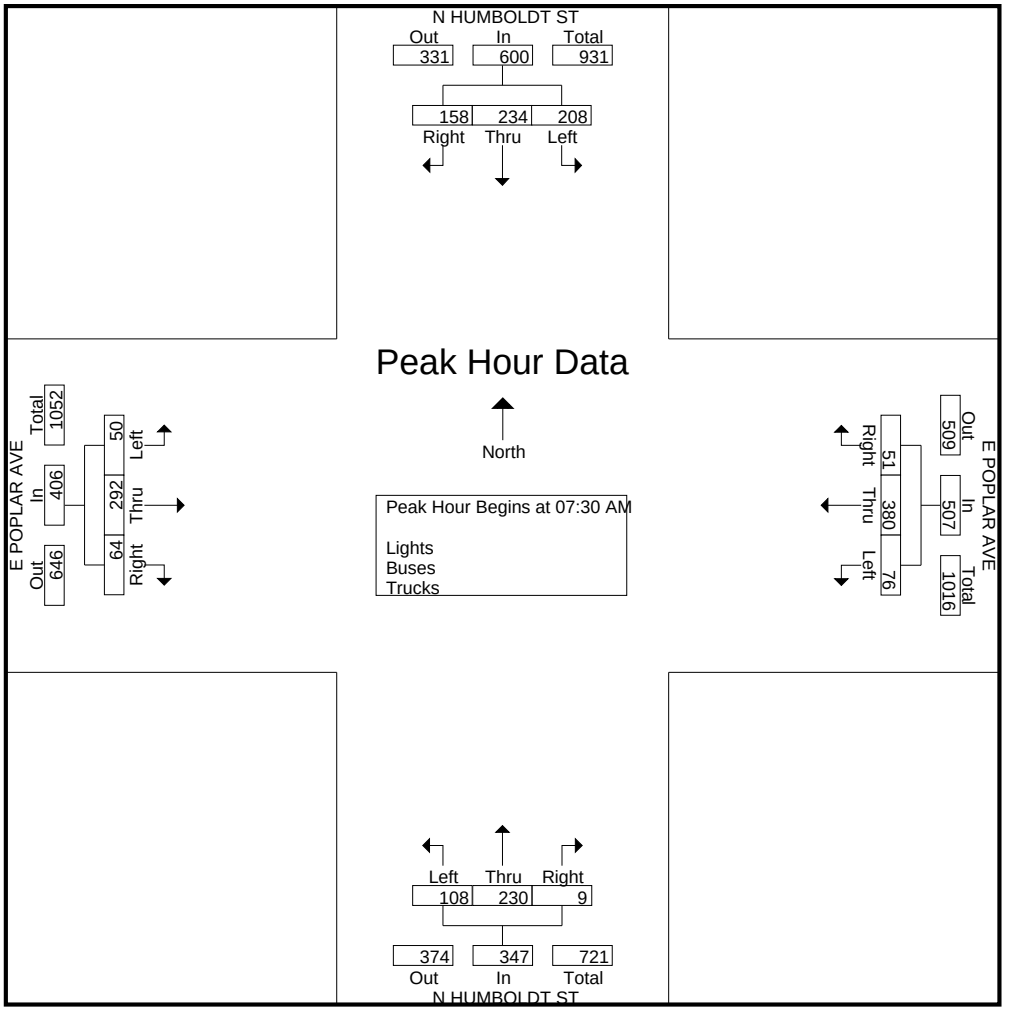
	N HUMBOLDT ST Southbound					E POPLAR AVE Westbound					N HUMBOLDT ST Northbound					E POPLAR AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	9	16	65	0	90	11	53	10	2	76	0	39	9	11	59	11	86	13	2	112	337
07:15 AM	17	18	54	10	99	8	92	11	3	114	4	58	13	11	86	15	66	6	6	93	392
07:30 AM	52	51	53	6	162	10	89	13	14	126	2	60	31	18	111	8	85	9	15	117	516
07:45 AM	63	65	48	13	189	17	89	29	4	139	1	50	18	17	86	11	70	13	12	106	520
Total	141	150	220	29	540	46	323	63	23	455	7	207	71	57	342	45	307	41	35	428	1765
08:00 AM	24	73	45	1	143	14	90	20	1	125	4	62	25	1	92	31	76	19	0	126	486
08:15 AM	19	45	62	2	128	10	112	14	2	138	2	58	34	0	94	14	61	9	0	84	444
08:30 AM	10	43	55	5	113	13	107	17	0	137	5	47	13	1	66	12	73	20	11	116	432
08:45 AM	13	32	66	8	119	10	94	17	1	122	6	51	15	2	74	15	69	15	27	126	441
Total	66	193	228	16	503	47	403	68	4	522	17	218	87	4	326	72	279	63	38	452	1803
Grand Total	207	343	448	45	1043	93	726	131	27	977	24	425	158	61	668	117	586	104	73	880	3568
Apprch %	19.8	32.9	43	4.3		9.5	74.3	13.4	2.8		3.6	63.6	23.7	9.1		13.3	66.6	11.8	8.3		
Total %	5.8	9.6	12.6	1.3	29.2	2.6	20.3	3.7	0.8	27.4	0.7	11.9	4.4	1.7	18.7	3.3	16.4	2.9	2	24.7	
Lights	202	328	442	45	1017	88	711	129	27	955	24	407	150	61	642	114	559	98	73	844	3458
% Lights	97.6	95.6	98.7	100	97.5	94.6	97.9	98.5	100	97.7	100	95.8	94.9	100	96.1	97.4	95.4	94.2	100	95.9	96.9
Buses	2	2	0	0	4	2	6	0	0	8	0	9	8	0	17	3	20	4	0	27	56
% Buses	1	0.6	0	0	0.4	2.2	0.8	0	0	0.8	0	2.1	5.1	0	2.5	2.6	3.4	3.8	0	3.1	1.6
Trucks	3	13	6	0	22	3	9	2	0	14	0	9	0	0	9	0	7	2	0	9	54
% Trucks	1.4	3.8	1.3	0	2.1	3.2	1.2	1.5	0	1.4	0	2.1	0	0	1.3	0	1.2	1.9	0	1	1.5

	N HUMBOLDT ST Southbound				E POPLAR AVE Westbound				N HUMBOLDT ST Northbound				E POPLAR AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	52	51	53	156	10	89	13	112	2	60	31	93	8	**85**	9	102	463
07:45 AM	**63**	65	48	**176**	**17**	89	**29**	135	1	50	18	69	11	70	13	94	474
08:00 AM	24	**73**	45	142	14	90	20	124	**4**	**62**	25	91	**31**	76	**19**	**126**	**483**
08:15 AM	19	45	**62**	126	10	**112**	14	**136**	2	58	**34**	**94**	14	61	9	84	440
Total Volume	158	234	208	600	51	380	76	507	9	230	108	347	64	292	50	406	1860
% App. Total	26.3	39	34.7		10.1	75	15		2.6	66.3	31.1		15.8	71.9	12.3		
PHF	.627	.801	.839	.852	.750	.848	.655	.932	.563	.927	.794	.923	.516	.859	.658	.806	.963

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Site Code : 00000012
Start Date : 5/30/2018
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File Name : 12AM FINAL
Site Code : 00000012
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Groups Printed- Bikes

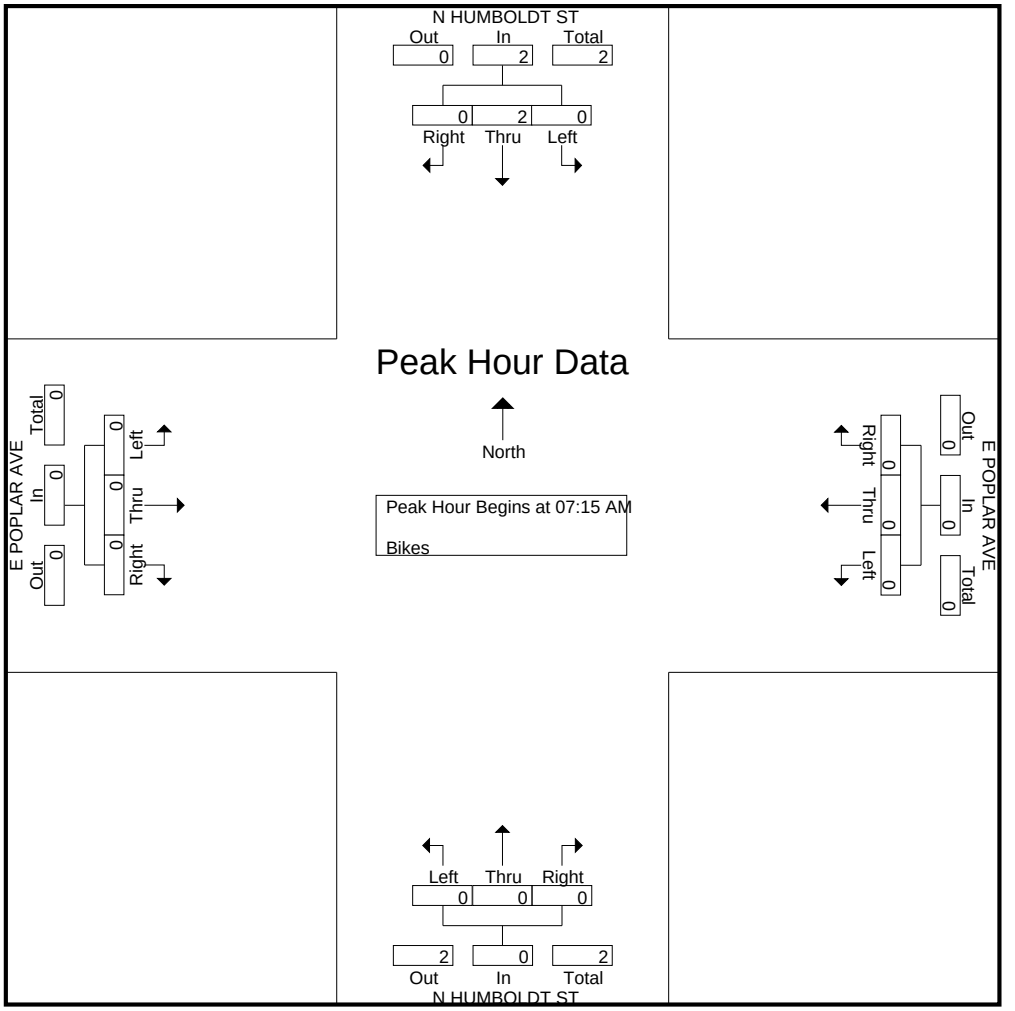
	N HUMBOLDT ST Southbound					E POPLAR AVE Westbound					N HUMBOLDT ST Northbound					E POPLAR AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Apprch %	0	100	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %	0	100	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

	N HUMBOLDT ST Southbound				E POPLAR AVE Westbound				N HUMBOLDT ST Northbound				E POPLAR AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	**1**
08:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500

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File Name : 12AM FINAL
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Traffic Data Service

San Jose, CA
(408) 622-4787
tdsbay@cs.com

File Name : 12PM FINAL
Site Code : 00000012
Start Date : 5/30/2018
Page No : 1

Groups Printed- Lights - Buses - Trucks

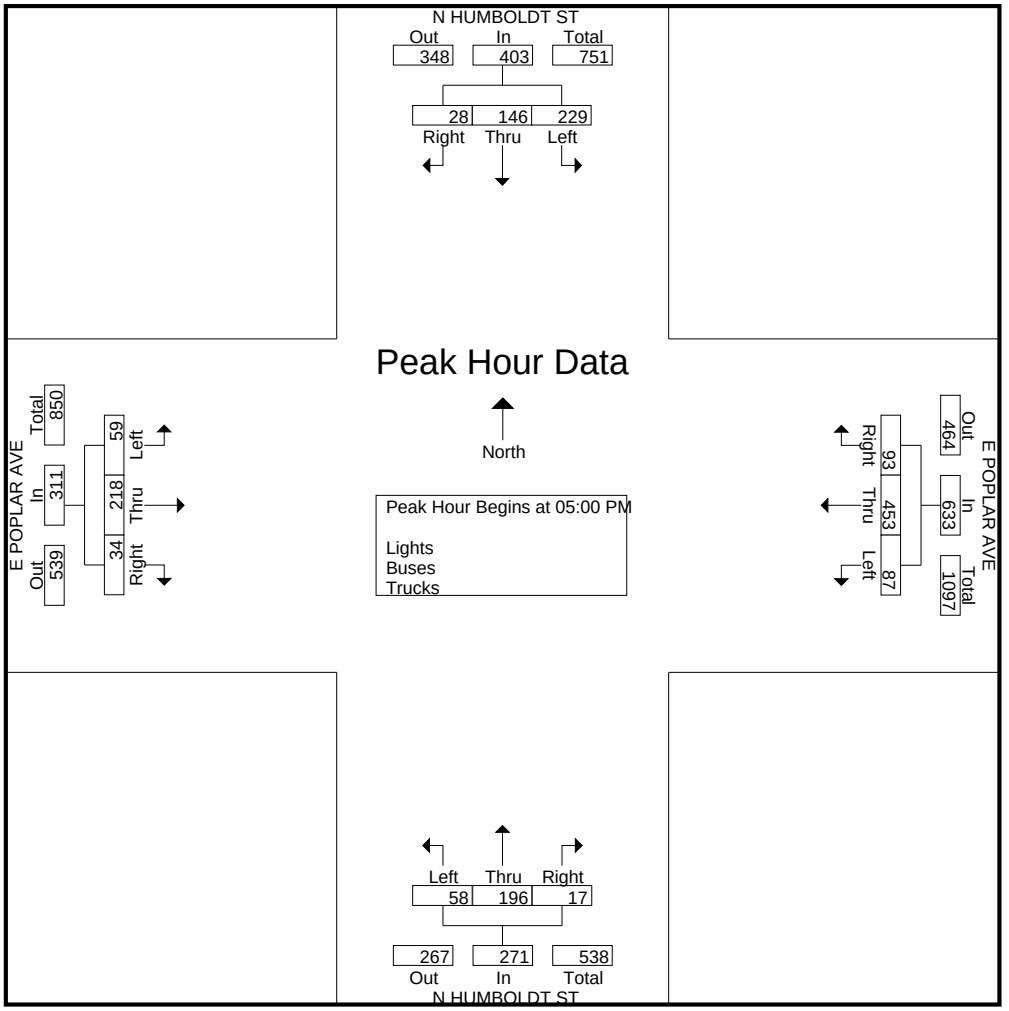
	N HUMBOLDT ST Southbound					E POPLAR AVE Westbound					N HUMBOLDT ST Northbound					E POPLAR AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	10	45	48	2	105	20	98	19	2	139	6	37	6	0	49	10	86	8	3	107	400
04:15 PM	4	44	43	1	92	11	97	15	1	124	7	42	8	0	57	14	69	6	3	92	365
04:30 PM	11	41	52	2	106	23	84	18	2	127	6	46	2	5	59	14	69	10	1	94	386
04:45 PM	8	51	43	3	105	14	92	25	3	134	5	54	12	1	72	19	62	12	1	94	405
Total	33	181	186	8	408	68	371	77	8	524	24	179	28	6	237	57	286	36	8	387	1556
05:00 PM	5	44	54	5	108	14	103	20	3	140	4	59	19	0	82	8	52	9	3	72	402
05:15 PM	9	29	54	0	92	34	114	21	1	170	5	42	18	2	67	11	49	21	0	81	410
05:30 PM	6	37	62	2	107	21	118	26	2	167	3	34	11	2	50	8	56	15	0	79	403
05:45 PM	8	36	59	1	104	24	118	20	1	163	5	61	10	0	76	7	61	14	2	84	427
Total	28	146	229	8	411	93	453	87	7	640	17	196	58	4	275	34	218	59	5	316	1642
Grand Total	61	327	415	16	819	161	824	164	15	1164	41	375	86	10	512	91	504	95	13	703	3198
Apprch %	7.4	39.9	50.7	2		13.8	70.8	14.1	1.3		8	73.2	16.8	2		12.9	71.7	13.5	1.8		
Total %	1.9	10.2	13	0.5	25.6	5	25.8	5.1	0.5	36.4	1.3	11.7	2.7	0.3	16	2.8	15.8	3	0.4	22	
Lights	60	324	407	16	807	161	821	163	15	1160	40	373	82	10	505	90	493	94	13	690	3162
% Lights	98.4	99.1	98.1	100	98.5	100	99.6	99.4	100	99.7	97.6	99.5	95.3	100	98.6	98.9	97.8	98.9	100	98.2	98.9
Buses	1	0	1	0	2	0	0	0	0	0	0	0	4	0	4	0	0	1	0	1	7
% Buses	1.6	0	0.2	0	0.2	0	0	0	0	0	0	0	4.7	0	0.8	0	0	1.1	0	0.1	0.2
Trucks	0	3	7	0	10	0	3	1	0	4	1	2	0	0	3	1	11	0	0	12	29
% Trucks	0	0.9	1.7	0	1.2	0	0.4	0.6	0	0.3	2.4	0.5	0	0	0.6	1.1	2.2	0	0	1.7	0.9

	N HUMBOLDT ST Southbound				E POPLAR AVE Westbound				N HUMBOLDT ST Northbound				E POPLAR AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	5	**44**	54	103	14	103	20	137	4	59	**19**	**82**	8	52	9	69	391
05:15 PM	**9**	29	54	92	**34**	114	21	**169**	**5**	42	18	65	**11**	49	**21**	81	407
05:30 PM	6	37	**62**	**105**	21	**118**	**26**	165	3	34	11	48	8	56	15	79	397
05:45 PM	8	36	59	103	24	118	20	162	5	**61**	10	76	7	**61**	14	**82**	**423**
Total Volume	28	146	229	403	93	453	87	633	17	196	58	271	34	218	59	311	1618
% App. Total	6.9	36.2	56.8		14.7	71.6	13.7		6.3	72.3	21.4		10.9	70.1	19		
PHF	.778	.830	.923	.960	.684	.960	.837	.936	.850	.803	.763	.826	.773	.893	.702	.948	.956

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Groups Printed- Bikes

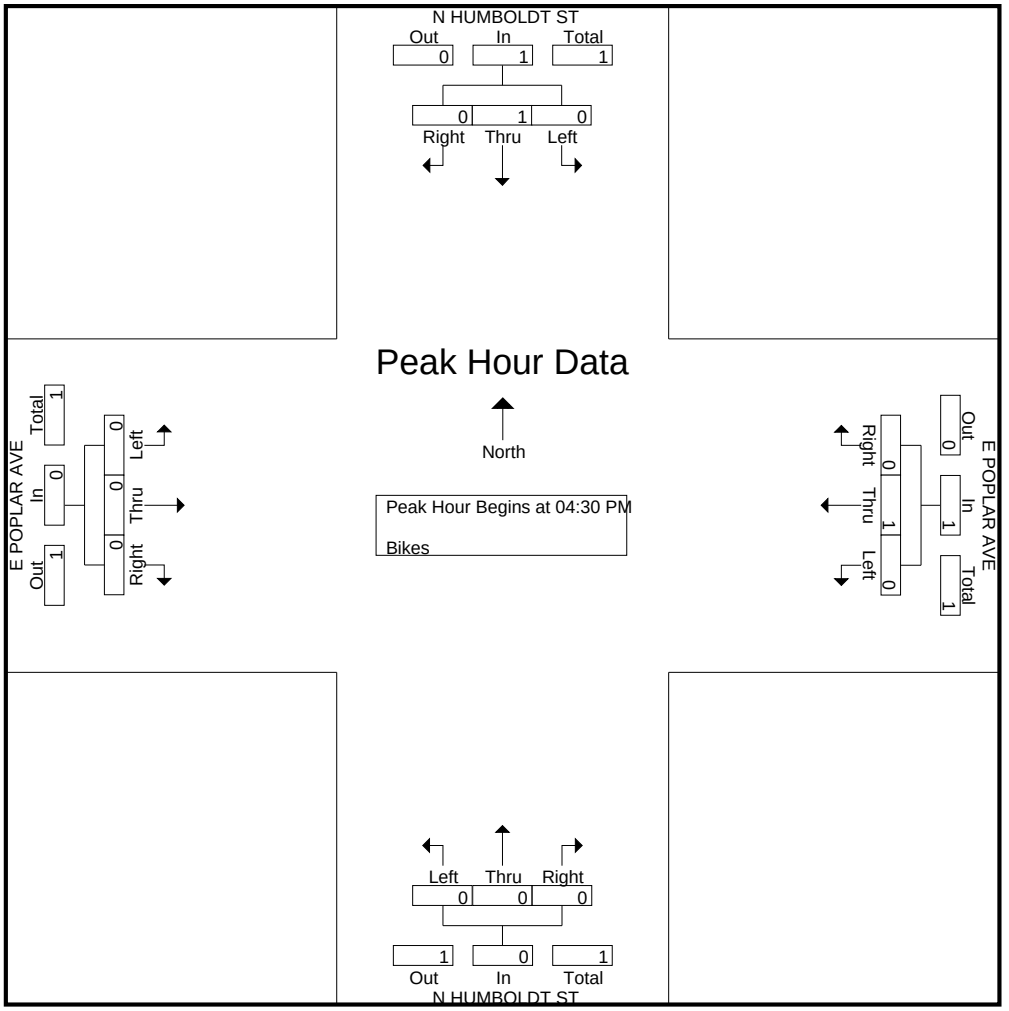
	N HUMBOLDT ST Southbound					E POPLAR AVE Westbound					N HUMBOLDT ST Northbound					E POPLAR AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
Grand Total	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3
Apprch %	0	100	0	0		0	100	0	0		0	0	0	0		0	0	0	0		
Total %	0	66.7	0	0	66.7	0	33.3	0	0	33.3	0	0	0	0	0	0	0	0	0	0	

	N HUMBOLDT ST Southbound				E POPLAR AVE Westbound				N HUMBOLDT ST Northbound				E POPLAR AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	**1**
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0	1
Total Volume	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
% App. Total	0	100	0		0	100	0		0	0	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.500

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Groups Printed- Lights - Buses - Trucks

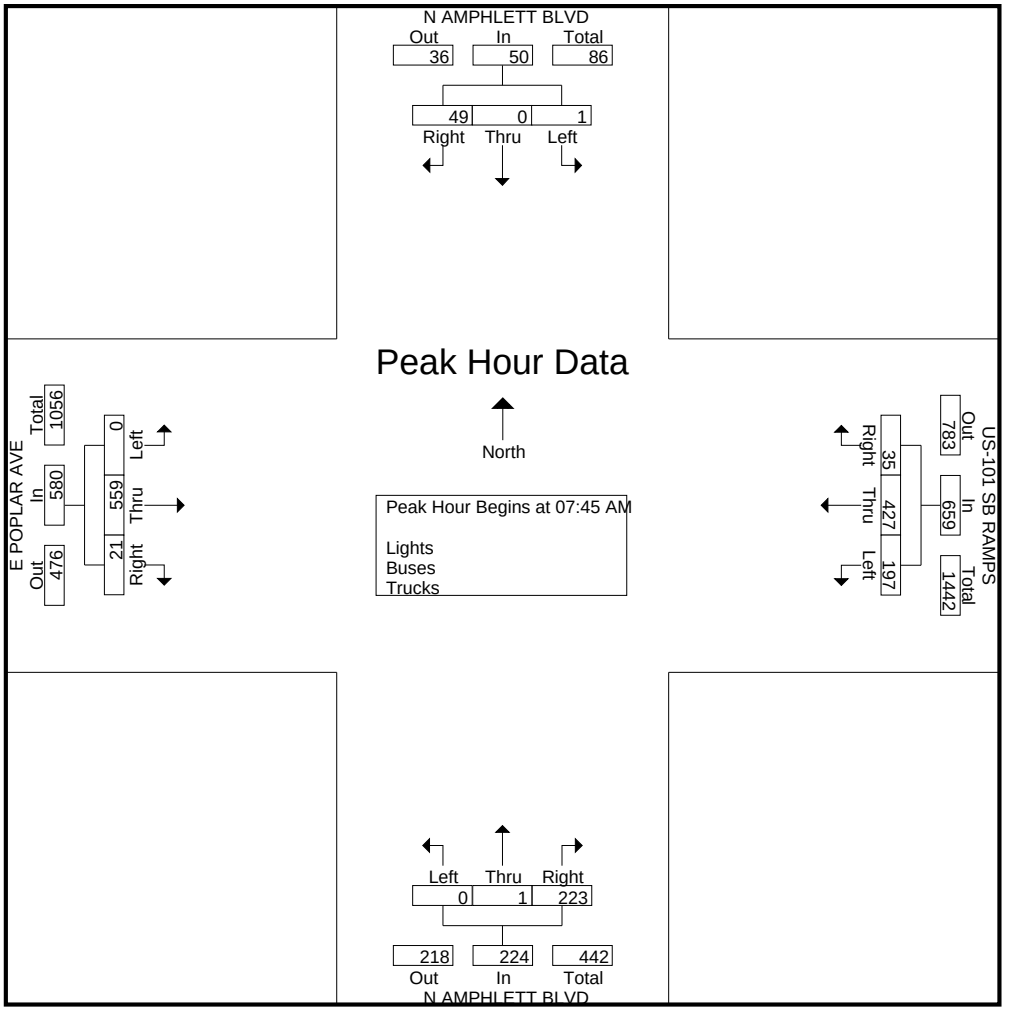
	N AMPHLETT BLVD Southbound					US-101 SB RAMPS Westbound					N AMPHLETT BLVD Northbound					E POPLAR AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	5	0	0	0	5	10	66	35	0	111	31	0	0	0	31	9	139	0	0	148	295
07:15 AM	5	0	0	0	5	4	103	40	0	147	31	0	0	0	31	6	132	0	0	138	321
07:30 AM	8	0	0	0	8	9	91	48	0	148	51	0	0	0	51	3	139	0	2	144	351
07:45 AM	13	0	1	0	14	12	102	65	0	179	72	1	0	0	73	10	126	0	1	137	403
Total	31	0	1	0	32	35	362	188	0	585	185	1	0	0	186	28	536	0	3	567	1370
08:00 AM	13	0	0	0	13	5	92	44	0	141	78	0	0	0	78	2	139	0	0	141	373
08:15 AM	7	0	0	0	7	10	103	52	0	165	32	0	0	0	32	5	146	0	0	151	355
08:30 AM	16	0	0	0	16	8	130	36	0	174	41	0	0	0	41	4	148	0	0	152	383
08:45 AM	11	0	0	0	11	16	102	27	0	145	30	0	0	0	30	5	140	0	0	145	331
Total	47	0	0	0	47	39	427	159	0	625	181	0	0	0	181	16	573	0	0	589	1442
Grand Total	78	0	1	0	79	74	789	347	0	1210	366	1	0	0	367	44	1109	0	3	1156	2812
Apprch %	98.7	0	1.3	0		6.1	65.2	28.7	0		99.7	0.3	0	0		3.8	95.9	0	0.3		
Total %	2.8	0	0	0	2.8	2.6	28.1	12.3	0	43	13	0	0	0	13.1	1.6	39.4	0	0.1	41.1	
Lights	75	0	1	0	76	72	769	341	0	1182	349	1	0	0	350	40	1070	0	3	1113	2721
% Lights	96.2	0	100	0	96.2	97.3	97.5	98.3	0	97.7	95.4	100	0	0	95.4	90.9	96.5	0	100	96.3	96.8
Buses	2	0	0	0	2	0	5	2	0	7	4	0	0	0	4	3	14	0	0	17	30
% Buses	2.6	0	0	0	2.5	0	0.6	0.6	0	0.6	1.1	0	0	0	1.1	6.8	1.3	0	0	1.5	1.1
Trucks	1	0	0	0	1	2	15	4	0	21	13	0	0	0	13	1	25	0	0	26	61
% Trucks	1.3	0	0	0	1.3	2.7	1.9	1.2	0	1.7	3.6	0	0	0	3.5	2.3	2.3	0	0	2.2	2.2

	N AMPHLETT BLVD Southbound				US-101 SB RAMPS Westbound				N AMPHLETT BLVD Northbound				E POPLAR AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	13	0	**1**	14	**12**	102	**65**	**179**	72	**1**	0	73	**10**	126	0	136	**402**
08:00 AM	13	0	0	13	5	92	44	141	**78**	0	0	**78**	2	139	0	141	373
08:15 AM	7	0	0	7	10	103	52	165	32	0	0	32	5	146	0	151	355
08:30 AM	**16**	0	0	**16**	8	**130**	36	174	41	0	0	41	4	**148**	0	**152**	383
Total Volume	49	0	1	50	35	427	197	659	223	1	0	224	21	559	0	580	1513
% App. Total	98	0	2		5.3	64.8	29.9		99.6	0.4	0		3.6	96.4	0		
PHF	.766	.000	.250	.781	.729	.821	.758	.920	.715	.250	.000	.718	.525	.944	.000	.954	.941

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Groups Printed- Bikes

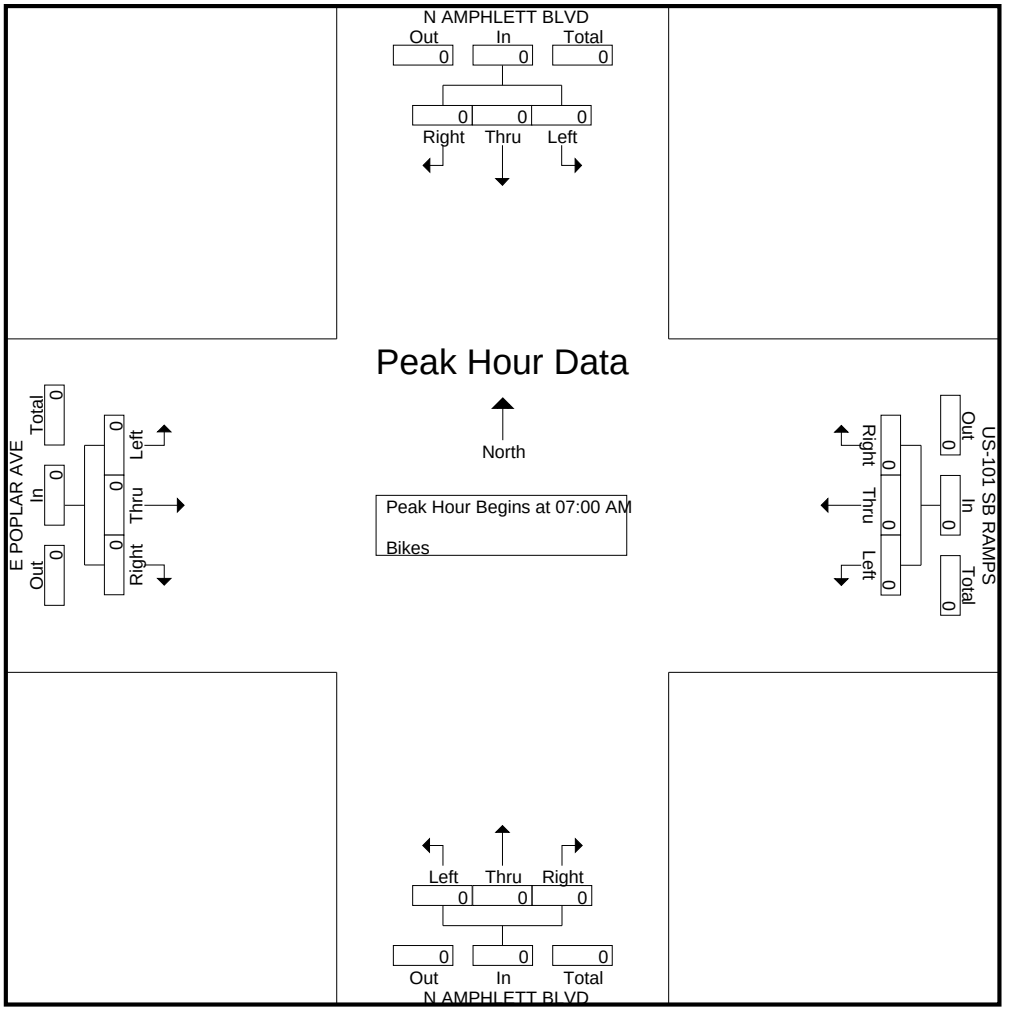
	N AMPHLETT BLVD Southbound					US-101 SB RAMPS Westbound					N AMPHLETT BLVD Northbound					E POPLAR AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

	N AMPHLETT BLVD Southbound				US-101 SB RAMPS Westbound				N AMPHLETT BLVD Northbound				E POPLAR AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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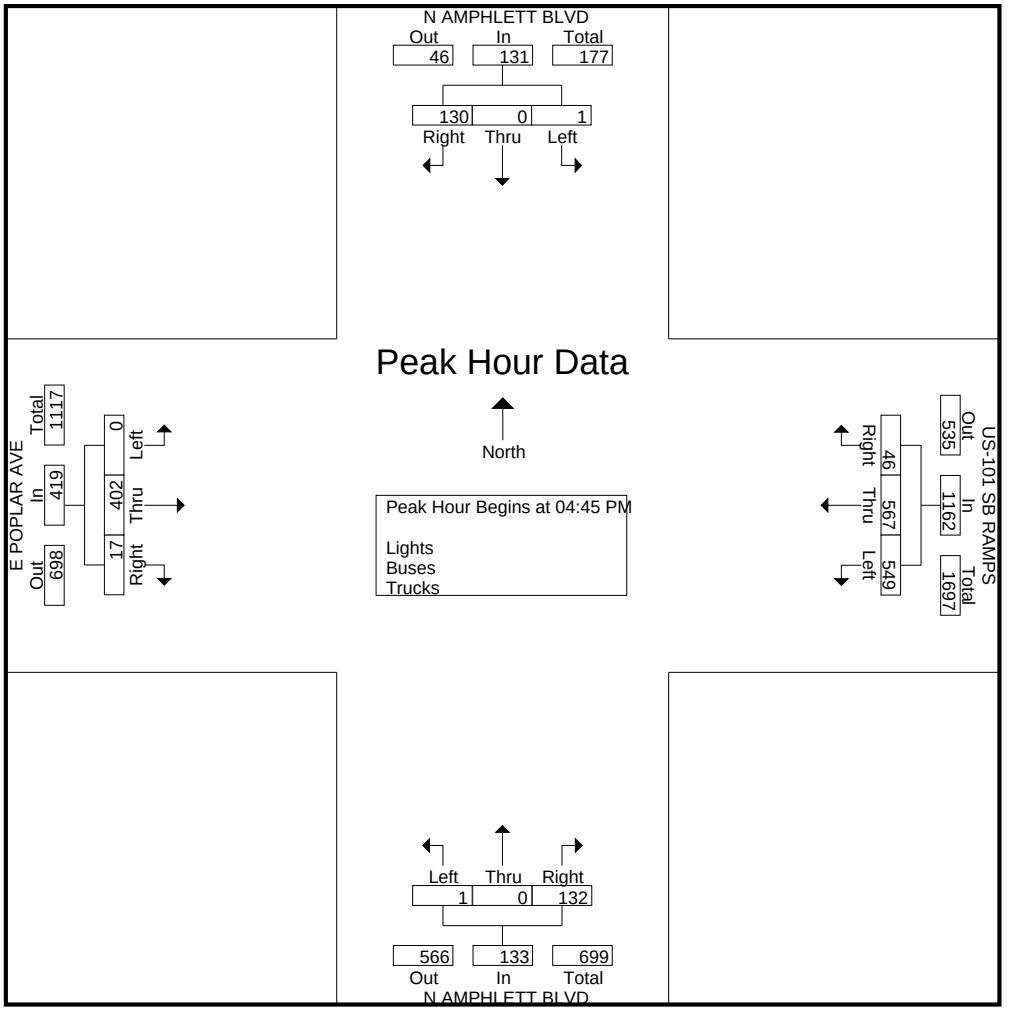
	N AMPHLETT BLVD Southbound					US-101 SB RAMPS Westbound					N AMPHLETT BLVD Northbound					E POPLAR AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	9	0	0	0	9	10	114	68	0	192	32	0	0	0	32	6	136	0	1	143	376
04:15 PM	10	1	0	0	11	10	105	84	0	199	46	0	0	0	46	1	125	1	0	127	383
04:30 PM	14	0	0	0	14	8	136	113	0	257	45	0	0	0	45	5	98	0	0	103	419
04:45 PM	20	0	1	0	21	10	150	141	0	301	24	0	0	0	24	5	94	0	0	99	445
Total	53	1	1	0	55	38	505	406	0	949	147	0	0	0	147	17	453	1	1	472	1623
05:00 PM	39	0	0	0	39	8	138	145	0	291	30	0	0	0	30	6	94	0	0	100	460
05:15 PM	33	0	0	0	33	15	132	131	0	278	39	0	1	0	40	3	108	0	0	111	462
05:30 PM	38	0	0	0	38	13	147	132	0	292	39	0	0	0	39	3	106	0	0	109	478
05:45 PM	26	0	1	0	27	6	129	125	0	260	30	0	0	0	30	2	110	0	0	112	429
Total	136	0	1	0	137	42	546	533	0	1121	138	0	1	0	139	14	418	0	0	432	1829
Grand Total	189	1	2	0	192	80	1051	939	0	2070	285	0	1	0	286	31	871	1	1	904	3452
Apprch %	98.4	0.5	1	0		3.9	50.8	45.4	0		99.7	0	0.3	0		3.4	96.3	0.1	0.1		
Total %	5.5	0	0.1	0	5.6	2.3	30.4	27.2	0	60	8.3	0	0	0	8.3	0.9	25.2	0	0	26.2	
Lights	182	1	2	0	185	79	1041	928	0	2048	279	0	1	0	280	30	856	1	1	888	3401
% Lights	96.3	100	100	0	96.4	98.8	99	98.8	0	98.9	97.9	0	100	0	97.9	96.8	98.3	100	100	98.2	98.5
Buses	2	0	0	0	2	0	3	2	0	5	1	0	0	0	1	1	3	0	0	4	12
% Buses	1.1	0	0	0	1	0	0.3	0.2	0	0.2	0.4	0	0	0	0.3	3.2	0.3	0	0	0.4	0.3
Trucks	5	0	0	0	5	1	7	9	0	17	5	0	0	0	5	0	12	0	0	12	39
% Trucks	2.6	0	0	0	2.6	1.2	0.7	1	0	0.8	1.8	0	0	0	1.7	0	1.4	0	0	1.3	1.1

	N AMPHLETT BLVD Southbound				US-101 SB RAMPS Westbound				N AMPHLETT BLVD Northbound				E POPLAR AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	20	0	**1**	21	10	**150**	141	**301**	24	0	0	24	5	94	0	99	445
05:00 PM	**39**	0	0	**39**	8	138	**145**	291	30	0	0	30	**6**	94	0	100	460
05:15 PM	33	0	0	33	**15**	132	131	278	**39**	0	**1**	**40**	3	**108**	0	**111**	462
05:30 PM	38	0	0	38	13	147	132	292	39	0	0	39	3	106	0	109	**478**
Total Volume	130	0	1	131	46	567	549	1162	132	0	1	133	17	402	0	419	1845
% App. Total	99.2	0	0.8		4	48.8	47.2		99.2	0	0.8		4.1	95.9	0		
PHF	.833	.000	.250	.840	.767	.945	.947	.965	.846	.000	.250	.831	.708	.931	.000	.944	.965

Traffic Data Service

San Jose, CA
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File Name : 13PM FINAL
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Traffic Data Service

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File Name : 13PM FINAL
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Groups Printed- Bikes

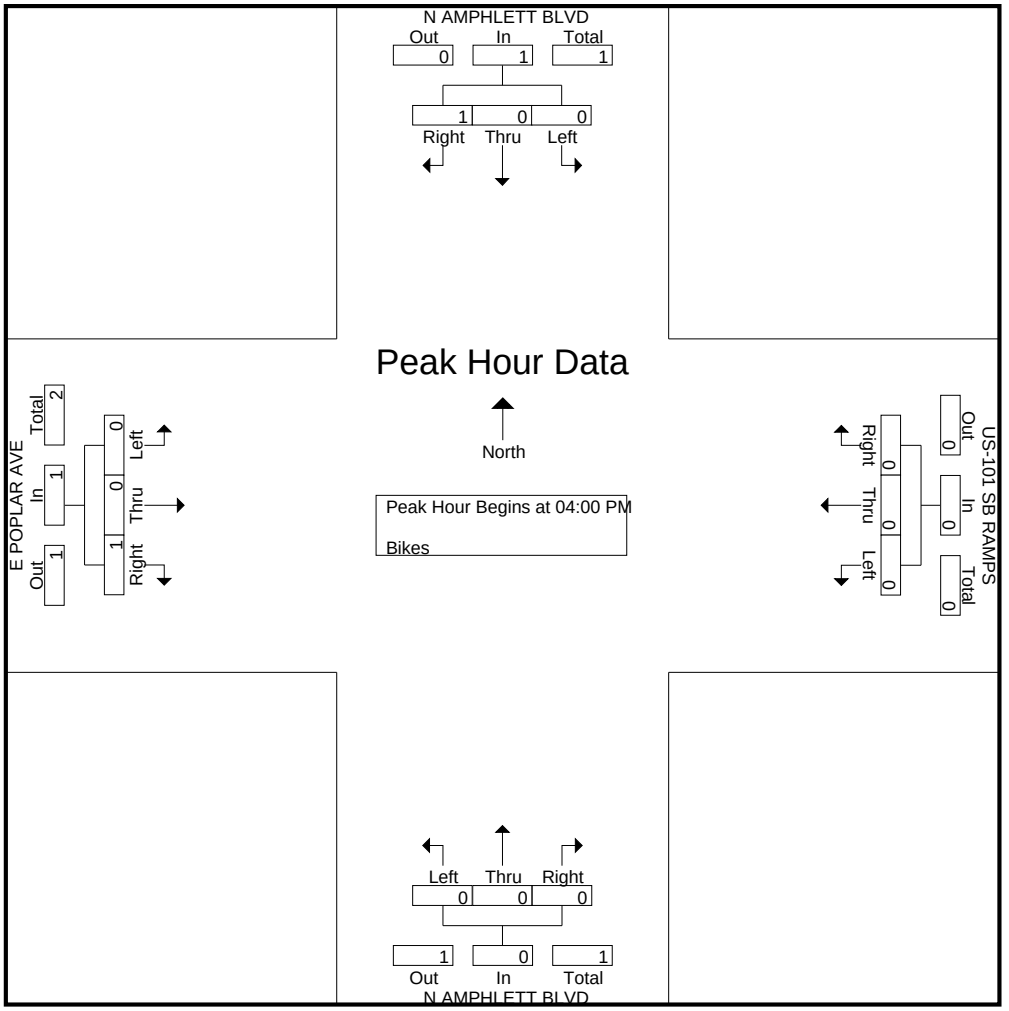
	N AMPHLETT BLVD Southbound					US-101 SB RAMPS Westbound					N AMPHLETT BLVD Northbound					E POPLAR AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
Apprch %	100	0	0	0		0	0	0	0		0	0	0	0		100	0	0	0		
Total %	50	0	0	0	50	0	0	0	0	0	0	0	0	0	0	50	0	0	0	50	

	N AMPHLETT BLVD Southbound				US-101 SB RAMPS Westbound				N AMPHLETT BLVD Northbound				E POPLAR AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	**1**	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	**1**
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	**1**	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
% App. Total	100	0	0		0	0	0		0	0	0		100	0	0		
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.500

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Traffic Data Service

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File Name : 14AM FINAL
Site Code : 00000014
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Groups Printed- Lights - Buses - Trucks

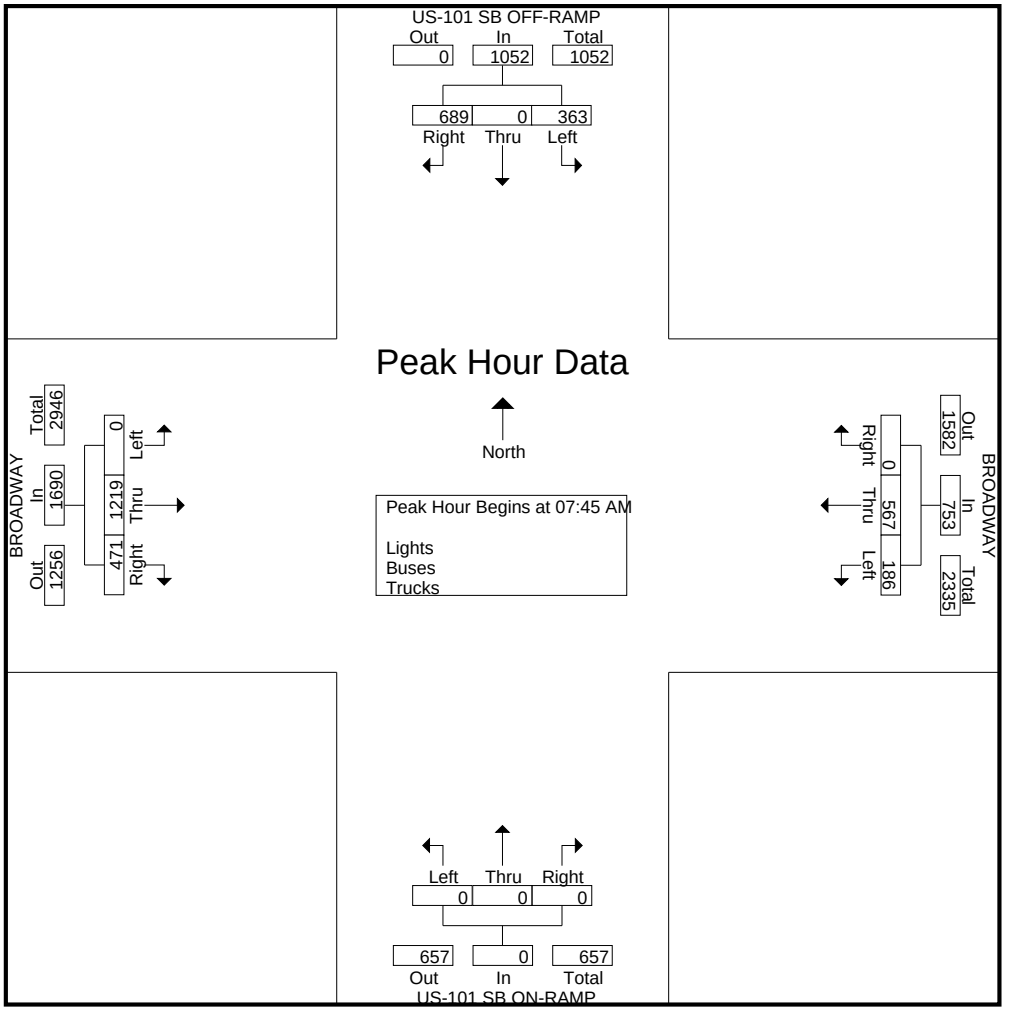
	US-101 SB OFF-RAMP Southbound					BROADWAY Westbound					US-101 SB ON-RAMP Northbound					BROADWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	122	0	55	0	177	0	122	33	0	155	0	0	0	0	0	112	199	0	0	311	643
07:15 AM	144	0	59	5	208	0	128	25	0	153	0	0	0	0	0	123	273	0	0	396	757
07:30 AM	177	0	64	3	244	0	145	36	0	181	0	0	0	0	0	120	274	0	0	394	819
07:45 AM	201	0	83	2	286	0	149	49	0	198	0	0	0	0	0	110	301	0	0	411	895
Total	644	0	261	10	915	0	544	143	0	687	0	0	0	0	0	465	1047	0	0	1512	3114
08:00 AM	158	0	91	0	249	0	139	51	0	190	0	0	0	0	0	123	309	0	0	432	871
08:15 AM	191	0	87	0	278	0	132	39	0	171	0	0	0	0	0	129	298	0	0	427	876
08:30 AM	139	0	102	1	242	0	147	47	0	194	0	0	0	0	0	109	311	0	0	420	856
08:45 AM	203	0	86	4	293	0	135	33	0	168	0	0	0	0	0	130	261	0	0	391	852
Total	691	0	366	5	1062	0	553	170	0	723	0	0	0	0	0	491	1179	0	0	1670	3455
Grand Total	1335	0	627	15	1977	0	1097	313	0	1410	0	0	0	0	0	956	2226	0	0	3182	6569
Apprch %	67.5	0	31.7	0.8		0	77.8	22.2	0		0	0	0	0		30	70	0	0		
Total %	20.3	0	9.5	0.2	30.1	0	16.7	4.8	0	21.5	0	0	0	0	0	14.6	33.9	0	0	48.4	
Lights	1296	0	574	15	1885	0	1044	273	0	1317	0	0	0	0	0	924	2171	0	0	3095	6297
% Lights	97.1	0	91.5	100	95.3	0	95.2	87.2	0	93.4	0	0	0	0	0	96.7	97.5	0	0	97.3	95.9
Buses	3	0	27	0	30	0	8	12	0	20	0	0	0	0	0	4	9	0	0	13	63
% Buses	0.2	0	4.3	0	1.5	0	0.7	3.8	0	1.4	0	0	0	0	0	0.4	0.4	0	0	0.4	1
Trucks	36	0	26	0	62	0	45	28	0	73	0	0	0	0	0	28	46	0	0	74	209
% Trucks	2.7	0	4.1	0	3.1	0	4.1	8.9	0	5.2	0	0	0	0	0	2.9	2.1	0	0	2.3	3.2

	US-101 SB OFF-RAMP Southbound				BROADWAY Westbound				US-101 SB ON-RAMP Northbound				BROADWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**201**	0	83	**284**	0	**149**	49	**198**	0	0	0	0	110	301	0	411	**893**
08:00 AM	158	0	91	249	0	139	**51**	190	0	0	0	0	123	309	0	**432**	871
08:15 AM	191	0	87	278	0	132	39	171	0	0	0	0	**129**	298	0	427	876
08:30 AM	139	0	**102**	241	0	147	47	194	0	0	0	0	109	**311**	0	420	855
Total Volume	689	0	363	1052	0	567	186	753	0	0	0	0	471	1219	0	1690	3495
% App. Total	65.5	0	34.5		0	75.3	24.7		0	0	0		27.9	72.1	0		
PHF	.857	.000	.890	.926	.000	.951	.912	.951	.000	.000	.000	.000	.913	.980	.000	.978	.978

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File Name : 14AM FINAL
Site Code : 00000014
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Groups Printed- Bikes

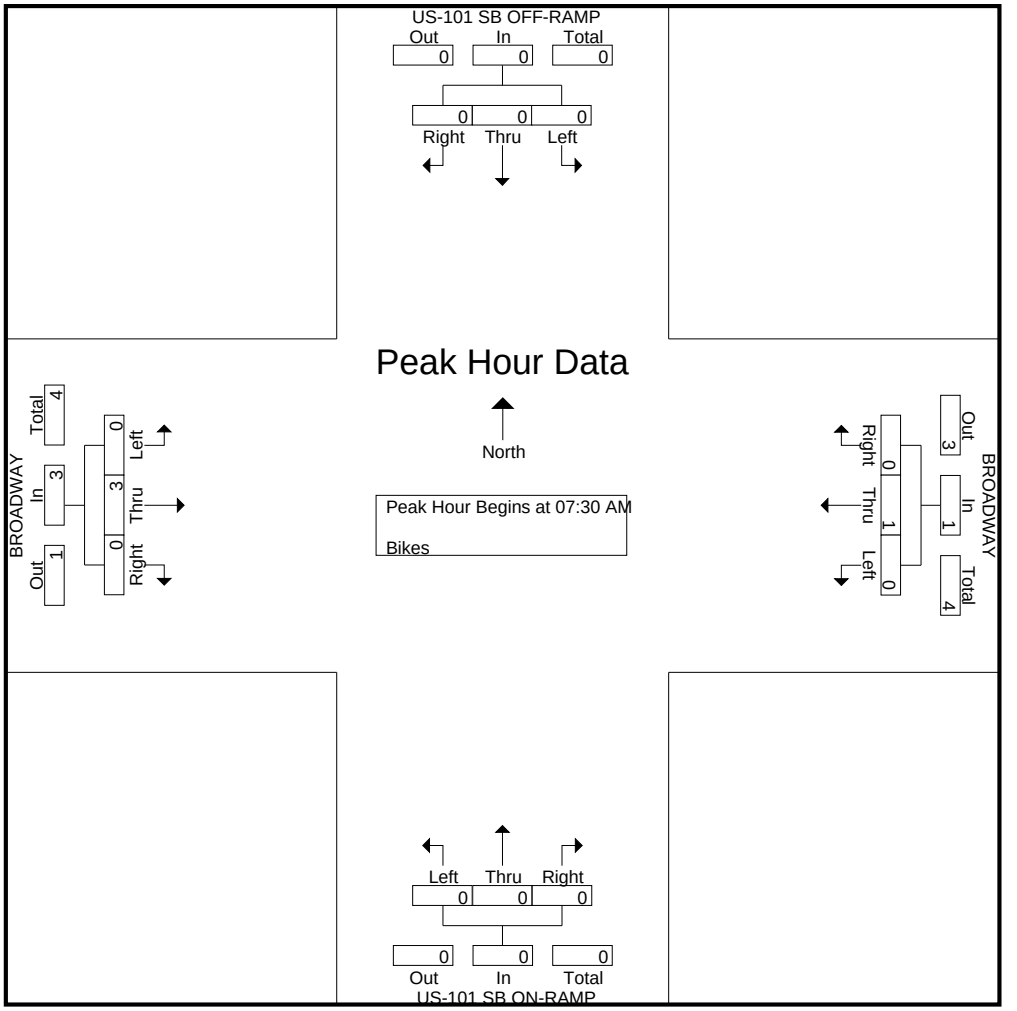
	US-101 SB OFF-RAMP Southbound					BROADWAY Westbound					US-101 SB ON-RAMP Northbound					BROADWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	4
Grand Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	5
Apprch %	0	0	0	0		0	100	0	0		0	0	0	0		0	100	0	0		
Total %	0	0	0	0	0	0	20	0	0	20	0	0	0	0	0	0	80	0	0	80	

	US-101 SB OFF-RAMP Southbound				BROADWAY Westbound				US-101 SB ON-RAMP Northbound				BROADWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	**2**	0	**2**	**3**
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.375	.000	.375	.333

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Traffic Data Service

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File Name : 14PM FINAL
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Groups Printed- Lights - Buses - Trucks

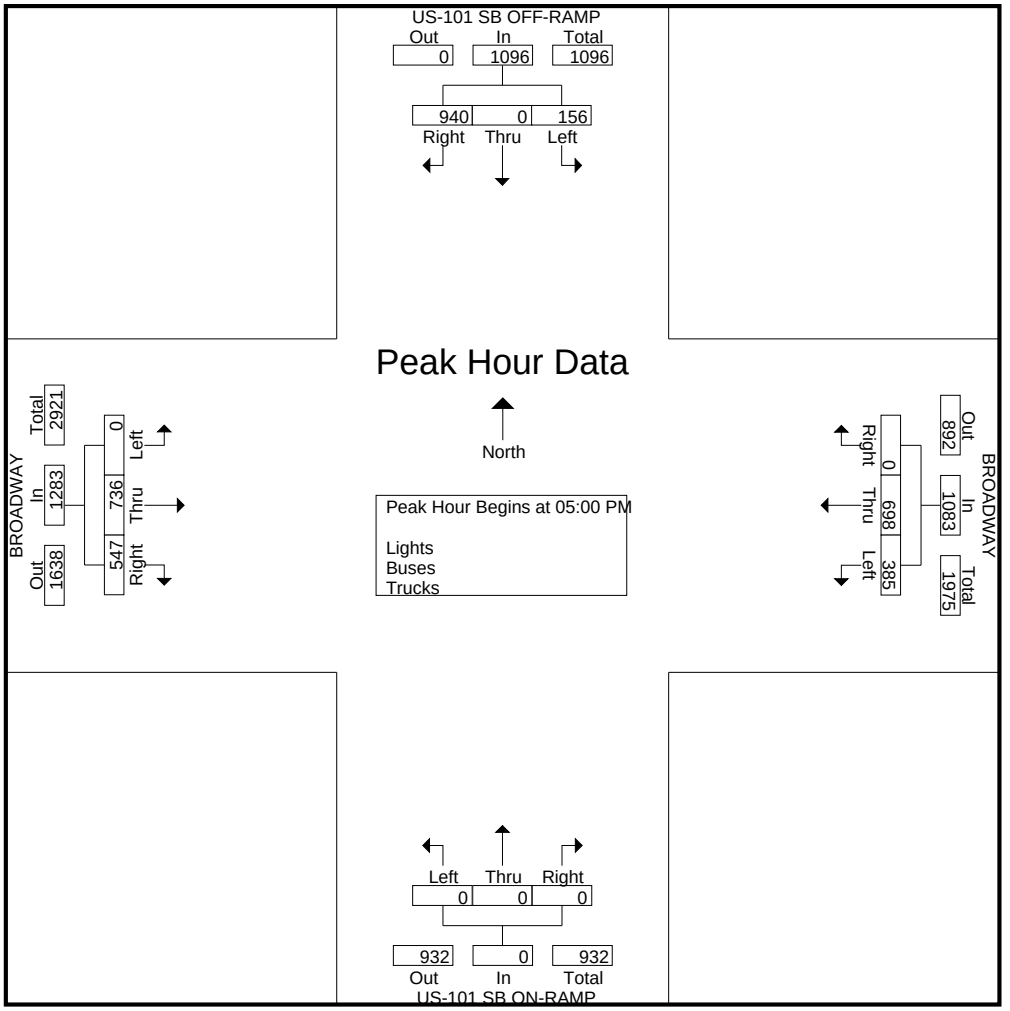
	US-101 SB OFF-RAMP Southbound					BROADWAY Westbound					US-101 SB ON-RAMP Northbound					BROADWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	192	0	43	3	238	0	128	87	0	215	0	0	0	0	0	157	190	0	0	347	800
04:15 PM	177	1	40	2	220	0	163	93	0	256	0	0	0	0	0	135	217	0	0	352	828
04:30 PM	195	0	46	4	245	0	176	99	0	275	0	0	0	0	0	159	181	0	0	340	860
04:45 PM	214	0	61	2	277	0	171	88	0	259	0	0	0	0	0	132	217	0	0	349	885
Total	778	1	190	11	980	0	638	367	0	1005	0	0	0	0	0	583	805	0	0	1388	3373
05:00 PM	222	0	44	2	268	0	173	102	0	275	0	0	0	0	0	127	196	0	0	323	866
05:15 PM	212	0	36	5	253	0	164	83	0	247	0	0	0	0	0	140	201	0	0	341	841
05:30 PM	236	0	31	1	268	0	191	103	0	294	0	0	0	0	0	154	160	0	0	314	876
05:45 PM	270	0	45	3	318	0	170	97	0	267	0	0	0	0	0	126	179	0	0	305	890
Total	940	0	156	11	1107	0	698	385	0	1083	0	0	0	0	0	547	736	0	0	1283	3473
Grand Total	1718	1	346	22	2087	0	1336	752	0	2088	0	0	0	0	0	1130	1541	0	0	2671	6846
Apprch %	82.3	0	16.6	1.1		0	64	36	0		0	0	0	0		42.3	57.7	0	0		
Total %	25.1	0	5.1	0.3	30.5	0	19.5	11	0	30.5	0	0	0	0	0	16.5	22.5	0	0	39	
Lights	1706	1	311	22	2040	0	1305	744	0	2049	0	0	0	0	0	1103	1509	0	0	2612	6701
% Lights	99.3	100	89.9	100	97.7	0	97.7	98.9	0	98.1	0	0	0	0	0	97.6	97.9	0	0	97.8	97.9
Buses	2	0	17	0	19	0	7	2	0	9	0	0	0	0	0	4	8	0	0	12	40
% Buses	0.1	0	4.9	0	0.9	0	0.5	0.3	0	0.4	0	0	0	0	0	0.4	0.5	0	0	0.4	0.6
Trucks	10	0	18	0	28	0	24	6	0	30	0	0	0	0	0	23	24	0	0	47	105
% Trucks	0.6	0	5.2	0	1.3	0	1.8	0.8	0	1.4	0	0	0	0	0	2	1.6	0	0	1.8	1.5

	US-101 SB OFF-RAMP Southbound				BROADWAY Westbound				US-101 SB ON-RAMP Northbound				BROADWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	222	0	44	266	0	173	102	275	0	0	0	0	127	196	0	323	864
05:15 PM	212	0	36	248	0	164	83	247	0	0	0	0	140	**201**	0	**341**	836
05:30 PM	236	0	31	267	0	**191**	**103**	**294**	0	0	0	0	**154**	160	0	314	875
05:45 PM	**270**	0	**45**	**315**	0	170	97	267	0	0	0	0	126	179	0	305	**887**
Total Volume	940	0	156	1096	0	698	385	1083	0	0	0	0	547	736	0	1283	3462
% App. Total	85.8	0	14.2		0	64.5	35.5		0	0	0		42.6	57.4	0		
PHF	.870	.000	.867	.870	.000	.914	.934	.921	.000	.000	.000	.000	.888	.915	.000	.941	.976

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File Name : 14PM FINAL
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Groups Printed- Bikes

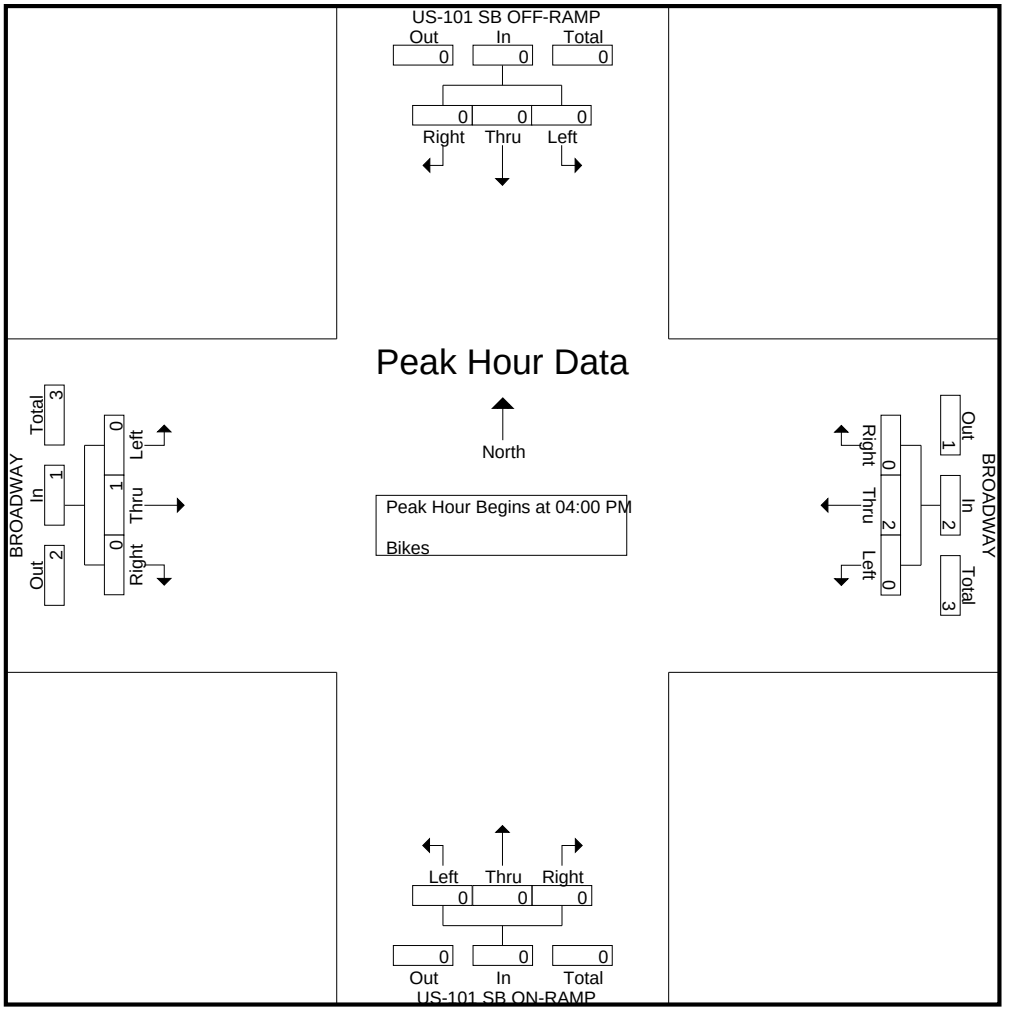
	US-101 SB OFF-RAMP Southbound					BROADWAY Westbound					US-101 SB ON-RAMP Northbound					BROADWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
Grand Total	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	6
Apprch %	0	0	0	0		0	100	0	0		0	0	0	0		0	100	0	0		
Total %	0	0	0	0	0	0	66.7	0	0	66.7	0	0	0	0	0	0	33.3	0	0	33.3	

	US-101 SB OFF-RAMP Southbound				BROADWAY Westbound				US-101 SB ON-RAMP Northbound				BROADWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**	**1**
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.750

Traffic Data Service

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File Name : 14PM FINAL
Site Code : 00000014
Start Date : 5/30/2018
Page No : 2



Traffic Data Service

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File Name : 15AM FINAL
Site Code : 00000015
Start Date : 5/30/2018
Page No : 1

Groups Printed- Lights - Buses - Trucks

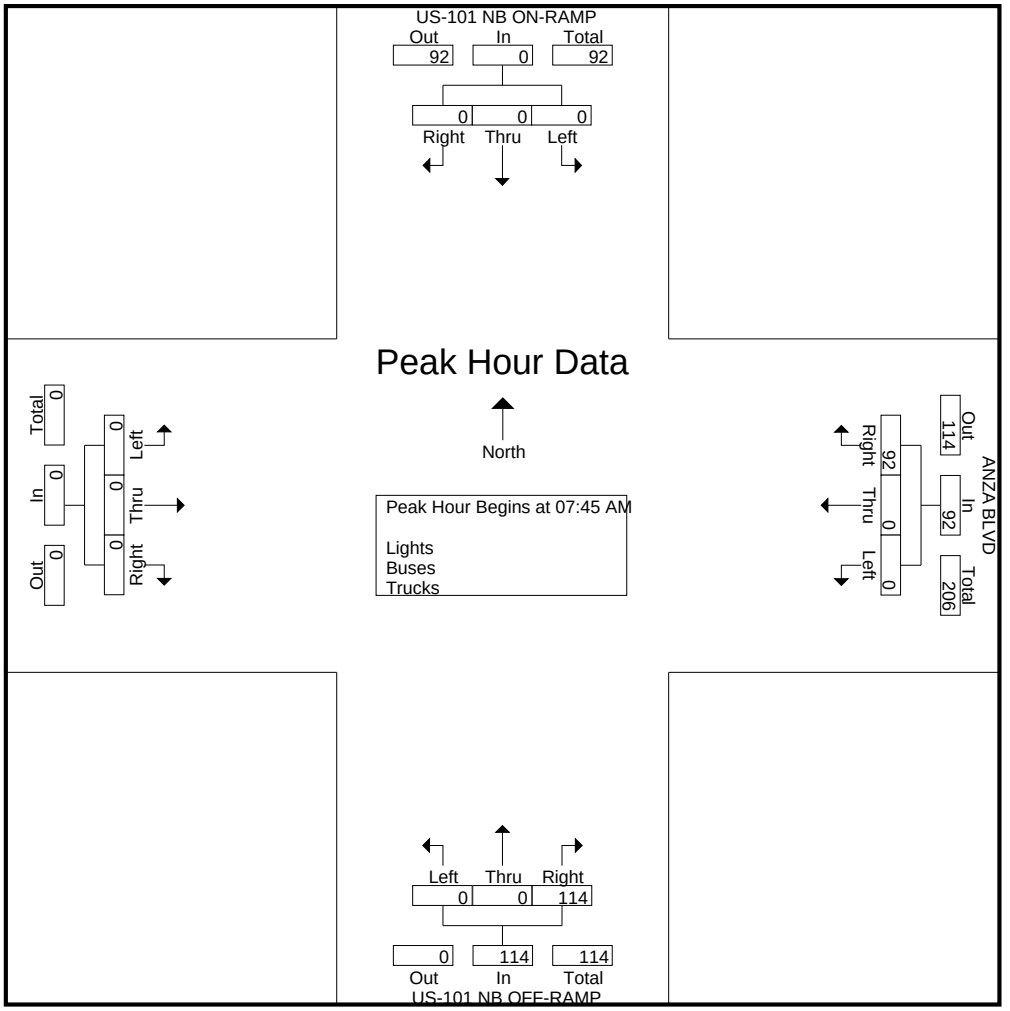
	US-101 NB ON-RAMP Southbound					ANZA BLVD Westbound					US-101 NB OFF-RAMP Northbound					Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	26	0	0	0	26	25	0	0	0	25	0	0	0	0	0	51
07:15 AM	0	0	0	0	0	22	0	0	0	22	27	0	0	0	27	0	0	0	0	0	49
07:30 AM	0	0	0	0	0	23	0	0	0	23	23	0	0	0	23	0	0	0	0	0	46
07:45 AM	0	0	0	0	0	30	0	0	0	30	24	0	0	0	24	0	0	0	0	0	54
Total	0	0	0	0	0	101	0	0	0	101	99	0	0	0	99	0	0	0	0	0	200
08:00 AM	0	0	0	0	0	23	0	0	0	23	29	0	0	0	29	0	0	0	0	0	52
08:15 AM	0	0	0	0	0	20	0	0	0	20	26	0	0	0	26	0	0	0	0	0	46
08:30 AM	0	0	0	0	0	19	0	0	0	19	35	0	0	0	35	0	0	0	0	0	54
08:45 AM	0	0	0	0	0	23	0	0	0	23	29	0	0	0	29	0	0	0	0	0	52
Total	0	0	0	0	0	85	0	0	0	85	119	0	0	0	119	0	0	0	0	0	204
Grand Total	0	0	0	0	0	186	0	0	0	186	218	0	0	0	218	0	0	0	0	0	404
Apprch %	0	0	0	0		100	0	0	0		100	0	0	0		0	0	0	0		
Total %	0	0	0	0	0	46	0	0	0	46	54	0	0	0	54	0	0	0	0	0	
Lights	0	0	0	0	0	136	0	0	0	136	212	0	0	0	212	0	0	0	0	0	348
% Lights	0	0	0	0	0	73.1	0	0	0	73.1	97.2	0	0	0	97.2	0	0	0	0	0	86.1
Buses	0	0	0	0	0	46	0	0	0	46	2	0	0	0	2	0	0	0	0	0	48
% Buses	0	0	0	0	0	24.7	0	0	0	24.7	0.9	0	0	0	0.9	0	0	0	0	0	11.9
Trucks	0	0	0	0	0	4	0	0	0	4	4	0	0	0	4	0	0	0	0	0	8
% Trucks	0	0	0	0	0	2.2	0	0	0	2.2	1.8	0	0	0	1.8	0	0	0	0	0	2

	US-101 NB ON-RAMP Southbound				ANZA BLVD Westbound				US-101 NB OFF-RAMP Northbound				Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	**30**	0	0	**30**	24	0	0	24	0	0	0	0	**54**
08:00 AM	0	0	0	0	23	0	0	23	29	0	0	29	0	0	0	0	52
08:15 AM	0	0	0	0	20	0	0	20	26	0	0	26	0	0	0	0	46
08:30 AM	0	0	0	0	19	0	0	19	**35**	0	0	**35**	0	0	0	0	54
Total Volume	0	0	0	0	92	0	0	92	114	0	0	114	0	0	0	0	206
% App. Total	0	0	0		100	0	0		100	0	0		0	0	0		
PHF	.000	.000	.000	.000	.767	.000	.000	.767	.814	.000	.000	.814	.000	.000	.000	.000	.954

Traffic Data Service

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File Name : 15AM FINAL
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Groups Printed- Bikes

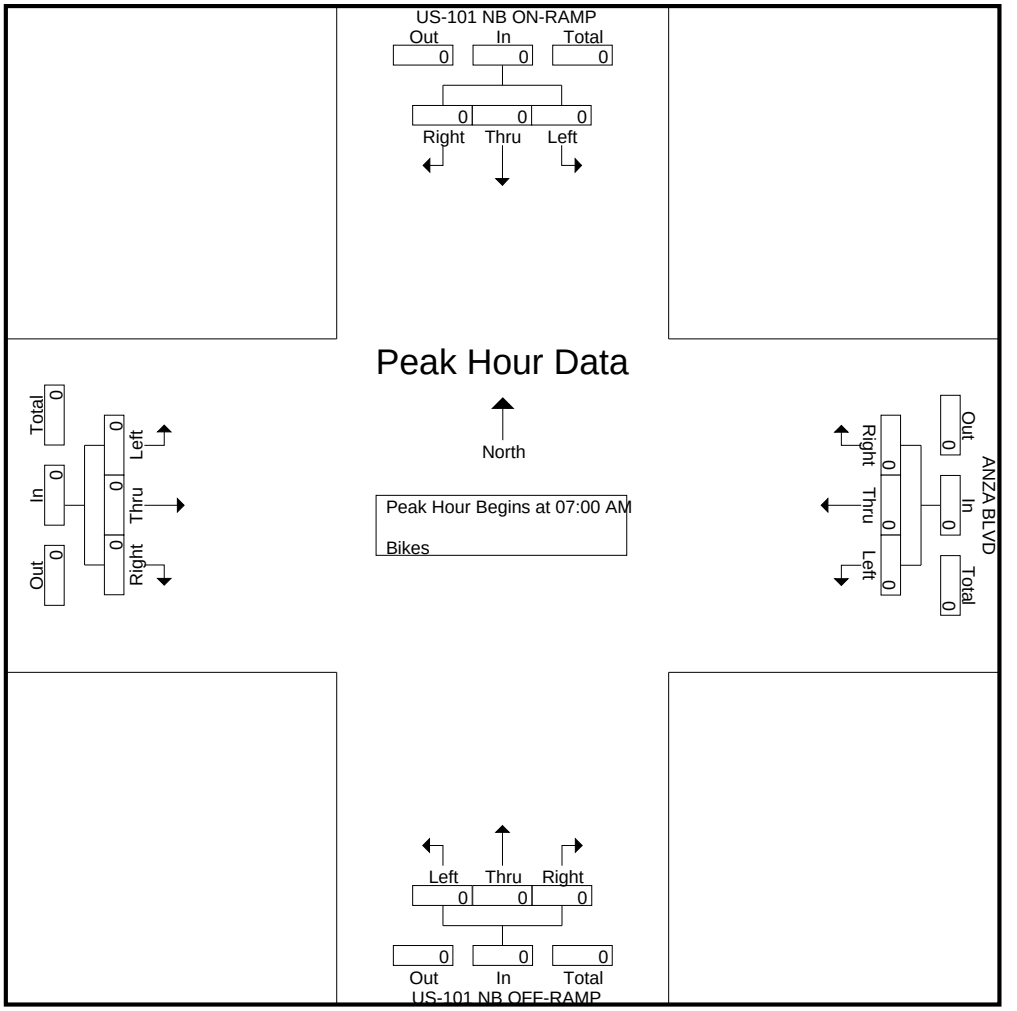
	US-101 NB ON-RAMP Southbound					ANZA BLVD Westbound					US-101 NB OFF-RAMP Northbound					Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

	US-101 NB ON-RAMP Southbound				ANZA BLVD Westbound				US-101 NB OFF-RAMP Northbound				Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Traffic Data Service

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Traffic Data Service

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File Name : 15PM FINAL
Site Code : 00000015
Start Date : 5/30/2018
Page No : 1

Groups Printed- Lights - Buses - Trucks

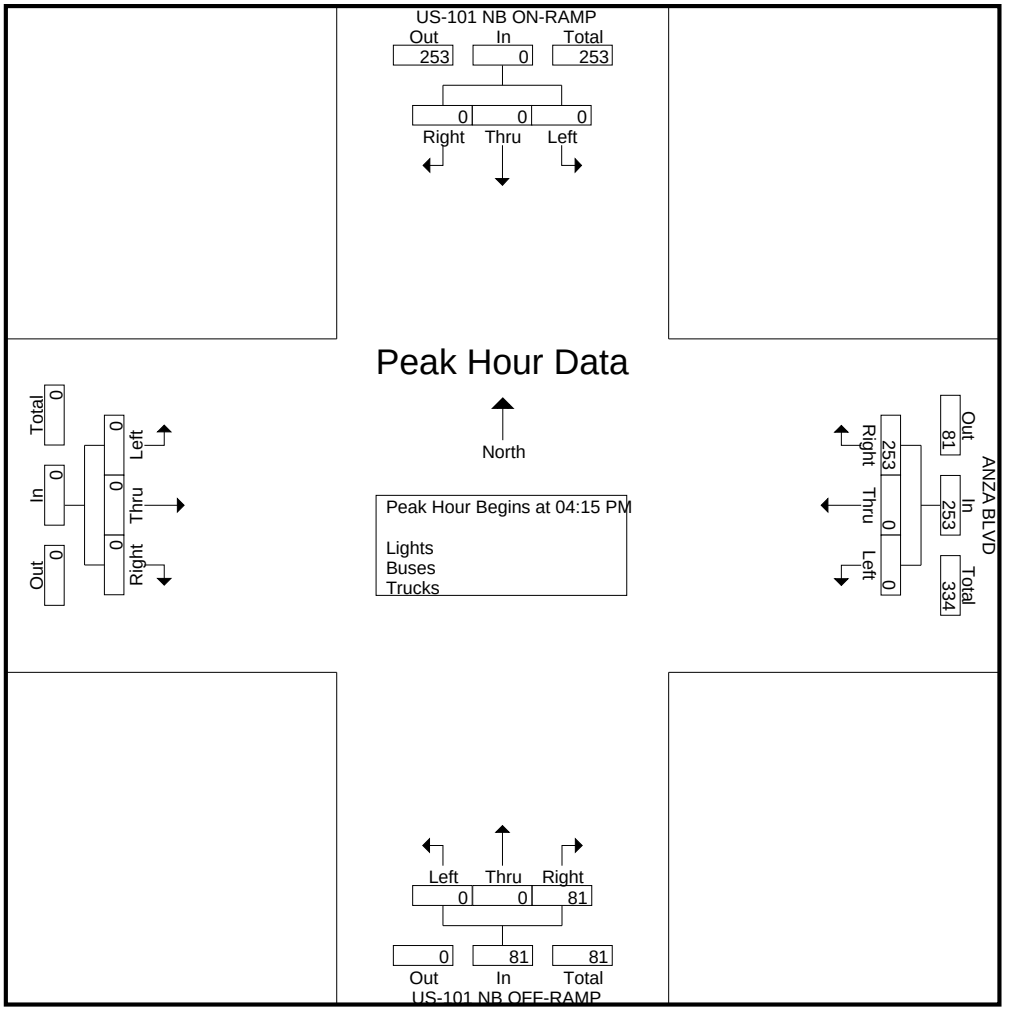
	US-101 NB ON-RAMP Southbound					ANZA BLVD Westbound					US-101 NB OFF-RAMP Northbound					Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	67	0	0	0	67	23	0	0	0	23	0	0	0	0	0	90
04:15 PM	0	0	0	0	0	54	0	0	0	54	26	0	0	0	26	0	0	0	0	0	80
04:30 PM	0	0	0	0	0	65	0	0	0	65	17	0	0	0	17	0	0	0	0	0	82
04:45 PM	0	0	0	0	0	54	0	0	0	54	22	0	0	0	22	0	0	0	0	0	76
Total	0	0	0	0	0	240	0	0	0	240	88	0	0	0	88	0	0	0	0	0	328
05:00 PM	0	0	0	0	0	80	0	0	0	80	16	0	0	0	16	0	0	0	0	0	96
05:15 PM	0	0	0	0	0	60	0	0	0	60	14	0	0	0	14	0	0	0	0	0	74
05:30 PM	0	0	0	0	0	49	0	0	0	49	18	0	0	0	18	0	0	0	0	0	67
05:45 PM	0	0	0	0	0	51	0	0	0	51	15	0	0	0	15	0	0	0	0	0	66
Total	0	0	0	0	0	240	0	0	0	240	63	0	0	0	63	0	0	0	0	0	303
Grand Total	0	0	0	0	0	480	0	0	0	480	151	0	0	0	151	0	0	0	0	0	631
Apprch %	0	0	0	0		100	0	0	0		100	0	0	0		0	0	0	0		
Total %	0	0	0	0	0	76.1	0	0	0	76.1	23.9	0	0	0	23.9	0	0	0	0	0	
Lights	0	0	0	0	0	435	0	0	0	435	142	0	0	0	142	0	0	0	0	0	577
% Lights	0	0	0	0	0	90.6	0	0	0	90.6	94	0	0	0	94	0	0	0	0	0	91.4
Buses	0	0	0	0	0	36	0	0	0	36	4	0	0	0	4	0	0	0	0	0	40
% Buses	0	0	0	0	0	7.5	0	0	0	7.5	2.6	0	0	0	2.6	0	0	0	0	0	6.3
Trucks	0	0	0	0	0	9	0	0	0	9	5	0	0	0	5	0	0	0	0	0	14
% Trucks	0	0	0	0	0	1.9	0	0	0	1.9	3.3	0	0	0	3.3	0	0	0	0	0	2.2

	US-101 NB ON-RAMP Southbound				ANZA BLVD Westbound				US-101 NB OFF-RAMP Northbound				Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	54	0	0	54	**26**	0	0	**26**	0	0	0	0	80
04:30 PM	0	0	0	0	65	0	0	65	17	0	0	17	0	0	0	0	82
04:45 PM	0	0	0	0	54	0	0	54	22	0	0	22	0	0	0	0	76
05:00 PM	0	0	0	0	**80**	0	0	**80**	16	0	0	16	0	0	0	0	**96**
Total Volume	0	0	0	0	253	0	0	253	81	0	0	81	0	0	0	0	334
% App. Total	0	0	0		100	0	0		100	0	0		0	0	0		
PHF	.000	.000	.000	.000	.791	.000	.000	.791	.779	.000	.000	.779	.000	.000	.000	.000	.870

Traffic Data Service

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File Name : 15PM FINAL
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Traffic Data Service

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File Name : 15PM FINAL
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Start Date : 5/30/2018
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Groups Printed- Bikes

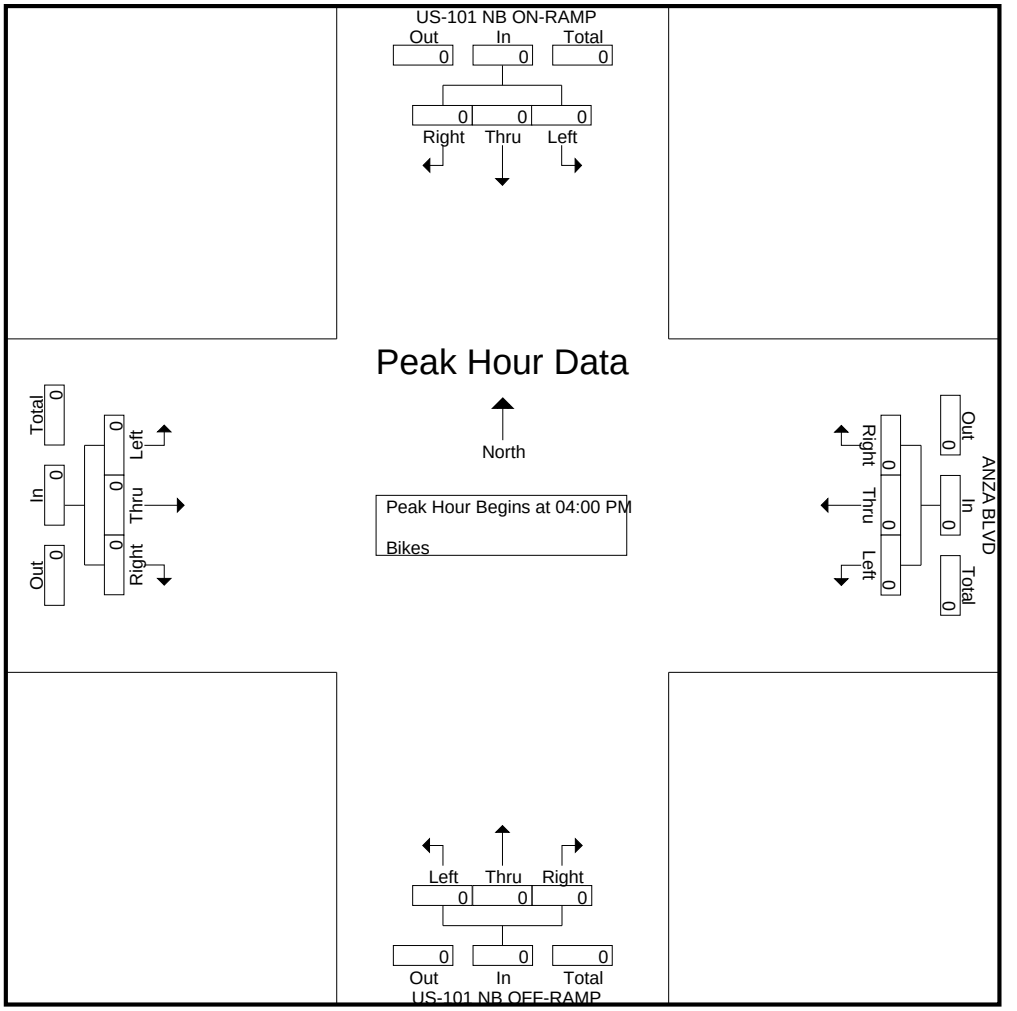
	US-101 NB ON-RAMP Southbound					ANZA BLVD Westbound					US-101 NB OFF-RAMP Northbound					Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

	US-101 NB ON-RAMP Southbound				ANZA BLVD Westbound				US-101 NB OFF-RAMP Northbound				Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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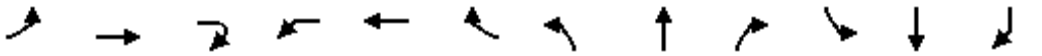
File Name : 15PM FINAL
Site Code : 00000015
Start Date : 5/30/2018
Page No : 2



APPENDIX B: LEVEL OF SERVICE WORKSHEETS



EXISTING AM



Movement	EBL	EBT	EBR2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	227	0	902	359	7	344	7	418	12	10	5
Future Volume (vph)	8	227	0	902	359	7	344	7	418	12	10	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.1		4.0	4.1		4.1	4.1	4.1		3.0	
Lane Util. Factor	1.00	0.95		0.97	0.95		0.95	0.91	0.95		1.00	
Frt	1.00	1.00		1.00	1.00		1.00	0.90	0.85		0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99	1.00		0.98	
Satd. Flow (prot)	1770	3539		3433	3529		1681	1501	1504		1777	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99	1.00		0.98	
Satd. Flow (perm)	1770	3539		3433	3529		1681	1501	1504		1777	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	8	227	0	902	359	7	344	7	418	12	10	5
RTOR Reduction (vph)	0	0	0	0	1	0	0	68	202	0	0	0
Lane Group Flow (vph)	8	227	0	902	365	0	268	186	45	0	27	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases			6						4			
Actuated Green, G (s)	0.9	10.6		67.4	78.1		22.0	22.0	22.0		3.8	
Effective Green, g (s)	0.9	10.6		67.4	78.1		22.0	22.0	22.0		3.8	
Actuated g/C Ratio	0.01	0.09		0.56	0.65		0.18	0.18	0.18		0.03	
Clearance Time (s)	4.0	5.1		4.0	4.1		4.1	4.1	4.1		3.0	
Vehicle Extension (s)	0.2	0.2		0.2	0.2		0.2	0.2	0.2		0.2	
Lane Grp Cap (vph)	13	312		1928	2296		308	275	275		56	
v/s Ratio Prot	0.00	c0.06		c0.26	0.10		c0.16	0.12			c0.02	
v/s Ratio Perm									0.03			
v/c Ratio	0.62	0.73		0.47	0.16		0.87	0.68	0.16		0.48	
Uniform Delay, d1	59.4	53.3		15.6	8.2		47.6	45.7	41.3		57.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	48.2	7.0		0.8	0.1		21.8	5.1	0.1		2.4	
Delay (s)	107.6	60.3		16.5	8.3		69.4	50.8	41.4		59.5	
Level of Service	F	E		B	A		E	D	D		E	
Approach Delay (s)		61.9			14.1			54.3			59.5	
Approach LOS		E			B			D			E	

Intersection Summary			
HCM 2000 Control Delay	33.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	64.0%	ICU Level of Service	C
Analysis Period (min)	15		

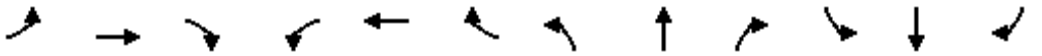
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	8	579	15	14	6	1152	389	16	4	83	102
Future Volume (veh/h)	70	8	579	15	14	6	1152	389	16	4	83	102
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		0.99	1.00		0.96	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	77	0	591	15	14	6	1176	397	16	4	85	104
Adj No. of Lanes	2	0	2	0	2	0	2	2	0	1	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	1437	0	1272	115	112	49	961	1336	54	7	345	148
Arrive On Green	0.40	0.00	0.40	0.08	0.08	0.08	0.28	0.39	0.39	0.00	0.10	0.10
Sat Flow, veh/h	3548	0	3141	1463	1428	620	3442	3466	139	1774	3539	1520
Grp Volume(v), veh/h	77	0	591	18	0	17	1176	202	211	4	85	104
Grp Sat Flow(s),veh/h/ln	1774	0	1570	1790	0	1721	1721	1770	1835	1774	1770	1520
Q Serve(g_s), s	1.7	0.0	17.9	1.2	0.0	1.2	36.3	10.3	10.4	0.3	2.9	8.6
Cycle Q Clear(g_c), s	1.7	0.0	17.9	1.2	0.0	1.2	36.3	10.3	10.4	0.3	2.9	8.6
Prop In Lane	1.00		1.00	0.82		0.36	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	1437	0	1272	140	0	135	961	682	708	7	345	148
V/C Ratio(X)	0.05	0.00	0.46	0.13	0.00	0.12	1.22	0.30	0.30	0.54	0.25	0.70
Avail Cap(c_a), veh/h	1437	0	1272	279	0	269	961	682	708	205	553	237
HCM Platoon Ratio	1.00	1.00	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	0.00	0.75	1.00	0.00	1.00	0.89	0.89	0.89	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.5	0.0	28.4	55.8	0.0	55.7	46.8	27.7	27.7	64.6	54.3	56.8
Incr Delay (d2), s/veh	0.0	0.0	0.1	1.9	0.0	1.9	109.1	0.1	0.1	21.3	0.1	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	7.8	0.7	0.0	0.6	31.8	5.1	5.3	0.2	1.4	3.7
LnGrp Delay(d),s/veh	23.5	0.0	28.4	57.7	0.0	57.6	156.0	27.8	27.8	85.9	54.4	59.1
LnGrp LOS	C		C	E		E	F	C	C	F	D	E
Approach Vol, veh/h		668			35			1589			193	
Approach Delay, s/veh		27.9			57.6			122.6			57.6	
Approach LOS		C			E			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		57.3	41.0	17.8		13.9	3.5	55.2
Change Period (Y+Rc), s		* 4.7	* 4.7	* 5.1		3.7	3.0	5.1
Max Green Setting (Gmax), s		* 36	* 36	* 20		20.3	15.0	32.9
Max Q Clear Time (g_c+I1), s		19.9	38.3	10.6		3.2	2.3	12.4
Green Ext Time (p_c), s		0.2	0.0	0.1		0.0	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	91.2
HCM 2010 LOS	F

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	363	0	689	0	0	0	0	1194	471	186	491	0
Future Volume (vph)	363	0	689	0	0	0	0	1194	471	186	491	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Lane Util. Factor		1.00	0.76					0.86	0.86	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.99	0.85	1.00	1.00	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1770	3610					4751	1362	3433	3539	
Flt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1770	3610					4751	1362	3433	3539	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	370	0	703	0	0	0	0	1218	481	190	501	0
RTOR Reduction (vph)	0	0	555	0	0	0	0	6	126	0	0	0
Lane Group Flow (vph)	0	370	148	0	0	0	0	1313	254	190	501	0
Confl. Peds. (#/hr)							11					11
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		25.2	25.2					73.8	73.8	9.3	79.1	
Effective Green, g (s)		25.2	25.2					73.8	73.8	9.3	79.1	
Actuated g/C Ratio		0.21	0.21					0.61	0.61	0.08	0.66	
Clearance Time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Vehicle Extension (s)		0.2	0.2					0.2	0.2	0.2	1.0	
Lane Grp Cap (vph)		371	758					2921	837	266	2332	
v/s Ratio Prot								c0.28		c0.06	0.14	
v/s Ratio Perm		0.21	0.04						0.19			
v/c Ratio		1.00	0.19					0.45	0.30	0.71	0.21	
Uniform Delay, d1		47.4	39.0					12.3	10.9	54.1	8.1	
Progression Factor		1.00	1.00					0.54	0.24	1.00	1.00	
Incremental Delay, d2		45.6	0.0					0.4	0.8	7.4	0.2	
Delay (s)		93.0	39.1					7.1	3.5	61.4	8.3	
Level of Service		F	D					A	A	E	A	
Approach Delay (s)		57.7			0.0			6.3			22.9	
Approach LOS		E			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	25.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	57	98	105	183	353	187	1165	35	218	700	262
Future Volume (veh/h)	147	57	98	105	183	353	187	1165	35	218	700	262
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	155	60	103	111	193	0	197	1226	37	229	737	0
Adj No. of Lanes	2	1	1	1	1	1	2	3	0	2	3	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	312	169	143	212	223	189	256	1243	37	1405	2990	931
Arrive On Green	0.09	0.09	0.09	0.12	0.12	0.00	0.07	0.25	0.25	0.13	0.19	0.00
Sat Flow, veh/h	3442	1863	1573	1774	1863	1583	3442	5072	153	3442	5085	1583
Grp Volume(v), veh/h	155	60	103	111	193	0	197	819	444	229	737	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1573	1774	1863	1583	1721	1695	1834	1721	1695	1583
Q Serve(g_s), s	5.1	3.6	7.6	7.1	12.2	0.0	6.7	28.9	28.9	7.1	14.7	0.0
Cycle Q Clear(g_c), s	5.1	3.6	7.6	7.1	12.2	0.0	6.7	28.9	28.9	7.1	14.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	312	169	143	212	223	189	256	831	449	1405	2990	931
V/C Ratio(X)	0.50	0.36	0.72	0.52	0.87	0.00	0.77	0.99	0.99	0.16	0.25	0.00
Avail Cap(c_a), veh/h	1030	557	471	235	247	210	574	831	449	1405	2990	931
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.84	0.84	0.00	0.86	0.86	0.86	0.92	0.92	0.00
Uniform Delay (d), s/veh	51.9	51.3	53.1	49.6	51.9	0.0	54.5	45.1	45.1	33.8	25.9	0.0
Incr Delay (d2), s/veh	0.5	0.5	2.6	0.6	20.0	0.0	1.6	25.8	36.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	1.9	3.4	3.5	7.5	0.0	3.3	16.5	19.2	3.4	6.9	0.0
LnGrp Delay(d),s/veh	52.4	51.7	55.7	50.3	71.9	0.0	56.1	71.0	81.3	33.8	25.9	0.0
LnGrp LOS	D	D	E	D	E		E	E	F	C	C	
Approach Vol, veh/h		318			304			1460			966	
Approach Delay, s/veh		53.3			64.0			72.1			27.7	
Approach LOS		D			E			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	53.1	33.5		15.0	11.9	74.7		18.4
Change Period (Y+Rc), s	4.1	* 4.1		4.1	3.0	4.1		4.1
Max Green Setting (Gmax), s	23.5	* 29		35.9	20.0	32.9		15.9
Max Q Clear Time (g_c+I1), s	9.1	30.9		9.6	8.7	16.7		14.2
Green Ext Time (p_c), s	2.4	0.0		0.4	0.2	2.9		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	55.3
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	69	0	298	0	1089	171	103	800	0
Future Volume (vph)	0	0	0	69	0	298	0	1089	171	103	800	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.1	4.1		4.1		3.5	4.1	
Lane Util. Factor					1.00	1.00		0.91		1.00	0.91	
Frpb, ped/bikes					1.00	0.98		0.99		1.00	1.00	
Flpb, ped/bikes					1.00	1.00		1.00		1.00	1.00	
Frt					1.00	0.85		0.98		1.00	1.00	
Flt Protected					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)					1593	1400		4452		1593	4577	
Flt Permitted					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (perm)					1593	1400		4452		1593	4577	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	73	0	314	0	1146	180	108	842	0
RTOR Reduction (vph)	0	0	0	0	0	255	0	10	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	73	59	0	1316	0	108	842	0
Confl. Peds. (#/hr)						3			24			6
Turn Type				Perm	NA	Perm	custom	NA		Prot	NA	
Protected Phases					1			2 8		7	2 3 4	
Permitted Phases				1		1	8					
Actuated Green, G (s)					17.4	17.4		94.8		14.3	117.3	
Effective Green, g (s)					17.4	17.4		94.8		14.3	117.3	
Actuated g/C Ratio					0.12	0.12		0.67		0.10	0.82	
Clearance Time (s)					4.1	4.1				3.5		
Vehicle Extension (s)					2.0	2.0				2.0		
Lane Grp Cap (vph)					194	171		2965		160	3772	
v/s Ratio Prot								c0.30		c0.07	0.18	
v/s Ratio Perm					0.05	0.04						
v/c Ratio					0.38	0.34		0.44		0.68	0.22	
Uniform Delay, d1					57.5	57.2		11.3		61.8	2.7	
Progression Factor					1.00	1.00		0.45		1.00	1.00	
Incremental Delay, d2					0.4	0.4		0.1		8.5	0.0	
Delay (s)					57.9	57.6		5.2		70.3	2.7	
Level of Service					E	E		A		E	A	
Approach Delay (s)		0.0			57.7			5.2			10.4	
Approach LOS		A			E			A			B	

Intersection Summary			
HCM 2000 Control Delay	14.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	142.3	Sum of lost time (s)	20.3
Intersection Capacity Utilization	55.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	401	333	22	44	378	443	3	416	27	253	265	351
Future Volume (vph)	401	333	22	44	378	443	3	416	27	253	265	351
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5	4.1	4.1
Lane Util. Factor	0.97	1.00		1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.96	1.00	1.00		1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.97	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1841		1770	3539	1518	1716	3498		1770	1863	1501
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.59	1.00		0.31	1.00	1.00
Satd. Flow (perm)	3433	1841		1770	3539	1518	1063	3498		574	1863	1501
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	422	351	23	46	398	466	3	438	28	266	279	369
RTOR Reduction (vph)	0	1	0	0	0	328	0	3	0	0	0	236
Lane Group Flow (vph)	422	373	0	46	398	138	3	463	0	266	279	133
Confl. Peds. (#/hr)			7			12	24		8			24
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		custom	NA	custom
Protected Phases	3	8		7	4			6		5	1 2 5 6	
Permitted Phases						4	6			2		2
Actuated Green, G (s)	37.4	43.5		14.3	20.4	20.4	40.7	40.7		51.3	72.8	51.3
Effective Green, g (s)	37.4	43.5		14.3	20.4	20.4	40.7	40.7		51.3	72.8	51.3
Actuated g/C Ratio	0.26	0.31		0.10	0.14	0.14	0.29	0.29		0.36	0.51	0.36
Clearance Time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5		4.1
Vehicle Extension (s)	2.5	3.0		2.0	3.0	3.0	3.0	3.0		3.0		4.0
Lane Grp Cap (vph)	902	562		177	507	217	304	1000		258	953	541
v/s Ratio Prot	0.12	c0.20		0.03	c0.11			0.13		c0.04	c0.15	
v/s Ratio Perm						0.09	0.00			c0.33		0.09
v/c Ratio	0.47	0.66		0.26	0.79	0.64	0.01	0.46		1.03	0.29	0.25
Uniform Delay, d1	44.1	43.0		59.1	58.8	57.4	36.4	41.8		46.8	20.0	31.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.92	0.90	0.54
Incremental Delay, d2	0.3	2.9		0.3	7.8	6.0	0.1	1.5		64.0	0.1	0.3
Delay (s)	44.4	46.0		59.4	66.7	63.4	36.4	43.4		106.8	18.0	17.5
Level of Service	D	D		E	E	E	D	D		F	B	B
Approach Delay (s)		45.1			64.6			43.3			43.7	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	50.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	142.3	Sum of lost time (s)	20.3
Intersection Capacity Utilization	71.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	251	59	12	422	219	13
Future Volume (veh/h)	251	59	12	422	219	13
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	292	69	14	491	255	15
Adj No. of Lanes	2	0	1	1	0	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	1518	353	754	992	335	20
Arrive On Green	0.53	0.53	0.53	0.53	0.20	0.20
Sat Flow, veh/h	2942	663	1014	1863	1659	98
Grp Volume(v), veh/h	180	181	14	491	271	0
Grp Sat Flow(s),veh/h/ln	1770	1742	1014	1863	1763	0
Q Serve(g_s), s	1.4	1.5	0.2	4.5	3.9	0.0
Cycle Q Clear(g_c), s	1.4	1.5	1.6	4.5	3.9	0.0
Prop In Lane		0.38	1.00		0.94	0.06
Lane Grp Cap(c), veh/h	943	928	754	992	356	0
V/C Ratio(X)	0.19	0.20	0.02	0.49	0.76	0.00
Avail Cap(c_a), veh/h	1851	1823	1275	1949	1449	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	3.3	3.3	3.7	4.0	10.1	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.5	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.7	0.1	2.3	2.0	0.0
LnGrp Delay(d),s/veh	3.4	3.4	3.7	4.5	11.4	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h	361			505	271	
Approach Delay, s/veh	3.4			4.5	11.4	
Approach LOS	A			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		8.4		18.4				18.4
Change Period (Y+Rc), s		3.0		4.1				4.1
Max Green Setting (Gmax), s		22.0		28.0				28.0
Max Q Clear Time (g_c+I1), s		5.9		3.5				6.5
Green Ext Time (p_c), s		0.4		8.2				7.8

Intersection Summary	
HCM 2010 Ctrl Delay	5.8
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	328	32	46	119	28	35	36	49	12	24	18
Future Volume (veh/h)	105	328	32	46	119	28	35	36	49	12	24	18
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	1900	1863	1900
Adj Flow Rate, veh/h	115	360	35	51	131	31	38	40	54	13	26	20
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	211	979	95	195	829	191	156	164	138	38	76	58
Arrive On Green	0.12	0.30	0.30	0.11	0.29	0.29	0.09	0.09	0.09	0.05	0.05	0.05
Sat Flow, veh/h	1774	3260	315	1774	2852	655	1774	1863	1570	763	1531	1184
Grp Volume(v), veh/h	115	194	201	51	80	82	38	40	54	31	0	28
Grp Sat Flow(s),veh/h/ln	1774	1770	1805	1774	1770	1738	1774	1863	1570	1825	0	1654
Q Serve(g_s), s	2.2	3.1	3.2	1.0	1.2	1.3	0.7	0.7	1.2	0.6	0.0	0.6
Cycle Q Clear(g_c), s	2.2	3.1	3.2	1.0	1.2	1.3	0.7	0.7	1.2	0.6	0.0	0.6
Prop In Lane	1.00		0.17	1.00		0.38	1.00		1.00	0.42		0.72
Lane Grp Cap(c), veh/h	211	531	542	195	515	505	156	164	138	90	0	82
V/C Ratio(X)	0.54	0.37	0.37	0.26	0.16	0.16	0.24	0.24	0.39	0.35	0.00	0.34
Avail Cap(c_a), veh/h	973	1942	1981	3017	3980	3909	1217	1277	1077	2302	0	2087
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.1	10.0	10.0	14.9	9.6	9.6	15.5	15.5	15.7	16.8	0.0	16.8
Incr Delay (d2), s/veh	0.8	0.4	0.4	0.3	0.1	0.1	0.3	0.3	0.7	0.8	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	1.1	1.6	1.6	0.5	0.6	0.6	0.4	0.4	0.5	0.3	0.0	0.3
LnGrp Delay(d),s/veh	15.9	10.4	10.5	15.1	9.7	9.8	15.8	15.8	16.4	17.6	0.0	17.7
LnGrp LOS	B	B	B	B	A	A	B	B	B	B		B
Approach Vol, veh/h		510			213			132			59	
Approach Delay, s/veh		11.7			11.0			16.0			17.6	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		7.2	8.0	15.4		5.8	8.3	15.1
Change Period (Y+Rc), s		4.0	4.0	4.5		4.0	4.0	4.5
Max Green Setting (Gmax), s		25.0	62.0	40.0		46.0	20.0	82.0
Max Q Clear Time (g_c+I1), s		3.2	3.0	5.2		2.6	4.2	3.3
Green Ext Time (p_c), s		0.2	0.1	3.6		0.2	0.1	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	12.5
HCM 2010 LOS	B

Notes

Movement	EBT	EBR	WBL	WBT	NBL	NBR	NEL	NER
Lane Configurations								
Traffic Volume (veh/h)	103	11	944	117	176	632	0	0
Future Volume (veh/h)	103	11	944	117	176	632	0	0
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	110	12	1097	0	187	75		
Adj No. of Lanes	2	0	2	1	1	1		
Peak Hour Factor	0.94	0.94	0.94	0.90	0.94	0.94		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	1247	134	1153	605	246	219		
Arrive On Green	0.39	0.39	0.32	0.00	0.14	0.14		
Sat Flow, veh/h	3317	347	3548	1863	1774	1583		
Grp Volume(v), veh/h	60	62	1097	0	187	75		
Grp Sat Flow(s),veh/h/ln	1770	1802	1774	1863	1774	1583		
Q Serve(g_s), s	1.7	1.8	24.2	0.0	8.1	3.4		
Cycle Q Clear(g_c), s	1.7	1.8	24.2	0.0	8.1	3.4		
Prop In Lane		0.19	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	684	696	1153	605	246	219		
V/C Ratio(X)	0.09	0.09	0.95	0.00	0.76	0.34		
Avail Cap(c_a), veh/h	684	696	1153	605	532	475		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.17	0.00	1.00	1.00		
Uniform Delay (d), s/veh	15.6	15.6	26.4	0.0	33.2	31.2		
Incr Delay (d2), s/veh	0.3	0.3	4.1	0.0	6.8	1.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.9	0.9	12.4	0.0	4.5	1.6		
LnGrp Delay(d),s/veh	15.8	15.8	30.5	0.0	40.0	32.5		
LnGrp LOS	B	B	C		D	C		
Approach Vol, veh/h	122			1097	262			
Approach Delay, s/veh	15.8			30.5	37.8			
Approach LOS	B			C	D			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		34.9				30.0		15.1
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		18.0				26.0		24.0
Max Q Clear Time (g_c+I1), s		3.8				26.2		10.1
Green Ext Time (p_c), s		0.6				0.0		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.6
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	16	719	1054	35	13	7
Future Volume (veh/h)	16	719	1054	35	13	7
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	19	856	1255	42	15	8
Adj No. of Lanes	1	1	2	1	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	289	962	1291	1277	522	432
Arrive On Green	0.23	0.23	0.38	0.69	0.28	0.28
Sat Flow, veh/h	1242	1583	3442	1863	1863	1541
Grp Volume(v), veh/h	19	856	1255	42	15	8
Grp Sat Flow(s),veh/h/ln	1242	1583	1721	1863	1863	1541
Q Serve(g_s), s	1.4	27.0	41.6	0.8	0.7	0.4
Cycle Q Clear(g_c), s	1.4	27.0	41.6	0.8	0.7	0.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	289	962	1291	1277	522	432
V/C Ratio(X)	0.07	0.89	0.97	0.03	0.03	0.02
Avail Cap(c_a), veh/h	289	962	1291	1277	522	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.68	0.68	0.98	0.98	1.00	1.00
Uniform Delay (d), s/veh	34.7	19.4	35.7	5.9	30.3	30.2
Incr Delay (d2), s/veh	0.1	7.4	18.5	0.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	40.1	23.0	0.4	0.4	0.2
LnGrp Delay(d),s/veh	34.7	26.8	54.1	5.9	30.4	30.3
LnGrp LOS	C	C	D	A	C	C
Approach Vol, veh/h	875			1297	23	
Approach Delay, s/veh	27.0			52.6	30.4	
Approach LOS	C			D	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		84.5		31.5	47.0	37.5		
Change Period (Y+Rc), s		5.0		4.5	3.5	5.0		
Max Green Setting (Gmax), s		79.0		27.0	43.5	32.0		
Max Q Clear Time (g_c+I1), s		2.8		29.0	43.6	2.7		
Green Ext Time (p_c), s		0.2		0.0	0.0	0.1		

Intersection Summary	
HCM 2010 Ctrl Delay	42.1
HCM 2010 LOS	D



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	277	174	915	198	48	684
Future Volume (vph)	277	174	915	198	48	684
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	3.5	5.0		3.5	4.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.97		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3431		1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3431		1770	3539
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	304	191	1005	218	53	752
RTOR Reduction (vph)	0	148	13	0	0	0
Lane Group Flow (vph)	304	43	1210	0	53	752
Confl. Peds. (#/hr)				2		
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	
Permitted Phases		8				6
Actuated Green, G (s)	18.9	18.9	38.0		5.7	48.2
Effective Green, g (s)	18.9	18.9	38.0		5.7	48.2
Actuated g/C Ratio	0.22	0.22	0.45		0.07	0.57
Clearance Time (s)	3.5	3.5	5.0		3.5	4.0
Vehicle Extension (s)	2.0	2.0	4.0		2.0	4.0
Lane Grp Cap (vph)	398	356	1552		120	2030
v/s Ratio Prot	c0.17		c0.35		c0.03	
v/s Ratio Perm		0.03				0.21
v/c Ratio	0.76	0.12	0.78		0.44	0.37
Uniform Delay, d1	30.5	25.9	19.5		37.6	9.7
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	7.6	0.1	3.9		0.9	0.5
Delay (s)	38.1	26.0	23.4		38.6	10.2
Level of Service	D	C	C		D	B
Approach Delay (s)	33.4		23.4			12.1
Approach LOS	C		C			B

Intersection Summary			
HCM 2000 Control Delay	21.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	84.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	61.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	131	7	77	50	266	2	813	137	197	712	128
Future Volume (veh/h)	58	131	7	77	50	266	2	813	137	197	712	128
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.98	1.00		1.00	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	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	66	149	8	88	57	302	2	924	156	224	809	145
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	113	424	80	33	429	4	1274	215	269	1063	892
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.00	0.42	0.42	0.15	0.57	0.57
Sat Flow, veh/h	0	410	1537	0	121	1556	1774	3028	511	1774	1863	1564
Grp Volume(v), veh/h	215	0	8	145	0	302	2	540	540	224	809	145
Grp Sat Flow(s),veh/h/ln	410	0	1537	121	0	1556	1774	1770	1770	1774	1863	1564
Q Serve(g_s), s	0.0	0.0	0.3	0.0	0.0	12.7	0.1	18.4	18.5	8.9	23.9	3.2
Cycle Q Clear(g_c), s	20.0	0.0	0.3	20.0	0.0	12.7	0.1	18.4	18.5	8.9	23.9	3.2
Prop In Lane	0.31		1.00	0.61		1.00	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	178	0	424	113	0	429	4	745	745	269	1063	892
V/C Ratio(X)	1.21	0.00	0.02	1.28	0.00	0.70	0.52	0.72	0.73	0.83	0.76	0.16
Avail Cap(c_a), veh/h	178	0	424	113	0	429	489	976	976	367	1063	892
HCM Platoon Ratio	1.00	1.00	1.00	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	25.0	0.0	19.1	30.6	0.0	23.6	36.2	17.5	17.5	29.9	11.8	7.4
Incr Delay (d2), s/veh	134.9	0.0	0.0	178.9	0.0	4.8	34.6	2.5	2.5	8.4	3.5	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	10.2	0.0	0.1	7.8	0.0	6.0	0.1	9.5	9.5	5.0	13.2	1.4
LnGrp Delay(d),s/veh	159.9	0.0	19.1	209.4	0.0	28.5	70.7	20.0	20.0	38.3	15.3	7.5
LnGrp LOS	F		B	F		C	E	C	C	D	B	A
Approach Vol, veh/h		223			447			1082			1178	
Approach Delay, s/veh		154.8			87.2			20.1			18.7	
Approach LOS		F			F			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	35.0		23.5	3.2	45.9		23.5
Change Period (Y+Rc), s	3.0	4.5		3.5	3.0	4.5		3.5
Max Green Setting (Gmax), s	15.0	40.0		20.0	20.0	35.0		20.0
Max Q Clear Time (g_c+I1), s	10.9	20.5		22.0	2.1	25.9		22.0
Green Ext Time (p_c), s	0.1	10.1		0.0	0.0	8.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	208	234	158	108	230	9	50	292	64	76	380	51
Future Volume (veh/h)	208	234	158	108	230	9	50	292	64	76	380	51
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)	0.98		0.97	0.99		0.97	0.99		0.95	0.99		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	244	165	112	240	9	52	304	67	79	396	53
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	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	527	461	312	391	802	30	306	580	128	359	633	85
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1108	1023	692	965	1782	67	928	1465	323	992	1599	214
Grp Volume(v), veh/h	217	0	409	112	0	249	52	0	371	79	0	449
Grp Sat Flow(s),veh/h/ln	1108	0	1715	965	0	1849	928	0	1788	992	0	1813
Q Serve(g_s), s	9.1	0.0	10.1	5.5	0.0	5.0	2.8	0.0	9.3	3.9	0.0	11.6
Cycle Q Clear(g_c), s	14.1	0.0	10.1	15.6	0.0	5.0	14.4	0.0	9.3	13.1	0.0	11.6
Prop In Lane	1.00		0.40	1.00		0.04	1.00		0.18	1.00		0.12
Lane Grp Cap(c), veh/h	527	0	772	391	0	832	306	0	708	359	0	718
V/C Ratio(X)	0.41	0.00	0.53	0.29	0.00	0.30	0.17	0.00	0.52	0.22	0.00	0.63
Avail Cap(c_a), veh/h	786	0	1172	616	0	1263	414	0	916	475	0	929
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.7	0.0	11.6	17.3	0.0	10.2	20.0	0.0	13.5	18.5	0.0	14.2
Incr Delay (d2), s/veh	0.7	0.0	0.8	0.6	0.0	0.3	0.4	0.0	0.9	0.4	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	4.8	1.5	0.0	2.6	0.7	0.0	4.7	1.1	0.0	6.0
LnGrp Delay(d),s/veh	15.4	0.0	12.4	17.8	0.0	10.5	20.3	0.0	14.3	18.9	0.0	15.5
LnGrp LOS	B		B	B		B	C		B	B		B
Approach Vol, veh/h		626			361			423			528	
Approach Delay, s/veh		13.5			12.8			15.1			16.0	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		30.8		27.7		30.8		27.7
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		40.0		30.0		40.0		30.0
Max Q Clear Time (g_c+I1), s		16.1		15.1		17.6		16.4
Green Ext Time (p_c), s		9.1		7.2		8.8		6.8

Intersection Summary	
HCM 2010 Ctrl Delay	14.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	49	0	0	223	0	559	21	197	427	35
Future Vol, veh/h	0	0	49	0	0	223	0	559	21	197	427	35
Conflicting Peds, #/hr	0	0	3	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	52	0	0	237	0	595	22	210	454	37

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	476	-	-	606	-	0	0	617	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	0	589	0	0	497	0	-	-	963	-	-
Stage 1	0	0	-	0	0	-	0	-	-	-	-	-
Stage 2	0	0	-	0	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	587	-	-	497	-	-	-	963	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.7	18.7	0	2.9
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	587	497	963	-	-
HCM Lane V/C Ratio	-	-	0.089	0.477	0.218	-	-
HCM Control Delay (s)	-	-	11.7	18.7	9.8	-	-
HCM Lane LOS	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	-	-	0.3	2.5	0.8	-	-

Intersection	
Int Delay, s/veh	1.6

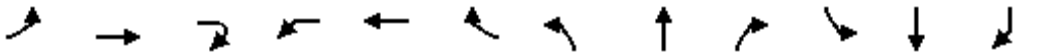
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	26	28	176	104	26
Future Vol, veh/h	16	26	28	176	104	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	110	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	27	29	185	109	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	274	68	136	0	-	0
Stage 1	123	-	-	-	-	-
Stage 2	151	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	693	981	1446	-	-	-
Stage 1	889	-	-	-	-	-
Stage 2	861	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	679	981	1446	-	-	-
Mov Cap-2 Maneuver	679	-	-	-	-	-
Stage 1	871	-	-	-	-	-
Stage 2	861	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1446	-	839	-	-
HCM Lane V/C Ratio	0.02	-	0.053	-	-
HCM Control Delay (s)	7.5	-	9.5	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

EXISTING PM



Movement	EBL	EBT	EBR2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	572	174	664	220	18	137	4	357	17	11	5
Future Volume (vph)	12	572	174	664	220	18	137	4	357	17	11	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.1	5.1	4.0	4.1		4.1	4.1	4.1		3.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.86	0.85		0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.97	
Satd. Flow (prot)	1770	3539	1583	3433	3499		1681	1460	1504		1779	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.97	
Satd. Flow (perm)	1770	3539	1583	3433	3499		1681	1460	1504		1779	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	12	572	174	664	220	18	137	4	357	17	11	5
RTOR Reduction (vph)	0	0	108	0	3	0	0	144	157	0	0	0
Lane Group Flow (vph)	12	572	66	664	235	0	123	45	29	0	33	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases			6						4			
Actuated Green, G (s)	1.1	20.2	20.2	26.2	46.3		12.5	12.5	12.5		4.1	
Effective Green, g (s)	1.1	20.2	20.2	26.2	46.3		12.5	12.5	12.5		4.1	
Actuated g/C Ratio	0.01	0.26	0.26	0.33	0.58		0.16	0.16	0.16		0.05	
Clearance Time (s)	4.0	5.1	5.1	4.0	4.1		4.1	4.1	4.1		3.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	24	902	403	1135	2045		265	230	237		92	
v/s Ratio Prot	0.01	c0.16		c0.19	0.07		c0.07	0.03			c0.02	
v/s Ratio Perm			0.04						0.02			
v/c Ratio	0.50	0.63	0.16	0.59	0.11		0.46	0.20	0.12		0.36	
Uniform Delay, d1	38.8	26.2	22.9	22.0	7.3		30.3	29.0	28.6		36.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	15.4	1.5	0.2	0.8	0.0		1.3	0.4	0.2		2.4	
Delay (s)	54.2	27.7	23.1	22.8	7.3		31.6	29.4	28.9		38.7	
Level of Service	D	C	C	C	A		C	C	C		D	
Approach Delay (s)		27.1			18.7			29.7			38.7	
Approach LOS		C			B			C			D	

Intersection Summary			
HCM 2000 Control Delay	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	79.2	Sum of lost time (s)	16.2
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		

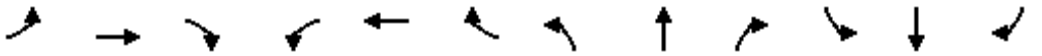
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	12	785	7	16	7	746	270	14	4	155	140
Future Volume (veh/h)	149	12	785	7	16	7	746	270	14	4	155	140
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		0.99	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	175	0	872	8	18	8	829	300	16	4	172	156
Adj No. of Lanes	2	0	2	0	2	0	2	2	0	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1053	0	929	86	195	88	890	1344	71	7	493	214
Arrive On Green	0.30	0.00	0.30	0.11	0.11	0.11	0.26	0.39	0.39	0.00	0.14	0.14
Sat Flow, veh/h	3548	0	3131	817	1855	834	3442	3415	181	1774	3539	1539
Grp Volume(v), veh/h	175	0	872	18	0	16	829	155	161	4	172	156
Grp Sat Flow(s),veh/h/ln	1774	0	1566	1822	0	1684	1721	1770	1827	1774	1770	1539
Q Serve(g_s), s	3.3	0.0	24.8	0.8	0.0	0.8	21.5	5.3	5.4	0.2	4.0	8.9
Cycle Q Clear(g_c), s	3.3	0.0	24.8	0.8	0.0	0.8	21.5	5.3	5.4	0.2	4.0	8.9
Prop In Lane	1.00		1.00	0.45		0.50	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	1053	0	929	191	0	177	890	697	719	7	493	214
V/C Ratio(X)	0.17	0.00	0.94	0.09	0.00	0.09	0.93	0.22	0.22	0.53	0.35	0.73
Avail Cap(c_a), veh/h	1943	0	1715	599	0	553	1131	969	1000	194	1163	506
HCM Platoon Ratio	1.00	1.00	1.00	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	23.8	0.0	31.3	36.9	0.0	36.9	33.1	18.4	18.4	45.4	35.6	37.6
Incr Delay (d2), s/veh	0.0	0.0	2.6	0.1	0.0	0.1	10.4	0.1	0.1	20.0	0.2	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	11.0	0.4	0.0	0.4	11.4	2.6	2.7	0.1	2.0	3.9
LnGrp Delay(d),s/veh	23.8	0.0	33.9	37.0	0.0	37.0	43.5	18.5	18.5	65.4	35.7	39.4
LnGrp LOS	C		C	D		D	D	B	B	E	D	D
Approach Vol, veh/h		1047			34			1145			332	
Approach Delay, s/veh		32.2			37.0			36.6			37.8	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		32.2	26.6	17.8		14.7	3.4	41.0
Change Period (Y+Rc), s		5.1	3.0	5.1		5.1	3.0	5.1
Max Green Setting (Gmax), s		50.0	30.0	30.0		30.0	10.0	50.0
Max Q Clear Time (g_c+I1), s		26.8	23.5	10.9		2.8	2.2	7.4
Green Ext Time (p_c), s		0.3	0.1	0.5		0.0	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	35.0
HCM 2010 LOS	C

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	156	0	940	0	0	0	0	842	547	379	568	0
Future Volume (vph)	156	0	940	0	0	0	0	842	547	379	568	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Lane Util. Factor		1.00	0.76					0.86	0.86	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.97	0.85	1.00	1.00	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1770	3610					4652	1362	3433	3539	
Flt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1770	3610					4652	1362	3433	3539	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	159	0	959	0	0	0	0	859	558	387	580	0
RTOR Reduction (vph)	0	0	761	0	0	0	0	49	207	0	0	0
Lane Group Flow (vph)	0	159	198	0	0	0	0	1044	117	387	580	0
Confl. Peds. (#/hr)							11					11
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		10.1	10.1					17.6	17.6	9.4	22.6	
Effective Green, g (s)		10.1	10.1					17.6	17.6	9.4	22.6	
Actuated g/C Ratio		0.21	0.21					0.36	0.36	0.19	0.46	
Clearance Time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Vehicle Extension (s)		0.2	0.2					0.2	0.2	0.2	1.0	
Lane Grp Cap (vph)		366	747					1677	491	661	1638	
v/s Ratio Prot								c0.22		c0.11	0.16	
v/s Ratio Perm		0.09	0.05						0.09			
v/c Ratio		0.43	0.27					0.62	0.24	0.59	0.35	
Uniform Delay, d1		16.9	16.2					12.9	10.9	17.9	8.4	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.3	0.1					0.5	0.1	0.9	0.0	
Delay (s)		17.2	16.3					13.4	11.0	18.8	8.5	
Level of Service		B	B					B	B	B	A	
Approach Delay (s)		16.4			0.0			12.8			12.6	
Approach LOS		B			A			B			B	

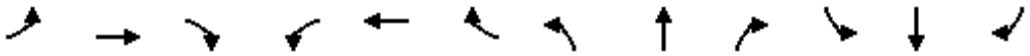
Intersection Summary			
HCM 2000 Control Delay	13.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	48.8	Sum of lost time (s)	11.7
Intersection Capacity Utilization	52.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	204	172	42	67	168	131	891	42	398	1005	105
Future Volume (veh/h)	330	204	172	42	67	168	131	891	42	398	1005	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		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	344	212	179	44	70	0	136	928	44	415	1047	0
Adj No. of Lanes	2	1	1	1	1	1	2	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	598	324	273	152	160	136	312	1269	60	716	1990	620
Arrive On Green	0.17	0.17	0.17	0.09	0.09	0.00	0.09	0.26	0.26	0.21	0.39	0.00
Sat Flow, veh/h	3442	1863	1572	1774	1863	1583	3442	4973	235	3442	5085	1583
Grp Volume(v), veh/h	344	212	179	44	70	0	136	632	340	415	1047	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1572	1774	1863	1583	1721	1695	1818	1721	1695	1583
Q Serve(g_s), s	5.4	6.3	6.3	1.4	2.1	0.0	2.2	10.1	10.1	6.4	9.3	0.0
Cycle Q Clear(g_c), s	5.4	6.3	6.3	1.4	2.1	0.0	2.2	10.1	10.1	6.4	9.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	598	324	273	152	160	136	312	865	464	716	1990	620
V/C Ratio(X)	0.58	0.65	0.66	0.29	0.44	0.00	0.44	0.73	0.73	0.58	0.53	0.00
Avail Cap(c_a), veh/h	1977	1070	903	719	755	642	1163	1426	765	1163	2139	666
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.4	22.8	22.8	25.4	25.7	0.0	25.5	20.2	20.2	21.1	13.8	0.0
Incr Delay (d2), s/veh	0.3	0.8	1.0	0.4	0.7	0.0	0.4	0.4	0.8	0.3	0.1	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	2.6	3.3	2.8	0.7	1.1	0.0	1.1	4.7	5.2	3.1	4.4	0.0
LnGrp Delay(d),s/veh	22.8	23.6	23.8	25.7	26.4	0.0	25.8	20.6	21.0	21.4	13.9	0.0
LnGrp LOS	C	C	C	C	C		C	C	C	C	B	
Approach Vol, veh/h		735			114			1108			1462	
Approach Delay, s/veh		23.3			26.1			21.4			16.0	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.4	19.2		14.4	8.4	27.3		9.2
Change Period (Y+Rc), s	4.1	* 4.1		4.1	3.0	4.1		4.1
Max Green Setting (Gmax), s	20.0	* 25		34.0	20.0	24.9		24.0
Max Q Clear Time (g_c+I1), s	8.4	12.1		8.3	4.2	11.3		4.1
Green Ext Time (p_c), s	3.9	3.0		1.2	0.1	4.2		0.2

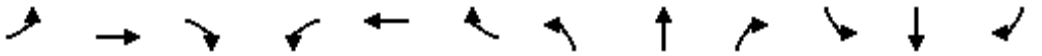
Intersection Summary	
HCM 2010 Ctrl Delay	19.7
HCM 2010 LOS	B

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	1	39	0	239	1	825	96	182	1036	1
Future Volume (vph)	0	0	1	39	0	239	1	825	96	182	1036	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.1	4.1	4.1	4.1		3.5	4.1	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00			1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt		0.85			1.00	0.85	1.00	0.98		1.00	1.00	
Flt Protected		1.00			0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		0			1593	1400	1593	4484		1593	4576	
Flt Permitted		1.00			0.95	1.00	0.26	1.00		0.95	1.00	
Satd. Flow (perm)		0			1593	1400	428	4484		1593	4576	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	1	40	0	246	1	851	99	188	1068	1
RTOR Reduction (vph)	0	1	0	0	0	212	0	8	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	40	34	1	942	0	188	1069	0
Confl. Peds. (#/hr)						3			19			22
Turn Type				Perm	NA	Perm	custom	NA		Prot	NA	
Protected Phases					1			2 8		7	2 3 4	
Permitted Phases				1		1	8					
Actuated Green, G (s)		0.0			21.0	21.0	40.6	81.2		21.8	107.1	
Effective Green, g (s)		0.0			21.0	21.0	40.6	81.2		21.8	107.1	
Actuated g/C Ratio		0.00			0.14	0.14	0.27	0.54		0.14	0.71	
Clearance Time (s)					4.1	4.1	4.1			3.5		
Vehicle Extension (s)					2.0	2.0	3.0			2.0		
Lane Grp Cap (vph)		0			222	195	115	2419		230	3256	
v/s Ratio Prot								c0.21		c0.12	c0.23	
v/s Ratio Perm					0.03	0.02	0.00					
v/c Ratio		0.00			0.18	0.18	0.01	0.39		0.82	0.33	
Uniform Delay, d1		75.2			57.2	57.1	40.2	20.2		62.4	8.2	
Progression Factor		1.00			1.00	1.00	1.06	0.64		1.00	1.00	
Incremental Delay, d2		0.0			0.1	0.2	0.0	0.1		18.8	0.1	
Delay (s)		75.2			57.3	57.3	42.6	13.1		81.2	8.2	
Level of Service		E			E	E	D	B		F	A	
Approach Delay (s)		75.2			57.3			13.2			19.2	
Approach LOS		E			E			B			B	

Intersection Summary			
HCM 2000 Control Delay	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	150.5	Sum of lost time (s)	20.3
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	303	330	31	37	393	375	10	244	47	270	400	406
Future Volume (vph)	303	330	31	37	393	375	10	244	47	270	400	406
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5	4.1	4.1
Lane Util. Factor	0.97	1.00		1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	0.98		1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.98	1.00		0.97	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1832		1770	3539	1540	1726	3391		1722	1863	1503
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.52	1.00		0.50	1.00	1.00
Satd. Flow (perm)	3433	1832		1770	3539	1540	953	3391		905	1863	1503
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	306	333	31	37	397	379	10	246	47	273	404	410
RTOR Reduction (vph)	0	2	0	0	0	328	0	9	0	0	0	227
Lane Group Flow (vph)	306	362	0	37	397	51	10	284	0	273	404	183
Confl. Peds. (#/hr)			9			6	22		32	32		22
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		custom	NA	custom
Protected Phases	3	8		7	4			6!		5!	1 2 5 6	
Permitted Phases						4	6			2		2
Actuated Green, G (s)	42.0	40.6		21.8	20.4	20.4	51.3	51.3		46.8	76.4	40.6
Effective Green, g (s)	42.0	40.6		21.8	20.4	20.4	51.3	51.3		46.8	76.4	40.6
Actuated g/C Ratio	0.28	0.27		0.14	0.14	0.14	0.34	0.34		0.31	0.51	0.27
Clearance Time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5		4.1
Vehicle Extension (s)	2.5	3.0		2.0	3.0	3.0	3.0	3.0		3.0		4.0
Lane Grp Cap (vph)	958	494		256	479	208	324	1155		315	945	405
v/s Ratio Prot	0.09	c0.20		0.02	c0.11			0.08		c0.04	c0.22	
v/s Ratio Perm						0.03	0.01			c0.23		0.12
v/c Ratio	0.32	0.73		0.14	0.83	0.25	0.03	0.25		0.87	0.43	0.45
Uniform Delay, d1	42.9	50.0		56.2	63.3	58.2	33.0	35.7		52.4	23.3	45.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.02	1.14
Incremental Delay, d2	0.1	5.5		0.1	11.3	0.6	0.2	0.5		20.8	0.1	1.1
Delay (s)	43.1	55.6		56.3	74.6	58.8	33.2	36.2		73.1	23.9	53.3
Level of Service	D	E		E	E	E	C	D		E	C	D
Approach Delay (s)		49.9			66.4			36.1			47.3	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	52.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	150.5	Sum of lost time (s)	20.3
Intersection Capacity Utilization	72.8%	ICU Level of Service	C
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	510	134	9	191	86	18
Future Volume (veh/h)	510	134	9	191	86	18
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	593	156	10	222	100	21
Adj No. of Lanes	2	0	1	1	0	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	1530	401	576	1028	256	54
Arrive On Green	0.55	0.55	0.55	0.55	0.18	0.18
Sat Flow, veh/h	2866	728	709	1863	1413	297
Grp Volume(v), veh/h	378	371	10	222	122	0
Grp Sat Flow(s),veh/h/ln	1770	1731	709	1863	1724	0
Q Serve(g_s), s	3.2	3.2	0.2	1.6	1.7	0.0
Cycle Q Clear(g_c), s	3.2	3.2	3.5	1.6	1.7	0.0
Prop In Lane		0.42	1.00		0.82	0.17
Lane Grp Cap(c), veh/h	976	955	576	1028	312	0
V/C Ratio(X)	0.39	0.39	0.02	0.22	0.39	0.00
Avail Cap(c_a), veh/h	1866	1825	932	1964	1428	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	3.4	3.4	4.4	3.0	9.6	0.0
Incr Delay (d2), s/veh	0.4	0.4	0.0	0.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.6	0.0	0.8	0.8	0.0
LnGrp Delay(d),s/veh	3.8	3.8	4.4	3.2	9.9	0.0
LnGrp LOS	A	A	A	A	A	
Approach Vol, veh/h	749			232	122	
Approach Delay, s/veh	3.8			3.2	9.9	
Approach LOS	A			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		7.8		18.8				18.8
Change Period (Y+Rc), s		3.0		4.1				4.1
Max Green Setting (Gmax), s		22.0		28.0				28.0
Max Q Clear Time (g_c+I1), s		3.7		5.2				5.5
Green Ext Time (p_c), s		0.1		9.1				9.1

Intersection Summary	
HCM 2010 Ctrl Delay	4.3
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	300	25	145	165	20	39	24	22	51	58	47
Future Volume (veh/h)	46	300	25	145	165	20	39	24	22	51	58	47
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	1900	1863	1900
Adj Flow Rate, veh/h	55	361	30	175	199	24	38	42	27	61	70	57
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	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	172	816	67	262	947	113	180	188	154	116	136	113
Arrive On Green	0.10	0.25	0.25	0.15	0.30	0.30	0.10	0.10	0.10	0.11	0.11	0.11
Sat Flow, veh/h	1774	3310	274	1774	3185	380	1774	1863	1518	1105	1294	1080
Grp Volume(v), veh/h	55	192	199	175	109	114	38	42	27	100	0	88
Grp Sat Flow(s),veh/h/ln	1774	1770	1814	1774	1770	1795	1774	1863	1518	1807	0	1672
Q Serve(g_s), s	1.2	3.8	3.8	3.9	1.9	2.0	0.8	0.9	0.7	2.2	0.0	2.1
Cycle Q Clear(g_c), s	1.2	3.8	3.8	3.9	1.9	2.0	0.8	0.9	0.7	2.2	0.0	2.1
Prop In Lane	1.00		0.15	1.00		0.21	1.00		1.00	0.61		0.65
Lane Grp Cap(c), veh/h	172	436	447	262	526	534	180	188	154	190	0	176
V/C Ratio(X)	0.32	0.44	0.44	0.67	0.21	0.21	0.21	0.22	0.18	0.53	0.00	0.50
Avail Cap(c_a), veh/h	859	1715	1757	2664	3515	3565	1074	1128	919	2014	0	1863
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.4	13.2	13.2	16.6	10.9	10.9	17.0	17.1	17.0	17.5	0.0	17.5
Incr Delay (d2), s/veh	0.4	0.7	0.7	1.1	0.2	0.2	0.2	0.2	0.2	0.8	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.9	2.0	1.9	0.9	1.0	0.4	0.5	0.3	1.1	0.0	1.0
LnGrp Delay(d),s/veh	17.8	13.9	13.9	17.7	11.1	11.1	17.3	17.3	17.2	18.3	0.0	18.3
LnGrp LOS	B	B	B	B	B	B	B	B	B	B		B
Approach Vol, veh/h		446			398			107			188	
Approach Delay, s/veh		14.3			14.0			17.2			18.3	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		8.2	10.1	14.7		8.3	8.0	16.8
Change Period (Y+Rc), s		4.0	4.0	4.5		4.0	4.0	4.5
Max Green Setting (Gmax), s		25.0	62.0	40.0		46.0	20.0	82.0
Max Q Clear Time (g_c+I1), s		2.9	5.9	5.8		4.2	3.2	4.0
Green Ext Time (p_c), s		0.2	0.2	4.0		0.7	0.0	4.1

Intersection Summary	
HCM 2010 Ctrl Delay	15.2
HCM 2010 LOS	B

Notes

Movement	EBT	EBR	WBL	WBT	NBL	NBR	NEL	NER
Lane Configurations								
Traffic Volume (veh/h)	281	28	623	77	60	440	0	0
Future Volume (veh/h)	281	28	623	77	60	440	0	0
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	305	30	737	0	65	-19		
Adj No. of Lanes	2	0	2	1	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	694	68	1269	666	93	83		
Arrive On Green	0.21	0.21	0.36	0.00	0.05	0.00		
Sat Flow, veh/h	3351	318	3548	1863	1774	1583		
Grp Volume(v), veh/h	165	170	737	0	65	-19		
Grp Sat Flow(s),veh/h/ln	1770	1807	1774	1863	1774	1583		
Q Serve(g_s), s	2.6	2.6	5.4	0.0	1.1	0.0		
Cycle Q Clear(g_c), s	2.6	2.6	5.4	0.0	1.1	0.0		
Prop In Lane		0.18	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	377	385	1269	666	93	83		
V/C Ratio(X)	0.44	0.44	0.58	0.00	0.70	-0.23		
Avail Cap(c_a), veh/h	1428	1458	2696	1415	1337	1193		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00		
Uniform Delay (d), s/veh	10.9	10.9	8.3	0.0	14.8	0.0		
Incr Delay (d2), s/veh	1.1	1.1	0.6	0.0	12.6	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.4	1.4	2.7	0.0	0.9	0.0		
LnGrp Delay(d),s/veh	12.0	12.0	8.9	0.0	27.4	0.0		
LnGrp LOS	B	B	A		C			
Approach Vol, veh/h	335			737	46			
Approach Delay, s/veh	12.0			8.9	38.8			
Approach LOS	B			A	D			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		10.8				15.4		5.7
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		25.7				24.2		24.0
Max Q Clear Time (g_c+I1), s		4.6				7.4		3.1
Green Ext Time (p_c), s		2.5				4.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	11.1
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	75	646	655	38	97	45
Future Volume (veh/h)	75	646	655	38	97	45
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	77	666	675	39	100	46
Adj No. of Lanes	1	1	2	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	439	956	861	847	249	211
Arrive On Green	0.35	0.35	0.25	0.45	0.13	0.13
Sat Flow, veh/h	1242	1583	3442	1863	1863	1578
Grp Volume(v), veh/h	77	666	675	39	100	46
Grp Sat Flow(s),veh/h/ln	1242	1583	1721	1863	1863	1578
Q Serve(g_s), s	2.1	14.2	9.1	0.6	2.4	1.3
Cycle Q Clear(g_c), s	2.1	14.2	9.1	0.6	2.4	1.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	439	956	861	847	249	211
V/C Ratio(X)	0.18	0.70	0.78	0.05	0.40	0.22
Avail Cap(c_a), veh/h	678	1260	3373	3143	1186	1004
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.0	6.7	17.3	7.5	19.6	19.1
Incr Delay (d2), s/veh	0.1	0.6	0.6	0.0	1.5	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	12.8	4.4	0.3	1.4	0.6
LnGrp Delay(d),s/veh	11.1	7.3	17.9	7.5	21.1	19.9
LnGrp LOS	B	A	B	A	C	B
Approach Vol, veh/h	743			714	146	
Approach Delay, s/veh	7.7			17.3	20.7	
Approach LOS	A			B	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		27.5		22.0	15.9	11.6		
Change Period (Y+Rc), s		5.0		4.5	3.5	5.0		
Max Green Setting (Gmax), s		83.5		27.0	48.5	31.5		
Max Q Clear Time (g_c+I1), s		2.6		16.2	11.1	4.4		
Green Ext Time (p_c), s		0.3		1.2	1.3	0.9		

Intersection Summary	
HCM 2010 Ctrl Delay	13.2
HCM 2010 LOS	B



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	246	79	614	331	162	581
Future Volume (vph)	246	79	614	331	162	581
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	3.5	5.0		3.5	4.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.95		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3353		1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3353		1770	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	273	88	682	368	180	646
RTOR Reduction (vph)	0	53	42	0	0	0
Lane Group Flow (vph)	273	35	1008	0	180	646
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	
Permitted Phases		8				6
Actuated Green, G (s)	17.7	17.7	34.8		13.0	52.3
Effective Green, g (s)	17.7	17.7	34.8		13.0	52.3
Actuated g/C Ratio	0.21	0.21	0.41		0.15	0.61
Clearance Time (s)	3.5	3.5	5.0		3.5	4.0
Vehicle Extension (s)	2.0	2.0	4.0		2.0	4.0
Lane Grp Cap (vph)	365	327	1363		268	2162
v/s Ratio Prot	c0.15		c0.30		c0.10	
v/s Ratio Perm		0.02				0.18
v/c Ratio	0.75	0.11	0.74		0.67	0.30
Uniform Delay, d1	31.9	27.5	21.6		34.3	7.9
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	7.2	0.1	2.3		5.1	0.1
Delay (s)	39.0	27.6	23.8		39.4	8.0
Level of Service	D	C	C		D	A
Approach Delay (s)	36.2		23.8			14.9
Approach LOS	D		C			B

Intersection Summary			
HCM 2000 Control Delay	22.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	85.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	61.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	107	11	46	21	245	10	593	137	167	769	142
Future Volume (veh/h)	82	107	11	46	21	245	10	593	137	167	769	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		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	86	113	12	48	22	258	11	624	144	176	809	149
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	75	71	457	89	25	459	20	1200	277	225	999	846
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.01	0.42	0.42	0.13	0.54	0.54
Sat Flow, veh/h	0	244	1564	0	85	1572	1774	2855	658	1774	1863	1576
Grp Volume(v), veh/h	199	0	12	70	0	258	11	386	382	176	809	149
Grp Sat Flow(s),veh/h/ln	244	0	1564	85	0	1572	1774	1770	1743	1774	1863	1576
Q Serve(g_s), s	0.0	0.0	0.4	0.0	0.0	9.5	0.4	11.1	11.1	6.6	24.4	3.3
Cycle Q Clear(g_c), s	20.0	0.0	0.4	20.0	0.0	9.5	0.4	11.1	11.1	6.6	24.4	3.3
Prop In Lane	0.43		1.00	0.69		1.00	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	146	0	457	113	0	459	20	744	733	225	999	846
V/C Ratio(X)	1.36	0.00	0.03	0.62	0.00	0.56	0.56	0.52	0.52	0.78	0.81	0.18
Avail Cap(c_a), veh/h	146	0	457	113	0	459	518	1033	1017	388	999	846
HCM Platoon Ratio	1.00	1.00	1.00	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	25.2	0.0	17.3	27.3	0.0	20.6	33.7	14.7	14.7	29.0	13.0	8.1
Incr Delay (d2), s/veh	199.3	0.0	0.0	8.7	0.0	1.3	9.1	0.9	0.9	2.2	5.3	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	10.8	0.0	0.2	1.6	0.0	4.3	0.3	5.5	5.5	3.4	13.8	1.5
LnGrp Delay(d),s/veh	224.5	0.0	17.3	36.0	0.0	21.9	42.8	15.6	15.6	31.2	18.3	8.3
LnGrp LOS	F		B	D		C	D	B	B	C	B	A
Approach Vol, veh/h		211			328			779			1134	
Approach Delay, s/veh		212.7			24.9			16.0			19.0	
Approach LOS		F			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	11.7	33.3		23.5	3.8	41.3		23.5
Change Period (Y+Rc), s	3.0	4.5		3.5	3.0	4.5		3.5
Max Green Setting (Gmax), s	15.0	40.0		20.0	20.0	35.0		20.0
Max Q Clear Time (g_c+I1), s	8.6	13.1		22.0	2.4	26.4		22.0
Green Ext Time (p_c), s	0.1	15.7		0.0	0.0	7.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	146	28	58	196	17	59	218	34	87	453	93
Future Volume (veh/h)	229	146	28	58	196	17	59	218	34	87	453	93
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		0.99	0.99		0.99	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	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	249	159	30	63	213	18	64	237	37	95	492	101
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	481	614	116	514	683	58	265	704	110	502	671	138
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1139	1522	287	1183	1693	143	821	1572	245	1096	1498	307
Grp Volume(v), veh/h	249	0	189	63	0	231	64	0	274	95	0	593
Grp Sat Flow(s),veh/h/ln	1139	0	1809	1183	0	1836	821	0	1817	1096	0	1805
Q Serve(g_s), s	11.6	0.0	4.2	2.3	0.0	5.2	4.2	0.0	5.9	3.7	0.0	16.4
Cycle Q Clear(g_c), s	16.8	0.0	4.2	6.5	0.0	5.2	20.6	0.0	5.9	9.7	0.0	16.4
Prop In Lane	1.00		0.16	1.00		0.08	1.00		0.14	1.00		0.17
Lane Grp Cap(c), veh/h	481	0	730	514	0	741	265	0	814	502	0	809
V/C Ratio(X)	0.52	0.00	0.26	0.12	0.00	0.31	0.24	0.00	0.34	0.19	0.00	0.73
Avail Cap(c_a), veh/h	773	0	1194	817	0	1212	303	0	899	554	0	894
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.1	0.0	12.0	14.2	0.0	12.3	22.2	0.0	10.9	14.0	0.0	13.7
Incr Delay (d2), s/veh	1.2	0.0	0.3	0.2	0.0	0.3	0.7	0.0	0.3	0.3	0.0	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	3.8	0.0	2.2	0.8	0.0	2.7	1.0	0.0	3.0	1.2	0.0	8.8
LnGrp Delay(d),s/veh	19.3	0.0	12.3	14.4	0.0	12.7	22.9	0.0	11.2	14.3	0.0	16.9
LnGrp LOS	B		B	B		B	C		B	B		B
Approach Vol, veh/h		438			294			338			688	
Approach Delay, s/veh		16.3			13.0			13.4			16.6	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		29.0		31.7		29.0		31.7
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		40.0		30.0		40.0		30.0
Max Q Clear Time (g_c+I1), s		18.8		18.4		8.5		22.6
Green Ext Time (p_c), s		5.7		6.6		6.4		4.7

Intersection Summary	
HCM 2010 Ctrl Delay	15.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	130	0	0	132	0	402	17	549	567	46
Future Vol, veh/h	0	0	130	0	0	132	0	402	17	549	567	46
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	135	0	0	138	0	419	18	572	591	48

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	615	-	-	428	-	0	0	436	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	0	491	0	0	627	0	-	-	1124	-	-
Stage 1	0	0	-	0	0	-	0	-	-	-	-	-
Stage 2	0	0	-	0	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	491	-	-	627	-	-	-	1124	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.1	12.3	0	5.4
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	491	627	1124	-	-
HCM Lane V/C Ratio	-	-	0.276	0.219	0.509	-	-
HCM Control Delay (s)	-	-	15.1	12.3	11.5	-	-
HCM Lane LOS	-	-	C	B	B	-	-
HCM 95th %tile Q(veh)	-	-	1.1	0.8	3	-	-

Intersection	
Int Delay, s/veh	1.5

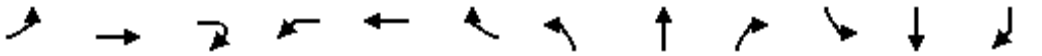
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	33	28	10	90	308	27
Future Vol, veh/h	33	28	10	90	308	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	110	-	-	-
Veh in Median Storage, #	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	36	30	11	98	335	29

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	421	182	364	0	-	0
Stage 1	350	-	-	-	-	-
Stage 2	71	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	561	829	1191	-	-	-
Stage 1	684	-	-	-	-	-
Stage 2	943	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	556	829	1191	-	-	-
Mov Cap-2 Maneuver	556	-	-	-	-	-
Stage 1	678	-	-	-	-	-
Stage 2	943	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.1	0.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1191	-	655	-	-
HCM Lane V/C Ratio	0.009	-	0.101	-	-
HCM Control Delay (s)	8.1	-	11.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

EXISTING PLUS PROJECT AM



Movement	EBL	EBT	EBR2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	227	88	902	359	7	344	7	419	12	10	5
Future Volume (vph)	8	227	88	902	359	7	344	7	419	12	10	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.1	5.1	4.0	4.1		4.1	4.1	4.1		3.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.90	0.85		0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.99	1.00		0.98	
Satd. Flow (prot)	1770	3539	1583	3433	3529		1681	1501	1504		1777	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.99	1.00		0.98	
Satd. Flow (perm)	1770	3539	1583	3433	3529		1681	1501	1504		1777	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	8	227	88	902	359	7	344	7	419	12	10	5
RTOR Reduction (vph)	0	0	80	0	1	0	0	69	202	0	0	0
Lane Group Flow (vph)	8	227	8	902	365	0	268	186	45	0	27	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases			6						4			
Actuated Green, G (s)	0.9	10.6	10.6	67.4	78.1		22.0	22.0	22.0		3.8	
Effective Green, g (s)	0.9	10.6	10.6	67.4	78.1		22.0	22.0	22.0		3.8	
Actuated g/C Ratio	0.01	0.09	0.09	0.56	0.65		0.18	0.18	0.18		0.03	
Clearance Time (s)	4.0	5.1	5.1	4.0	4.1		4.1	4.1	4.1		3.0	
Vehicle Extension (s)	0.2	0.2	0.2	0.2	0.2		0.2	0.2	0.2		0.2	
Lane Grp Cap (vph)	13	312	139	1928	2296		308	275	275		56	
v/s Ratio Prot	0.00	c0.06		c0.26	0.10		c0.16	0.12			c0.02	
v/s Ratio Perm			0.00						0.03			
v/c Ratio	0.62	0.73	0.06	0.47	0.16		0.87	0.68	0.16		0.48	
Uniform Delay, d1	59.4	53.3	50.1	15.6	8.2		47.6	45.7	41.3		57.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	48.2	7.0	0.1	0.8	0.1		21.8	5.1	0.1		2.4	
Delay (s)	107.6	60.3	50.2	16.5	8.3		69.4	50.8	41.4		59.5	
Level of Service	F	E	D	B	A		E	D	D		E	
Approach Delay (s)		58.7			14.1			54.3			59.5	
Approach LOS		E			B			D			E	

Intersection Summary			
HCM 2000 Control Delay	33.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	64.0%	ICU Level of Service	C
Analysis Period (min)	15		

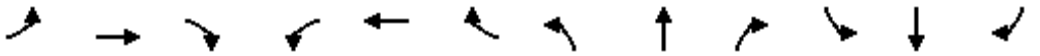
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	8	579	15	14	6	1152	397	16	4	84	102
Future Volume (veh/h)	71	8	579	15	14	6	1152	397	16	4	84	102
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		0.99	1.00		0.93	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	78	0	591	15	14	6	1176	405	16	4	86	104
Adj No. of Lanes	2	0	2	0	2	0	2	2	0	1	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	1451	0	1284	114	110	48	954	1329	52	7	344	148
Arrive On Green	0.41	0.00	0.41	0.08	0.08	0.08	0.28	0.38	0.38	0.00	0.10	0.10
Sat Flow, veh/h	3548	0	3141	1462	1414	613	3442	3469	137	1774	3539	1520
Grp Volume(v), veh/h	78	0	591	18	0	17	1176	206	215	4	86	104
Grp Sat Flow(s),veh/h/ln	1774	0	1571	1790	0	1700	1721	1770	1836	1774	1770	1520
Q Serve(g_s), s	1.7	0.0	17.9	1.3	0.0	1.2	36.3	10.7	10.7	0.3	2.9	8.7
Cycle Q Clear(g_c), s	1.7	0.0	17.9	1.3	0.0	1.2	36.3	10.7	10.7	0.3	2.9	8.7
Prop In Lane	1.00		1.00	0.82		0.36	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	1451	0	1284	140	0	133	954	678	703	7	344	148
V/C Ratio(X)	0.05	0.00	0.46	0.13	0.00	0.13	1.23	0.30	0.31	0.55	0.25	0.70
Avail Cap(c_a), veh/h	1451	0	1284	287	0	272	954	678	703	203	567	244
HCM Platoon Ratio	1.00	1.00	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	0.00	0.75	1.00	0.00	1.00	0.89	0.89	0.89	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.4	0.0	28.2	56.3	0.0	56.2	47.3	28.2	28.2	65.1	54.7	57.3
Incr Delay (d2), s/veh	0.0	0.0	0.1	1.9	0.0	1.9	113.2	0.1	0.1	21.3	0.1	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	7.8	0.7	0.0	0.6	32.2	5.2	5.4	0.2	1.5	3.7
LnGrp Delay(d),s/veh	23.4	0.0	28.3	58.2	0.0	58.2	160.5	28.3	28.3	86.4	54.9	59.6
LnGrp LOS	C		C	E		E	F	C	C	F	D	E
Approach Vol, veh/h		669			35			1597			194	
Approach Delay, s/veh		27.7			58.2			125.7			58.1	
Approach LOS		C			E			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		58.3	41.0	17.8		13.9	3.5	55.3
Change Period (Y+Rc), s		* 4.7	* 4.7	* 5.1		3.7	3.0	5.1
Max Green Setting (Gmax), s		* 36	* 36	* 21		21.0	15.0	32.9
Max Q Clear Time (g_c+I1), s		19.9	38.3	10.7		3.3	2.3	12.7
Green Ext Time (p_c), s		0.2	0.0	0.1		0.0	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	93.2
HCM 2010 LOS	F

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	369	0	689	0	0	0	0	1196	471	187	491	0
Future Volume (vph)	369	0	689	0	0	0	0	1196	471	187	491	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Lane Util. Factor		1.00	0.76					0.86	0.86	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.99	0.85	1.00	1.00	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1770	3610					4751	1362	3433	3539	
Flt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1770	3610					4751	1362	3433	3539	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	377	0	703	0	0	0	0	1220	481	191	501	0
RTOR Reduction (vph)	0	0	555	0	0	0	0	6	126	0	0	0
Lane Group Flow (vph)	0	377	148	0	0	0	0	1315	254	191	501	0
Confl. Peds. (#/hr)							11					11
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		25.2	25.2					73.8	73.8	9.3	79.1	
Effective Green, g (s)		25.2	25.2					73.8	73.8	9.3	79.1	
Actuated g/C Ratio		0.21	0.21					0.61	0.61	0.08	0.66	
Clearance Time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Vehicle Extension (s)		0.2	0.2					0.2	0.2	0.2	1.0	
Lane Grp Cap (vph)		371	758					2921	837	266	2332	
v/s Ratio Prot								c0.28		c0.06	0.14	
v/s Ratio Perm		0.21	0.04						0.19			
v/c Ratio		1.02	0.19					0.45	0.30	0.72	0.21	
Uniform Delay, d1		47.4	39.0					12.3	10.9	54.1	8.1	
Progression Factor		1.00	1.00					0.55	0.24	1.00	1.00	
Incremental Delay, d2		50.9	0.0					0.4	0.8	7.5	0.2	
Delay (s)		98.3	39.1					7.1	3.5	61.6	8.3	
Level of Service		F	D					A	A	E	A	
Approach Delay (s)		59.8			0.0			6.3			23.0	
Approach LOS		E			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	26.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	57	98	105	183	353	187	1167	35	218	700	262
Future Volume (veh/h)	147	57	98	105	183	353	187	1167	35	218	700	262
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	155	60	103	111	193	0	197	1228	37	229	737	0
Adj No. of Lanes	2	1	1	1	1	1	2	3	0	2	3	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	312	169	143	212	223	189	256	1243	37	1405	2990	931
Arrive On Green	0.09	0.09	0.09	0.12	0.12	0.00	0.07	0.25	0.25	0.13	0.19	0.00
Sat Flow, veh/h	3442	1863	1573	1774	1863	1583	3442	5072	153	3442	5085	1583
Grp Volume(v), veh/h	155	60	103	111	193	0	197	821	444	229	737	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1573	1774	1863	1583	1721	1695	1834	1721	1695	1583
Q Serve(g_s), s	5.1	3.6	7.6	7.1	12.2	0.0	6.7	28.9	29.0	7.1	14.7	0.0
Cycle Q Clear(g_c), s	5.1	3.6	7.6	7.1	12.2	0.0	6.7	28.9	29.0	7.1	14.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	312	169	143	212	223	189	256	831	449	1405	2990	931
V/C Ratio(X)	0.50	0.36	0.72	0.52	0.87	0.00	0.77	0.99	0.99	0.16	0.25	0.00
Avail Cap(c_a), veh/h	1030	557	471	235	247	210	574	831	449	1405	2990	931
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.84	0.84	0.00	0.86	0.86	0.86	0.92	0.92	0.00
Uniform Delay (d), s/veh	51.9	51.3	53.1	49.6	51.9	0.0	54.5	45.1	45.1	33.8	25.9	0.0
Incr Delay (d2), s/veh	0.5	0.5	2.6	0.6	20.0	0.0	1.6	26.2	36.5	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	1.9	3.4	3.5	7.5	0.0	3.3	16.6	19.2	3.4	6.9	0.0
LnGrp Delay(d),s/veh	52.4	51.7	55.7	50.3	71.9	0.0	56.1	71.3	81.7	33.8	25.9	0.0
LnGrp LOS	D	D	E	D	E		E	E	F	C	C	
Approach Vol, veh/h		318			304			1462			966	
Approach Delay, s/veh		53.3			64.0			72.4			27.7	
Approach LOS		D			E			E			C	

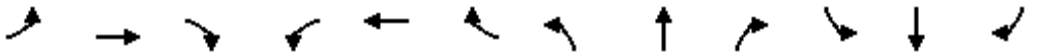
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	53.1	33.5		15.0	11.9	74.7		18.4
Change Period (Y+Rc), s	4.1	* 4.1		4.1	3.0	4.1		4.1
Max Green Setting (Gmax), s	23.5	* 29		35.9	20.0	32.9		15.9
Max Q Clear Time (g_c+I1), s	9.1	31.0		9.6	8.7	16.7		14.2
Green Ext Time (p_c), s	2.4	0.0		0.4	0.2	2.9		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	55.4
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	69	0	298	0	1091	171	103	800	0
Future Volume (vph)	0	0	0	69	0	298	0	1091	171	103	800	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.1	4.1		4.1		3.5	4.1	
Lane Util. Factor					1.00	1.00		0.91		1.00	0.91	
Frpb, ped/bikes					1.00	0.98		0.99		1.00	1.00	
Flpb, ped/bikes					1.00	1.00		1.00		1.00	1.00	
Frt					1.00	0.85		0.98		1.00	1.00	
Flt Protected					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)					1593	1400		4452		1593	4577	
Flt Permitted					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (perm)					1593	1400		4452		1593	4577	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	73	0	314	0	1148	180	108	842	0
RTOR Reduction (vph)	0	0	0	0	0	255	0	10	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	73	59	0	1318	0	108	842	0
Confl. Peds. (#/hr)						3			24			6
Turn Type				Perm	NA	Perm	custom	NA		Prot	NA	
Protected Phases					1			2 8		7	2 3 4	
Permitted Phases				1		1	8					
Actuated Green, G (s)					17.4	17.4		94.8		14.3	117.3	
Effective Green, g (s)					17.4	17.4		94.8		14.3	117.3	
Actuated g/C Ratio					0.12	0.12		0.67		0.10	0.82	
Clearance Time (s)					4.1	4.1				3.5		
Vehicle Extension (s)					2.0	2.0				2.0		
Lane Grp Cap (vph)					194	171		2965		160	3772	
v/s Ratio Prot								c0.30		c0.07	0.18	
v/s Ratio Perm					0.05	0.04						
v/c Ratio					0.38	0.35		0.44		0.68	0.22	
Uniform Delay, d1					57.5	57.2		11.3		61.8	2.7	
Progression Factor					1.00	1.00		0.45		1.00	1.00	
Incremental Delay, d2					0.4	0.4		0.1		8.5	0.0	
Delay (s)					57.9	57.7		5.2		70.3	2.7	
Level of Service					E	E		A		E	A	
Approach Delay (s)		0.0			57.7			5.2			10.4	
Approach LOS		A			E			A			B	

Intersection Summary			
HCM 2000 Control Delay	14.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	142.3	Sum of lost time (s)	20.3
Intersection Capacity Utilization	55.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	402	333	22	44	378	444	3	416	27	253	265	351
Future Volume (vph)	402	333	22	44	378	444	3	416	27	253	265	351
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5	4.1	4.1
Lane Util. Factor	0.97	1.00		1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.96	1.00	1.00		1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.97	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1841		1770	3539	1518	1716	3498		1770	1863	1501
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.59	1.00		0.31	1.00	1.00
Satd. Flow (perm)	3433	1841		1770	3539	1518	1063	3498		574	1863	1501
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	423	351	23	46	398	467	3	438	28	266	279	369
RTOR Reduction (vph)	0	1	0	0	0	328	0	3	0	0	0	236
Lane Group Flow (vph)	423	373	0	46	398	139	3	463	0	266	279	133
Confl. Peds. (#/hr)			7			12	24		8			24
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		custom	NA	custom
Protected Phases	3	8		7	4			6		5	1 2 5 6	
Permitted Phases						4	6			2		2
Actuated Green, G (s)	37.4	43.5		14.3	20.4	20.4	40.7	40.7		51.3	72.8	51.3
Effective Green, g (s)	37.4	43.5		14.3	20.4	20.4	40.7	40.7		51.3	72.8	51.3
Actuated g/C Ratio	0.26	0.31		0.10	0.14	0.14	0.29	0.29		0.36	0.51	0.36
Clearance Time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5		4.1
Vehicle Extension (s)	2.5	3.0		2.0	3.0	3.0	3.0	3.0		3.0		4.0
Lane Grp Cap (vph)	902	562		177	507	217	304	1000		258	953	541
v/s Ratio Prot	0.12	c0.20		0.03	c0.11			0.13		c0.04	c0.15	
v/s Ratio Perm						0.09	0.00			c0.33		0.09
v/c Ratio	0.47	0.66		0.26	0.79	0.64	0.01	0.46		1.03	0.29	0.25
Uniform Delay, d1	44.1	43.0		59.1	58.8	57.5	36.4	41.8		46.8	20.0	31.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.92	0.90	0.54
Incremental Delay, d2	0.3	2.9		0.3	7.8	6.3	0.1	1.5		64.0	0.1	0.3
Delay (s)	44.4	46.0		59.4	66.7	63.8	36.4	43.4		106.8	18.0	17.5
Level of Service	D	D		E	E	E	D	D		F	B	B
Approach Delay (s)		45.1			64.8			43.3			43.7	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	50.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	142.3	Sum of lost time (s)	20.3
Intersection Capacity Utilization	71.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	251	59	12	422	219	13
Future Volume (veh/h)	251	59	12	422	219	13
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	292	69	14	491	255	15
Adj No. of Lanes	2	0	1	1	0	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	1518	353	754	992	335	20
Arrive On Green	0.53	0.53	0.53	0.53	0.20	0.20
Sat Flow, veh/h	2942	663	1014	1863	1659	98
Grp Volume(v), veh/h	180	181	14	491	271	0
Grp Sat Flow(s),veh/h/ln	1770	1742	1014	1863	1763	0
Q Serve(g_s), s	1.4	1.5	0.2	4.5	3.9	0.0
Cycle Q Clear(g_c), s	1.4	1.5	1.6	4.5	3.9	0.0
Prop In Lane		0.38	1.00		0.94	0.06
Lane Grp Cap(c), veh/h	943	928	754	992	356	0
V/C Ratio(X)	0.19	0.20	0.02	0.49	0.76	0.00
Avail Cap(c_a), veh/h	1851	1823	1275	1949	1449	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	3.3	3.3	3.7	4.0	10.1	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.5	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.7	0.1	2.3	2.0	0.0
LnGrp Delay(d),s/veh	3.4	3.4	3.7	4.5	11.4	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h	361			505	271	
Approach Delay, s/veh	3.4			4.5	11.4	
Approach LOS	A			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		8.4		18.4				18.4
Change Period (Y+Rc), s		3.0		4.1				4.1
Max Green Setting (Gmax), s		22.0		28.0				28.0
Max Q Clear Time (g_c+I1), s		5.9		3.5				6.5
Green Ext Time (p_c), s		0.4		8.2				7.8

Intersection Summary	
HCM 2010 Ctrl Delay	5.8
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	328	33	52	121	28	35	36	50	12	24	18
Future Volume (veh/h)	105	328	33	52	121	28	35	36	50	12	24	18
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	1900	1863	1900
Adj Flow Rate, veh/h	115	360	36	57	133	31	38	40	55	13	26	20
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	211	976	97	195	832	188	157	165	139	38	76	58
Arrive On Green	0.12	0.30	0.30	0.11	0.29	0.29	0.09	0.09	0.09	0.05	0.05	0.05
Sat Flow, veh/h	1774	3250	323	1774	2861	648	1774	1863	1570	763	1531	1184
Grp Volume(v), veh/h	115	195	201	57	81	83	38	40	55	31	0	28
Grp Sat Flow(s),veh/h/ln	1774	1770	1804	1774	1770	1739	1774	1863	1570	1825	0	1654
Q Serve(g_s), s	2.2	3.2	3.2	1.1	1.2	1.3	0.7	0.7	1.2	0.6	0.0	0.6
Cycle Q Clear(g_c), s	2.2	3.2	3.2	1.1	1.2	1.3	0.7	0.7	1.2	0.6	0.0	0.6
Prop In Lane	1.00		0.18	1.00		0.37	1.00		1.00	0.42		0.72
Lane Grp Cap(c), veh/h	211	531	541	195	514	506	157	165	139	90	0	82
V/C Ratio(X)	0.54	0.37	0.37	0.29	0.16	0.16	0.24	0.24	0.40	0.35	0.00	0.34
Avail Cap(c_a), veh/h	973	1941	1979	3016	3979	3911	1216	1277	1077	2301	0	2086
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.1	10.0	10.1	14.9	9.6	9.6	15.5	15.5	15.7	16.8	0.0	16.8
Incr Delay (d2), s/veh	0.8	0.4	0.4	0.3	0.1	0.2	0.3	0.3	0.7	0.8	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	1.1	1.6	1.6	0.5	0.6	0.6	0.4	0.4	0.5	0.3	0.0	0.3
LnGrp Delay(d),s/veh	15.9	10.5	10.5	15.2	9.8	9.8	15.8	15.8	16.4	17.6	0.0	17.7
LnGrp LOS	B	B	B	B	A	A	B	B	B	B		B
Approach Vol, veh/h		511			221			133			59	
Approach Delay, s/veh		11.7			11.2			16.0			17.6	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		7.2	8.0	15.4		5.8	8.3	15.1
Change Period (Y+Rc), s		4.0	4.0	4.5		4.0	4.0	4.5
Max Green Setting (Gmax), s		25.0	62.0	40.0		46.0	20.0	82.0
Max Q Clear Time (g_c+I1), s		3.2	3.1	5.2		2.6	4.2	3.3
Green Ext Time (p_c), s		0.2	0.1	3.6		0.2	0.1	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	12.6
HCM 2010 LOS	B

Notes

Movement	EBT	EBR	WBL	WBT	NBL	NBR	NEL	NER
Lane Configurations								
Traffic Volume (veh/h)	103	11	944	124	177	632	0	0
Future Volume (veh/h)	103	11	944	124	177	632	0	0
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	110	12	1103	0	188	75		
Adj No. of Lanes	2	0	2	1	1	1		
Peak Hour Factor	0.94	0.94	0.94	0.90	0.94	0.94		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	1245	134	1153	605	247	220		
Arrive On Green	0.39	0.39	0.32	0.00	0.14	0.14		
Sat Flow, veh/h	3317	347	3548	1863	1774	1583		
Grp Volume(v), veh/h	60	62	1103	0	188	75		
Grp Sat Flow(s),veh/h/ln	1770	1802	1774	1863	1774	1583		
Q Serve(g_s), s	1.7	1.8	24.4	0.0	8.2	3.4		
Cycle Q Clear(g_c), s	1.7	1.8	24.4	0.0	8.2	3.4		
Prop In Lane		0.19	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	683	695	1153	605	247	220		
V/C Ratio(X)	0.09	0.09	0.96	0.00	0.76	0.34		
Avail Cap(c_a), veh/h	683	695	1153	605	532	475		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.16	0.00	1.00	1.00		
Uniform Delay (d), s/veh	15.6	15.6	26.4	0.0	33.2	31.1		
Incr Delay (d2), s/veh	0.3	0.3	4.2	0.0	6.8	1.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.9	0.9	12.5	0.0	4.4	1.6		
LnGrp Delay(d),s/veh	15.9	15.9	30.6	0.0	40.0	32.4		
LnGrp LOS	B	B	C		D	C		
Approach Vol, veh/h	122			1103	263			
Approach Delay, s/veh	15.9			30.6	37.8			
Approach LOS	B			C	D			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		34.9				30.0		15.1
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		18.0				26.0		24.0
Max Q Clear Time (g_c+I1), s		3.8				26.4		10.2
Green Ext Time (p_c), s		0.6				0.0		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.7
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	16	719	1061	35	13	7
Future Volume (veh/h)	16	719	1061	35	13	7
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	19	856	1263	42	15	8
Adj No. of Lanes	1	1	2	1	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	289	962	1291	1277	522	432
Arrive On Green	0.23	0.23	0.38	0.69	0.28	0.28
Sat Flow, veh/h	1242	1583	3442	1863	1863	1541
Grp Volume(v), veh/h	19	856	1263	42	15	8
Grp Sat Flow(s),veh/h/ln	1242	1583	1721	1863	1863	1541
Q Serve(g_s), s	1.4	27.0	42.0	0.8	0.7	0.4
Cycle Q Clear(g_c), s	1.4	27.0	42.0	0.8	0.7	0.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	289	962	1291	1277	522	432
V/C Ratio(X)	0.07	0.89	0.98	0.03	0.03	0.02
Avail Cap(c_a), veh/h	289	962	1291	1277	522	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.68	0.68	0.69	0.69	1.00	1.00
Uniform Delay (d), s/veh	34.7	19.4	35.8	5.9	30.3	30.2
Incr Delay (d2), s/veh	0.1	7.4	16.0	0.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	40.1	22.7	0.4	0.4	0.2
LnGrp Delay(d),s/veh	34.7	26.8	51.8	5.9	30.4	30.3
LnGrp LOS	C	C	D	A	C	C
Approach Vol, veh/h	875			1305	23	
Approach Delay, s/veh	27.0			50.3	30.4	
Approach LOS	C			D	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		84.5		31.5	47.0	37.5		
Change Period (Y+Rc), s		5.0		4.5	3.5	5.0		
Max Green Setting (Gmax), s		79.0		27.0	43.5	32.0		
Max Q Clear Time (g_c+I1), s		2.8		29.0	44.0	2.7		
Green Ext Time (p_c), s		0.2		0.0	0.0	0.1		

Intersection Summary	
HCM 2010 Ctrl Delay	40.8
HCM 2010 LOS	D



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	277	179	917	198	48	684
Future Volume (vph)	277	179	917	198	48	684
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	3.5	5.0		3.5	4.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.97		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3431		1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3431		1770	3539
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	304	197	1008	218	53	752
RTOR Reduction (vph)	0	153	13	0	0	0
Lane Group Flow (vph)	304	44	1213	0	53	752
Confl. Peds. (#/hr)				2		
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	
Permitted Phases		8				6
Actuated Green, G (s)	18.9	18.9	38.0		5.7	48.2
Effective Green, g (s)	18.9	18.9	38.0		5.7	48.2
Actuated g/C Ratio	0.22	0.22	0.45		0.07	0.57
Clearance Time (s)	3.5	3.5	5.0		3.5	4.0
Vehicle Extension (s)	2.0	2.0	4.0		2.0	4.0
Lane Grp Cap (vph)	398	356	1552		120	2030
v/s Ratio Prot	c0.17		c0.35		c0.03	
v/s Ratio Perm		0.03				0.21
v/c Ratio	0.76	0.12	0.78		0.44	0.37
Uniform Delay, d1	30.5	26.0	19.5		37.6	9.7
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	7.6	0.1	4.0		0.9	0.5
Delay (s)	38.1	26.0	23.5		38.6	10.2
Level of Service	D	C	C		D	B
Approach Delay (s)	33.3		23.5			12.1
Approach LOS	C		C			B

Intersection Summary			
HCM 2000 Control Delay	21.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	84.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	61.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	131	7	77	50	266	2	815	137	197	712	128
Future Volume (veh/h)	58	131	7	77	50	266	2	815	137	197	712	128
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.98	1.00		1.00	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	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	66	149	8	88	57	302	2	926	156	224	809	145
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	113	424	80	33	429	4	1275	215	269	1063	892
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.00	0.42	0.42	0.15	0.57	0.57
Sat Flow, veh/h	0	410	1537	0	121	1556	1774	3030	510	1774	1863	1564
Grp Volume(v), veh/h	215	0	8	145	0	302	2	541	541	224	809	145
Grp Sat Flow(s),veh/h/ln	410	0	1537	121	0	1556	1774	1770	1770	1774	1863	1564
Q Serve(g_s), s	0.0	0.0	0.3	0.0	0.0	12.7	0.1	18.5	18.5	8.9	23.9	3.2
Cycle Q Clear(g_c), s	20.0	0.0	0.3	20.0	0.0	12.7	0.1	18.5	18.5	8.9	23.9	3.2
Prop In Lane	0.31		1.00	0.61		1.00	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	178	0	424	113	0	429	4	745	745	269	1063	892
V/C Ratio(X)	1.21	0.00	0.02	1.28	0.00	0.70	0.52	0.73	0.73	0.83	0.76	0.16
Avail Cap(c_a), veh/h	178	0	424	113	0	429	489	975	976	367	1063	892
HCM Platoon Ratio	1.00	1.00	1.00	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	25.0	0.0	19.1	30.6	0.0	23.6	36.2	17.5	17.5	29.9	11.8	7.4
Incr Delay (d2), s/veh	135.0	0.0	0.0	179.0	0.0	4.9	34.6	2.5	2.5	8.4	3.5	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	10.2	0.0	0.1	7.8	0.0	6.0	0.1	9.5	9.5	5.0	13.2	1.4
LnGrp Delay(d),s/veh	160.0	0.0	19.2	209.6	0.0	28.5	70.8	20.0	20.1	38.3	15.3	7.5
LnGrp LOS	F		B	F		C	E	C	C	D	B	A
Approach Vol, veh/h		223			447			1084			1178	
Approach Delay, s/veh		154.9			87.2			20.1			18.7	
Approach LOS		F			F			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	35.0		23.5	3.2	45.9		23.5
Change Period (Y+Rc), s	3.0	4.5		3.5	3.0	4.5		3.5
Max Green Setting (Gmax), s	15.0	40.0		20.0	20.0	35.0		20.0
Max Q Clear Time (g_c+I1), s	10.9	20.5		22.0	2.1	25.9		22.0
Green Ext Time (p_c), s	0.1	10.0		0.0	0.0	8.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	208	234	158	108	230	9	50	292	64	76	380	51
Future Volume (veh/h)	208	234	158	108	230	9	50	292	64	76	380	51
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)	0.98		0.97	0.99		0.97	0.99		0.95	0.99		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	244	165	112	240	9	52	304	67	79	396	53
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	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	527	461	312	391	802	30	306	580	128	359	633	85
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1108	1023	692	965	1782	67	928	1465	323	992	1599	214
Grp Volume(v), veh/h	217	0	409	112	0	249	52	0	371	79	0	449
Grp Sat Flow(s),veh/h/ln	1108	0	1715	965	0	1849	928	0	1788	992	0	1813
Q Serve(g_s), s	9.1	0.0	10.1	5.5	0.0	5.0	2.8	0.0	9.3	3.9	0.0	11.6
Cycle Q Clear(g_c), s	14.1	0.0	10.1	15.6	0.0	5.0	14.4	0.0	9.3	13.1	0.0	11.6
Prop In Lane	1.00		0.40	1.00		0.04	1.00		0.18	1.00		0.12
Lane Grp Cap(c), veh/h	527	0	772	391	0	832	306	0	708	359	0	718
V/C Ratio(X)	0.41	0.00	0.53	0.29	0.00	0.30	0.17	0.00	0.52	0.22	0.00	0.63
Avail Cap(c_a), veh/h	786	0	1172	616	0	1263	414	0	916	475	0	929
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.7	0.0	11.6	17.3	0.0	10.2	20.0	0.0	13.5	18.5	0.0	14.2
Incr Delay (d2), s/veh	0.7	0.0	0.8	0.6	0.0	0.3	0.4	0.0	0.9	0.4	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	4.8	1.5	0.0	2.6	0.7	0.0	4.7	1.1	0.0	6.0
LnGrp Delay(d),s/veh	15.4	0.0	12.4	17.8	0.0	10.5	20.3	0.0	14.3	18.9	0.0	15.5
LnGrp LOS	B		B	B		B	C		B	B		B
Approach Vol, veh/h		626			361			423			528	
Approach Delay, s/veh		13.5			12.8			15.1			16.0	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		30.8		27.7		30.8		27.7
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		40.0		30.0		40.0		30.0
Max Q Clear Time (g_c+I1), s		16.1		15.1		17.6		16.4
Green Ext Time (p_c), s		9.1		7.2		8.8		6.8

Intersection Summary	
HCM 2010 Ctrl Delay	14.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	49	0	0	223	0	559	21	197	427	35
Future Vol, veh/h	0	0	49	0	0	223	0	559	21	197	427	35
Conflicting Peds, #/hr	0	0	3	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	52	0	0	237	0	595	22	210	454	37

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	476	-	-	606	-	0	0	617	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	0	589	0	0	497	0	-	-	963	-	-
Stage 1	0	0	-	0	0	-	0	-	-	-	-	-
Stage 2	0	0	-	0	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	587	-	-	497	-	-	-	963	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.7	18.7	0	2.9
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	587	497	963	-	-
HCM Lane V/C Ratio	-	-	0.089	0.477	0.218	-	-
HCM Control Delay (s)	-	-	11.7	18.7	9.8	-	-
HCM Lane LOS	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	-	-	0.3	2.5	0.8	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	29	32	176	104	33
Future Vol, veh/h	17	29	32	176	104	33
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	-	110	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	31	34	185	109	35

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	288	72	144	0	-	0
Stage 1	127	-	-	-	-	-
Stage 2	161	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	679	975	1436	-	-	-
Stage 1	885	-	-	-	-	-
Stage 2	851	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	663	975	1436	-	-	-
Mov Cap-2 Maneuver	663	-	-	-	-	-
Stage 1	864	-	-	-	-	-
Stage 2	851	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	1.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1436	-	831	-	-
HCM Lane V/C Ratio	0.023	-	0.058	-	-
HCM Control Delay (s)	7.6	-	9.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	0

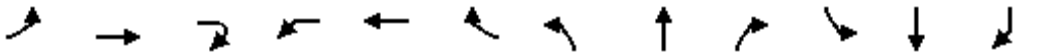
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	466	8	2	172	1	0
Future Vol, veh/h	466	8	2	172	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	507	9	2	187	1	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	515	0	702	511
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	191	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1051	-	404	563
Stage 1	-	-	-	-	602	-
Stage 2	-	-	-	-	841	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1051	-	403	563
Mov Cap-2 Maneuver	-	-	-	-	403	-
Stage 1	-	-	-	-	602	-
Stage 2	-	-	-	-	839	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	403	-	-	1051	-
HCM Lane V/C Ratio	0.003	-	-	0.002	-
HCM Control Delay (s)	14	-	-	8.4	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

EXISTING PLUS PROJECT PM



Movement	EBL	EBT	EBR2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	579	174	664	220	18	137	4	359	17	11	5
Future Volume (vph)	12	579	174	664	220	18	137	4	359	17	11	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.1	5.1	4.0	4.1		4.1	4.1	4.1		3.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.86	0.85		0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.97	
Satd. Flow (prot)	1770	3539	1583	3433	3499		1681	1460	1504		1779	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.97	
Satd. Flow (perm)	1770	3539	1583	3433	3499		1681	1460	1504		1779	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	12	579	174	664	220	18	137	4	359	17	11	5
RTOR Reduction (vph)	0	0	106	0	3	0	0	145	157	0	0	0
Lane Group Flow (vph)	12	579	68	664	235	0	123	45	30	0	33	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases			6						4			
Actuated Green, G (s)	1.1	20.5	20.5	26.3	46.7		12.6	12.6	12.6		4.1	
Effective Green, g (s)	1.1	20.5	20.5	26.3	46.7		12.6	12.6	12.6		4.1	
Actuated g/C Ratio	0.01	0.26	0.26	0.33	0.59		0.16	0.16	0.16		0.05	
Clearance Time (s)	4.0	5.1	5.1	4.0	4.1		4.1	4.1	4.1		3.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	24	910	407	1132	2050		265	230	237		91	
v/s Ratio Prot	0.01	c0.16		c0.19	0.07		c0.07	0.03			c0.02	
v/s Ratio Perm			0.04						0.02			
v/c Ratio	0.50	0.64	0.17	0.59	0.11		0.46	0.20	0.12		0.36	
Uniform Delay, d1	39.0	26.3	23.0	22.2	7.3		30.5	29.2	28.8		36.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	15.4	1.5	0.2	0.8	0.0		1.3	0.4	0.2		2.5	
Delay (s)	54.5	27.8	23.2	23.0	7.3		31.8	29.6	29.1		39.0	
Level of Service	D	C	C	C	A		C	C	C		D	
Approach Delay (s)		27.1			18.8			29.9			39.0	
Approach LOS		C			B			C			D	

Intersection Summary			
HCM 2000 Control Delay	24.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	79.7	Sum of lost time (s)	16.2
Intersection Capacity Utilization	61.8%	ICU Level of Service	B
Analysis Period (min)	15		

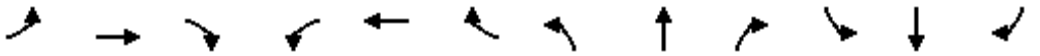
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	12	785	7	16	7	746	270	14	4	166	141
Future Volume (veh/h)	158	12	785	7	16	7	746	270	14	4	166	141
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		0.99	1.00		0.95	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	185	0	872	8	18	8	829	300	16	4	184	157
Adj No. of Lanes	2	0	2	0	2	0	2	2	0	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1053	0	929	86	193	86	890	1346	71	7	495	215
Arrive On Green	0.30	0.00	0.30	0.10	0.10	0.10	0.26	0.39	0.39	0.00	0.14	0.14
Sat Flow, veh/h	3548	0	3131	816	1845	824	3442	3415	181	1774	3539	1539
Grp Volume(v), veh/h	185	0	872	18	0	16	829	155	161	4	184	157
Grp Sat Flow(s),veh/h/ln	1774	0	1566	1822	0	1664	1721	1770	1827	1774	1770	1539
Q Serve(g_s), s	3.5	0.0	24.8	0.8	0.0	0.8	21.5	5.3	5.4	0.2	4.3	8.9
Cycle Q Clear(g_c), s	3.5	0.0	24.8	0.8	0.0	0.8	21.5	5.3	5.4	0.2	4.3	8.9
Prop In Lane	1.00		1.00	0.45		0.50	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	1053	0	929	191	0	174	890	698	720	7	495	215
V/C Ratio(X)	0.18	0.00	0.94	0.09	0.00	0.09	0.93	0.22	0.22	0.53	0.37	0.73
Avail Cap(c_a), veh/h	1939	0	1712	597	0	546	1129	967	999	194	1161	505
HCM Platoon Ratio	1.00	1.00	1.00	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	23.9	0.0	31.4	37.0	0.0	37.0	33.1	18.4	18.4	45.5	35.7	37.7
Incr Delay (d2), s/veh	0.0	0.0	2.6	0.1	0.0	0.1	10.5	0.1	0.1	20.0	0.2	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	11.0	0.4	0.0	0.4	11.5	2.6	2.7	0.1	2.1	3.9
LnGrp Delay(d),s/veh	23.9	0.0	34.0	37.1	0.0	37.1	43.6	18.5	18.5	65.5	35.9	39.5
LnGrp LOS	C		C	D		D	D	B	B	E	D	D
Approach Vol, veh/h		1057			34			1145			345	
Approach Delay, s/veh		32.2			37.1			36.7			37.9	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		32.2	26.7	17.9		14.7	3.4	41.2
Change Period (Y+Rc), s		5.1	3.0	5.1		5.1	3.0	5.1
Max Green Setting (Gmax), s		50.0	30.0	30.0		30.0	10.0	50.0
Max Q Clear Time (g_c+I1), s		26.8	23.5	10.9		2.8	2.2	7.4
Green Ext Time (p_c), s		0.3	0.1	0.5		0.0	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	35.0
HCM 2010 LOS	D

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	0	940	0	0	0	0	853	547	380	578	0
Future Volume (vph)	177	0	940	0	0	0	0	853	547	380	578	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Lane Util. Factor		1.00	0.76					0.86	0.86	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.97	0.85	1.00	1.00	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1770	3610					4653	1362	3433	3539	
Flt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1770	3610					4653	1362	3433	3539	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	181	0	959	0	0	0	0	870	558	388	590	0
RTOR Reduction (vph)	0	0	755	0	0	0	0	47	207	0	0	0
Lane Group Flow (vph)	0	181	204	0	0	0	0	1057	117	388	590	0
Confl. Peds. (#/hr)							11					11
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		10.6	10.6					18.0	18.0	9.6	23.2	
Effective Green, g (s)		10.6	10.6					18.0	18.0	9.6	23.2	
Actuated g/C Ratio		0.21	0.21					0.36	0.36	0.19	0.46	
Clearance Time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Vehicle Extension (s)		0.2	0.2					0.2	0.2	0.2	1.0	
Lane Grp Cap (vph)		375	766					1678	491	660	1645	
v/s Ratio Prot								c0.23		c0.11	0.17	
v/s Ratio Perm		0.10	0.06						0.09			
v/c Ratio		0.48	0.27					0.63	0.24	0.59	0.36	
Uniform Delay, d1		17.2	16.4					13.2	11.2	18.3	8.6	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.4	0.1					0.5	0.1	0.9	0.0	
Delay (s)		17.6	16.5					13.7	11.2	19.2	8.6	
Level of Service		B	B					B	B	B	A	
Approach Delay (s)		16.7			0.0			13.2			12.8	
Approach LOS		B			A			B			B	

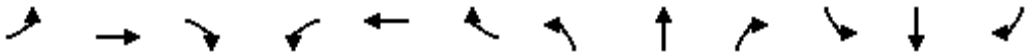
Intersection Summary			
HCM 2000 Control Delay	14.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	49.9	Sum of lost time (s)	11.7
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	204	172	42	67	168	131	902	42	399	1014	105
Future Volume (veh/h)	330	204	172	42	67	168	131	902	42	399	1014	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		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	344	212	179	44	70	0	136	940	44	416	1056	0
Adj No. of Lanes	2	1	1	1	1	1	2	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	597	323	273	152	159	135	310	1280	60	717	2003	624
Arrive On Green	0.17	0.17	0.17	0.09	0.09	0.00	0.09	0.26	0.26	0.21	0.39	0.00
Sat Flow, veh/h	3442	1863	1572	1774	1863	1583	3442	4976	233	3442	5085	1583
Grp Volume(v), veh/h	344	212	179	44	70	0	136	640	344	416	1056	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1572	1774	1863	1583	1721	1695	1818	1721	1695	1583
Q Serve(g_s), s	5.5	6.3	6.3	1.4	2.1	0.0	2.2	10.3	10.3	6.5	9.5	0.0
Cycle Q Clear(g_c), s	5.5	6.3	6.3	1.4	2.1	0.0	2.2	10.3	10.3	6.5	9.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	597	323	273	152	159	135	310	872	468	717	2003	624
V/C Ratio(X)	0.58	0.66	0.66	0.29	0.44	0.00	0.44	0.73	0.74	0.58	0.53	0.00
Avail Cap(c_a), veh/h	1966	1064	898	715	751	638	1156	1418	761	1156	2127	662
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.6	22.9	22.9	25.5	25.9	0.0	25.7	20.2	20.3	21.2	13.8	0.0
Incr Delay (d2), s/veh	0.3	0.8	1.0	0.4	0.7	0.0	0.4	0.5	0.9	0.3	0.1	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	2.6	3.3	2.8	0.7	1.1	0.0	1.1	4.9	5.3	3.1	4.4	0.0
LnGrp Delay(d),s/veh	22.9	23.8	23.9	25.9	26.6	0.0	26.0	20.7	21.1	21.5	13.9	0.0
LnGrp LOS	C	C	C	C	C		C	C	C	C	B	
Approach Vol, veh/h		735			114			1120			1472	
Approach Delay, s/veh		23.4			26.3			21.5			16.0	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.5	19.4		14.4	8.4	27.5		9.2
Change Period (Y+Rc), s	4.1	* 4.1		4.1	3.0	4.1		4.1
Max Green Setting (Gmax), s	20.0	* 25		34.0	20.0	24.9		24.0
Max Q Clear Time (g_c+I1), s	8.5	12.3		8.3	4.2	11.5		4.1
Green Ext Time (p_c), s	3.9	3.0		1.2	0.1	4.2		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	19.7
HCM 2010 LOS	B

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	1	39	0	239	1	836	96	182	1045	1
Future Volume (vph)	0	0	1	39	0	239	1	836	96	182	1045	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.1	4.1	4.1	4.1		3.5	4.1	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00			1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt		0.85			1.00	0.85	1.00	0.98		1.00	1.00	
Flt Protected		1.00			0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		0			1593	1400	1593	4485		1593	4576	
Flt Permitted		1.00			0.95	1.00	0.25	1.00		0.95	1.00	
Satd. Flow (perm)		0			1593	1400	424	4485		1593	4576	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	1	40	0	246	1	862	99	188	1077	1
RTOR Reduction (vph)	0	1	0	0	0	212	0	8	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	40	34	1	953	0	188	1078	0
Confl. Peds. (#/hr)						3			19			22
Turn Type				Perm	NA	Perm	custom	NA		Prot	NA	
Protected Phases					1			2 8		7	2 3 4	
Permitted Phases				1		1	8					
Actuated Green, G (s)		0.0			21.1	21.1	40.6	81.2		21.9	107.2	
Effective Green, g (s)		0.0			21.1	21.1	40.6	81.2		21.9	107.2	
Actuated g/C Ratio		0.00			0.14	0.14	0.27	0.54		0.15	0.71	
Clearance Time (s)					4.1	4.1	4.1			3.5		
Vehicle Extension (s)					2.0	2.0	3.0			2.0		
Lane Grp Cap (vph)		0			223	196	114	2416		231	3255	
v/s Ratio Prot								c0.21		c0.12	c0.24	
v/s Ratio Perm					0.03	0.02	0.00					
v/c Ratio		0.00			0.18	0.18	0.01	0.39		0.81	0.33	
Uniform Delay, d1		75.3			57.2	57.1	40.3	20.3		62.4	8.2	
Progression Factor		1.00			1.00	1.00	1.07	0.64		1.00	1.00	
Incremental Delay, d2		0.0			0.1	0.2	0.0	0.1		18.4	0.1	
Delay (s)		75.3			57.3	57.3	43.0	13.2		80.8	8.3	
Level of Service		E			E	E	D	B		F	A	
Approach Delay (s)		75.3			57.3			13.2			19.1	
Approach LOS		E			E			B			B	

Intersection Summary			
HCM 2000 Control Delay	21.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	150.7	Sum of lost time (s)	20.3
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	304	330	31	37	393	379	10	250	47	272	406	407
Future Volume (vph)	304	330	31	37	393	379	10	250	47	272	406	407
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5	4.1	4.1
Lane Util. Factor	0.97	1.00		1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	0.98		1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.98	1.00		0.97	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1832		1770	3539	1540	1726	3394		1723	1863	1503
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.52	1.00		0.49	1.00	1.00
Satd. Flow (perm)	3433	1832		1770	3539	1540	948	3394		893	1863	1503
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	307	333	31	37	397	383	10	253	47	275	410	411
RTOR Reduction (vph)	0	2	0	0	0	331	0	9	0	0	0	224
Lane Group Flow (vph)	307	362	0	37	397	52	10	291	0	275	410	187
Confl. Peds. (#/hr)			9			6	22		32	32		22
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		custom	NA	custom
Protected Phases	3	8		7	4			6!		5!	1 2 5 6	
Permitted Phases						4	6			2		2
Actuated Green, G (s)	42.1	40.6		21.9	20.4	20.4	51.3	51.3		46.8	76.5	40.6
Effective Green, g (s)	42.1	40.6		21.9	20.4	20.4	51.3	51.3		46.8	76.5	40.6
Actuated g/C Ratio	0.28	0.27		0.15	0.14	0.14	0.34	0.34		0.31	0.51	0.27
Clearance Time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5		4.1
Vehicle Extension (s)	2.5	3.0		2.0	3.0	3.0	3.0	3.0		3.0		4.0
Lane Grp Cap (vph)	959	493		257	479	208	322	1155		311	945	404
v/s Ratio Prot	0.09	c0.20		0.02	c0.11			0.09		c0.04	c0.22	
v/s Ratio Perm						0.03	0.01			c0.24		0.12
v/c Ratio	0.32	0.73		0.14	0.83	0.25	0.03	0.25		0.88	0.43	0.46
Uniform Delay, d1	43.0	50.1		56.2	63.4	58.3	33.1	35.9		52.6	23.4	45.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.02	1.13
Incremental Delay, d2	0.1	5.6		0.1	11.3	0.6	0.2	0.5		23.8	0.1	1.1
Delay (s)	43.1	55.7		56.3	74.7	58.9	33.3	36.4		76.4	24.0	53.0
Level of Service	D	E		E	E	E	C	D		E	C	D
Approach Delay (s)		50.0			66.5			36.3			48.0	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	52.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	150.7	Sum of lost time (s)	20.3
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	511	134	9	191	86	18
Future Volume (veh/h)	511	134	9	191	86	18
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	594	156	10	222	100	21
Adj No. of Lanes	2	0	1	1	0	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	1531	401	575	1028	256	54
Arrive On Green	0.55	0.55	0.55	0.55	0.18	0.18
Sat Flow, veh/h	2867	727	708	1863	1413	297
Grp Volume(v), veh/h	378	372	10	222	122	0
Grp Sat Flow(s),veh/h/ln	1770	1731	708	1863	1724	0
Q Serve(g_s), s	3.2	3.3	0.2	1.6	1.7	0.0
Cycle Q Clear(g_c), s	3.2	3.3	3.5	1.6	1.7	0.0
Prop In Lane		0.42	1.00		0.82	0.17
Lane Grp Cap(c), veh/h	977	956	575	1028	312	0
V/C Ratio(X)	0.39	0.39	0.02	0.22	0.39	0.00
Avail Cap(c_a), veh/h	1865	1824	931	1963	1427	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	3.4	3.4	4.4	3.0	9.6	0.0
Incr Delay (d2), s/veh	0.4	0.4	0.0	0.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.6	0.0	0.8	0.8	0.0
LnGrp Delay(d),s/veh	3.8	3.8	4.4	3.2	9.9	0.0
LnGrp LOS	A	A	A	A	A	
Approach Vol, veh/h	750			232	122	
Approach Delay, s/veh	3.8			3.2	9.9	
Approach LOS	A			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		7.8		18.8				18.8
Change Period (Y+Rc), s		3.0		4.1				4.1
Max Green Setting (Gmax), s		22.0		28.0				28.0
Max Q Clear Time (g_c+I1), s		3.7		5.3				5.5
Green Ext Time (p_c), s		0.1		9.1				9.1

Intersection Summary	
HCM 2010 Ctrl Delay	4.3
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	308	30	155	167	20	39	24	48	51	58	47
Future Volume (veh/h)	46	308	30	155	167	20	39	24	48	51	58	47
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	1900	1863	1900
Adj Flow Rate, veh/h	55	371	36	187	201	24	38	42	58	61	70	57
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	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	167	802	77	272	972	115	191	201	164	115	135	113
Arrive On Green	0.09	0.25	0.25	0.15	0.30	0.30	0.11	0.11	0.11	0.10	0.10	0.10
Sat Flow, veh/h	1774	3261	315	1774	3189	376	1774	1863	1522	1105	1294	1080
Grp Volume(v), veh/h	55	200	207	187	110	115	38	42	58	100	0	88
Grp Sat Flow(s),veh/h/ln	1774	1770	1806	1774	1770	1796	1774	1863	1522	1807	0	1672
Q Serve(g_s), s	1.2	4.1	4.1	4.2	2.0	2.0	0.8	0.9	1.5	2.2	0.0	2.1
Cycle Q Clear(g_c), s	1.2	4.1	4.1	4.2	2.0	2.0	0.8	0.9	1.5	2.2	0.0	2.1
Prop In Lane	1.00		0.17	1.00		0.21	1.00		1.00	0.61		0.65
Lane Grp Cap(c), veh/h	167	435	444	272	539	547	191	201	164	189	0	174
V/C Ratio(X)	0.33	0.46	0.47	0.69	0.20	0.21	0.20	0.21	0.35	0.53	0.00	0.51
Avail Cap(c_a), veh/h	836	1669	1703	2593	3421	3471	1045	1098	897	1960	0	1813
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.0	13.6	13.6	17.0	10.9	11.0	17.3	17.3	17.6	18.0	0.0	18.0
Incr Delay (d2), s/veh	0.4	0.8	0.8	1.2	0.2	0.2	0.2	0.2	0.5	0.9	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.0	2.2	2.2	1.0	1.0	0.4	0.5	0.6	1.2	0.0	1.0
LnGrp Delay(d),s/veh	18.4	14.4	14.4	18.2	11.1	11.1	17.4	17.5	18.0	18.9	0.0	18.8
LnGrp LOS	B	B	B	B	B	B	B	B	B	B		B
Approach Vol, veh/h		462			412			138			188	
Approach Delay, s/veh		14.8			14.3			17.7			18.8	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		8.6	10.5	14.9		8.4	8.0	17.4
Change Period (Y+Rc), s		4.0	4.0	4.5		4.0	4.0	4.5
Max Green Setting (Gmax), s		25.0	62.0	40.0		46.0	20.0	82.0
Max Q Clear Time (g_c+I1), s		3.5	6.2	6.1		4.2	3.2	4.0
Green Ext Time (p_c), s		0.3	0.3	4.1		0.7	0.0	4.3

Intersection Summary	
HCM 2010 Ctrl Delay	15.6
HCM 2010 LOS	B

Notes

Movement	EBT	EBR	WBL	WBT	NBL	NBR	NEL	NER
Lane Configurations								
Traffic Volume (veh/h)	313	29	623	87	62	440	0	0
Future Volume (veh/h)	313	29	623	87	62	440	0	0
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	340	32	745	0	67	-19		
Adj No. of Lanes	2	0	2	1	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	749	70	1258	660	96	85		
Arrive On Green	0.23	0.23	0.35	0.00	0.05	0.00		
Sat Flow, veh/h	3365	306	3548	1863	1774	1583		
Grp Volume(v), veh/h	183	189	745	0	67	-19		
Grp Sat Flow(s),veh/h/ln	1770	1809	1774	1863	1774	1583		
Q Serve(g_s), s	2.9	3.0	5.7	0.0	1.2	0.0		
Cycle Q Clear(g_c), s	2.9	3.0	5.7	0.0	1.2	0.0		
Prop In Lane		0.17	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	405	414	1258	660	96	85		
V/C Ratio(X)	0.45	0.46	0.59	0.00	0.70	-0.22		
Avail Cap(c_a), veh/h	1375	1405	2595	1362	1287	1148		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00		
Uniform Delay (d), s/veh	11.0	11.0	8.7	0.0	15.4	0.0		
Incr Delay (d2), s/veh	1.1	1.1	0.6	0.0	12.4	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.5	1.6	2.8	0.0	0.9	0.0		
LnGrp Delay(d),s/veh	12.1	12.1	9.4	0.0	27.8	0.0		
LnGrp LOS	B	B	A		C			
Approach Vol, veh/h	372			745	48			
Approach Delay, s/veh	12.1			9.4	38.8			
Approach LOS	B			A	D			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		11.6				15.7		5.8
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		25.7				24.2		24.0
Max Q Clear Time (g_c+I1), s		5.0				7.7		3.2
Green Ext Time (p_c), s		2.8				4.1		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	11.4
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	75	678	665	38	97	45
Future Volume (veh/h)	75	678	665	38	97	45
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	77	699	686	39	100	46
Adj No. of Lanes	1	1	2	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	454	977	866	837	242	205
Arrive On Green	0.37	0.37	0.25	0.45	0.13	0.13
Sat Flow, veh/h	1242	1583	3442	1863	1863	1578
Grp Volume(v), veh/h	77	699	686	39	100	46
Grp Sat Flow(s),veh/h/ln	1242	1583	1721	1863	1863	1578
Q Serve(g_s), s	2.2	15.6	9.6	0.6	2.5	1.3
Cycle Q Clear(g_c), s	2.2	15.6	9.6	0.6	2.5	1.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	454	977	866	837	242	205
V/C Ratio(X)	0.17	0.72	0.79	0.05	0.41	0.22
Avail Cap(c_a), veh/h	652	1229	3145	2952	1123	951
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.0	6.7	18.0	8.0	20.6	20.1
Incr Delay (d2), s/veh	0.1	0.9	0.6	0.0	1.6	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	14.0	4.6	0.3	1.4	0.6
LnGrp Delay(d),s/veh	11.1	7.7	18.6	8.0	22.2	20.8
LnGrp LOS	B	A	B	A	C	C
Approach Vol, veh/h	776			725	146	
Approach Delay, s/veh	8.0			18.1	21.8	
Approach LOS	A			B	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		28.1		23.3	16.4	11.7		
Change Period (Y+Rc), s		5.0		4.5	3.5	5.0		
Max Green Setting (Gmax), s		81.5		27.0	47.0	31.0		
Max Q Clear Time (g_c+I1), s		2.6		17.6	11.6	4.5		
Green Ext Time (p_c), s		0.3		1.3	1.4	0.9		

Intersection Summary	
HCM 2010 Ctrl Delay	13.7
HCM 2010 LOS	B



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	246	83	620	331	190	585
Future Volume (vph)	246	83	620	331	190	585
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	3.5	5.0		3.5	4.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.95		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3354		1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3354		1770	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	273	92	689	368	211	650
RTOR Reduction (vph)	0	56	42	0	0	0
Lane Group Flow (vph)	273	36	1015	0	211	650
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	
Permitted Phases		8				6
Actuated Green, G (s)	17.9	17.9	34.5		15.0	54.0
Effective Green, g (s)	17.9	17.9	34.5		15.0	54.0
Actuated g/C Ratio	0.20	0.20	0.39		0.17	0.62
Clearance Time (s)	3.5	3.5	5.0		3.5	4.0
Vehicle Extension (s)	2.0	2.0	4.0		2.0	4.0
Lane Grp Cap (vph)	361	323	1320		303	2181
v/s Ratio Prot	c0.15		c0.30		c0.12	
v/s Ratio Perm		0.02				0.18
v/c Ratio	0.76	0.11	0.77		0.70	0.30
Uniform Delay, d1	32.8	28.4	23.1		34.2	7.9
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	7.8	0.1	2.9		5.5	0.1
Delay (s)	40.6	28.4	26.0		39.7	8.0
Level of Service	D	C	C		D	A
Approach Delay (s)	37.5		26.0			15.8
Approach LOS	D		C			B

Intersection Summary			
HCM 2000 Control Delay	24.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	87.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	107	11	46	21	249	10	594	137	169	771	143
Future Volume (veh/h)	83	107	11	46	21	249	10	594	137	169	771	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		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	87	113	12	48	22	262	11	625	144	178	812	151
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	75	70	456	88	25	458	20	1199	276	227	1000	846
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.01	0.42	0.42	0.13	0.54	0.54
Sat Flow, veh/h	0	241	1564	0	85	1572	1774	2856	657	1774	1863	1576
Grp Volume(v), veh/h	200	0	12	70	0	262	11	387	382	178	812	151
Grp Sat Flow(s),veh/h/ln	241	0	1564	85	0	1572	1774	1770	1743	1774	1863	1576
Q Serve(g_s), s	0.0	0.0	0.4	0.0	0.0	9.7	0.4	11.1	11.2	6.7	24.5	3.4
Cycle Q Clear(g_c), s	20.0	0.0	0.4	20.0	0.0	9.7	0.4	11.1	11.2	6.7	24.5	3.4
Prop In Lane	0.43		1.00	0.69		1.00	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	146	0	456	113	0	458	20	743	732	227	1000	846
V/C Ratio(X)	1.37	0.00	0.03	0.62	0.00	0.57	0.56	0.52	0.52	0.78	0.81	0.18
Avail Cap(c_a), veh/h	146	0	456	113	0	458	517	1032	1016	388	1000	846
HCM Platoon Ratio	1.00	1.00	1.00	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	25.3	0.0	17.3	27.3	0.0	20.7	33.8	14.8	14.8	29.0	13.0	8.1
Incr Delay (d2), s/veh	205.2	0.0	0.0	8.7	0.0	1.5	9.1	0.9	0.9	2.2	5.4	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	11.0	0.0	0.2	1.6	0.0	4.4	0.3	5.6	5.5	3.4	13.9	1.5
LnGrp Delay(d),s/veh	230.5	0.0	17.4	36.1	0.0	22.1	42.8	15.6	15.7	31.2	18.4	8.3
LnGrp LOS	F		B	D		C	D	B	B	C	B	A
Approach Vol, veh/h		212			332			780			1141	
Approach Delay, s/veh		218.4			25.1			16.0			19.1	
Approach LOS		F			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	11.8	33.3		23.5	3.8	41.3		23.5
Change Period (Y+Rc), s	3.0	4.5		3.5	3.0	4.5		3.5
Max Green Setting (Gmax), s	15.0	40.0		20.0	20.0	35.0		20.0
Max Q Clear Time (g_c+I1), s	8.7	13.2		22.0	2.4	26.5		22.0
Green Ext Time (p_c), s	0.1	15.6		0.0	0.0	7.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	36.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	147	29	58	198	17	61	218	34	87	453	93
Future Volume (veh/h)	229	147	29	58	198	17	61	218	34	87	453	93
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		0.99	0.99		0.99	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	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	249	160	32	63	215	18	66	237	37	95	492	101
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	480	609	122	512	685	57	264	704	110	502	671	138
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1137	1505	301	1180	1694	142	821	1572	245	1096	1498	307
Grp Volume(v), veh/h	249	0	192	63	0	233	66	0	274	95	0	593
Grp Sat Flow(s),veh/h/ln	1137	0	1807	1180	0	1836	821	0	1817	1096	0	1805
Q Serve(g_s), s	11.6	0.0	4.3	2.3	0.0	5.3	4.4	0.0	6.0	3.8	0.0	16.5
Cycle Q Clear(g_c), s	16.9	0.0	4.3	6.6	0.0	5.3	20.8	0.0	6.0	9.7	0.0	16.5
Prop In Lane	1.00		0.17	1.00		0.08	1.00		0.14	1.00		0.17
Lane Grp Cap(c), veh/h	480	0	731	512	0	743	264	0	814	502	0	808
V/C Ratio(X)	0.52	0.00	0.26	0.12	0.00	0.31	0.25	0.00	0.34	0.19	0.00	0.73
Avail Cap(c_a), veh/h	766	0	1186	809	0	1205	301	0	894	550	0	889
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.1	0.0	12.1	14.3	0.0	12.4	22.4	0.0	10.9	14.1	0.0	13.8
Incr Delay (d2), s/veh	1.2	0.0	0.3	0.2	0.0	0.3	0.7	0.0	0.3	0.3	0.0	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	3.8	0.0	2.2	0.8	0.0	2.7	1.0	0.0	3.0	1.2	0.0	8.8
LnGrp Delay(d),s/veh	19.4	0.0	12.4	14.4	0.0	12.7	23.1	0.0	11.3	14.4	0.0	17.1
LnGrp LOS	B		B	B		B	C		B	B		B
Approach Vol, veh/h		441			296			340			688	
Approach Delay, s/veh		16.3			13.1			13.6			16.7	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		29.1		31.8		29.1		31.8
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		40.0		30.0		40.0		30.0
Max Q Clear Time (g_c+I1), s		18.9		18.5		8.6		22.8
Green Ext Time (p_c), s		5.7		6.6		6.5		4.5

Intersection Summary	
HCM 2010 Ctrl Delay	15.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	130	0	0	132	0	402	17	549	567	46
Future Vol, veh/h	0	0	130	0	0	132	0	402	17	549	567	46
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	135	0	0	138	0	419	18	572	591	48

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	615	-	-	428	-	0	0	436	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	0	491	0	0	627	0	-	-	1124	-	-
Stage 1	0	0	-	0	0	-	0	-	-	-	-	-
Stage 2	0	0	-	0	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	491	-	-	627	-	-	-	1124	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.1	12.3	0	5.4
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	491	627	1124	-	-
HCM Lane V/C Ratio	-	-	0.276	0.219	0.509	-	-
HCM Control Delay (s)	-	-	15.1	12.3	11.5	-	-
HCM Lane LOS	-	-	C	B	B	-	-
HCM 95th %tile Q(veh)	-	-	1.1	0.8	3	-	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	59	59	38	90	308	42
Future Vol, veh/h	59	59	38	90	308	42
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	-	110	-	-	-
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	64	64	41	98	335	46

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	489	191	381	0	-	0
Stage 1	358	-	-	-	-	-
Stage 2	131	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	508	818	1174	-	-	-
Stage 1	678	-	-	-	-	-
Stage 2	881	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	490	818	1174	-	-	-
Mov Cap-2 Maneuver	490	-	-	-	-	-
Stage 1	654	-	-	-	-	-
Stage 2	881	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	2.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1174	-	613	-	-
HCM Lane V/C Ratio	0.035	-	0.209	-	-
HCM Control Delay (s)	8.2	-	12.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.8	-	-

Intersection	
Int Delay, s/veh	0.4

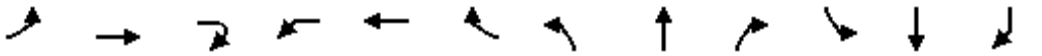
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	399	36	2	251	12	8
Future Vol, veh/h	399	36	2	251	12	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	434	39	2	273	13	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	473	0	730	453
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	277	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1089	-	389	607
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	770	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1089	-	388	607
Mov Cap-2 Maneuver	-	-	-	-	388	-
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	769	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	13.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	453	-	-	1089	-
HCM Lane V/C Ratio	0.048	-	-	0.002	-
HCM Control Delay (s)	13.3	-	-	8.3	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

BACKGROUND AM



Movement	EBL	EBT	EBR2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	237	0	931	366	7	344	7	452	12	10	5
Future Volume (vph)	8	237	0	931	366	7	344	7	452	12	10	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.1		4.0	4.1		4.1	4.1	4.1		3.0	
Lane Util. Factor	1.00	0.95		0.97	0.95		0.95	0.91	0.95		1.00	
Frt	1.00	1.00		1.00	1.00		1.00	0.89	0.85		0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99	1.00		0.98	
Satd. Flow (prot)	1770	3539		3433	3529		1681	1491	1504		1777	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99	1.00		0.98	
Satd. Flow (perm)	1770	3539		3433	3529		1681	1491	1504		1777	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	8	237	0	931	366	7	344	7	452	12	10	5
RTOR Reduction (vph)	0	0	0	0	1	0	0	88	209	0	0	0
Lane Group Flow (vph)	8	237	0	931	372	0	279	178	49	0	27	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases			6						4			
Actuated Green, G (s)	0.9	10.9		66.3	77.3		22.8	22.8	22.8		3.8	
Effective Green, g (s)	0.9	10.9		66.3	77.3		22.8	22.8	22.8		3.8	
Actuated g/C Ratio	0.01	0.09		0.55	0.64		0.19	0.19	0.19		0.03	
Clearance Time (s)	4.0	5.1		4.0	4.1		4.1	4.1	4.1		3.0	
Vehicle Extension (s)	0.2	0.2		0.2	0.2		0.2	0.2	0.2		0.2	
Lane Grp Cap (vph)	13	321		1896	2273		319	283	285		56	
v/s Ratio Prot	0.00	c0.07		c0.27	0.11		c0.17	0.12			c0.02	
v/s Ratio Perm									0.03			
v/c Ratio	0.62	0.74		0.49	0.16		0.87	0.63	0.17		0.48	
Uniform Delay, d1	59.4	53.2		16.5	8.5		47.2	44.7	40.7		57.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	48.2	7.4		0.9	0.2		21.8	3.1	0.1		2.4	
Delay (s)	107.6	60.6		17.4	8.6		69.0	47.8	40.8		59.5	
Level of Service	F	E		B	A		E	D	D		E	
Approach Delay (s)		62.1			14.9			52.9			59.5	
Approach LOS		E			B			D			E	

Intersection Summary			
HCM 2000 Control Delay	33.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	65.2%	ICU Level of Service	C
Analysis Period (min)	15		

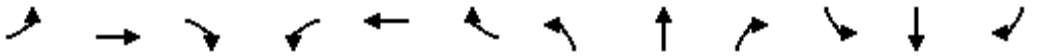
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	49	582	73	24	6	1199	392	323	4	83	102
Future Volume (veh/h)	70	49	582	73	24	6	1199	392	323	4	83	102
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		0.99	1.00		0.96	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	60	65	594	74	24	6	1223	400	330	4	85	104
Adj No. of Lanes	1	1	2	0	2	0	2	2	0	1	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	719	755	1273	139	112	28	961	707	578	7	343	147
Arrive On Green	0.41	0.41	0.41	0.08	0.08	0.08	0.28	0.39	0.39	0.00	0.10	0.10
Sat Flow, veh/h	1774	1863	3141	1774	1425	356	3442	1837	1501	1774	3539	1520
Grp Volume(v), veh/h	60	65	594	74	0	30	1223	385	345	4	85	104
Grp Sat Flow(s),veh/h/ln	1774	1863	1570	1774	0	1781	1721	1770	1568	1774	1770	1520
Q Serve(g_s), s	2.7	2.8	18.0	5.2	0.0	2.1	36.3	22.2	22.5	0.3	2.9	8.6
Cycle Q Clear(g_c), s	2.7	2.8	18.0	5.2	0.0	2.1	36.3	22.2	22.5	0.3	2.9	8.6
Prop In Lane	1.00		1.00	1.00		0.20	1.00		0.96	1.00		1.00
Lane Grp Cap(c), veh/h	719	755	1273	139	0	140	961	682	604	7	343	147
V/C Ratio(X)	0.08	0.09	0.47	0.53	0.00	0.21	1.27	0.57	0.57	0.54	0.25	0.71
Avail Cap(c_a), veh/h	719	755	1273	277	0	278	961	682	604	205	553	237
HCM Platoon Ratio	1.00	1.00	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	0.00	1.00	0.86	0.86	0.86	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	23.8	28.3	57.6	0.0	56.1	46.8	31.4	31.5	64.6	54.3	56.9
Incr Delay (d2), s/veh	0.0	0.0	0.1	13.8	0.0	3.5	129.8	0.6	0.7	21.3	0.1	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.4	7.8	3.1	0.0	1.1	34.5	10.9	9.9	0.2	1.4	3.7
LnGrp Delay(d),s/veh	23.8	23.8	28.4	71.4	0.0	59.6	176.6	32.0	32.2	85.9	54.4	59.2
LnGrp LOS	C	C	C	E		E	F	C	C	F	D	E
Approach Vol, veh/h		719			104			1953			193	
Approach Delay, s/veh		27.6			68.0			122.6			57.7	
Approach LOS		C			E			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		57.4	41.0	17.7		13.9	3.5	55.2
Change Period (Y+Rc), s		* 4.7	* 4.7	* 5.1		3.7	3.0	5.1
Max Green Setting (Gmax), s		* 36	* 36	* 20		20.3	15.0	32.9
Max Q Clear Time (g_c+I1), s		20.0	38.3	10.6		7.2	2.3	24.5
Green Ext Time (p_c), s		0.2	0.0	0.2		0.1	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	93.5
HCM 2010 LOS	F

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	604	0	738	0	0	0	0	1310	490	234	504	0
Future Volume (vph)	604	0	738	0	0	0	0	1310	490	234	504	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Lane Util. Factor		1.00	0.76					0.86	0.86	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.99	0.85	1.00	1.00	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1770	3610					4760	1362	3433	3539	
Flt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1770	3610					4760	1362	3433	3539	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	616	0	753	0	0	0	0	1337	500	239	514	0
RTOR Reduction (vph)	0	0	404	0	0	0	0	5	125	0	0	0
Lane Group Flow (vph)	0	616	349	0	0	0	0	1422	285	239	514	0
Confl. Peds. (#/hr)							11					11
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		25.2	25.2					72.1	72.1	11.0	79.1	
Effective Green, g (s)		25.2	25.2					72.1	72.1	11.0	79.1	
Actuated g/C Ratio		0.21	0.21					0.60	0.60	0.09	0.66	
Clearance Time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Vehicle Extension (s)		0.2	0.2					0.2	0.2	0.2	1.0	
Lane Grp Cap (vph)		371	758					2859	818	314	2332	
v/s Ratio Prot								c0.30		c0.07	0.15	
v/s Ratio Perm		0.35	0.10						0.21			
v/c Ratio		1.66	0.46					0.50	0.35	0.76	0.22	
Uniform Delay, d1		47.4	41.5					13.6	12.1	53.2	8.2	
Progression Factor		1.00	1.00					0.56	0.25	1.00	1.00	
Incremental Delay, d2		308.9	0.2					0.5	1.0	9.4	0.2	
Delay (s)		356.3	41.6					8.1	4.1	62.6	8.4	
Level of Service		F	D					A	A	E	A	
Approach Delay (s)		183.2			0.0			7.2			25.6	
Approach LOS		F			A			A			C	

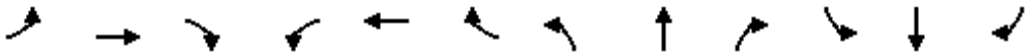
Intersection Summary			
HCM 2000 Control Delay	71.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	57	98	105	186	393	187	1259	35	216	763	262
Future Volume (veh/h)	147	57	98	105	186	393	187	1259	35	216	763	262
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	155	60	103	111	196	0	197	1325	37	227	803	0
Adj No. of Lanes	2	1	1	1	1	1	2	3	0	2	3	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	312	169	143	215	225	192	256	1246	35	1400	2983	929
Arrive On Green	0.09	0.09	0.09	0.12	0.12	0.00	0.07	0.25	0.25	0.13	0.19	0.00
Sat Flow, veh/h	3442	1863	1573	1774	1863	1583	3442	5085	142	3442	5085	1583
Grp Volume(v), veh/h	155	60	103	111	196	0	197	883	479	227	803	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1573	1774	1863	1583	1721	1695	1836	1721	1695	1583
Q Serve(g_s), s	5.1	3.6	7.6	7.0	12.4	0.0	6.7	29.4	29.4	7.0	16.1	0.0
Cycle Q Clear(g_c), s	5.1	3.6	7.6	7.0	12.4	0.0	6.7	29.4	29.4	7.0	16.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	312	169	143	215	225	192	256	831	450	1400	2983	929
V/C Ratio(X)	0.50	0.36	0.72	0.52	0.87	0.00	0.77	1.06	1.06	0.16	0.27	0.00
Avail Cap(c_a), veh/h	1030	557	471	235	247	210	574	831	450	1400	2983	929
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.82	0.82	0.00	0.82	0.82	0.82	0.88	0.88	0.00
Uniform Delay (d), s/veh	51.9	51.3	53.1	49.5	51.8	0.0	54.5	45.3	45.3	33.9	26.5	0.0
Incr Delay (d2), s/veh	0.5	0.5	2.6	0.6	20.1	0.0	1.5	46.8	56.5	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	1.9	3.4	3.5	7.6	0.0	3.3	19.1	21.9	3.4	7.6	0.0
LnGrp Delay(d),s/veh	52.4	51.7	55.7	50.0	72.0	0.0	56.1	92.1	101.8	33.9	26.5	0.0
LnGrp LOS	D	D	E	D	E		E	F	F	C	C	
Approach Vol, veh/h		318			307			1559			1030	
Approach Delay, s/veh		53.3			64.0			90.6			28.1	
Approach LOS		D			E			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	52.9	33.5		15.0	11.9	74.5		18.6
Change Period (Y+Rc), s	4.1	* 4.1		4.1	3.0	4.1		4.1
Max Green Setting (Gmax), s	23.5	* 29		35.9	20.0	32.9		15.9
Max Q Clear Time (g_c+I1), s	9.0	31.4		9.6	8.7	18.1		14.4
Green Ext Time (p_c), s	2.5	0.0		0.4	0.2	3.1		0.1

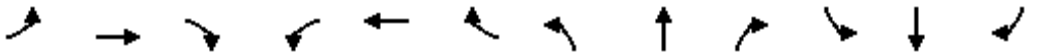
Intersection Summary	
HCM 2010 Ctrl Delay	64.3
HCM 2010 LOS	E

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	82	0	318	0	1163	173	124	842	0
Future Volume (vph)	0	0	0	82	0	318	0	1163	173	124	842	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.1	4.1		4.1		3.5	4.1	
Lane Util. Factor					1.00	1.00		0.91		1.00	0.91	
Frpb, ped/bikes					1.00	0.98		0.99		1.00	1.00	
Flpb, ped/bikes					1.00	1.00		1.00		1.00	1.00	
Frt					1.00	0.85		0.98		1.00	1.00	
Flt Protected					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)					1593	1400		4457		1593	4577	
Flt Permitted					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (perm)					1593	1400		4457		1593	4577	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	86	0	335	0	1224	182	131	886	0
RTOR Reduction (vph)	0	0	0	0	0	246	0	10	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	86	89	0	1396	0	131	886	0
Confl. Peds. (#/hr)						3			24			6
Turn Type				Perm	NA	Perm	custom	NA		Prot	NA	
Protected Phases					1			2 8		7	2 3 4	
Permitted Phases				1		1	8					
Actuated Green, G (s)					18.5	18.5		95.8		16.7	120.7	
Effective Green, g (s)					18.5	18.5		95.8		16.7	120.7	
Actuated g/C Ratio					0.13	0.13		0.65		0.11	0.82	
Clearance Time (s)					4.1	4.1				3.5		
Vehicle Extension (s)					2.0	2.0				2.0		
Lane Grp Cap (vph)					200	176		2908		181	3763	
v/s Ratio Prot								c0.31		c0.08	c0.19	
v/s Ratio Perm					0.05	c0.06						
v/c Ratio					0.43	0.51		0.48		0.72	0.24	
Uniform Delay, d1					59.3	59.9		12.9		62.8	2.9	
Progression Factor					1.00	1.00		0.52		1.00	1.00	
Incremental Delay, d2					0.5	0.8		0.1		11.5	0.0	
Delay (s)					59.8	60.7		6.9		74.3	2.9	
Level of Service					E	E		A		E	A	
Approach Delay (s)		0.0			60.6			6.9			12.1	
Approach LOS		A			E			A			B	

Intersection Summary			
HCM 2000 Control Delay	16.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	146.8	Sum of lost time (s)	20.3
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	435	334	22	45	379	476	3	425	28	285	277	361
Future Volume (vph)	435	334	22	45	379	476	3	425	28	285	277	361
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5	4.1	4.1
Lane Util. Factor	0.97	1.00		1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.96	1.00	1.00		1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.97	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1841		1770	3539	1516	1715	3498		1770	1863	1499
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.58	1.00		0.29	1.00	1.00
Satd. Flow (perm)	3433	1841		1770	3539	1516	1050	3498		545	1863	1499
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	458	352	23	47	399	501	3	447	29	300	292	380
RTOR Reduction (vph)	0	1	0	0	0	318	0	3	0	0	0	247
Lane Group Flow (vph)	458	374	0	47	399	183	3	473	0	300	292	133
Confl. Peds. (#/hr)			7			12	24		8			24
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		custom	NA	custom
Protected Phases	3	8		7	4			6		5	1 2 5 6	
Permitted Phases						4	6			2		2
Actuated Green, G (s)	40.9	44.6		16.7	20.4	20.4	40.6	40.6		51.2	73.8	51.2
Effective Green, g (s)	40.9	44.6		16.7	20.4	20.4	40.6	40.6		51.2	73.8	51.2
Actuated g/C Ratio	0.28	0.30		0.11	0.14	0.14	0.28	0.28		0.35	0.50	0.35
Clearance Time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5		4.1
Vehicle Extension (s)	2.5	3.0		2.0	3.0	3.0	3.0	3.0		3.0		4.0
Lane Grp Cap (vph)	956	559		201	491	210	290	967		240	936	522
v/s Ratio Prot	0.13	c0.20		0.03	0.11			0.14		c0.05	c0.16	
v/s Ratio Perm						c0.12	0.00			c0.38		0.09
v/c Ratio	0.48	0.67		0.23	0.81	0.87	0.01	0.49		1.25	0.31	0.25
Uniform Delay, d1	44.1	44.6		59.2	61.3	61.9	38.5	44.4		49.0	21.5	34.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.91	0.89	0.50
Incremental Delay, d2	0.3	3.0		0.2	9.9	30.4	0.1	1.8		141.8	0.1	0.3
Delay (s)	44.4	47.7		59.4	71.2	92.3	38.6	46.2		186.6	19.2	17.5
Level of Service	D	D		E	E	F	D	D		F	B	B
Approach Delay (s)		45.8			81.8			46.1			70.2	
Approach LOS		D			F			D			E	

Intersection Summary			
HCM 2000 Control Delay	63.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	146.8	Sum of lost time (s)	20.3
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	249	59	12	465	219	13
Future Volume (veh/h)	249	59	12	465	219	13
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	290	69	14	541	255	15
Adj No. of Lanes	2	0	1	1	0	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	1556	364	758	1019	334	20
Arrive On Green	0.55	0.55	0.55	0.55	0.20	0.20
Sat Flow, veh/h	2938	666	1016	1863	1659	98
Grp Volume(v), veh/h	179	180	14	541	271	0
Grp Sat Flow(s),veh/h/ln	1770	1742	1016	1863	1763	0
Q Serve(g_s), s	1.4	1.5	0.2	5.2	4.1	0.0
Cycle Q Clear(g_c), s	1.4	1.5	1.7	5.2	4.1	0.0
Prop In Lane		0.38	1.00		0.94	0.06
Lane Grp Cap(c), veh/h	968	953	758	1019	355	0
V/C Ratio(X)	0.18	0.19	0.02	0.53	0.76	0.00
Avail Cap(c_a), veh/h	1757	1730	1211	1850	1375	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	3.2	3.2	3.7	4.1	10.6	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.6	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.7	0.1	2.7	2.1	0.0
LnGrp Delay(d),s/veh	3.3	3.4	3.7	4.7	11.9	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h	359			555	271	
Approach Delay, s/veh	3.4			4.7	11.9	
Approach LOS	A			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		8.7		19.5				19.5
Change Period (Y+Rc), s		3.0		4.1				4.1
Max Green Setting (Gmax), s		22.0		28.0				28.0
Max Q Clear Time (g_c+I1), s		6.1		3.5				7.2
Green Ext Time (p_c), s		0.4		8.9				8.2

Intersection Summary	
HCM 2010 Ctrl Delay	5.9
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	676	32	133	187	28	35	36	199	12	24	18
Future Volume (veh/h)	105	676	32	133	187	28	35	36	199	12	24	18
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	1900	1863	1900
Adj Flow Rate, veh/h	115	743	35	146	205	31	38	40	219	13	26	20
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	1206	57	212	1139	170	321	337	285	33	67	51
Arrive On Green	0.10	0.35	0.35	0.12	0.37	0.37	0.18	0.18	0.18	0.04	0.04	0.04
Sat Flow, veh/h	1774	3441	162	1774	3086	460	1774	1863	1575	763	1531	1184
Grp Volume(v), veh/h	115	382	396	146	116	120	38	40	219	31	0	28
Grp Sat Flow(s),veh/h/ln	1774	1770	1833	1774	1770	1776	1774	1863	1575	1825	0	1654
Q Serve(g_s), s	3.4	9.7	9.7	4.3	2.4	2.5	1.0	1.0	7.1	0.9	0.0	0.9
Cycle Q Clear(g_c), s	3.4	9.7	9.7	4.3	2.4	2.5	1.0	1.0	7.1	0.9	0.0	0.9
Prop In Lane	1.00		0.09	1.00		0.26	1.00		1.00	0.42		0.72
Lane Grp Cap(c), veh/h	180	620	643	212	653	655	321	337	285	79	0	72
V/C Ratio(X)	0.64	0.62	0.62	0.69	0.18	0.18	0.12	0.12	0.77	0.39	0.00	0.39
Avail Cap(c_a), veh/h	656	1309	1357	2035	2684	2695	820	861	729	1553	0	1407
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.3	14.5	14.5	22.8	11.5	11.5	18.5	18.5	21.1	25.2	0.0	25.2
Incr Delay (d2), s/veh	1.4	1.0	1.0	1.5	0.1	0.1	0.1	0.1	1.7	1.2	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	4.8	5.0	2.2	1.2	1.2	0.5	0.5	3.2	0.5	0.0	0.4
LnGrp Delay(d),s/veh	24.7	15.5	15.5	24.3	11.6	11.7	18.6	18.6	22.7	26.3	0.0	26.4
LnGrp LOS	C	B	B	C	B	B	B	B	C	C		C
Approach Vol, veh/h		893			382			297			59	
Approach Delay, s/veh		16.7			16.5			21.6			26.4	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		13.8	10.5	23.5		6.4	9.5	24.4
Change Period (Y+Rc), s		4.0	4.0	4.5		4.0	4.0	4.5
Max Green Setting (Gmax), s		25.0	62.0	40.0		46.0	20.0	82.0
Max Q Clear Time (g_c+I1), s		9.1	6.3	11.7		2.9	5.4	4.5
Green Ext Time (p_c), s		0.5	0.2	7.2		0.2	0.1	8.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.9
HCM 2010 LOS	B

Notes

Movement	EBT	EBR	WBL	WBT	NBL	NBR	NEL	NER
Lane Configurations								
Traffic Volume (veh/h)	135	20	975	120	266	890	0	0
Future Volume (veh/h)	135	20	975	120	266	890	0	0
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	144	21	1132	0	283	350		
Adj No. of Lanes	2	0	2	1	1	1		
Peak Hour Factor	0.94	0.94	0.94	0.90	0.94	0.94		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	837	120	1153	605	453	405		
Arrive On Green	0.27	0.27	0.32	0.00	0.26	0.26		
Sat Flow, veh/h	3201	446	3548	1863	1774	1583		
Grp Volume(v), veh/h	81	84	1132	0	283	350		
Grp Sat Flow(s),veh/h/ln	1770	1784	1774	1863	1774	1583		
Q Serve(g_s), s	2.8	2.9	25.3	0.0	11.3	16.9		
Cycle Q Clear(g_c), s	2.8	2.9	25.3	0.0	11.3	16.9		
Prop In Lane		0.25	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	477	481	1153	605	453	405		
V/C Ratio(X)	0.17	0.17	0.98	0.00	0.62	0.86		
Avail Cap(c_a), veh/h	477	481	1153	605	532	475		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.10	0.00	1.00	1.00		
Uniform Delay (d), s/veh	22.4	22.4	26.8	0.0	26.4	28.5		
Incr Delay (d2), s/veh	0.8	0.8	5.1	0.0	2.3	14.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.5	1.5	13.1	0.0	5.8	9.0		
LnGrp Delay(d),s/veh	23.1	23.2	31.9	0.0	28.7	43.1		
LnGrp LOS	C	C	C		C	D		
Approach Vol, veh/h	165			1132	633			
Approach Delay, s/veh	23.2			31.9	36.6			
Approach LOS	C			C	D			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		25.6				30.0		24.4
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		18.0				26.0		24.0
Max Q Clear Time (g_c+I1), s		4.9				27.3		18.9
Green Ext Time (p_c), s		0.8				0.0		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	32.7
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	18	762	1087	36	13	7
Future Volume (veh/h)	18	762	1087	36	13	7
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	21	907	1294	43	15	8
Adj No. of Lanes	1	1	2	1	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	289	962	1291	1277	522	432
Arrive On Green	0.23	0.23	0.38	0.69	0.28	0.28
Sat Flow, veh/h	1242	1583	3442	1863	1863	1541
Grp Volume(v), veh/h	21	907	1294	43	15	8
Grp Sat Flow(s),veh/h/ln	1242	1583	1721	1863	1863	1541
Q Serve(g_s), s	1.5	27.0	43.5	0.9	0.7	0.4
Cycle Q Clear(g_c), s	1.5	27.0	43.5	0.9	0.7	0.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	289	962	1291	1277	522	432
V/C Ratio(X)	0.07	0.94	1.00	0.03	0.03	0.02
Avail Cap(c_a), veh/h	289	962	1291	1277	522	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.49	0.49	0.66	0.66	1.00	1.00
Uniform Delay (d), s/veh	34.7	20.9	36.3	5.9	30.3	30.2
Incr Delay (d2), s/veh	0.1	9.9	21.0	0.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	43.1	24.4	0.5	0.4	0.2
LnGrp Delay(d),s/veh	34.8	30.8	57.3	5.9	30.4	30.3
LnGrp LOS	C	C	F	A	C	C
Approach Vol, veh/h	928			1337	23	
Approach Delay, s/veh	30.9			55.6	30.4	
Approach LOS	C			E	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		84.5		31.5	47.0	37.5		
Change Period (Y+Rc), s		5.0		4.5	3.5	5.0		
Max Green Setting (Gmax), s		79.0		27.0	43.5	32.0		
Max Q Clear Time (g_c+I1), s		2.9		29.0	45.5	2.7		
Green Ext Time (p_c), s		0.2		0.0	0.0	0.1		

Intersection Summary	
HCM 2010 Ctrl Delay	45.3
HCM 2010 LOS	D



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	296	174	930	203	51	727
Future Volume (vph)	296	174	930	203	51	727
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	3.5	5.0		3.5	4.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.97		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3430		1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3430		1770	3539
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	325	191	1022	223	56	799
RTOR Reduction (vph)	0	146	14	0	0	0
Lane Group Flow (vph)	325	45	1231	0	56	799
Confl. Peds. (#/hr)				2		
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	
Permitted Phases		8				6
Actuated Green, G (s)	19.9	19.9	37.0		5.7	47.2
Effective Green, g (s)	19.9	19.9	37.0		5.7	47.2
Actuated g/C Ratio	0.24	0.24	0.44		0.07	0.56
Clearance Time (s)	3.5	3.5	5.0		3.5	4.0
Vehicle Extension (s)	2.0	2.0	4.0		2.0	4.0
Lane Grp Cap (vph)	419	375	1510		120	1988
v/s Ratio Prot	c0.18		c0.36		0.03	
v/s Ratio Perm		0.03				c0.23
v/c Ratio	0.78	0.12	0.82		0.47	0.40
Uniform Delay, d1	30.0	25.2	20.5		37.7	10.4
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	8.0	0.1	5.0		1.0	0.6
Delay (s)	37.9	25.2	25.5		38.7	11.0
Level of Service	D	C	C		D	B
Approach Delay (s)	33.2		25.5			12.8
Approach LOS	C		C			B

Intersection Summary			
HCM 2000 Control Delay	22.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	84.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	131	7	77	50	274	2	886	137	201	740	130
Future Volume (veh/h)	66	131	7	77	50	274	2	886	137	201	740	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.98	1.00		1.00	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	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	75	149	8	88	57	311	2	1007	156	228	841	148
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	99	419	79	33	424	4	1302	201	273	1072	900
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.00	0.42	0.42	0.15	0.58	0.58
Sat Flow, veh/h	0	364	1537	0	121	1555	1774	3071	475	1774	1863	1564
Grp Volume(v), veh/h	224	0	8	145	0	311	2	580	583	228	841	148
Grp Sat Flow(s),veh/h/ln	364	0	1537	121	0	1555	1774	1770	1776	1774	1863	1564
Q Serve(g_s), s	0.0	0.0	0.3	0.0	0.0	13.3	0.1	20.6	20.7	9.2	25.6	3.3
Cycle Q Clear(g_c), s	20.0	0.0	0.3	20.0	0.0	13.3	0.1	20.6	20.7	9.2	25.6	3.3
Prop In Lane	0.33		1.00	0.61		1.00	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	165	0	419	112	0	424	4	750	753	273	1072	900
V/C Ratio(X)	1.36	0.00	0.02	1.30	0.00	0.73	0.52	0.77	0.77	0.84	0.78	0.16
Avail Cap(c_a), veh/h	165	0	419	112	0	424	483	964	968	363	1072	900
HCM Platoon Ratio	1.00	1.00	1.00	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	25.8	0.0	19.5	31.0	0.0	24.3	36.6	18.1	18.1	30.2	12.1	7.3
Incr Delay (d2), s/veh	196.4	0.0	0.0	185.0	0.0	6.2	34.6	3.7	3.7	9.5	4.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.3	0.0	0.1	8.0	0.0	6.5	0.1	10.8	10.8	5.2	14.3	1.4
LnGrp Delay(d),s/veh	222.3	0.0	19.5	216.0	0.0	30.4	71.2	21.8	21.8	39.6	16.2	7.4
LnGrp LOS	F		B	F		C	E	C	C	D	B	A
Approach Vol, veh/h		232			456			1165			1217	
Approach Delay, s/veh		215.3			89.4			21.9			19.5	
Approach LOS		F			F			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.3	35.6		23.5	3.2	46.7		23.5
Change Period (Y+Rc), s	3.0	4.5		3.5	3.0	4.5		3.5
Max Green Setting (Gmax), s	15.0	40.0		20.0	20.0	35.0		20.0
Max Q Clear Time (g_c+I1), s	11.2	22.7		22.0	2.1	27.6		22.0
Green Ext Time (p_c), s	0.1	8.4		0.0	0.0	6.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	45.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	208	236	160	108	230	9	58	298	64	76	404	51
Future Volume (veh/h)	208	236	160	108	230	9	58	298	64	76	404	51
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)	0.98		0.97	0.99		0.97	0.99		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	246	167	112	240	9	60	310	67	79	421	53
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	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	518	456	310	379	796	30	296	596	129	362	653	82
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1109	1021	693	962	1782	67	909	1471	318	988	1613	203
Grp Volume(v), veh/h	217	0	413	112	0	249	60	0	377	79	0	474
Grp Sat Flow(s),veh/h/ln	1109	0	1715	962	0	1849	909	0	1789	988	0	1816
Q Serve(g_s), s	9.4	0.0	10.7	5.8	0.0	5.2	3.5	0.0	9.6	4.0	0.0	12.8
Cycle Q Clear(g_c), s	14.7	0.0	10.7	16.5	0.0	5.2	16.2	0.0	9.6	13.6	0.0	12.8
Prop In Lane	1.00		0.40	1.00		0.04	1.00		0.18	1.00		0.11
Lane Grp Cap(c), veh/h	518	0	766	379	0	825	296	0	725	362	0	736
V/C Ratio(X)	0.42	0.00	0.54	0.30	0.00	0.30	0.20	0.00	0.52	0.22	0.00	0.64
Avail Cap(c_a), veh/h	754	0	1130	584	0	1218	377	0	884	450	0	897
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.4	0.0	12.2	18.3	0.0	10.7	21.1	0.0	13.6	18.7	0.0	14.5
Incr Delay (d2), s/veh	0.8	0.0	0.8	0.6	0.0	0.3	0.5	0.0	0.8	0.4	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	5.1	1.6	0.0	2.7	0.9	0.0	4.9	1.1	0.0	6.6
LnGrp Delay(d),s/veh	16.2	0.0	13.1	18.9	0.0	11.0	21.5	0.0	14.4	19.2	0.0	16.1
LnGrp LOS	B		B	B		B	C		B	B		B
Approach Vol, veh/h		630			361			437			553	
Approach Delay, s/veh		14.2			13.5			15.4			16.5	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		31.6		29.1		31.6		29.1
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		40.0		30.0		40.0		30.0
Max Q Clear Time (g_c+I1), s		16.7		15.6		18.5		18.2
Green Ext Time (p_c), s		9.0		7.3		8.7		6.4

Intersection Summary	
HCM 2010 Ctrl Delay	15.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	49	0	0	223	0	559	21	197	451	35
Future Vol, veh/h	0	0	49	0	0	223	0	559	21	197	451	35
Conflicting Peds, #/hr	0	0	3	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	52	0	0	237	0	595	22	210	480	37

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	501	-	-	606	-	0	0	617	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	0	570	0	0	497	0	-	-	963	-	-
Stage 1	0	0	-	0	0	-	0	-	-	-	-	-
Stage 2	0	0	-	0	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	568	-	-	497	-	-	-	963	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12	18.7	0	2.8
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	568	497	963	-	-
HCM Lane V/C Ratio	-	-	0.092	0.477	0.218	-	-
HCM Control Delay (s)	-	-	12	18.7	9.8	-	-
HCM Lane LOS	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	-	-	0.3	2.5	0.8	-	-

Intersection	
Int Delay, s/veh	1.1

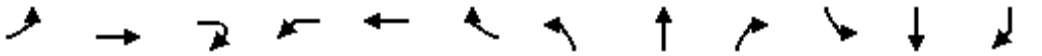
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	26	28	326	191	26
Future Vol, veh/h	16	26	28	326	191	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	110	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	27	29	343	201	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	445	114	228	0	-	0
Stage 1	215	-	-	-	-	-
Stage 2	230	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	542	917	1337	-	-	-
Stage 1	800	-	-	-	-	-
Stage 2	786	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	530	917	1337	-	-	-
Mov Cap-2 Maneuver	530	-	-	-	-	-
Stage 1	782	-	-	-	-	-
Stage 2	786	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1337	-	717	-	-
HCM Lane V/C Ratio	0.022	-	0.062	-	-
HCM Control Delay (s)	7.8	-	10.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

BACKGROUND PM



Movement	EBL	EBT	EBR2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	597	174	669	224	18	137	4	382	17	14	5
Future Volume (vph)	12	597	174	669	224	18	137	4	382	17	14	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.1	5.1	4.0	4.1		4.1	4.1	4.1		3.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.86	0.85		0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1770	3539	1583	3433	3500		1681	1459	1504		1786	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.98	
Satd. Flow (perm)	1770	3539	1583	3433	3500		1681	1459	1504		1786	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	12	597	174	669	224	18	137	4	382	17	14	5
RTOR Reduction (vph)	0	0	103	0	3	0	0	154	168	0	0	0
Lane Group Flow (vph)	12	597	71	669	239	0	123	47	31	0	36	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases			6						4			
Actuated Green, G (s)	1.1	21.4	21.4	27.1	48.4		12.9	12.9	12.9		4.3	
Effective Green, g (s)	1.1	21.4	21.4	27.1	48.4		12.9	12.9	12.9		4.3	
Actuated g/C Ratio	0.01	0.26	0.26	0.33	0.59		0.16	0.16	0.16		0.05	
Clearance Time (s)	4.0	5.1	5.1	4.0	4.1		4.1	4.1	4.1		3.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	23	924	413	1135	2068		264	229	236		93	
v/s Ratio Prot	0.01	c0.17		c0.19	0.07		c0.07	0.03			c0.02	
v/s Ratio Perm			0.05						0.02			
v/c Ratio	0.52	0.65	0.17	0.59	0.12		0.47	0.20	0.13		0.39	
Uniform Delay, d1	40.1	26.9	23.4	22.8	7.4		31.4	30.0	29.7		37.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	19.7	1.6	0.2	0.8	0.0		1.3	0.4	0.3		2.7	
Delay (s)	59.8	28.4	23.6	23.6	7.4		32.7	30.5	29.9		40.2	
Level of Service	E	C	C	C	A		C	C	C		D	
Approach Delay (s)		27.9			19.3			30.8			40.2	
Approach LOS		C			B			C			D	

Intersection Summary			
HCM 2000 Control Delay	25.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	81.9	Sum of lost time (s)	16.2
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		

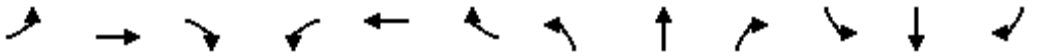
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	44	807	87	23	7	813	239	114	4	157	140
Future Volume (veh/h)	149	44	807	87	23	7	813	239	114	4	157	140
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		0.99	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	108	131	897	97	26	8	903	266	127	4	174	156
Adj No. of Lanes	1	1	2	0	2	0	2	2	0	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	538	565	951	173	132	41	957	960	444	7	484	210
Arrive On Green	0.30	0.30	0.30	0.10	0.10	0.10	0.28	0.41	0.41	0.00	0.14	0.14
Sat Flow, veh/h	1774	1863	3132	1774	1355	417	3442	2338	1082	1774	3539	1538
Grp Volume(v), veh/h	108	131	897	97	0	34	903	199	194	4	174	156
Grp Sat Flow(s),veh/h/ln	1774	1863	1566	1774	0	1772	1721	1770	1651	1774	1770	1538
Q Serve(g_s), s	4.5	5.2	27.8	5.2	0.0	1.8	25.5	7.4	7.8	0.2	4.4	9.7
Cycle Q Clear(g_c), s	4.5	5.2	27.8	5.2	0.0	1.8	25.5	7.4	7.8	0.2	4.4	9.7
Prop In Lane	1.00		1.00	1.00		0.24	1.00		0.66	1.00		1.00
Lane Grp Cap(c), veh/h	538	565	951	173	0	173	957	727	678	7	484	210
V/C Ratio(X)	0.20	0.23	0.94	0.56	0.00	0.20	0.94	0.27	0.29	0.54	0.36	0.74
Avail Cap(c_a), veh/h	892	936	1574	535	0	534	1038	889	830	178	1067	464
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.7	26.0	33.8	42.8	0.0	41.3	35.2	19.5	19.6	49.4	39.0	41.2
Incr Delay (d2), s/veh	0.1	0.1	5.4	1.0	0.0	0.2	15.1	0.1	0.1	20.3	0.2	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	2.2	2.7	12.7	2.6	0.0	0.9	14.2	3.7	3.6	0.2	2.2	4.2
LnGrp Delay(d),s/veh	25.8	26.0	39.2	43.9	0.0	41.5	50.2	19.5	19.7	69.7	39.1	43.2
LnGrp LOS	C	C	D	D		D	D	B	B	E	D	D
Approach Vol, veh/h		1136			131			1296			334	
Approach Delay, s/veh		36.4			43.3			40.9			41.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		35.3	30.7	18.7		14.8	3.4	45.9
Change Period (Y+Rc), s		5.1	3.0	5.1		5.1	3.0	5.1
Max Green Setting (Gmax), s		50.0	30.0	30.0		30.0	10.0	50.0
Max Q Clear Time (g_c+I1), s		29.8	27.5	11.7		7.2	2.2	9.8
Green Ext Time (p_c), s		0.4	0.1	0.6		0.1	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	39.3
HCM 2010 LOS	D

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	222	0	985	0	0	0	0	944	551	386	665	0
Future Volume (vph)	222	0	985	0	0	0	0	944	551	386	665	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Lane Util. Factor		1.00	0.76					0.86	0.86	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.97	0.85	1.00	1.00	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1770	3610					4672	1362	3433	3539	
Flt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1770	3610					4672	1362	3433	3539	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	227	0	1005	0	0	0	0	963	562	394	679	0
RTOR Reduction (vph)	0	0	784	0	0	0	0	35	213	0	0	0
Lane Group Flow (vph)	0	227	221	0	0	0	0	1147	130	394	679	0
Confl. Peds. (#/hr)							11					11
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		12.1	12.1					20.9	20.9	10.3	26.8	
Effective Green, g (s)		12.1	12.1					20.9	20.9	10.3	26.8	
Actuated g/C Ratio		0.22	0.22					0.38	0.38	0.19	0.49	
Clearance Time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Vehicle Extension (s)		0.2	0.2					0.2	0.2	0.2	1.0	
Lane Grp Cap (vph)		389	794					1775	517	642	1724	
v/s Ratio Prot								c0.25		c0.11	0.19	
v/s Ratio Perm		0.13	0.06						0.10			
v/c Ratio		0.58	0.28					0.65	0.25	0.61	0.39	
Uniform Delay, d1		19.2	17.8					14.0	11.7	20.5	8.9	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		1.4	0.1					0.6	0.1	1.2	0.1	
Delay (s)		20.6	17.9					14.6	11.8	21.8	9.0	
Level of Service		C	B					B	B	C	A	
Approach Delay (s)		18.4			0.0			14.0			13.7	
Approach LOS		B			A			B			B	

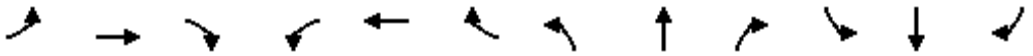
Intersection Summary			
HCM 2000 Control Delay	15.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	206	172	42	68	176	131	989	42	439	1105	105
Future Volume (veh/h)	330	206	172	42	68	176	131	989	42	439	1105	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		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	344	215	179	44	71	0	136	1030	44	457	1151	0
Adj No. of Lanes	2	1	1	1	1	1	2	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	596	322	272	148	156	132	302	1361	58	709	2076	647
Arrive On Green	0.17	0.17	0.17	0.08	0.08	0.00	0.09	0.27	0.27	0.21	0.41	0.00
Sat Flow, veh/h	3442	1863	1572	1774	1863	1583	3442	4999	213	3442	5085	1583
Grp Volume(v), veh/h	344	215	179	44	71	0	136	698	376	457	1151	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1572	1774	1863	1583	1721	1695	1822	1721	1695	1583
Q Serve(g_s), s	5.7	6.7	6.6	1.4	2.2	0.0	2.3	11.7	11.7	7.5	10.7	0.0
Cycle Q Clear(g_c), s	5.7	6.7	6.6	1.4	2.2	0.0	2.3	11.7	11.7	7.5	10.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	596	322	272	148	156	132	302	923	496	709	2076	647
V/C Ratio(X)	0.58	0.67	0.66	0.30	0.46	0.00	0.45	0.76	0.76	0.64	0.55	0.00
Avail Cap(c_a), veh/h	1892	1024	864	688	723	614	1113	1365	734	1113	2076	647
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.5	23.9	23.9	26.6	27.0	0.0	26.8	20.6	20.6	22.5	14.0	0.0
Incr Delay (d2), s/veh	0.3	0.9	1.0	0.4	0.8	0.0	0.4	0.6	1.2	0.4	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	3.5	2.9	0.7	1.2	0.0	1.1	5.5	6.0	3.6	5.0	0.0
LnGrp Delay(d),s/veh	23.8	24.8	24.9	27.0	27.8	0.0	27.2	21.2	21.8	22.9	14.2	0.0
LnGrp LOS	C	C	C	C	C		C	C	C	C	B	
Approach Vol, veh/h		738			115			1210			1608	
Approach Delay, s/veh		24.4			27.5			22.1			16.7	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.8	20.9		14.8	8.4	29.4		9.3
Change Period (Y+Rc), s	4.1	* 4.1		4.1	3.0	4.1		4.1
Max Green Setting (Gmax), s	20.0	* 25		34.0	20.0	24.9		24.0
Max Q Clear Time (g_c+I1), s	9.5	13.7		8.7	4.3	12.7		4.2
Green Ext Time (p_c), s	3.2	3.1		1.2	0.1	4.4		0.2

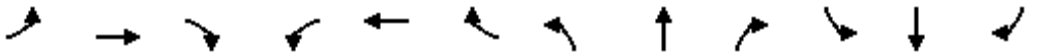
Intersection Summary	
HCM 2010 Ctrl Delay	20.3
HCM 2010 LOS	C

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	1	43	0	266	1	896	107	203	1115	1
Future Volume (vph)	0	0	1	43	0	266	1	896	107	203	1115	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.1	4.1	4.1	4.1		3.5	4.1	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00			1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt		0.85			1.00	0.85	1.00	0.98		1.00	1.00	
Flt Protected		1.00			0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		0			1593	1399	1593	4481		1593	4576	
Flt Permitted		1.00			0.95	1.00	0.23	1.00		0.95	1.00	
Satd. Flow (perm)		0			1593	1399	393	4481		1593	4576	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	1	44	0	274	1	924	110	209	1149	1
RTOR Reduction (vph)	0	1	0	0	0	235	0	9	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	44	39	1	1025	0	209	1150	0
Confl. Peds. (#/hr)						3			19			22
Turn Type				Perm	NA	Perm	custom	NA		Prot	NA	
Protected Phases					1			2 8		7	2 3 4	
Permitted Phases				1		1	8					
Actuated Green, G (s)		0.0			22.0	22.0	41.7	82.2		23.9	110.2	
Effective Green, g (s)		0.0			22.0	22.0	41.7	82.2		23.9	110.2	
Actuated g/C Ratio		0.00			0.14	0.14	0.27	0.53		0.15	0.71	
Clearance Time (s)					4.1	4.1	4.1			3.5		
Vehicle Extension (s)					2.0	2.0	3.0			2.0		
Lane Grp Cap (vph)		0			226	199	106	2384		246	3263	
v/s Ratio Prot								c0.23		c0.13	c0.25	
v/s Ratio Perm					0.03	c0.03	0.00					
v/c Ratio		0.00			0.19	0.20	0.01	0.43		0.85	0.35	
Uniform Delay, d1		77.2			58.4	58.4	41.3	21.9		63.6	8.5	
Progression Factor		1.00			1.00	1.00	1.06	0.67		1.00	1.00	
Incremental Delay, d2		0.0			0.2	0.2	0.0	0.2		22.2	0.1	
Delay (s)		77.2			58.6	58.6	43.8	14.8		85.7	8.6	
Level of Service		E			E	E	D	B		F	A	
Approach Delay (s)		77.2			58.6			14.8			20.4	
Approach LOS		E			E			B			C	

Intersection Summary			
HCM 2000 Control Delay	22.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	154.5	Sum of lost time (s)	20.3
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	308	331	31	39	395	425	10	270	48	283	462	414
Future Volume (vph)	308	331	31	39	395	425	10	270	48	283	462	414
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5	4.1	4.1
Lane Util. Factor	0.97	1.00		1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	0.98		1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.98	1.00		0.98	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1832		1770	3539	1539	1729	3399		1727	1863	1501
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.50	1.00		0.47	1.00	1.00
Satd. Flow (perm)	3433	1832		1770	3539	1539	901	3399		848	1863	1501
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	311	334	31	39	399	429	10	273	48	286	467	418
RTOR Reduction (vph)	0	2	0	0	0	373	0	8	0	0	0	202
Lane Group Flow (vph)	311	363	0	39	399	56	10	313	0	286	467	216
Confl. Peds. (#/hr)			9			6	22		32	32		22
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		custom	NA	custom
Protected Phases	3	8		7	4			6!		5!	1 2 5 6	
Permitted Phases						4	6			2		2
Actuated Green, G (s)	45.3	41.7		23.9	20.3	20.3	51.1	51.1		46.6	77.2	40.5
Effective Green, g (s)	45.3	41.7		23.9	20.3	20.3	51.1	51.1		46.6	77.2	40.5
Actuated g/C Ratio	0.29	0.27		0.15	0.13	0.13	0.33	0.33		0.30	0.50	0.26
Clearance Time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5		4.1
Vehicle Extension (s)	2.5	3.0		2.0	3.0	3.0	3.0	3.0		3.0		4.0
Lane Grp Cap (vph)	1006	494		273	464	202	298	1124		290	930	393
v/s Ratio Prot	c0.09	c0.20		0.02	c0.11			0.09		c0.04	c0.25	
v/s Ratio Perm						0.04	0.01			c0.26		0.14
v/c Ratio	0.31	0.73		0.14	0.86	0.28	0.03	0.28		0.99	0.50	0.55
Uniform Delay, d1	42.4	51.4		56.4	65.7	60.5	35.0	38.1		55.6	25.8	49.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.05
Incremental Delay, d2	0.1	5.6		0.1	14.7	0.8	0.2	0.6		47.7	0.2	1.9
Delay (s)	42.6	57.0		56.5	80.4	61.3	35.2	38.7		103.2	26.1	53.5
Level of Service	D	E		E	F	E	D	D		F	C	D
Approach Delay (s)		50.3			69.8			38.6			54.7	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	56.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	154.5	Sum of lost time (s)	20.3
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	554	134	9	199	86	18
Future Volume (veh/h)	554	134	9	199	86	18
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	644	156	10	231	100	21
Adj No. of Lanes	2	0	1	1	0	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	1591	385	555	1049	253	53
Arrive On Green	0.56	0.56	0.56	0.56	0.18	0.18
Sat Flow, veh/h	2918	684	676	1863	1413	297
Grp Volume(v), veh/h	403	397	10	231	122	0
Grp Sat Flow(s),veh/h/ln	1770	1739	676	1863	1723	0
Q Serve(g_s), s	3.5	3.6	0.2	1.7	1.7	0.0
Cycle Q Clear(g_c), s	3.5	3.6	3.8	1.7	1.7	0.0
Prop In Lane		0.39	1.00		0.82	0.17
Lane Grp Cap(c), veh/h	997	980	555	1049	309	0
V/C Ratio(X)	0.40	0.41	0.02	0.22	0.40	0.00
Avail Cap(c_a), veh/h	1799	1768	861	1894	1377	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	3.4	3.4	4.5	3.0	10.0	0.0
Incr Delay (d2), s/veh	0.4	0.4	0.0	0.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	1.8	0.0	0.9	0.8	0.0
LnGrp Delay(d),s/veh	3.8	3.8	4.5	3.1	10.3	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h	800			241	122	
Approach Delay, s/veh	3.8			3.2	10.3	
Approach LOS	A			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		7.9		19.6				19.6
Change Period (Y+Rc), s		3.0		4.1				4.1
Max Green Setting (Gmax), s		22.0		28.0				28.0
Max Q Clear Time (g_c+I1), s		3.7		5.6				5.8
Green Ext Time (p_c), s		0.1		9.7				9.6

Intersection Summary	
HCM 2010 Ctrl Delay	4.3
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	432	25	454	252	20	39	24	111	51	58	47
Future Volume (veh/h)	46	432	25	454	252	20	39	24	111	51	58	47
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	1900	1863	1900
Adj Flow Rate, veh/h	55	520	30	547	304	24	38	42	134	61	70	57
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	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	100	809	47	592	1713	134	235	247	203	96	112	94
Arrive On Green	0.06	0.24	0.24	0.33	0.52	0.52	0.13	0.13	0.13	0.09	0.09	0.09
Sat Flow, veh/h	1774	3401	196	1774	3325	261	1774	1863	1533	1105	1294	1080
Grp Volume(v), veh/h	55	270	280	547	161	167	38	42	134	100	0	88
Grp Sat Flow(s),veh/h/ln	1774	1770	1828	1774	1770	1816	1774	1863	1533	1807	0	1672
Q Serve(g_s), s	2.4	10.8	10.9	23.4	3.8	3.9	1.5	1.6	6.5	4.2	0.0	4.0
Cycle Q Clear(g_c), s	2.4	10.8	10.9	23.4	3.8	3.9	1.5	1.6	6.5	4.2	0.0	4.0
Prop In Lane	1.00		0.11	1.00		0.14	1.00		1.00	0.61		0.65
Lane Grp Cap(c), veh/h	100	421	434	592	912	936	235	247	203	157	0	145
V/C Ratio(X)	0.55	0.64	0.64	0.92	0.18	0.18	0.16	0.17	0.66	0.64	0.00	0.61
Avail Cap(c_a), veh/h	450	898	928	1396	1842	1890	563	591	486	1055	0	976
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.2	27.0	27.0	25.3	10.2	10.2	30.3	30.3	32.5	34.8	0.0	34.7
Incr Delay (d2), s/veh	1.8	1.6	1.6	2.8	0.1	0.1	0.1	0.1	1.4	1.6	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	5.4	5.6	11.9	1.9	2.0	0.7	0.8	2.8	2.2	0.0	1.9
LnGrp Delay(d),s/veh	38.0	28.7	28.6	28.1	10.3	10.3	30.4	30.4	33.8	36.4	0.0	36.2
LnGrp LOS	D	C	C	C	B	B	C	C	C	D		D
Approach Vol, veh/h		605			875			214			188	
Approach Delay, s/veh		29.5			21.4			32.6			36.3	
Approach LOS		C			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		14.4	30.3	23.2		10.8	8.4	45.1
Change Period (Y+Rc), s		4.0	4.0	4.5		4.0	4.0	4.5
Max Green Setting (Gmax), s		25.0	62.0	40.0		46.0	20.0	82.0
Max Q Clear Time (g_c+I1), s		8.5	25.4	12.9		6.2	4.4	5.9
Green Ext Time (p_c), s		0.4	0.9	5.8		0.7	0.0	6.4

Intersection Summary	
HCM 2010 Ctrl Delay	26.8
HCM 2010 LOS	C

Notes

Movement	EBT	EBR	WBL	WBT	NBL	NBR	NEL	NER
Lane Configurations								
Traffic Volume (veh/h)	374	43	643	79	66	490	0	0
Future Volume (veh/h)	374	43	643	79	66	490	0	0
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	407	47	762	0	72	36		
Adj No. of Lanes	2	0	2	1	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.90	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	809	93	1207	634	159	142		
Arrive On Green	0.25	0.25	0.34	0.00	0.09	0.09		
Sat Flow, veh/h	3293	368	3548	1863	1774	1583		
Grp Volume(v), veh/h	224	230	762	0	72	36		
Grp Sat Flow(s),veh/h/ln	1770	1798	1774	1863	1774	1583		
Q Serve(g_s), s	4.1	4.1	6.8	0.0	1.5	0.8		
Cycle Q Clear(g_c), s	4.1	4.1	6.8	0.0	1.5	0.8		
Prop In Lane		0.20	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	448	455	1207	634	159	142		
V/C Ratio(X)	0.50	0.51	0.63	0.00	0.45	0.25		
Avail Cap(c_a), veh/h	1202	1221	2269	1191	1125	1004		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	12.1	12.1	10.5	0.0	16.3	16.0		
Incr Delay (d2), s/veh	1.2	1.2	0.8	0.0	2.8	1.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.1	2.2	3.4	0.0	0.8	0.4		
LnGrp Delay(d),s/veh	13.3	13.3	11.3	0.0	19.2	17.4		
LnGrp LOS	B	B	B		B	B		
Approach Vol, veh/h	454			762	108			
Approach Delay, s/veh	13.3			11.3	18.6			
Approach LOS	B			B	B			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		13.6				16.9		7.4
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		25.7				24.2		24.0
Max Q Clear Time (g_c+I1), s		6.1				8.8		3.5
Green Ext Time (p_c), s		3.5				4.1		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	12.6
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	78	752	608	39	97	45
Future Volume (veh/h)	78	752	608	39	97	45
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	80	775	627	40	100	46
Adj No. of Lanes	1	1	2	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	505	1008	794	781	232	196
Arrive On Green	0.41	0.41	0.23	0.42	0.12	0.12
Sat Flow, veh/h	1242	1583	3442	1863	1863	1577
Grp Volume(v), veh/h	80	775	627	40	100	46
Grp Sat Flow(s),veh/h/ln	1242	1583	1721	1863	1863	1577
Q Serve(g_s), s	2.2	19.0	9.3	0.7	2.7	1.4
Cycle Q Clear(g_c), s	2.2	19.0	9.3	0.7	2.7	1.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	505	1008	794	781	232	196
V/C Ratio(X)	0.16	0.77	0.79	0.05	0.43	0.23
Avail Cap(c_a), veh/h	616	1150	2971	2789	1061	898
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.3	7.0	19.7	9.4	22.1	21.5
Incr Delay (d2), s/veh	0.1	2.3	0.7	0.0	1.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	16.5	4.5	0.4	1.5	0.7
LnGrp Delay(d),s/veh	10.3	9.3	20.4	9.4	23.9	22.4
LnGrp LOS	B	A	C	A	C	C
Approach Vol, veh/h	855			667	146	
Approach Delay, s/veh	9.4			19.7	23.4	
Approach LOS	A			B	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		27.8		26.6	16.1	11.8		
Change Period (Y+Rc), s		5.0		4.5	3.5	5.0		
Max Green Setting (Gmax), s		81.5		27.0	47.0	31.0		
Max Q Clear Time (g_c+I1), s		2.7		21.0	11.3	4.7		
Green Ext Time (p_c), s		0.3		1.2	1.2	0.9		

Intersection Summary	
HCM 2010 Ctrl Delay	14.8
HCM 2010 LOS	B



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	254	79	632	359	185	667
Future Volume (vph)	254	79	632	359	185	667
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	3.5	5.0		3.5	4.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.95		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3347		1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3347		1770	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	282	88	702	399	206	741
RTOR Reduction (vph)	0	51	48	0	0	0
Lane Group Flow (vph)	282	37	1053	0	206	741
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	
Permitted Phases		8				6
Actuated Green, G (s)	18.3	18.3	34.5		14.8	53.8
Effective Green, g (s)	18.3	18.3	34.5		14.8	53.8
Actuated g/C Ratio	0.21	0.21	0.39		0.17	0.61
Clearance Time (s)	3.5	3.5	5.0		3.5	4.0
Vehicle Extension (s)	2.0	2.0	4.0		2.0	4.0
Lane Grp Cap (vph)	368	329	1315		298	2168
v/s Ratio Prot	c0.16		c0.31		c0.12	
v/s Ratio Perm		0.02				0.21
v/c Ratio	0.77	0.11	0.80		0.69	0.34
Uniform Delay, d1	32.7	28.2	23.6		34.4	8.3
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	8.3	0.1	3.8		5.5	0.1
Delay (s)	41.1	28.2	27.4		39.8	8.5
Level of Service	D	C	C		D	A
Approach Delay (s)	38.0		27.4			15.3
Approach LOS	D		C			B

Intersection Summary			
HCM 2000 Control Delay	24.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	87.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	107	11	46	21	253	10	623	137	181	801	149
Future Volume (veh/h)	85	107	11	46	21	253	10	623	137	181	801	149
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	89	113	12	48	22	266	11	656	144	191	843	157
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	75	68	452	88	25	454	20	1204	264	240	1009	853
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.01	0.42	0.42	0.14	0.54	0.54
Sat Flow, veh/h	0	236	1564	0	85	1572	1774	2885	632	1774	1863	1576
Grp Volume(v), veh/h	202	0	12	70	0	266	11	402	398	191	843	157
Grp Sat Flow(s),veh/h/ln	236	0	1564	85	0	1572	1774	1770	1747	1774	1863	1576
Q Serve(g_s), s	0.0	0.0	0.4	0.0	0.0	10.0	0.4	11.9	11.9	7.2	26.3	3.5
Cycle Q Clear(g_c), s	20.0	0.0	0.4	20.0	0.0	10.0	0.4	11.9	11.9	7.2	26.3	3.5
Prop In Lane	0.44		1.00	0.69		1.00	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	143	0	452	112	0	454	20	739	729	240	1009	853
V/C Ratio(X)	1.41	0.00	0.03	0.62	0.00	0.59	0.56	0.54	0.55	0.80	0.84	0.18
Avail Cap(c_a), veh/h	143	0	452	112	0	454	512	1022	1009	384	1009	853
HCM Platoon Ratio	1.00	1.00	1.00	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	25.7	0.0	17.7	27.8	0.0	21.1	34.1	15.2	15.2	29.0	13.3	8.1
Incr Delay (d2), s/veh	222.0	0.0	0.0	9.3	0.0	1.7	9.1	1.0	1.0	2.3	6.5	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	11.5	0.0	0.2	1.6	0.0	4.5	0.3	5.9	5.9	3.7	15.2	1.6
LnGrp Delay(d),s/veh	247.7	0.0	17.7	37.0	0.0	22.8	43.2	16.2	16.2	31.3	19.8	8.2
LnGrp LOS	F		B	D		C	D	B	B	C	B	A
Approach Vol, veh/h		214			336			811			1191	
Approach Delay, s/veh		234.8			25.8			16.5			20.1	
Approach LOS		F			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	12.4	33.4		23.5	3.8	42.0		23.5
Change Period (Y+Rc), s	3.0	4.5		3.5	3.0	4.5		3.5
Max Green Setting (Gmax), s	15.0	40.0		20.0	20.0	35.0		20.0
Max Q Clear Time (g_c+I1), s	9.2	13.9		22.0	2.4	28.3		22.0
Green Ext Time (p_c), s	0.1	15.0		0.0	0.0	5.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	37.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	153	35	58	196	17	67	244	34	87	462	93
Future Volume (veh/h)	229	153	35	58	196	17	67	244	34	87	462	93
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		0.99	0.99		0.99	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	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	249	166	38	63	213	18	73	265	37	95	502	101
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	477	590	135	497	682	58	260	722	101	483	680	137
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1139	1465	335	1167	1693	143	813	1598	223	1069	1504	303
Grp Volume(v), veh/h	249	0	204	63	0	231	73	0	302	95	0	603
Grp Sat Flow(s),veh/h/ln	1139	0	1800	1167	0	1836	813	0	1821	1069	0	1806
Q Serve(g_s), s	11.8	0.0	4.7	2.4	0.0	5.3	5.0	0.0	6.8	4.0	0.0	17.0
Cycle Q Clear(g_c), s	17.2	0.0	4.7	7.1	0.0	5.3	22.1	0.0	6.8	10.7	0.0	17.0
Prop In Lane	1.00		0.19	1.00		0.08	1.00		0.12	1.00		0.17
Lane Grp Cap(c), veh/h	477	0	725	497	0	740	260	0	823	483	0	816
V/C Ratio(X)	0.52	0.00	0.28	0.13	0.00	0.31	0.28	0.00	0.37	0.20	0.00	0.74
Avail Cap(c_a), veh/h	754	0	1162	780	0	1185	286	0	881	517	0	874
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.5	0.0	12.5	14.9	0.0	12.6	23.0	0.0	11.2	14.7	0.0	14.0
Incr Delay (d2), s/veh	1.3	0.0	0.3	0.2	0.0	0.3	0.8	0.0	0.4	0.3	0.0	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	3.8	0.0	2.4	0.8	0.0	2.8	1.2	0.0	3.4	1.2	0.0	9.2
LnGrp Delay(d),s/veh	19.8	0.0	12.8	15.0	0.0	13.0	23.9	0.0	11.5	15.0	0.0	17.4
LnGrp LOS	B		B	B		B	C		B	B		B
Approach Vol, veh/h		453			294			375			698	
Approach Delay, s/veh		16.6			13.4			13.9			17.1	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		29.5		32.5		29.5		32.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		40.0		30.0		40.0		30.0
Max Q Clear Time (g_c+I1), s		19.2		19.0		9.1		24.1
Green Ext Time (p_c), s		5.8		6.6		6.6		4.0

Intersection Summary	
HCM 2010 Ctrl Delay	15.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	130	0	0	132	0	402	17	549	576	46
Future Vol, veh/h	0	0	130	0	0	132	0	402	17	549	576	46
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	135	0	0	138	0	419	18	572	600	48

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	624	-	-	428	-	0	0	436	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	0	485	0	0	627	0	-	-	1124	-	-
Stage 1	0	0	-	0	0	-	0	-	-	-	-	-
Stage 2	0	0	-	0	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	485	-	-	627	-	-	-	1124	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.3	12.3	0	5.4
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	485	627	1124	-	-
HCM Lane V/C Ratio	-	-	0.279	0.219	0.509	-	-
HCM Control Delay (s)	-	-	15.3	12.3	11.5	-	-
HCM Lane LOS	-	-	C	B	B	-	-
HCM 95th %tile Q(veh)	-	-	1.1	0.8	3	-	-

Intersection	
Int Delay, s/veh	1.2

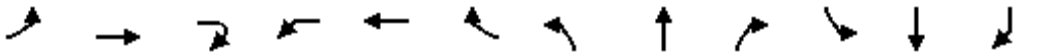
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	33	28	10	179	617	27
Future Vol, veh/h	33	28	10	179	617	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	110	-	-	-
Veh in Median Storage, #	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	36	30	11	195	671	29

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	806	350	700	0	-	0
Stage 1	686	-	-	-	-	-
Stage 2	120	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	320	646	893	-	-	-
Stage 1	461	-	-	-	-	-
Stage 2	892	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	316	646	893	-	-	-
Mov Cap-2 Maneuver	316	-	-	-	-	-
Stage 1	455	-	-	-	-	-
Stage 2	892	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.4	0.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	893	-	413	-	-
HCM Lane V/C Ratio	0.012	-	0.161	-	-
HCM Control Delay (s)	9.1	-	15.4	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.6	-	-

BACKGROUND PLUS PROJECT AM



Movement	EBL	EBT	EBR2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	237	88	931	366	7	344	7	453	12	10	5
Future Volume (vph)	8	237	88	931	366	7	344	7	453	12	10	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.1	5.1	4.0	4.1		4.1	4.1	4.1		3.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.89	0.85		0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.99	1.00		0.98	
Satd. Flow (prot)	1770	3539	1583	3433	3529		1681	1491	1504		1777	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.99	1.00		0.98	
Satd. Flow (perm)	1770	3539	1583	3433	3529		1681	1491	1504		1777	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	8	237	88	931	366	7	344	7	453	12	10	5
RTOR Reduction (vph)	0	0	80	0	1	0	0	88	209	0	0	0
Lane Group Flow (vph)	8	237	8	931	372	0	279	179	49	0	27	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases			6						4			
Actuated Green, G (s)	0.9	10.9	10.9	66.3	77.3		22.8	22.8	22.8		3.8	
Effective Green, g (s)	0.9	10.9	10.9	66.3	77.3		22.8	22.8	22.8		3.8	
Actuated g/C Ratio	0.01	0.09	0.09	0.55	0.64		0.19	0.19	0.19		0.03	
Clearance Time (s)	4.0	5.1	5.1	4.0	4.1		4.1	4.1	4.1		3.0	
Vehicle Extension (s)	0.2	0.2	0.2	0.2	0.2		0.2	0.2	0.2		0.2	
Lane Grp Cap (vph)	13	321	143	1896	2273		319	283	285		56	
v/s Ratio Prot	0.00	c0.07		c0.27	0.11		c0.17	0.12			c0.02	
v/s Ratio Perm			0.01						0.03			
v/c Ratio	0.62	0.74	0.06	0.49	0.16		0.87	0.63	0.17		0.48	
Uniform Delay, d1	59.4	53.2	49.8	16.5	8.5		47.2	44.7	40.7		57.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	48.2	7.4	0.1	0.9	0.2		21.8	3.4	0.1		2.4	
Delay (s)	107.6	60.6	49.9	17.4	8.6		69.0	48.1	40.8		59.5	
Level of Service	F	E	D	B	A		E	D	D		E	
Approach Delay (s)		58.9			14.9			53.0			59.5	
Approach LOS		E			B			D			E	

Intersection Summary			
HCM 2000 Control Delay	33.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	65.2%	ICU Level of Service	C
Analysis Period (min)	15		

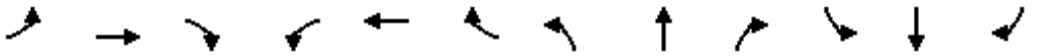
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	49	582	73	24	6	1199	400	323	4	84	102
Future Volume (veh/h)	71	49	582	73	24	6	1199	400	323	4	84	102
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		0.99	1.00		0.93	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	61	65	594	74	24	6	1223	408	330	4	86	104
Adj No. of Lanes	1	1	2	0	2	0	2	2	0	1	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	726	762	1286	138	110	28	954	709	569	7	342	147
Arrive On Green	0.41	0.41	0.41	0.08	0.08	0.08	0.28	0.38	0.38	0.00	0.10	0.10
Sat Flow, veh/h	1774	1863	3141	1774	1415	354	3442	1854	1486	1774	3539	1519
Grp Volume(v), veh/h	61	65	594	74	0	30	1223	389	349	4	86	104
Grp Sat Flow(s),veh/h/ln	1774	1863	1571	1774	0	1769	1721	1770	1570	1774	1770	1519
Q Serve(g_s), s	2.8	2.8	18.0	5.3	0.0	2.1	36.3	22.8	23.1	0.3	2.9	8.7
Cycle Q Clear(g_c), s	2.8	2.8	18.0	5.3	0.0	2.1	36.3	22.8	23.1	0.3	2.9	8.7
Prop In Lane	1.00		1.00	1.00		0.20	1.00		0.95	1.00		1.00
Lane Grp Cap(c), veh/h	726	762	1286	138	0	138	954	677	601	7	342	147
V/C Ratio(X)	0.08	0.09	0.46	0.53	0.00	0.22	1.28	0.57	0.58	0.55	0.25	0.71
Avail Cap(c_a), veh/h	726	762	1286	284	0	284	954	677	601	203	567	244
HCM Platoon Ratio	1.00	1.00	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	0.00	1.00	0.86	0.86	0.86	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.7	23.7	28.2	58.1	0.0	56.6	47.3	32.0	32.1	65.1	54.8	57.4
Incr Delay (d2), s/veh	0.0	0.0	0.1	14.0	0.0	3.6	134.1	0.7	0.8	21.3	0.1	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.4	7.8	3.1	0.0	1.2	35.0	11.3	10.1	0.2	1.5	3.8
LnGrp Delay(d),s/veh	23.7	23.7	28.3	72.1	0.0	60.2	181.4	32.7	32.9	86.4	54.9	59.7
LnGrp LOS	C	C	C	E		E	F	C	C	F	D	E
Approach Vol, veh/h		720			104			1961			194	
Approach Delay, s/veh		27.5			68.7			125.5			58.1	
Approach LOS		C			E			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		58.3	41.0	17.8		13.9	3.5	55.2
Change Period (Y+Rc), s		* 4.7	* 4.7	* 5.1		3.7	3.0	5.1
Max Green Setting (Gmax), s		* 36	* 36	* 21		21.0	15.0	32.9
Max Q Clear Time (g_c+I1), s		20.0	38.3	10.7		7.3	2.3	25.1
Green Ext Time (p_c), s		0.2	0.0	0.2		0.1	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	95.4
HCM 2010 LOS	F

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	610	0	738	0	0	0	0	1312	490	235	504	0
Future Volume (vph)	610	0	738	0	0	0	0	1312	490	235	504	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Lane Util. Factor		1.00	0.76					0.86	0.86	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.99	0.85	1.00	1.00	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1770	3610					4760	1362	3433	3539	
Flt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1770	3610					4760	1362	3433	3539	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	622	0	753	0	0	0	0	1339	500	240	514	0
RTOR Reduction (vph)	0	0	400	0	0	0	0	5	124	0	0	0
Lane Group Flow (vph)	0	622	353	0	0	0	0	1424	286	240	514	0
Confl. Peds. (#/hr)							11					11
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		25.2	25.2					72.0	72.0	11.1	79.1	
Effective Green, g (s)		25.2	25.2					72.0	72.0	11.1	79.1	
Actuated g/C Ratio		0.21	0.21					0.60	0.60	0.09	0.66	
Clearance Time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Vehicle Extension (s)		0.2	0.2					0.2	0.2	0.2	1.0	
Lane Grp Cap (vph)		371	758					2856	817	317	2332	
v/s Ratio Prot								c0.30		c0.07	0.15	
v/s Ratio Perm		0.35	0.10						0.21			
v/c Ratio		1.68	0.47					0.50	0.35	0.76	0.22	
Uniform Delay, d1		47.4	41.5					13.7	12.1	53.1	8.2	
Progression Factor		1.00	1.00					0.56	0.25	1.00	1.00	
Incremental Delay, d2		316.0	0.2					0.5	1.0	8.8	0.2	
Delay (s)		363.4	41.7					8.1	4.1	62.0	8.4	
Level of Service		F	D					A	A	E	A	
Approach Delay (s)		187.2			0.0			7.2			25.4	
Approach LOS		F			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	73.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	57	98	105	186	393	187	1261	35	216	763	262
Future Volume (veh/h)	147	57	98	105	186	393	187	1261	35	216	763	262
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	155	60	103	111	196	0	197	1327	37	227	803	0
Adj No. of Lanes	2	1	1	1	1	1	2	3	0	2	3	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	312	169	143	215	225	192	256	1246	35	1400	2983	929
Arrive On Green	0.09	0.09	0.09	0.12	0.12	0.00	0.07	0.25	0.25	0.13	0.19	0.00
Sat Flow, veh/h	3442	1863	1573	1774	1863	1583	3442	5085	142	3442	5085	1583
Grp Volume(v), veh/h	155	60	103	111	196	0	197	885	479	227	803	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1573	1774	1863	1583	1721	1695	1836	1721	1695	1583
Q Serve(g_s), s	5.1	3.6	7.6	7.0	12.4	0.0	6.7	29.4	29.4	7.0	16.1	0.0
Cycle Q Clear(g_c), s	5.1	3.6	7.6	7.0	12.4	0.0	6.7	29.4	29.4	7.0	16.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	312	169	143	215	225	192	256	831	450	1400	2983	929
V/C Ratio(X)	0.50	0.36	0.72	0.52	0.87	0.00	0.77	1.07	1.07	0.16	0.27	0.00
Avail Cap(c_a), veh/h	1030	557	471	235	247	210	574	831	450	1400	2983	929
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.82	0.82	0.00	0.82	0.82	0.82	0.88	0.88	0.00
Uniform Delay (d), s/veh	51.9	51.3	53.1	49.5	51.8	0.0	54.5	45.3	45.3	33.9	26.5	0.0
Incr Delay (d2), s/veh	0.5	0.5	2.6	0.6	20.1	0.0	1.5	47.4	57.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	1.9	3.4	3.5	7.6	0.0	3.3	19.2	22.0	3.4	7.6	0.0
LnGrp Delay(d),s/veh	52.4	51.7	55.7	50.0	72.0	0.0	56.1	92.7	102.3	33.9	26.5	0.0
LnGrp LOS	D	D	E	D	E		E	F	F	C	C	
Approach Vol, veh/h		318			307			1561			1030	
Approach Delay, s/veh		53.3			64.0			91.0			28.1	
Approach LOS		D			E			F			C	

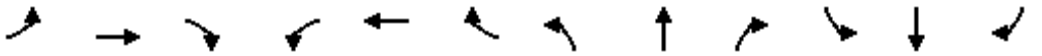
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	52.9	33.5		15.0	11.9	74.5		18.6
Change Period (Y+Rc), s	4.1	* 4.1		4.1	3.0	4.1		4.1
Max Green Setting (Gmax), s	23.5	* 29		35.9	20.0	32.9		15.9
Max Q Clear Time (g_c+I1), s	9.0	31.4		9.6	8.7	18.1		14.4
Green Ext Time (p_c), s	2.5	0.0		0.4	0.2	3.1		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	64.6
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	82	0	318	0	1165	173	124	842	0
Future Volume (vph)	0	0	0	82	0	318	0	1165	173	124	842	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.1	4.1		4.1		3.5	4.1	
Lane Util. Factor					1.00	1.00		0.91		1.00	0.91	
Frpb, ped/bikes					1.00	0.98		0.99		1.00	1.00	
Flpb, ped/bikes					1.00	1.00		1.00		1.00	1.00	
Frt					1.00	0.85		0.98		1.00	1.00	
Flt Protected					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)					1593	1400		4457		1593	4577	
Flt Permitted					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (perm)					1593	1400		4457		1593	4577	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	86	0	335	0	1226	182	131	886	0
RTOR Reduction (vph)	0	0	0	0	0	246	0	10	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	86	89	0	1398	0	131	886	0
Confl. Peds. (#/hr)						3			24			6
Turn Type				Perm	NA	Perm	custom	NA		Prot	NA	
Protected Phases					1			2 8		7	2 3 4	
Permitted Phases				1		1	8					
Actuated Green, G (s)					18.5	18.5		95.8		16.7	120.7	
Effective Green, g (s)					18.5	18.5		95.8		16.7	120.7	
Actuated g/C Ratio					0.13	0.13		0.65		0.11	0.82	
Clearance Time (s)					4.1	4.1				3.5		
Vehicle Extension (s)					2.0	2.0				2.0		
Lane Grp Cap (vph)					200	176		2908		181	3763	
v/s Ratio Prot								c0.31		c0.08	c0.19	
v/s Ratio Perm					0.05	c0.06						
v/c Ratio					0.43	0.51		0.48		0.72	0.24	
Uniform Delay, d1					59.3	59.9		12.9		62.8	2.9	
Progression Factor					1.00	1.00		0.52		1.00	1.00	
Incremental Delay, d2					0.5	0.8		0.1		11.5	0.0	
Delay (s)					59.8	60.7		6.9		74.3	2.9	
Level of Service					E	E		A		E	A	
Approach Delay (s)		0.0			60.6			6.9			12.1	
Approach LOS		A			E			A			B	

Intersection Summary			
HCM 2000 Control Delay	16.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	146.8	Sum of lost time (s)	20.3
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	436	334	22	45	379	477	3	425	28	285	277	361
Future Volume (vph)	436	334	22	45	379	477	3	425	28	285	277	361
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5	4.1	4.1
Lane Util. Factor	0.97	1.00		1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.96	1.00	1.00		1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.97	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1841		1770	3539	1516	1715	3498		1770	1863	1499
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.58	1.00		0.29	1.00	1.00
Satd. Flow (perm)	3433	1841		1770	3539	1516	1050	3498		545	1863	1499
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	459	352	23	47	399	502	3	447	29	300	292	380
RTOR Reduction (vph)	0	1	0	0	0	317	0	3	0	0	0	247
Lane Group Flow (vph)	459	374	0	47	399	185	3	473	0	300	292	133
Confl. Peds. (#/hr)			7			12	24		8			24
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		custom	NA	custom
Protected Phases	3	8		7	4			6		5	1 2 5 6	
Permitted Phases						4	6			2		2
Actuated Green, G (s)	40.9	44.6		16.7	20.4	20.4	40.6	40.6		51.2	73.8	51.2
Effective Green, g (s)	40.9	44.6		16.7	20.4	20.4	40.6	40.6		51.2	73.8	51.2
Actuated g/C Ratio	0.28	0.30		0.11	0.14	0.14	0.28	0.28		0.35	0.50	0.35
Clearance Time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5		4.1
Vehicle Extension (s)	2.5	3.0		2.0	3.0	3.0	3.0	3.0		3.0		4.0
Lane Grp Cap (vph)	956	559		201	491	210	290	967		240	936	522
v/s Ratio Prot	0.13	c0.20		0.03	0.11			0.14		c0.05	c0.16	
v/s Ratio Perm						c0.12	0.00			c0.38		0.09
v/c Ratio	0.48	0.67		0.23	0.81	0.88	0.01	0.49		1.25	0.31	0.25
Uniform Delay, d1	44.1	44.6		59.2	61.3	62.0	38.5	44.4		49.0	21.5	34.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.91	0.89	0.50
Incremental Delay, d2	0.3	3.0		0.2	9.9	32.2	0.1	1.8		141.8	0.1	0.3
Delay (s)	44.4	47.7		59.4	71.2	94.2	38.6	46.2		186.6	19.2	17.5
Level of Service	D	D		E	E	F	D	D		F	B	B
Approach Delay (s)		45.9			82.8			46.1			70.2	
Approach LOS		D			F			D			E	

Intersection Summary			
HCM 2000 Control Delay	64.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	146.8	Sum of lost time (s)	20.3
Intersection Capacity Utilization	74.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	249	59	12	465	219	13
Future Volume (veh/h)	249	59	12	465	219	13
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	290	69	14	541	255	15
Adj No. of Lanes	2	0	1	1	0	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	1556	364	758	1019	334	20
Arrive On Green	0.55	0.55	0.55	0.55	0.20	0.20
Sat Flow, veh/h	2938	666	1016	1863	1659	98
Grp Volume(v), veh/h	179	180	14	541	271	0
Grp Sat Flow(s),veh/h/ln	1770	1742	1016	1863	1763	0
Q Serve(g_s), s	1.4	1.5	0.2	5.2	4.1	0.0
Cycle Q Clear(g_c), s	1.4	1.5	1.7	5.2	4.1	0.0
Prop In Lane		0.38	1.00		0.94	0.06
Lane Grp Cap(c), veh/h	968	953	758	1019	355	0
V/C Ratio(X)	0.18	0.19	0.02	0.53	0.76	0.00
Avail Cap(c_a), veh/h	1757	1730	1211	1850	1375	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	3.2	3.2	3.7	4.1	10.6	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.6	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.7	0.1	2.7	2.1	0.0
LnGrp Delay(d),s/veh	3.3	3.4	3.7	4.7	11.9	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h	359			555	271	
Approach Delay, s/veh	3.4			4.7	11.9	
Approach LOS	A			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		8.7		19.5				19.5
Change Period (Y+Rc), s		3.0		4.1				4.1
Max Green Setting (Gmax), s		22.0		28.0				28.0
Max Q Clear Time (g_c+I1), s		6.1		3.5				7.2
Green Ext Time (p_c), s		0.4		8.9				8.2

Intersection Summary	
HCM 2010 Ctrl Delay	5.9
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	676	33	139	189	28	35	36	200	12	24	18
Future Volume (veh/h)	105	676	33	139	189	28	35	36	200	12	24	18
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	1900	1863	1900
Adj Flow Rate, veh/h	115	743	36	153	208	31	38	40	220	13	26	20
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	1202	58	219	1151	169	322	338	286	33	66	51
Arrive On Green	0.10	0.35	0.35	0.12	0.37	0.37	0.18	0.18	0.18	0.04	0.04	0.04
Sat Flow, veh/h	1774	3436	166	1774	3093	454	1774	1863	1575	763	1531	1184
Grp Volume(v), veh/h	115	383	396	153	118	121	38	40	220	31	0	28
Grp Sat Flow(s),veh/h/ln	1774	1770	1833	1774	1770	1778	1774	1863	1575	1825	0	1654
Q Serve(g_s), s	3.4	9.8	9.8	4.5	2.4	2.5	1.0	1.0	7.3	0.9	0.0	0.9
Cycle Q Clear(g_c), s	3.4	9.8	9.8	4.5	2.4	2.5	1.0	1.0	7.3	0.9	0.0	0.9
Prop In Lane	1.00		0.09	1.00		0.26	1.00		1.00	0.42		0.72
Lane Grp Cap(c), veh/h	179	619	641	219	658	661	322	338	286	79	0	72
V/C Ratio(X)	0.64	0.62	0.62	0.70	0.18	0.18	0.12	0.12	0.77	0.39	0.00	0.39
Avail Cap(c_a), veh/h	650	1297	1343	2015	2659	2671	813	853	722	1538	0	1394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.6	14.7	14.7	23.0	11.5	11.5	18.7	18.7	21.3	25.4	0.0	25.4
Incr Delay (d2), s/veh	1.4	1.0	1.0	1.5	0.1	0.1	0.1	0.1	1.7	1.2	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	5.0	5.1	2.3	1.2	1.2	0.5	0.5	3.3	0.5	0.0	0.4
LnGrp Delay(d),s/veh	25.0	15.7	15.7	24.5	11.7	11.7	18.8	18.8	22.9	26.6	0.0	26.7
LnGrp LOS	C	B	B	C	B	B	B	B	C	C		C
Approach Vol, veh/h		894			392			298			59	
Approach Delay, s/veh		16.9			16.7			21.8			26.6	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		13.9	10.7	23.6		6.4	9.5	24.8
Change Period (Y+Rc), s		4.0	4.0	4.5		4.0	4.0	4.5
Max Green Setting (Gmax), s		25.0	62.0	40.0		46.0	20.0	82.0
Max Q Clear Time (g_c+I1), s		9.3	6.5	11.8		2.9	5.4	4.5
Green Ext Time (p_c), s		0.5	0.2	7.2		0.2	0.1	8.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.1
HCM 2010 LOS	B

Notes

Movement	EBT	EBR	WBL	WBT	NBL	NBR	NEL	NER
Lane Configurations								
Traffic Volume (veh/h)	135	20	975	127	267	890	0	0
Future Volume (veh/h)	135	20	975	127	267	890	0	0
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	144	21	1138	0	284	350		
Adj No. of Lanes	2	0	2	1	1	1		
Peak Hour Factor	0.94	0.94	0.94	0.90	0.94	0.94		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	837	120	1153	605	453	405		
Arrive On Green	0.27	0.27	0.32	0.00	0.26	0.26		
Sat Flow, veh/h	3201	446	3548	1863	1774	1583		
Grp Volume(v), veh/h	81	84	1138	0	284	350		
Grp Sat Flow(s),veh/h/ln	1770	1784	1774	1863	1774	1583		
Q Serve(g_s), s	2.8	2.9	25.5	0.0	11.4	16.9		
Cycle Q Clear(g_c), s	2.8	2.9	25.5	0.0	11.4	16.9		
Prop In Lane		0.25	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	477	481	1153	605	453	405		
V/C Ratio(X)	0.17	0.17	0.99	0.00	0.63	0.86		
Avail Cap(c_a), veh/h	477	481	1153	605	532	475		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.15	0.00	1.00	1.00		
Uniform Delay (d), s/veh	22.4	22.4	26.8	0.0	26.4	28.5		
Incr Delay (d2), s/veh	0.8	0.8	7.5	0.0	2.3	14.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.5	1.5	13.7	0.0	5.8	9.0		
LnGrp Delay(d),s/veh	23.1	23.2	34.4	0.0	28.7	43.0		
LnGrp LOS	C	C	C		C	D		
Approach Vol, veh/h	165			1138	634			
Approach Delay, s/veh	23.2			34.4	36.6			
Approach LOS	C			C	D			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		25.6				30.0		24.4
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		18.0				26.0		24.0
Max Q Clear Time (g_c+I1), s		4.9				27.5		18.9
Green Ext Time (p_c), s		0.8				0.0		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	34.2
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	18	762	1094	36	13	7
Future Volume (veh/h)	18	762	1094	36	13	7
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	21	907	1302	43	15	8
Adj No. of Lanes	1	1	2	1	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	289	962	1291	1277	522	432
Arrive On Green	0.23	0.23	0.38	0.69	0.28	0.28
Sat Flow, veh/h	1242	1583	3442	1863	1863	1541
Grp Volume(v), veh/h	21	907	1302	43	15	8
Grp Sat Flow(s),veh/h/ln	1242	1583	1721	1863	1863	1541
Q Serve(g_s), s	1.5	27.0	43.5	0.9	0.7	0.4
Cycle Q Clear(g_c), s	1.5	27.0	43.5	0.9	0.7	0.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	289	962	1291	1277	522	432
V/C Ratio(X)	0.07	0.94	1.01	0.03	0.03	0.02
Avail Cap(c_a), veh/h	289	962	1291	1277	522	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.49	0.49	0.71	0.71	1.00	1.00
Uniform Delay (d), s/veh	34.7	20.9	36.3	5.9	30.3	30.2
Incr Delay (d2), s/veh	0.1	9.9	23.2	0.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	43.1	24.8	0.5	0.4	0.2
LnGrp Delay(d),s/veh	34.8	30.8	59.5	5.9	30.4	30.3
LnGrp LOS	C	C	F	A	C	C
Approach Vol, veh/h	928			1345	23	
Approach Delay, s/veh	30.9			57.8	30.4	
Approach LOS	C			E	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		84.5		31.5	47.0	37.5		
Change Period (Y+Rc), s		5.0		4.5	3.5	5.0		
Max Green Setting (Gmax), s		79.0		27.0	43.5	32.0		
Max Q Clear Time (g_c+I1), s		2.9		29.0	45.5	2.7		
Green Ext Time (p_c), s		0.2		0.0	0.0	0.1		

Intersection Summary	
HCM 2010 Ctrl Delay	46.6
HCM 2010 LOS	D



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	296	179	932	205	51	727
Future Volume (vph)	296	179	932	205	51	727
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	3.5	5.0		3.5	4.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.97		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3430		1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3430		1770	3539
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	325	197	1024	225	56	799
RTOR Reduction (vph)	0	150	14	0	0	0
Lane Group Flow (vph)	325	47	1235	0	56	799
Confl. Peds. (#/hr)				2		
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	
Permitted Phases		8				6
Actuated Green, G (s)	19.9	19.9	37.0		5.7	47.2
Effective Green, g (s)	19.9	19.9	37.0		5.7	47.2
Actuated g/C Ratio	0.24	0.24	0.44		0.07	0.56
Clearance Time (s)	3.5	3.5	5.0		3.5	4.0
Vehicle Extension (s)	2.0	2.0	4.0		2.0	4.0
Lane Grp Cap (vph)	419	375	1510		120	1988
v/s Ratio Prot	c0.18		c0.36		0.03	
v/s Ratio Perm		0.03				c0.23
v/c Ratio	0.78	0.12	0.82		0.47	0.40
Uniform Delay, d1	30.0	25.2	20.6		37.7	10.4
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	8.0	0.1	5.0		1.0	0.6
Delay (s)	37.9	25.3	25.6		38.7	11.0
Level of Service	D	C	C		D	B
Approach Delay (s)	33.2		25.6			12.8
Approach LOS	C		C			B

Intersection Summary			
HCM 2000 Control Delay	22.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	84.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	131	7	77	50	274	2	888	137	201	740	130
Future Volume (veh/h)	66	131	7	77	50	274	2	888	137	201	740	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.98	1.00		1.00	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	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	75	149	8	88	57	311	2	1009	156	228	841	148
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	99	419	79	33	424	4	1302	201	273	1072	900
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.00	0.42	0.42	0.15	0.58	0.58
Sat Flow, veh/h	0	364	1537	0	121	1555	1774	3072	474	1774	1863	1564
Grp Volume(v), veh/h	224	0	8	145	0	311	2	581	584	228	841	148
Grp Sat Flow(s),veh/h/ln	364	0	1537	121	0	1555	1774	1770	1777	1774	1863	1564
Q Serve(g_s), s	0.0	0.0	0.3	0.0	0.0	13.3	0.1	20.7	20.7	9.2	25.6	3.3
Cycle Q Clear(g_c), s	20.0	0.0	0.3	20.0	0.0	13.3	0.1	20.7	20.7	9.2	25.6	3.3
Prop In Lane	0.33		1.00	0.61		1.00	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	165	0	419	112	0	424	4	750	753	273	1072	900
V/C Ratio(X)	1.36	0.00	0.02	1.30	0.00	0.73	0.52	0.77	0.78	0.84	0.78	0.16
Avail Cap(c_a), veh/h	165	0	419	112	0	424	483	964	968	362	1072	900
HCM Platoon Ratio	1.00	1.00	1.00	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	25.8	0.0	19.5	31.0	0.0	24.3	36.6	18.1	18.1	30.2	12.1	7.3
Incr Delay (d2), s/veh	196.6	0.0	0.0	185.2	0.0	6.2	34.6	3.7	3.7	9.5	4.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.3	0.0	0.1	8.0	0.0	6.5	0.1	10.8	10.8	5.2	14.3	1.4
LnGrp Delay(d),s/veh	222.4	0.0	19.5	216.2	0.0	30.4	71.2	21.8	21.9	39.6	16.2	7.4
LnGrp LOS	F		B	F		C	E	C	C	D	B	A
Approach Vol, veh/h		232			456			1167			1217	
Approach Delay, s/veh		215.4			89.5			21.9			19.5	
Approach LOS		F			F			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.3	35.6		23.5	3.2	46.8		23.5
Change Period (Y+Rc), s	3.0	4.5		3.5	3.0	4.5		3.5
Max Green Setting (Gmax), s	15.0	40.0		20.0	20.0	35.0		20.0
Max Q Clear Time (g_c+I1), s	11.2	22.7		22.0	2.1	27.6		22.0
Green Ext Time (p_c), s	0.1	8.4		0.0	0.0	6.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	45.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	208	236	160	108	230	9	58	298	64	76	404	51
Future Volume (veh/h)	208	236	160	108	230	9	58	298	64	76	404	51
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)	0.98		0.97	0.99		0.97	0.99		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	246	167	112	240	9	60	310	67	79	421	53
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	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	518	456	310	379	796	30	296	596	129	362	653	82
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1109	1021	693	962	1782	67	909	1471	318	988	1613	203
Grp Volume(v), veh/h	217	0	413	112	0	249	60	0	377	79	0	474
Grp Sat Flow(s),veh/h/ln	1109	0	1715	962	0	1849	909	0	1789	988	0	1816
Q Serve(g_s), s	9.4	0.0	10.7	5.8	0.0	5.2	3.5	0.0	9.6	4.0	0.0	12.8
Cycle Q Clear(g_c), s	14.7	0.0	10.7	16.5	0.0	5.2	16.2	0.0	9.6	13.6	0.0	12.8
Prop In Lane	1.00		0.40	1.00		0.04	1.00		0.18	1.00		0.11
Lane Grp Cap(c), veh/h	518	0	766	379	0	825	296	0	725	362	0	736
V/C Ratio(X)	0.42	0.00	0.54	0.30	0.00	0.30	0.20	0.00	0.52	0.22	0.00	0.64
Avail Cap(c_a), veh/h	754	0	1130	584	0	1218	377	0	884	450	0	897
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.4	0.0	12.2	18.3	0.0	10.7	21.1	0.0	13.6	18.7	0.0	14.5
Incr Delay (d2), s/veh	0.8	0.0	0.8	0.6	0.0	0.3	0.5	0.0	0.8	0.4	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	5.1	1.6	0.0	2.7	0.9	0.0	4.9	1.1	0.0	6.6
LnGrp Delay(d),s/veh	16.2	0.0	13.1	18.9	0.0	11.0	21.5	0.0	14.4	19.2	0.0	16.1
LnGrp LOS	B		B	B		B	C		B	B		B
Approach Vol, veh/h		630			361			437			553	
Approach Delay, s/veh		14.2			13.5			15.4			16.5	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		31.6		29.1		31.6		29.1
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		40.0		30.0		40.0		30.0
Max Q Clear Time (g_c+I1), s		16.7		15.6		18.5		18.2
Green Ext Time (p_c), s		9.0		7.3		8.7		6.4

Intersection Summary	
HCM 2010 Ctrl Delay	15.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	49	0	0	223	0	559	21	197	451	35
Future Vol, veh/h	0	0	49	0	0	223	0	559	21	197	451	35
Conflicting Peds, #/hr	0	0	3	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	52	0	0	237	0	595	22	210	480	37

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	501	-	-	606	-	0	0	617	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	0	570	0	0	497	0	-	-	963	-	-
Stage 1	0	0	-	0	0	-	0	-	-	-	-	-
Stage 2	0	0	-	0	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	568	-	-	497	-	-	-	963	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12	18.7	0	2.8
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	568	497	963	-	-
HCM Lane V/C Ratio	-	-	0.092	0.477	0.218	-	-
HCM Control Delay (s)	-	-	12	18.7	9.8	-	-
HCM Lane LOS	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	-	-	0.3	2.5	0.8	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	29	32	326	191	33
Future Vol, veh/h	17	29	32	326	191	33
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	-	110	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	31	34	343	201	35

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	459	118	236	0	-	0
Stage 1	219	-	-	-	-	-
Stage 2	240	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	531	912	1328	-	-	-
Stage 1	796	-	-	-	-	-
Stage 2	777	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	517	912	1328	-	-	-
Mov Cap-2 Maneuver	517	-	-	-	-	-
Stage 1	775	-	-	-	-	-
Stage 2	777	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1328	-	711	-	-
HCM Lane V/C Ratio	0.025	-	0.068	-	-
HCM Control Delay (s)	7.8	-	10.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	466	8	2	172	1	0
Future Vol, veh/h	466	8	2	172	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	507	9	2	187	1	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	515	0	702	511
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	191	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1051	-	404	563
Stage 1	-	-	-	-	602	-
Stage 2	-	-	-	-	841	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1051	-	403	563
Mov Cap-2 Maneuver	-	-	-	-	403	-
Stage 1	-	-	-	-	602	-
Stage 2	-	-	-	-	839	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	403	-	-	1051	-
HCM Lane V/C Ratio	0.003	-	-	0.002	-
HCM Control Delay (s)	14	-	-	8.4	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

BACKGROUND PLUS PROJECT PM

Movement	EBL	EBT	EBR2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	604	174	669	224	18	137	4	384	17	14	5
Future Volume (vph)	12	604	174	669	224	18	137	4	384	17	14	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.1	5.1	4.0	4.1		4.1	4.1	4.1		3.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.86	0.85		0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1770	3539	1583	3433	3500		1681	1458	1504		1786	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.98	
Satd. Flow (perm)	1770	3539	1583	3433	3500		1681	1458	1504		1786	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	12	604	174	669	224	18	137	4	384	17	14	5
RTOR Reduction (vph)	0	0	101	0	3	0	0	155	169	0	0	0
Lane Group Flow (vph)	12	604	73	669	239	0	123	47	31	0	36	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases			6						4			
Actuated Green, G (s)	1.1	21.7	21.7	27.0	48.6		12.9	12.9	12.9		4.3	
Effective Green, g (s)	1.1	21.7	21.7	27.0	48.6		12.9	12.9	12.9		4.3	
Actuated g/C Ratio	0.01	0.26	0.26	0.33	0.59		0.16	0.16	0.16		0.05	
Clearance Time (s)	4.0	5.1	5.1	4.0	4.1		4.1	4.1	4.1		3.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	23	935	418	1129	2071		264	229	236		93	
v/s Ratio Prot	0.01	c0.17		c0.19	0.07		c0.07	0.03			c0.02	
v/s Ratio Perm			0.05						0.02			
v/c Ratio	0.52	0.65	0.18	0.59	0.12		0.47	0.20	0.13		0.39	
Uniform Delay, d1	40.2	26.8	23.3	23.0	7.3		31.5	30.1	29.8		37.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	19.7	1.5	0.2	0.8	0.0		1.3	0.4	0.3		2.7	
Delay (s)	59.9	28.3	23.5	23.8	7.4		32.8	30.6	30.0		40.3	
Level of Service	E	C	C	C	A		C	C	C		D	
Approach Delay (s)		27.8			19.4			30.9			40.3	
Approach LOS		C			B			C			D	

Intersection Summary			
HCM 2000 Control Delay	25.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	82.1	Sum of lost time (s)	16.2
Intersection Capacity Utilization	62.9%	ICU Level of Service	B
Analysis Period (min)	15		

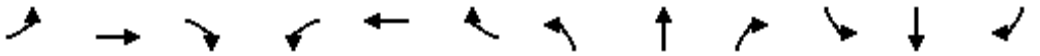
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	44	807	87	23	7	813	271	114	4	168	141
Future Volume (veh/h)	158	44	807	87	23	7	813	271	114	4	168	141
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		0.99	1.00		0.94	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	112	138	897	97	26	8	903	301	127	4	187	157
Adj No. of Lanes	1	1	2	0	2	0	2	2	0	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	538	565	951	173	131	40	957	1001	412	7	487	212
Arrive On Green	0.30	0.30	0.30	0.10	0.10	0.10	0.28	0.41	0.41	0.00	0.14	0.14
Sat Flow, veh/h	1774	1863	3132	1774	1346	414	3442	2434	1002	1774	3539	1538
Grp Volume(v), veh/h	112	138	897	97	0	34	903	217	211	4	187	157
Grp Sat Flow(s),veh/h/ln	1774	1863	1566	1774	0	1761	1721	1770	1667	1774	1770	1538
Q Serve(g_s), s	4.7	5.6	27.9	5.2	0.0	1.8	25.6	8.2	8.5	0.2	4.8	9.8
Cycle Q Clear(g_c), s	4.7	5.6	27.9	5.2	0.0	1.8	25.6	8.2	8.5	0.2	4.8	9.8
Prop In Lane	1.00		1.00	1.00		0.24	1.00		0.60	1.00		1.00
Lane Grp Cap(c), veh/h	538	565	951	173	0	172	957	728	686	7	487	212
V/C Ratio(X)	0.21	0.24	0.94	0.56	0.00	0.20	0.94	0.30	0.31	0.54	0.38	0.74
Avail Cap(c_a), veh/h	889	934	1570	534	0	529	1035	887	835	178	1064	463
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	26.1	33.9	43.0	0.0	41.4	35.3	19.7	19.8	49.6	39.2	41.3
Incr Delay (d2), s/veh	0.1	0.1	5.5	1.1	0.0	0.2	15.2	0.1	0.1	20.3	0.2	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	2.3	2.8	12.7	2.6	0.0	0.9	14.2	4.0	3.9	0.2	2.3	4.3
LnGrp Delay(d),s/veh	25.9	26.2	39.4	44.0	0.0	41.6	50.4	19.8	19.9	69.9	39.4	43.2
LnGrp LOS	C	C	D	D		D	D	B	B	E	D	D
Approach Vol, veh/h		1147			131			1331			348	
Approach Delay, s/veh		36.5			43.4			40.6			41.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		35.4	30.7	18.8		14.8	3.4	46.1
Change Period (Y+Rc), s		5.1	3.0	5.1		5.1	3.0	5.1
Max Green Setting (Gmax), s		50.0	30.0	30.0		30.0	10.0	50.0
Max Q Clear Time (g_c+I1), s		29.9	27.6	11.8		7.2	2.2	10.5
Green Ext Time (p_c), s		0.4	0.1	0.7		0.1	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	39.2
HCM 2010 LOS	D

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	243	0	985	0	0	0	0	955	551	387	675	0
Future Volume (vph)	243	0	985	0	0	0	0	955	551	387	675	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Lane Util. Factor		1.00	0.76					0.86	0.86	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.97	0.85	1.00	1.00	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1770	3610					4676	1362	3433	3539	
Flt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1770	3610					4676	1362	3433	3539	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	248	0	1005	0	0	0	0	974	562	395	689	0
RTOR Reduction (vph)	0	0	778	0	0	0	0	33	216	0	0	0
Lane Group Flow (vph)	0	248	227	0	0	0	0	1155	132	395	689	0
Confl. Peds. (#/hr)							11					11
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		12.6	12.6					21.2	21.2	10.4	27.2	
Effective Green, g (s)		12.6	12.6					21.2	21.2	10.4	27.2	
Actuated g/C Ratio		0.23	0.23					0.38	0.38	0.19	0.49	
Clearance Time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Vehicle Extension (s)		0.2	0.2					0.2	0.2	0.2	1.0	
Lane Grp Cap (vph)		398	813					1773	516	638	1722	
v/s Ratio Prot								c0.25		c0.12	0.19	
v/s Ratio Perm		0.14	0.06						0.10			
v/c Ratio		0.62	0.28					0.65	0.26	0.62	0.40	
Uniform Delay, d1		19.5	17.9					14.3	11.9	20.9	9.1	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		2.2	0.1					0.7	0.1	1.3	0.1	
Delay (s)		21.7	18.0					15.0	12.0	22.2	9.2	
Level of Service		C	B					B	B	C	A	
Approach Delay (s)		18.7			0.0			14.3			13.9	
Approach LOS		B			A			B			B	

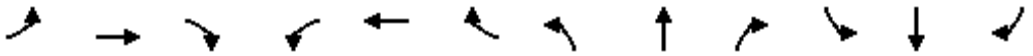
Intersection Summary			
HCM 2000 Control Delay	15.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	55.9	Sum of lost time (s)	11.7
Intersection Capacity Utilization	57.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	206	172	42	68	176	131	1000	42	440	1114	105
Future Volume (veh/h)	330	206	172	42	68	176	131	1000	42	440	1114	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		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	344	215	179	44	71	0	136	1042	44	458	1160	0
Adj No. of Lanes	2	1	1	1	1	1	2	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	596	322	272	148	156	132	301	1373	58	702	2079	647
Arrive On Green	0.17	0.17	0.17	0.08	0.08	0.00	0.09	0.27	0.27	0.20	0.41	0.00
Sat Flow, veh/h	3442	1863	1572	1774	1863	1583	3442	5002	211	3442	5085	1583
Grp Volume(v), veh/h	344	215	179	44	71	0	136	706	380	458	1160	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1572	1774	1863	1583	1721	1695	1823	1721	1695	1583
Q Serve(g_s), s	5.7	6.7	6.6	1.4	2.2	0.0	2.3	11.8	11.8	7.6	10.8	0.0
Cycle Q Clear(g_c), s	5.7	6.7	6.6	1.4	2.2	0.0	2.3	11.8	11.8	7.6	10.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	596	322	272	148	156	132	301	931	500	702	2079	647
V/C Ratio(X)	0.58	0.67	0.66	0.30	0.46	0.00	0.45	0.76	0.76	0.65	0.56	0.00
Avail Cap(c_a), veh/h	1890	1023	863	688	722	614	1112	1363	733	1112	2079	647
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.5	23.9	23.9	26.7	27.0	0.0	26.8	20.6	20.6	22.6	14.0	0.0
Incr Delay (d2), s/veh	0.3	0.9	1.0	0.4	0.8	0.0	0.4	0.7	1.3	0.4	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	3.5	2.9	0.7	1.2	0.0	1.1	5.6	6.1	3.6	5.1	0.0
LnGrp Delay(d),s/veh	23.9	24.8	24.9	27.1	27.8	0.0	27.2	21.3	21.9	23.0	14.2	0.0
LnGrp LOS	C	C	C	C	C		C	C	C	C	B	
Approach Vol, veh/h		738			115			1222			1618	
Approach Delay, s/veh		24.4			27.5			22.1			16.7	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.7	21.1		14.8	8.4	29.4		9.3
Change Period (Y+Rc), s	4.1	* 4.1		4.1	3.0	4.1		4.1
Max Green Setting (Gmax), s	20.0	* 25		34.0	20.0	24.9		24.0
Max Q Clear Time (g_c+I1), s	9.6	13.8		8.7	4.3	12.8		4.2
Green Ext Time (p_c), s	3.1	3.2		1.2	0.1	4.5		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	20.4
HCM 2010 LOS	C

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	1	43	0	266	1	907	107	203	1124	1
Future Volume (vph)	0	0	1	43	0	266	1	907	107	203	1124	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.1	4.1	4.1	4.1		3.5	4.1	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00			1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt		0.85			1.00	0.85	1.00	0.98		1.00	1.00	
Flt Protected		1.00			0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		0			1593	1399	1593	4482		1593	4576	
Flt Permitted		1.00			0.95	1.00	0.23	1.00		0.95	1.00	
Satd. Flow (perm)		0			1593	1399	389	4482		1593	4576	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	1	44	0	274	1	935	110	209	1159	1
RTOR Reduction (vph)	0	1	0	0	0	235	0	8	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	44	39	1	1037	0	209	1160	0
Confl. Peds. (#/hr)						3			19			22
Turn Type				Perm	NA	Perm	custom	NA		Prot	NA	
Protected Phases					1			2 8		7	2 3 4	
Permitted Phases				1		1	8					
Actuated Green, G (s)		0.0			22.0	22.0	41.7	82.1		23.9	110.1	
Effective Green, g (s)		0.0			22.0	22.0	41.7	82.1		23.9	110.1	
Actuated g/C Ratio		0.00			0.14	0.14	0.27	0.53		0.15	0.71	
Clearance Time (s)					4.1	4.1	4.1			3.5		
Vehicle Extension (s)					2.0	2.0	3.0			2.0		
Lane Grp Cap (vph)		0			226	199	104	2381		246	3260	
v/s Ratio Prot								c0.23		c0.13	c0.25	
v/s Ratio Perm					0.03	c0.03	0.00					
v/c Ratio		0.00			0.19	0.20	0.01	0.44		0.85	0.36	
Uniform Delay, d1		77.2			58.4	58.4	41.3	22.1		63.6	8.5	
Progression Factor		1.00			1.00	1.00	1.07	0.67		1.00	1.00	
Incremental Delay, d2		0.0			0.2	0.2	0.0	0.2		22.2	0.1	
Delay (s)		77.2			58.6	58.6	44.0	14.9		85.7	8.6	
Level of Service		E			E	E	D	B		F	A	
Approach Delay (s)		77.2			58.6			14.9			20.4	
Approach LOS		E			E			B			C	

Intersection Summary			
HCM 2000 Control Delay	22.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	154.5	Sum of lost time (s)	20.3
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	309	331	31	39	395	429	10	276	48	285	468	415
Future Volume (vph)	309	331	31	39	395	429	10	276	48	285	468	415
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5	4.1	4.1
Lane Util. Factor	0.97	1.00		1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	0.98		1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.98	1.00		0.98	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1832		1770	3539	1539	1729	3402		1728	1863	1501
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.49	1.00		0.46	1.00	1.00
Satd. Flow (perm)	3433	1832		1770	3539	1539	896	3402		838	1863	1501
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	312	334	31	39	399	433	10	279	48	288	473	419
RTOR Reduction (vph)	0	2	0	0	0	376	0	8	0	0	0	200
Lane Group Flow (vph)	312	363	0	39	399	57	10	319	0	288	473	219
Confl. Peds. (#/hr)			9			6	22		32	32		22
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		custom	NA	custom
Protected Phases	3	8		7	4			6!		5!	1 2 5 6	
Permitted Phases						4	6			2		2
Actuated Green, G (s)	45.3	41.7		23.9	20.3	20.3	51.1	51.1		46.6	77.2	40.4
Effective Green, g (s)	45.3	41.7		23.9	20.3	20.3	51.1	51.1		46.6	77.2	40.4
Actuated g/C Ratio	0.29	0.27		0.15	0.13	0.13	0.33	0.33		0.30	0.50	0.26
Clearance Time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5		4.1
Vehicle Extension (s)	2.5	3.0		2.0	3.0	3.0	3.0	3.0		3.0		4.0
Lane Grp Cap (vph)	1006	494		273	464	202	296	1125		288	930	392
v/s Ratio Prot	c0.09	c0.20		0.02	c0.11			0.09		c0.04	c0.25	
v/s Ratio Perm						0.04	0.01			c0.26		0.15
v/c Ratio	0.31	0.73		0.14	0.86	0.28	0.03	0.28		1.00	0.51	0.56
Uniform Delay, d1	42.5	51.4		56.4	65.7	60.5	35.0	38.2		55.8	25.9	49.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.04
Incremental Delay, d2	0.1	5.6		0.1	14.7	0.8	0.2	0.6		52.1	0.2	2.0
Delay (s)	42.6	57.0		56.5	80.4	61.3	35.2	38.8		107.8	26.1	53.3
Level of Service	D	E		E	F	E	D	D		F	C	D
Approach Delay (s)		50.3			69.8			38.7			55.7	
Approach LOS		D			E			D			E	

Intersection Summary			
HCM 2000 Control Delay	56.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	154.5	Sum of lost time (s)	20.3
Intersection Capacity Utilization	73.6%	ICU Level of Service	D
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	555	134	9	199	86	18
Future Volume (veh/h)	555	134	9	199	86	18
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	645	156	10	231	100	21
Adj No. of Lanes	2	0	1	1	0	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	1592	385	555	1050	253	53
Arrive On Green	0.56	0.56	0.56	0.56	0.18	0.18
Sat Flow, veh/h	2919	683	676	1863	1413	297
Grp Volume(v), veh/h	404	397	10	231	122	0
Grp Sat Flow(s),veh/h/ln	1770	1739	676	1863	1723	0
Q Serve(g_s), s	3.6	3.6	0.2	1.7	1.7	0.0
Cycle Q Clear(g_c), s	3.6	3.6	3.8	1.7	1.7	0.0
Prop In Lane		0.39	1.00		0.82	0.17
Lane Grp Cap(c), veh/h	997	980	555	1050	308	0
V/C Ratio(X)	0.40	0.41	0.02	0.22	0.40	0.00
Avail Cap(c_a), veh/h	1798	1767	860	1892	1376	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	3.4	3.4	4.5	3.0	10.0	0.0
Incr Delay (d2), s/veh	0.4	0.4	0.0	0.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	1.8	0.0	0.9	0.8	0.0
LnGrp Delay(d),s/veh	3.8	3.8	4.5	3.1	10.3	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h	801			241	122	
Approach Delay, s/veh	3.8			3.2	10.3	
Approach LOS	A			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		7.9		19.6				19.6
Change Period (Y+Rc), s		3.0		4.1				4.1
Max Green Setting (Gmax), s		22.0		28.0				28.0
Max Q Clear Time (g_c+I1), s		3.7		5.6				5.8
Green Ext Time (p_c), s		0.1		9.7				9.6

Intersection Summary	
HCM 2010 Ctrl Delay	4.3
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	440	30	464	254	20	39	24	137	51	58	47
Future Volume (veh/h)	46	440	30	464	254	20	39	24	137	51	58	47
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	1900	1863	1900
Adj Flow Rate, veh/h	55	530	36	559	306	24	38	42	165	61	70	57
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	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	96	794	54	600	1731	135	260	273	226	94	110	91
Arrive On Green	0.05	0.24	0.24	0.34	0.52	0.52	0.15	0.15	0.15	0.08	0.08	0.08
Sat Flow, veh/h	1774	3363	228	1774	3327	259	1774	1863	1538	1105	1294	1080
Grp Volume(v), veh/h	55	278	288	559	162	168	38	42	165	100	0	88
Grp Sat Flow(s),veh/h/ln	1774	1770	1822	1774	1770	1817	1774	1863	1538	1807	0	1672
Q Serve(g_s), s	2.6	12.1	12.2	25.9	4.1	4.2	1.6	1.7	8.7	4.5	0.0	4.3
Cycle Q Clear(g_c), s	2.6	12.1	12.2	25.9	4.1	4.2	1.6	1.7	8.7	4.5	0.0	4.3
Prop In Lane	1.00		0.13	1.00		0.14	1.00		1.00	0.61		0.65
Lane Grp Cap(c), veh/h	96	418	430	600	921	945	260	273	226	153	0	142
V/C Ratio(X)	0.57	0.67	0.67	0.93	0.18	0.18	0.15	0.15	0.73	0.65	0.00	0.62
Avail Cap(c_a), veh/h	417	832	857	1293	1706	1752	521	548	452	978	0	904
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.3	29.4	29.5	27.2	10.8	10.8	31.6	31.7	34.7	37.7	0.0	37.6
Incr Delay (d2), s/veh	2.0	1.8	1.8	3.0	0.1	0.1	0.1	0.1	1.7	1.7	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	6.1	6.4	13.1	2.0	2.1	0.8	0.9	3.8	2.3	0.0	2.1
LnGrp Delay(d),s/veh	41.2	31.3	31.3	30.1	10.9	10.9	31.7	31.8	36.4	39.5	0.0	39.3
LnGrp LOS	D	C	C	C	B	B	C	C	D	D		D
Approach Vol, veh/h		621			889			245			188	
Approach Delay, s/veh		32.2			23.0			34.9			39.4	
Approach LOS		C			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		16.5	32.8	24.6		11.2	8.6	48.7
Change Period (Y+Rc), s		4.0	4.0	4.5		4.0	4.0	4.5
Max Green Setting (Gmax), s		25.0	62.0	40.0		46.0	20.0	82.0
Max Q Clear Time (g_c+I1), s		10.7	27.9	14.2		6.5	4.6	6.2
Green Ext Time (p_c), s		0.4	0.9	5.9		0.7	0.0	6.6

Intersection Summary	
HCM 2010 Ctrl Delay	29.0
HCM 2010 LOS	C

Notes

Movement	EBT	EBR	WBL	WBT	NBL	NBR	NEL	NER
Lane Configurations								
Traffic Volume (veh/h)	406	44	643	89	68	490	0	0
Future Volume (veh/h)	406	44	643	89	68	490	0	0
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	441	48	768	0	74	36		
Adj No. of Lanes	2	0	2	1	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	852	92	1200	630	158	141		
Arrive On Green	0.26	0.26	0.34	0.00	0.09	0.09		
Sat Flow, veh/h	3315	349	3548	1863	1774	1583		
Grp Volume(v), veh/h	241	248	768	0	74	36		
Grp Sat Flow(s),veh/h/ln	1770	1801	1774	1863	1774	1583		
Q Serve(g_s), s	4.5	4.6	7.1	0.0	1.5	0.8		
Cycle Q Clear(g_c), s	4.5	4.6	7.1	0.0	1.5	0.8		
Prop In Lane		0.19	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	468	476	1200	630	158	141		
V/C Ratio(X)	0.52	0.52	0.64	0.00	0.47	0.25		
Avail Cap(c_a), veh/h	1168	1189	2205	1157	1093	976		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	12.2	12.2	10.9	0.0	16.9	16.5		
Incr Delay (d2), s/veh	1.3	1.3	0.8	0.0	3.0	1.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.4	2.4	3.5	0.0	0.9	0.4		
LnGrp Delay(d),s/veh	13.5	13.5	11.7	0.0	19.9	17.9		
LnGrp LOS	B	B	B		B	B		
Approach Vol, veh/h	489			768	110			
Approach Delay, s/veh	13.5			11.7	19.2			
Approach LOS	B			B	B			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		14.3				17.2		7.5
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		25.7				24.2		24.0
Max Q Clear Time (g_c+I1), s		6.6				9.1		3.5
Green Ext Time (p_c), s		3.8				4.1		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	12.9
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	78	784	618	39	97	45
Future Volume (veh/h)	78	784	618	39	97	45
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	80	808	637	40	100	46
Adj No. of Lanes	1	1	2	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	519	1029	798	771	224	190
Arrive On Green	0.42	0.42	0.23	0.41	0.12	0.12
Sat Flow, veh/h	1242	1583	3442	1863	1863	1577
Grp Volume(v), veh/h	80	808	637	40	100	46
Grp Sat Flow(s),veh/h/ln	1242	1583	1721	1863	1863	1577
Q Serve(g_s), s	2.3	20.7	9.9	0.7	2.8	1.5
Cycle Q Clear(g_c), s	2.3	20.7	9.9	0.7	2.8	1.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	519	1029	798	771	224	190
V/C Ratio(X)	0.15	0.79	0.80	0.05	0.45	0.24
Avail Cap(c_a), veh/h	592	1122	2858	2682	1020	864
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.2	7.1	20.5	9.9	23.1	22.5
Incr Delay (d2), s/veh	0.1	3.0	0.7	0.0	2.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	17.9	4.8	0.4	1.6	0.7
LnGrp Delay(d),s/veh	10.3	10.1	21.2	10.0	25.1	23.5
LnGrp LOS	B	B	C	A	C	C
Approach Vol, veh/h	888			677	146	
Approach Delay, s/veh	10.1			20.5	24.6	
Approach LOS	B			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		28.4		28.2	16.6	11.8		
Change Period (Y+Rc), s		5.0		4.5	3.5	5.0		
Max Green Setting (Gmax), s		81.5		27.0	47.0	31.0		
Max Q Clear Time (g_c+I1), s		2.7		22.7	11.9	4.8		
Green Ext Time (p_c), s		0.3		1.0	1.2	0.9		

Intersection Summary	
HCM 2010 Ctrl Delay	15.5
HCM 2010 LOS	B



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	254	83	638	359	213	671
Future Volume (vph)	254	83	638	359	213	671
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	3.5	5.0		3.5	4.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.95		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3348		1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3348		1770	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	282	92	709	399	237	746
RTOR Reduction (vph)	0	53	48	0	0	0
Lane Group Flow (vph)	282	39	1060	0	237	746
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	
Permitted Phases		8				6
Actuated Green, G (s)	18.4	18.4	34.1		17.5	56.1
Effective Green, g (s)	18.4	18.4	34.1		17.5	56.1
Actuated g/C Ratio	0.20	0.20	0.38		0.19	0.62
Clearance Time (s)	3.5	3.5	5.0		3.5	4.0
Vehicle Extension (s)	2.0	2.0	4.0		2.0	4.0
Lane Grp Cap (vph)	360	322	1264		343	2198
v/s Ratio Prot	c0.16		c0.32		c0.13	
v/s Ratio Perm		0.02				0.21
v/c Ratio	0.78	0.12	0.84		0.69	0.34
Uniform Delay, d1	34.1	29.3	25.6		33.9	8.2
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	9.9	0.1	5.3		4.8	0.1
Delay (s)	43.9	29.4	30.9		38.7	8.3
Level of Service	D	C	C		D	A
Approach Delay (s)	40.3		30.9			15.6
Approach LOS	D		C			B

Intersection Summary			
HCM 2000 Control Delay	26.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	90.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	65.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	107	11	46	21	257	10	624	137	183	803	150
Future Volume (veh/h)	86	107	11	46	21	257	10	624	137	183	803	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	91	113	12	48	22	271	11	657	144	193	845	158
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	75	67	451	88	25	453	20	1202	263	242	1009	854
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.01	0.42	0.42	0.14	0.54	0.54
Sat Flow, veh/h	0	231	1564	0	85	1572	1774	2885	632	1774	1863	1576
Grp Volume(v), veh/h	204	0	12	70	0	271	11	403	398	193	845	158
Grp Sat Flow(s),veh/h/ln	231	0	1564	85	0	1572	1774	1770	1748	1774	1863	1576
Q Serve(g_s), s	0.0	0.0	0.4	0.0	0.0	10.3	0.4	11.9	11.9	7.3	26.4	3.5
Cycle Q Clear(g_c), s	20.0	0.0	0.4	20.0	0.0	10.3	0.4	11.9	11.9	7.3	26.4	3.5
Prop In Lane	0.45		1.00	0.69		1.00	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	142	0	451	112	0	453	20	737	728	242	1009	854
V/C Ratio(X)	1.44	0.00	0.03	0.62	0.00	0.60	0.56	0.55	0.55	0.80	0.84	0.19
Avail Cap(c_a), veh/h	142	0	451	112	0	453	512	1021	1008	384	1009	854
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	0.0	17.7	27.8	0.0	21.2	34.1	15.3	15.3	29.0	13.3	8.1
Incr Delay (d2), s/veh	233.4	0.0	0.0	9.3	0.0	1.9	9.1	1.0	1.0	2.5	6.5	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	11.9	0.0	0.2	1.6	0.0	4.7	0.3	6.0	6.0	3.8	15.2	1.6
LnGrp Delay(d),s/veh	259.2	0.0	17.7	37.1	0.0	23.1	43.2	16.2	16.3	31.5	19.8	8.2
LnGrp LOS	F		B	D		C	D	B	B	C	B	A
Approach Vol, veh/h		216			341			812			1196	
Approach Delay, s/veh		245.8			26.0			16.6			20.2	
Approach LOS		F			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	12.4	33.4		23.5	3.8	42.1		23.5
Change Period (Y+Rc), s	3.0	4.5		3.5	3.0	4.5		3.5
Max Green Setting (Gmax), s	15.0	40.0		20.0	20.0	35.0		20.0
Max Q Clear Time (g_c+I1), s	9.3	13.9		22.0	2.4	28.4		22.0
Green Ext Time (p_c), s	0.1	14.9		0.0	0.0	5.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	38.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	154	36	58	198	17	69	244	34	87	462	93
Future Volume (veh/h)	229	154	36	58	198	17	69	244	34	87	462	93
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		0.99	1.00		0.99	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	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	249	167	39	63	215	18	75	265	37	95	502	101
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	476	589	138	496	684	57	260	722	101	482	679	137
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1137	1459	341	1165	1694	142	813	1598	223	1069	1504	303
Grp Volume(v), veh/h	249	0	206	63	0	233	75	0	302	95	0	603
Grp Sat Flow(s),veh/h/ln	1137	0	1799	1165	0	1836	813	0	1821	1069	0	1806
Q Serve(g_s), s	11.9	0.0	4.8	2.4	0.0	5.4	5.2	0.0	6.8	4.0	0.0	17.1
Cycle Q Clear(g_c), s	17.3	0.0	4.8	7.2	0.0	5.4	22.3	0.0	6.8	10.8	0.0	17.1
Prop In Lane	1.00		0.19	1.00		0.08	1.00		0.12	1.00		0.17
Lane Grp Cap(c), veh/h	476	0	726	496	0	741	260	0	823	482	0	816
V/C Ratio(X)	0.52	0.00	0.28	0.13	0.00	0.31	0.29	0.00	0.37	0.20	0.00	0.74
Avail Cap(c_a), veh/h	748	0	1155	774	0	1179	284	0	877	514	0	870
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.6	0.0	12.5	14.9	0.0	12.7	23.2	0.0	11.2	14.8	0.0	14.1
Incr Delay (d2), s/veh	1.3	0.0	0.3	0.2	0.0	0.3	0.9	0.0	0.4	0.3	0.0	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	3.9	0.0	2.4	0.8	0.0	2.8	1.2	0.0	3.4	1.2	0.0	9.2
LnGrp Delay(d),s/veh	19.9	0.0	12.8	15.1	0.0	13.0	24.1	0.0	11.6	15.0	0.0	17.5
LnGrp LOS	B		B	B		B	C		B	B		B
Approach Vol, veh/h		455			296			377			698	
Approach Delay, s/veh		16.7			13.5			14.1			17.2	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		29.6		32.6		29.6		32.6
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		40.0		30.0		40.0		30.0
Max Q Clear Time (g_c+I1), s		19.3		19.1		9.2		24.3
Green Ext Time (p_c), s		5.8		6.6		6.6		3.9

Intersection Summary	
HCM 2010 Ctrl Delay	15.8
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	130	0	0	132	0	402	17	549	576	46
Future Vol, veh/h	0	0	130	0	0	132	0	402	17	549	576	46
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	135	0	0	138	0	419	18	572	600	48

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	624	-	-	428	-	0	0	436	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	0	485	0	0	627	0	-	-	1124	-	-
Stage 1	0	0	-	0	0	-	0	-	-	-	-	-
Stage 2	0	0	-	0	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	485	-	-	627	-	-	-	1124	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.3	12.3	0	5.4
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	485	627	1124	-	-
HCM Lane V/C Ratio	-	-	0.279	0.219	0.509	-	-
HCM Control Delay (s)	-	-	15.3	12.3	11.5	-	-
HCM Lane LOS	-	-	C	B	B	-	-
HCM 95th %tile Q(veh)	-	-	1.1	0.8	3	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	59	59	38	179	617	42
Future Vol, veh/h	59	59	38	179	617	42
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	-	110	-	-	-
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	64	64	41	195	671	46

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	874	359	717	0	-	0
Stage 1	694	-	-	-	-	-
Stage 2	180	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	289	638	880	-	-	-
Stage 1	457	-	-	-	-	-
Stage 2	833	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	275	638	880	-	-	-
Mov Cap-2 Maneuver	275	-	-	-	-	-
Stage 1	436	-	-	-	-	-
Stage 2	833	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19	1.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	880	-	384	-	-
HCM Lane V/C Ratio	0.047	-	0.334	-	-
HCM Control Delay (s)	9.3	-	19	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.4	-	-

Intersection	
Int Delay, s/veh	0.4

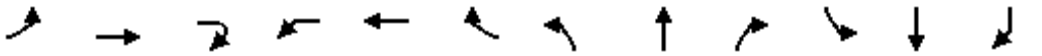
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	399	36	2	251	12	8
Future Vol, veh/h	399	36	2	251	12	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	434	39	2	273	13	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	473	0	730	453
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	277	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1089	-	389	607
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	770	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1089	-	388	607
Mov Cap-2 Maneuver	-	-	-	-	388	-
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	769	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	13.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	453	-	-	1089	-
HCM Lane V/C Ratio	0.048	-	-	0.002	-
HCM Control Delay (s)	13.3	-	-	8.3	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

CUMULATIVE AM



Movement	EBL	EBT	EBR2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	319	110	1025	605	8	489	8	497	13	11	6
Future Volume (vph)	9	319	110	1025	605	8	489	8	497	13	11	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.1	5.1	4.0	4.1		4.1	4.1	4.1		3.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.92	0.85		0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.98	1.00		0.98	
Satd. Flow (prot)	1770	3539	1583	3433	3532		1681	1523	1504		1774	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.98	1.00		0.98	
Satd. Flow (perm)	1770	3539	1583	3433	3532		1681	1523	1504		1774	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	9	319	110	1025	605	8	489	8	497	13	11	6
RTOR Reduction (vph)	0	0	98	0	0	0	0	39	243	0	0	0
Lane Group Flow (vph)	9	319	12	1025	613	0	347	295	70	0	30	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases			6						4			
Actuated Green, G (s)	0.9	13.3	13.3	59.9	73.3		26.8	26.8	26.8		3.8	
Effective Green, g (s)	0.9	13.3	13.3	59.9	73.3		26.8	26.8	26.8		3.8	
Actuated g/C Ratio	0.01	0.11	0.11	0.50	0.61		0.22	0.22	0.22		0.03	
Clearance Time (s)	4.0	5.1	5.1	4.0	4.1		4.1	4.1	4.1		3.0	
Vehicle Extension (s)	0.2	0.2	0.2	0.2	0.2		0.2	0.2	0.2		0.2	
Lane Grp Cap (vph)	13	392	175	1713	2157		375	340	335		56	
v/s Ratio Prot	0.01	c0.09		c0.30	0.17		c0.21	0.19			c0.02	
v/s Ratio Perm			0.01						0.05			
v/c Ratio	0.69	0.81	0.07	0.60	0.28		0.93	0.87	0.21		0.54	
Uniform Delay, d1	59.4	52.1	47.8	21.5	11.0		45.6	44.9	38.0		57.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	82.4	11.6	0.1	1.6	0.3		27.8	19.6	0.1		4.9	
Delay (s)	141.8	63.7	47.9	23.0	11.3		73.5	64.5	38.1		62.1	
Level of Service	F	E	D	C	B		E	E	D		E	
Approach Delay (s)		61.4			18.6			59.3			62.1	
Approach LOS		E			B			E			E	

Intersection Summary			
HCM 2000 Control Delay	38.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		

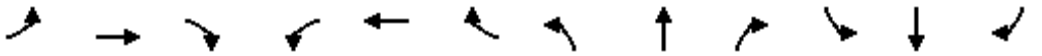
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	50	694	75	25	7	1533	433	325	4	92	136
Future Volume (veh/h)	84	50	694	75	25	7	1533	433	325	4	92	136
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		0.99	1.00		0.96	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	68	75	708	77	26	7	1564	442	332	4	94	139
Adj No. of Lanes	1	1	2	0	2	0	2	2	0	1	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	688	722	1217	139	110	30	961	773	577	7	406	175
Arrive On Green	0.39	0.39	0.39	0.08	0.08	0.08	0.28	0.40	0.40	0.00	0.11	0.11
Sat Flow, veh/h	1774	1863	3140	1774	1400	377	3442	1919	1433	1774	3539	1529
Grp Volume(v), veh/h	68	75	708	77	0	33	1564	407	367	4	94	139
Grp Sat Flow(s),veh/h/ln	1774	1863	1570	1774	0	1777	1721	1770	1582	1774	1770	1529
Q Serve(g_s), s	3.2	3.3	23.2	5.4	0.0	2.3	36.3	23.2	23.4	0.3	3.1	11.5
Cycle Q Clear(g_c), s	3.2	3.3	23.2	5.4	0.0	2.3	36.3	23.2	23.4	0.3	3.1	11.5
Prop In Lane	1.00		1.00	1.00		0.21	1.00		0.91	1.00		1.00
Lane Grp Cap(c), veh/h	688	722	1217	139	0	139	961	713	637	7	406	175
V/C Ratio(X)	0.10	0.10	0.58	0.55	0.00	0.24	1.63	0.57	0.58	0.54	0.23	0.79
Avail Cap(c_a), veh/h	688	722	1217	277	0	277	961	713	637	205	553	239
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.68	0.68	0.68	1.00	0.00	1.00	0.77	0.77	0.77	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.3	25.4	31.5	57.7	0.0	56.2	46.8	30.1	30.2	64.6	52.3	56.1
Incr Delay (d2), s/veh	0.0	0.0	0.3	14.9	0.0	4.0	286.1	0.6	0.6	21.3	0.1	8.3
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	1.6	1.7	10.0	3.2	0.0	1.3	55.4	11.4	10.3	0.2	1.5	5.3
LnGrp Delay(d),s/veh	25.4	25.4	31.8	72.6	0.0	60.2	332.9	30.7	30.8	85.9	52.5	64.4
LnGrp LOS	C	C	C	E		E	F	C	C	F	D	E
Approach Vol, veh/h		851			110			2338			237	
Approach Delay, s/veh		30.7			68.9			232.9			60.0	
Approach LOS		C			E			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		55.1	41.0	20.0		13.9	3.5	57.5
Change Period (Y+Rc), s		* 4.7	* 4.7	* 5.1		3.7	3.0	5.1
Max Green Setting (Gmax), s		* 36	* 36	* 20		20.3	15.0	32.9
Max Q Clear Time (g_c+I1), s		25.2	38.3	13.5		7.4	2.3	25.4
Green Ext Time (p_c), s		0.3	0.0	0.2		0.1	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	167.5
HCM 2010 LOS	F

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	724	0	826	0	0	0	0	1566	539	280	579	0
Future Volume (vph)	724	0	826	0	0	0	0	1566	539	280	579	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Lane Util. Factor		1.00	0.76					0.86	0.86	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.99	0.85	1.00	1.00	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1770	3610					4775	1362	3433	3539	
Flt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1770	3610					4775	1362	3433	3539	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	739	0	843	0	0	0	0	1598	550	286	591	0
RTOR Reduction (vph)	0	0	377	0	0	0	0	3	121	0	0	0
Lane Group Flow (vph)	0	739	466	0	0	0	0	1667	357	286	591	0
Confl. Peds. (#/hr)							11					11
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		25.2	25.2					70.4	70.4	12.7	79.1	
Effective Green, g (s)		25.2	25.2					70.4	70.4	12.7	79.1	
Actuated g/C Ratio		0.21	0.21					0.59	0.59	0.11	0.66	
Clearance Time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Vehicle Extension (s)		0.2	0.2					0.2	0.2	0.2	1.0	
Lane Grp Cap (vph)		371	758					2801	799	363	2332	
v/s Ratio Prot								c0.35		c0.08	0.17	
v/s Ratio Perm		0.42	0.13						0.26			
v/c Ratio		1.99	0.61					0.60	0.45	0.79	0.25	
Uniform Delay, d1		47.4	43.0					15.7	13.9	52.3	8.4	
Progression Factor		1.00	1.00					0.42	0.34	1.00	1.00	
Incremental Delay, d2		455.9	1.0					0.7	1.4	10.0	0.3	
Delay (s)		503.3	44.0					7.4	6.1	62.3	8.6	
Level of Service		F	D					A	A	E	A	
Approach Delay (s)		258.6			0.0			7.1			26.1	
Approach LOS		F			A			A			C	

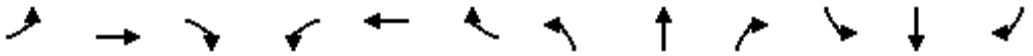
Intersection Summary			
HCM 2000 Control Delay	97.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	92.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	63	108	116	205	447	207	1484	39	243	871	290
Future Volume (veh/h)	173	63	108	116	205	447	207	1484	39	243	871	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	182	66	114	122	216	0	218	1562	41	256	917	0
Adj No. of Lanes	2	1	1	1	1	1	2	3	0	2	3	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	336	182	154	232	244	207	277	1248	33	1341	2865	892
Arrive On Green	0.10	0.10	0.10	0.13	0.13	0.00	0.08	0.25	0.25	0.13	0.19	0.00
Sat Flow, veh/h	3442	1863	1574	1774	1863	1583	3442	5094	134	3442	5085	1583
Grp Volume(v), veh/h	182	66	114	122	216	0	218	1039	564	256	917	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1574	1774	1863	1583	1721	1695	1838	1721	1695	1583
Q Serve(g_s), s	6.0	4.0	8.5	7.7	13.7	0.0	7.5	29.4	29.4	8.0	18.7	0.0
Cycle Q Clear(g_c), s	6.0	4.0	8.5	7.7	13.7	0.0	7.5	29.4	29.4	8.0	18.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	336	182	154	232	244	207	277	831	450	1341	2865	892
V/C Ratio(X)	0.54	0.36	0.74	0.53	0.89	0.00	0.79	1.25	1.25	0.19	0.32	0.00
Avail Cap(c_a), veh/h	1030	557	471	235	247	210	574	831	450	1341	2865	892
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.77	0.77	0.00	0.72	0.72	0.72	0.82	0.82	0.00
Uniform Delay (d), s/veh	51.6	50.6	52.7	48.7	51.3	0.0	54.2	45.3	45.3	35.4	28.9	0.0
Incr Delay (d2), s/veh	0.5	0.4	2.6	0.8	23.4	0.0	1.4	120.4	126.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	2.1	3.8	3.8	8.6	0.0	3.6	27.6	30.7	3.8	8.8	0.0
LnGrp Delay(d),s/veh	52.1	51.1	55.3	49.4	74.7	0.0	55.5	165.7	171.3	35.4	29.0	0.0
LnGrp LOS	D	D	E	D	E		E	F	F	D	C	
Approach Vol, veh/h		362			338			1821			1173	
Approach Delay, s/veh		52.9			65.6			154.3			30.4	
Approach LOS		D			E			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	50.9	33.5		15.8	12.7	71.7		19.8
Change Period (Y+Rc), s	4.1	* 4.1		4.1	3.0	4.1		4.1
Max Green Setting (Gmax), s	23.5	* 29		35.9	20.0	32.9		15.9
Max Q Clear Time (g_c+I1), s	10.0	31.4		10.5	9.5	20.7		15.7
Green Ext Time (p_c), s	2.4	0.0		0.5	0.2	3.3		0.0

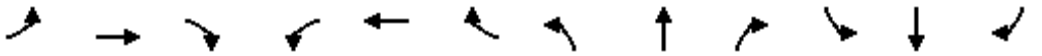
Intersection Summary		
HCM 2010 Ctrl Delay	96.9	
HCM 2010 LOS	F	

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	91	0	375	0	1354	192	147	949	0
Future Volume (vph)	0	0	0	91	0	375	0	1354	192	147	949	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.1	4.1		4.1		3.5	4.1	
Lane Util. Factor					1.00	1.00		0.91		1.00	0.91	
Frpb, ped/bikes					1.00	0.98		0.99		1.00	1.00	
Flpb, ped/bikes					1.00	1.00		1.00		1.00	1.00	
Frt					1.00	0.85		0.98		1.00	1.00	
Flt Protected					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)					1593	1399		4460		1593	4577	
Flt Permitted					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (perm)					1593	1399		4460		1593	4577	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	96	0	395	0	1425	202	155	999	0
RTOR Reduction (vph)	0	0	0	0	0	227	0	10	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	96	168	0	1617	0	155	999	0
Confl. Peds. (#/hr)						3			24			6
Turn Type				Perm	NA	Perm	custom	NA		Prot	NA	
Protected Phases					1			2 8		7	2 3 4	
Permitted Phases				1		1	8					
Actuated Green, G (s)					21.0	21.0		98.9		19.5	126.6	
Effective Green, g (s)					21.0	21.0		98.9		19.5	126.6	
Actuated g/C Ratio					0.14	0.14		0.64		0.13	0.82	
Clearance Time (s)					4.1	4.1				3.5		
Vehicle Extension (s)					2.0	2.0				2.0		
Lane Grp Cap (vph)					215	189		2842		200	3733	
v/s Ratio Prot								c0.36		c0.10	c0.22	
v/s Ratio Perm					0.06	c0.12						
v/c Ratio					0.45	0.89		0.57		0.78	0.27	
Uniform Delay, d1					61.8	66.0		16.0		65.7	3.4	
Progression Factor					1.00	1.00		0.61		1.00	1.00	
Incremental Delay, d2					0.5	36.1		0.2		15.6	0.1	
Delay (s)					62.3	102.0		10.1		81.3	3.4	
Level of Service					E	F		B		F	A	
Approach Delay (s)		0.0			94.3			10.1			13.9	
Approach LOS		A			F			B			B	

Intersection Summary			
HCM 2000 Control Delay	24.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	155.2	Sum of lost time (s)	20.3
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	491	370	24	51	420	564	3	490	32	328	312	402
Future Volume (vph)	491	370	24	51	420	564	3	490	32	328	312	402
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5	4.1	4.1
Lane Util. Factor	0.97	1.00		1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.96	1.00	1.00		1.00	1.00	0.94
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.97	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1841		1770	3539	1513	1715	3497		1770	1863	1495
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.56	1.00		0.22	1.00	1.00
Satd. Flow (perm)	3433	1841		1770	3539	1513	1015	3497		417	1863	1495
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	517	389	25	54	442	594	3	516	34	345	328	423
RTOR Reduction (vph)	0	1	0	0	0	297	0	3	0	0	0	284
Lane Group Flow (vph)	517	413	0	54	442	297	3	547	0	345	328	139
Confl. Peds. (#/hr)			7			12	24		8			24
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		custom	NA	custom
Protected Phases	3	8		7	4			6		5	1 2 5 6	
Permitted Phases						4	6			2		2
Actuated Green, G (s)	47.3	48.0		19.5	20.2	20.2	40.4	40.4		50.9	76.0	50.9
Effective Green, g (s)	47.3	48.0		19.5	20.2	20.2	40.4	40.4		50.9	76.0	50.9
Actuated g/C Ratio	0.30	0.31		0.13	0.13	0.13	0.26	0.26		0.33	0.49	0.33
Clearance Time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5		4.1
Vehicle Extension (s)	2.5	3.0		2.0	3.0	3.0	3.0	3.0		3.0		4.0
Lane Grp Cap (vph)	1046	569		222	460	196	264	910		189	912	490
v/s Ratio Prot	0.15	c0.22		0.03	0.12			0.16		c0.07	c0.18	
v/s Ratio Perm						c0.20	0.00			c0.53		0.09
v/c Ratio	0.49	0.73		0.24	0.96	1.51	0.01	0.60		1.83	0.36	0.28
Uniform Delay, d1	44.2	47.7		61.2	67.1	67.5	42.6	50.3		53.1	24.5	38.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.91	0.89	0.47
Incremental Delay, d2	0.3	4.6		0.2	32.0	255.3	0.1	2.9		391.0	0.1	0.4
Delay (s)	44.4	52.3		61.4	99.1	322.8	42.7	53.3		439.3	21.9	18.8
Level of Service	D	D		E	F	F	D	D		F	C	B
Approach Delay (s)		47.9			219.1			53.2			152.1	
Approach LOS		D			F			D			F	

Intersection Summary			
HCM 2000 Control Delay	130.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	155.2	Sum of lost time (s)	20.3
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	275	65	13	509	242	14
Future Volume (veh/h)	275	65	13	509	242	14
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	320	76	15	592	281	16
Adj No. of Lanes	2	0	1	1	0	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	1577	369	719	1033	362	21
Arrive On Green	0.55	0.55	0.55	0.55	0.22	0.22
Sat Flow, veh/h	2938	666	982	1863	1662	95
Grp Volume(v), veh/h	197	199	15	592	298	0
Grp Sat Flow(s),veh/h/ln	1770	1742	982	1863	1763	0
Q Serve(g_s), s	1.7	1.8	0.2	6.5	5.0	0.0
Cycle Q Clear(g_c), s	1.7	1.8	2.0	6.5	5.0	0.0
Prop In Lane		0.38	1.00		0.94	0.05
Lane Grp Cap(c), veh/h	981	966	719	1033	384	0
V/C Ratio(X)	0.20	0.21	0.02	0.57	0.78	0.00
Avail Cap(c_a), veh/h	1589	1564	1056	1672	1244	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	3.5	3.5	4.0	4.5	11.5	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.7	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.9	0.1	3.3	2.5	0.0
LnGrp Delay(d),s/veh	3.6	3.6	4.0	5.3	12.8	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h	396			607	298	
Approach Delay, s/veh	3.6			5.2	12.8	
Approach LOS	A			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		9.8		21.4				21.4
Change Period (Y+Rc), s		3.0		4.1				4.1
Max Green Setting (Gmax), s		22.0		28.0				28.0
Max Q Clear Time (g_c+I1), s		7.0		3.8				8.5
Green Ext Time (p_c), s		0.4		9.8				8.8

Intersection Summary	
HCM 2010 Ctrl Delay	6.5
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	717	35	138	222	31	39	40	204	13	27	20
Future Volume (veh/h)	116	717	35	138	222	31	39	40	204	13	27	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		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	1900	1863	1900
Adj Flow Rate, veh/h	127	788	38	152	244	34	43	44	224	14	30	22
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	1246	60	215	1178	162	324	340	288	33	72	53
Arrive On Green	0.11	0.36	0.36	0.12	0.38	0.38	0.18	0.18	0.18	0.05	0.05	0.05
Sat Flow, veh/h	1774	3437	166	1774	3122	430	1774	1863	1576	735	1580	1167
Grp Volume(v), veh/h	127	406	420	152	137	141	43	44	224	35	0	31
Grp Sat Flow(s),veh/h/ln	1774	1770	1833	1774	1770	1782	1774	1863	1576	1826	0	1657
Q Serve(g_s), s	3.9	10.8	10.9	4.7	3.0	3.1	1.2	1.1	7.7	1.1	0.0	1.0
Cycle Q Clear(g_c), s	3.9	10.8	10.9	4.7	3.0	3.1	1.2	1.1	7.7	1.1	0.0	1.0
Prop In Lane	1.00		0.09	1.00		0.24	1.00		1.00	0.40		0.70
Lane Grp Cap(c), veh/h	188	641	664	215	668	673	324	340	288	83	0	75
V/C Ratio(X)	0.67	0.63	0.63	0.71	0.21	0.21	0.13	0.13	0.78	0.42	0.00	0.41
Avail Cap(c_a), veh/h	620	1238	1282	1923	2537	2555	775	814	689	1469	0	1332
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.6	15.1	15.1	24.2	12.0	12.0	19.6	19.6	22.3	26.6	0.0	26.6
Incr Delay (d2), s/veh	1.6	1.0	1.0	1.6	0.2	0.2	0.1	0.1	1.7	1.3	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	5.5	5.7	2.4	1.5	1.5	0.6	0.6	3.5	0.6	0.0	0.5
LnGrp Delay(d),s/veh	26.2	16.1	16.1	25.8	12.2	12.2	19.7	19.6	24.0	27.8	0.0	27.9
LnGrp LOS	C	B	B	C	B	B	B	B	C	C		C
Approach Vol, veh/h		953			430			311			66	
Approach Delay, s/veh		17.4			17.0			22.8			27.9	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		14.4	10.9	25.2		6.6	10.1	26.1
Change Period (Y+Rc), s		4.0	4.0	4.5		4.0	4.0	4.5
Max Green Setting (Gmax), s		25.0	62.0	40.0		46.0	20.0	82.0
Max Q Clear Time (g_c+I1), s		9.7	6.7	12.9		3.1	5.9	5.1
Green Ext Time (p_c), s		0.5	0.2	7.9		0.2	0.1	9.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.7
HCM 2010 LOS	B

Notes

Movement	EBT	EBR	WBL	WBT	NBL	NBR	NEL	NER
Lane Configurations								
Traffic Volume (veh/h)	146	21	1076	132	284	958	0	0
Future Volume (veh/h)	146	21	1076	132	284	958	0	0
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	155	22	1250	0	302	422		
Adj No. of Lanes	2	0	2	1	1	1		
Peak Hour Factor	0.94	0.94	0.94	0.90	0.94	0.94		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	733	102	1153	605	515	459		
Arrive On Green	0.23	0.23	0.32	0.00	0.29	0.29		
Sat Flow, veh/h	3213	436	3548	1863	1774	1583		
Grp Volume(v), veh/h	87	90	1250	0	302	422		
Grp Sat Flow(s),veh/h/ln	1770	1786	1774	1863	1774	1583		
Q Serve(g_s), s	3.2	3.3	26.0	0.0	11.7	20.6		
Cycle Q Clear(g_c), s	3.2	3.3	26.0	0.0	11.7	20.6		
Prop In Lane		0.24	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	416	419	1153	605	515	459		
V/C Ratio(X)	0.21	0.21	1.08	0.00	0.59	0.92		
Avail Cap(c_a), veh/h	416	419	1153	605	532	475		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.69	0.00	1.00	1.00		
Uniform Delay (d), s/veh	24.6	24.7	27.0	0.0	24.3	27.5		
Incr Delay (d2), s/veh	1.1	1.2	48.7	0.0	2.0	23.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.7	1.7	20.4	0.0	6.0	12.0		
LnGrp Delay(d),s/veh	25.8	25.8	75.7	0.0	26.3	50.4		
LnGrp LOS	C	C	F		C	D		
Approach Vol, veh/h	177			1250	724			
Approach Delay, s/veh	25.8			75.7	40.4			
Approach LOS	C			E	D			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		22.8				30.0		27.2
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		18.0				26.0		24.0
Max Q Clear Time (g_c+I1), s		5.3				28.0		22.6
Green Ext Time (p_c), s		0.9				0.0		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	59.7
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	20	839	1199	40	14	8
Future Volume (veh/h)	20	839	1199	40	14	8
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	24	999	1427	48	17	10
Adj No. of Lanes	1	1	2	1	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	289	962	1291	1277	522	432
Arrive On Green	0.23	0.23	0.38	0.69	0.28	0.28
Sat Flow, veh/h	1242	1583	3442	1863	1863	1541
Grp Volume(v), veh/h	24	999	1427	48	17	10
Grp Sat Flow(s),veh/h/ln	1242	1583	1721	1863	1863	1541
Q Serve(g_s), s	1.8	27.0	43.5	1.0	0.8	0.5
Cycle Q Clear(g_c), s	1.8	27.0	43.5	1.0	0.8	0.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	289	962	1291	1277	522	432
V/C Ratio(X)	0.08	1.04	1.11	0.04	0.03	0.02
Avail Cap(c_a), veh/h	289	962	1291	1277	522	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.39	0.39	0.50	0.50	1.00	1.00
Uniform Delay (d), s/veh	34.8	22.8	36.3	5.9	30.3	30.2
Incr Delay (d2), s/veh	0.0	29.0	54.0	0.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	50.7	30.3	0.5	0.4	0.2
LnGrp Delay(d),s/veh	34.9	51.8	90.2	5.9	30.4	30.3
LnGrp LOS	C	F	F	A	C	C
Approach Vol, veh/h	1023			1475	27	
Approach Delay, s/veh	51.4			87.5	30.4	
Approach LOS	D			F	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		84.5		31.5	47.0	37.5		
Change Period (Y+Rc), s		5.0		4.5	3.5	5.0		
Max Green Setting (Gmax), s		79.0		27.0	43.5	32.0		
Max Q Clear Time (g_c+I1), s		3.0		29.0	45.5	2.8		
Green Ext Time (p_c), s		0.3		0.0	0.0	0.1		

Intersection Summary	
HCM 2010 Ctrl Delay	72.2
HCM 2010 LOS	E



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	331	192	1028	240	56	801
Future Volume (vph)	331	192	1028	240	56	801
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	3.5	5.0		3.5	4.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.97		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3424		1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3424		1770	3539
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	364	211	1130	264	62	880
RTOR Reduction (vph)	0	157	16	0	0	0
Lane Group Flow (vph)	364	54	1378	0	62	880
Confl. Peds. (#/hr)				2		
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	
Permitted Phases		8				6
Actuated Green, G (s)	21.6	21.6	35.4		5.6	45.5
Effective Green, g (s)	21.6	21.6	35.4		5.6	45.5
Actuated g/C Ratio	0.26	0.26	0.42		0.07	0.54
Clearance Time (s)	3.5	3.5	5.0		3.5	4.0
Vehicle Extension (s)	2.0	2.0	4.0		2.0	4.0
Lane Grp Cap (vph)	455	407	1442		118	1916
v/s Ratio Prot	c0.21		c0.40		0.04	
v/s Ratio Perm		0.03				c0.25
v/c Ratio	0.80	0.13	0.96		0.53	0.46
Uniform Delay, d1	29.2	24.0	23.5		37.9	11.7
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	9.2	0.1	15.3		1.9	0.8
Delay (s)	38.4	24.1	38.8		39.9	12.5
Level of Service	D	C	D		D	B
Approach Delay (s)	33.1		38.8			14.3
Approach LOS	C		D			B

Intersection Summary			
HCM 2000 Control Delay	29.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	84.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	145	8	85	55	302	2	987	151	222	822	143
Future Volume (veh/h)	72	145	8	85	55	302	2	987	151	222	822	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)	0.99		0.97	1.00		0.98	1.00		1.00	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	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	82	165	9	97	62	343	2	1122	172	252	934	162
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	62	80	398	75	31	403	4	1332	204	293	1111	933
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.00	0.43	0.43	0.17	0.60	0.60
Sat Flow, veh/h	0	310	1534	0	119	1554	1774	3077	470	1774	1863	1565
Grp Volume(v), veh/h	247	0	9	159	0	343	2	644	650	252	934	162
Grp Sat Flow(s),veh/h/ln	310	0	1534	119	0	1554	1774	1770	1777	1774	1863	1565
Q Serve(g_s), s	0.0	0.0	0.3	0.0	0.0	16.2	0.1	25.0	25.2	10.7	31.3	3.6
Cycle Q Clear(g_c), s	20.0	0.0	0.3	20.0	0.0	16.2	0.1	25.0	25.2	10.7	31.3	3.6
Prop In Lane	0.33		1.00	0.61		1.00	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	143	0	398	106	0	403	4	766	770	293	1111	933
V/C Ratio(X)	1.73	0.00	0.02	1.50	0.00	0.85	0.52	0.84	0.84	0.86	0.84	0.17
Avail Cap(c_a), veh/h	143	0	398	106	0	403	460	917	921	345	1111	933
HCM Platoon Ratio	1.00	1.00	1.00	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	28.2	0.0	21.3	33.0	0.0	27.2	38.5	19.5	19.6	31.3	12.6	7.0
Incr Delay (d2), s/veh	357.2	0.0	0.0	268.2	0.0	15.6	34.7	6.8	7.0	15.2	6.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.2	0.0	0.1	10.1	0.0	8.6	0.1	13.6	13.8	6.5	17.7	1.6
LnGrp Delay(d),s/veh	385.5	0.0	21.3	301.1	0.0	42.8	73.2	26.3	26.6	46.6	18.8	7.1
LnGrp LOS	F		C	F		D	E	C	C	D	B	A
Approach Vol, veh/h		256			502			1296			1348	
Approach Delay, s/veh		372.7			124.6			26.5			22.6	
Approach LOS		F			F			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	15.8	37.9		23.5	3.2	50.5		23.5
Change Period (Y+Rc), s	3.0	4.5		3.5	3.0	4.5		3.5
Max Green Setting (Gmax), s	15.0	40.0		20.0	20.0	35.0		20.0
Max Q Clear Time (g_c+I1), s	12.7	27.2		22.0	2.1	33.3		22.0
Green Ext Time (p_c), s	0.1	6.2		0.0	0.0	1.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	65.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	260	177	119	254	10	63	345	71	84	452	56
Future Volume (veh/h)	230	260	177	119	254	10	63	345	71	84	452	56
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)	0.99		0.97	1.00		0.97	1.00		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	240	271	184	124	265	10	66	359	74	88	471	58
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	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	504	471	320	353	821	31	248	605	125	312	659	81
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1086	1022	694	929	1781	67	870	1486	306	945	1618	199
Grp Volume(v), veh/h	240	0	455	124	0	275	66	0	433	88	0	529
Grp Sat Flow(s),veh/h/ln	1086	0	1716	929	0	1848	870	0	1792	945	0	1817
Q Serve(g_s), s	12.3	0.0	13.3	7.7	0.0	6.4	4.7	0.0	12.9	5.5	0.0	16.7
Cycle Q Clear(g_c), s	18.7	0.0	13.3	21.0	0.0	6.4	21.3	0.0	12.9	18.4	0.0	16.7
Prop In Lane	1.00		0.40	1.00		0.04	1.00		0.17	1.00		0.11
Lane Grp Cap(c), veh/h	504	0	791	353	0	852	248	0	730	312	0	740
V/C Ratio(X)	0.48	0.00	0.58	0.35	0.00	0.32	0.27	0.00	0.59	0.28	0.00	0.71
Avail Cap(c_a), veh/h	638	0	1003	468	0	1081	275	0	786	341	0	797
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.6	0.0	13.5	21.2	0.0	11.7	25.9	0.0	15.8	23.0	0.0	16.9
Incr Delay (d2), s/veh	1.0	0.0	0.9	0.8	0.0	0.3	0.8	0.0	1.3	0.7	0.0	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	3.8	0.0	6.4	2.0	0.0	3.4	1.2	0.0	6.6	1.5	0.0	8.9
LnGrp Delay(d),s/veh	18.6	0.0	14.5	22.1	0.0	12.0	26.7	0.0	17.2	23.7	0.0	20.1
LnGrp LOS	B		B	C		B	C		B	C		C
Approach Vol, veh/h		695			399			499			617	
Approach Delay, s/veh		15.9			15.1			18.4			20.6	
Approach LOS		B			B			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		36.0		32.4		36.0		32.4
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		40.0		30.0		40.0		30.0
Max Q Clear Time (g_c+I1), s		20.7		20.4		23.0		23.3
Green Ext Time (p_c), s		9.2		6.1		8.5		4.5

Intersection Summary	
HCM 2010 Ctrl Delay	17.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	54	0	0	246	0	617	23	218	504	39
Future Vol, veh/h	0	0	54	0	0	246	0	617	23	218	504	39
Conflicting Peds, #/hr	0	0	3	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	57	0	0	262	0	656	24	232	536	41

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	560	-	-	669	-	0	0	681	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	0	528	0	0	458	0	-	-	912	-	-
Stage 1	0	0	-	0	0	-	0	-	-	-	-	-
Stage 2	0	0	-	0	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	526	-	-	458	-	-	-	912	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.7	22.8	0	2.9
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	526	458	912	-	-
HCM Lane V/C Ratio	-	-	0.109	0.571	0.254	-	-
HCM Control Delay (s)	-	-	12.7	22.8	10.3	-	-
HCM Lane LOS	-	-	B	C	B	-	-
HCM 95th %tile Q(veh)	-	-	0.4	3.5	1	-	-

Intersection	
Int Delay, s/veh	1

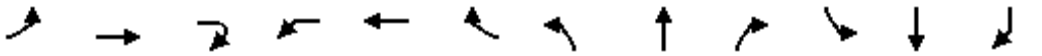
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	26	28	344	202	26
Future Vol, veh/h	16	26	28	344	202	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	110	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	27	29	362	213	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	466	120	240	0	-	0
Stage 1	227	-	-	-	-	-
Stage 2	239	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	525	909	1324	-	-	-
Stage 1	789	-	-	-	-	-
Stage 2	778	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	513	909	1324	-	-	-
Mov Cap-2 Maneuver	513	-	-	-	-	-
Stage 1	772	-	-	-	-	-
Stage 2	778	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.5	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1324	-	702	-	-
HCM Lane V/C Ratio	0.022	-	0.063	-	-
HCM Control Delay (s)	7.8	-	10.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

CUMULATIVE PM



Movement	EBL	EBT	EBR2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	866	265	738	317	20	184	4	421	19	15	6
Future Volume (vph)	13	866	265	738	317	20	184	4	421	19	15	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.1	5.1	4.0	4.1		4.1	4.1	4.1		3.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.86	0.85		0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1770	3539	1583	3433	3508		1681	1460	1504		1783	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.98	
Satd. Flow (perm)	1770	3539	1583	3433	3508		1681	1460	1504		1783	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	13	866	265	738	317	20	184	4	421	19	15	6
RTOR Reduction (vph)	0	0	99	0	2	0	0	169	183	0	0	0
Lane Group Flow (vph)	13	866	166	738	335	0	166	55	36	0	40	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases			6						4			
Actuated Green, G (s)	1.2	31.2	31.2	30.4	61.4		16.0	16.0	16.0		4.8	
Effective Green, g (s)	1.2	31.2	31.2	30.4	61.4		16.0	16.0	16.0		4.8	
Actuated g/C Ratio	0.01	0.32	0.32	0.31	0.62		0.16	0.16	0.16		0.05	
Clearance Time (s)	4.0	5.1	5.1	4.0	4.1		4.1	4.1	4.1		3.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	21	1119	500	1058	2184		272	236	244		86	
v/s Ratio Prot	0.01	c0.24		c0.21	0.10		c0.10	0.04			c0.02	
v/s Ratio Perm			0.10						0.02			
v/c Ratio	0.62	0.77	0.33	0.70	0.15		0.61	0.23	0.15		0.47	
Uniform Delay, d1	48.5	30.5	25.7	30.0	7.8		38.4	36.0	35.4		45.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	43.9	3.4	0.4	2.0	0.0		4.0	0.5	0.3		3.9	
Delay (s)	92.4	33.9	26.1	32.1	7.8		42.4	36.5	35.7		49.6	
Level of Service	F	C	C	C	A		D	D	D		D	
Approach Delay (s)		32.8			24.5			37.8			49.6	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	31.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	98.6	Sum of lost time (s)	16.2
Intersection Capacity Utilization	73.8%	ICU Level of Service	D
Analysis Period (min)	15		

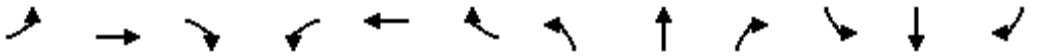
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	45	1076	88	25	8	987	264	115	4	173	172
Future Volume (veh/h)	189	45	1076	88	25	8	987	264	115	4	173	172
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		0.99	1.00		0.96	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	130	162	1196	98	28	9	1097	293	128	4	192	191
Adj No. of Lanes	1	1	2	0	2	0	2	2	0	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	693	728	1227	152	115	37	809	905	385	7	513	223
Arrive On Green	0.39	0.39	0.39	0.09	0.09	0.09	0.24	0.38	0.38	0.00	0.14	0.14
Sat Flow, veh/h	1774	1863	3140	1774	1337	430	3442	2406	1024	1774	3539	1541
Grp Volume(v), veh/h	130	162	1196	98	0	37	1097	213	208	4	192	191
Grp Sat Flow(s),veh/h/ln	1774	1863	1570	1774	0	1767	1721	1770	1661	1774	1770	1541
Q Serve(g_s), s	6.1	7.4	47.8	6.8	0.0	2.5	30.0	10.9	11.4	0.3	6.3	15.4
Cycle Q Clear(g_c), s	6.1	7.4	47.8	6.8	0.0	2.5	30.0	10.9	11.4	0.3	6.3	15.4
Prop In Lane	1.00		1.00	1.00		0.24	1.00		0.62	1.00		1.00
Lane Grp Cap(c), veh/h	693	728	1227	152	0	151	809	665	624	7	513	223
V/C Ratio(X)	0.19	0.22	0.97	0.64	0.00	0.24	1.36	0.32	0.33	0.54	0.37	0.86
Avail Cap(c_a), veh/h	695	730	1230	417	0	415	809	693	651	139	832	362
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.6	25.9	38.2	56.4	0.0	54.5	48.8	28.3	28.4	63.4	49.3	53.2
Incr Delay (d2), s/veh	0.0	0.1	19.7	1.7	0.0	0.3	168.1	0.1	0.1	21.2	0.2	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	3.8	24.1	3.4	0.0	1.2	33.1	5.4	5.2	0.2	3.1	6.9
LnGrp Delay(d),s/veh	25.6	26.0	57.9	58.1	0.0	54.8	216.9	28.4	28.5	84.6	49.5	58.9
LnGrp LOS	C	C	E	E		D	F	C	C	F	D	E
Approach Vol, veh/h		1488			135			1518			387	
Approach Delay, s/veh		51.6			57.2			164.7			54.5	
Approach LOS		D			E			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		55.0	33.0	23.6		16.0	3.5	53.1
Change Period (Y+Rc), s		5.1	3.0	5.1		5.1	3.0	5.1
Max Green Setting (Gmax), s		50.0	30.0	30.0		30.0	10.0	50.0
Max Q Clear Time (g_c+I1), s		49.8	32.0	17.4		8.8	2.3	13.4
Green Ext Time (p_c), s		0.0	0.0	0.7		0.1	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	100.8
HCM 2010 LOS	F

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	249	0	1133	0	0	0	0	1117	608	523	814	0
Future Volume (vph)	249	0	1133	0	0	0	0	1117	608	523	814	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Lane Util. Factor		1.00	0.76					0.86	0.86	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.98	0.85	1.00	1.00	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1770	3610					4688	1362	3433	3539	
Flt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1770	3610					4688	1362	3433	3539	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	254	0	1156	0	0	0	0	1140	620	534	831	0
RTOR Reduction (vph)	0	0	910	0	0	0	0	27	237	0	0	0
Lane Group Flow (vph)	0	254	246	0	0	0	0	1336	160	534	831	0
Confl. Peds. (#/hr)							11					11
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		14.3	14.3					27.1	27.1	14.2	36.9	
Effective Green, g (s)		14.3	14.3					27.1	27.1	14.2	36.9	
Actuated g/C Ratio		0.21	0.21					0.40	0.40	0.21	0.55	
Clearance Time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Vehicle Extension (s)		0.2	0.2					0.2	0.2	0.2	1.0	
Lane Grp Cap (vph)		376	767					1887	548	724	1940	
v/s Ratio Prot								c0.29		c0.16	0.23	
v/s Ratio Perm		0.14	0.07						0.12			
v/c Ratio		0.68	0.32					0.71	0.29	0.74	0.43	
Uniform Delay, d1		24.4	22.4					16.8	13.6	24.8	9.0	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		3.8	0.1					1.0	0.1	3.4	0.1	
Delay (s)		28.1	22.5					17.8	13.7	28.2	9.0	
Level of Service		C	C					B	B	C	A	
Approach Delay (s)		23.5			0.0			16.9			16.5	
Approach LOS		C			A			B			B	

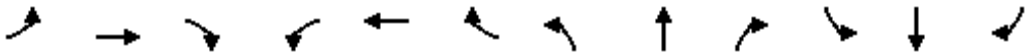
Intersection Summary			
HCM 2000 Control Delay	18.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	67.3	Sum of lost time (s)	11.7
Intersection Capacity Utilization	65.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	367	227	190	46	75	202	145	1157	46	495	1326	126
Future Volume (veh/h)	367	227	190	46	75	202	145	1157	46	495	1326	126
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	382	236	198	48	78	0	151	1205	48	516	1381	0
Adj No. of Lanes	2	1	1	1	1	1	2	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	625	338	286	145	152	129	292	1501	60	656	2144	668
Arrive On Green	0.18	0.18	0.18	0.08	0.08	0.00	0.08	0.30	0.30	0.19	0.42	0.00
Sat Flow, veh/h	3442	1863	1573	1774	1863	1583	3442	5016	200	3442	5085	1583
Grp Volume(v), veh/h	382	236	198	48	78	0	151	814	439	516	1381	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1573	1774	1863	1583	1721	1695	1825	1721	1695	1583
Q Serve(g_s), s	6.8	7.9	7.8	1.7	2.7	0.0	2.8	14.7	14.7	9.5	14.3	0.0
Cycle Q Clear(g_c), s	6.8	7.9	7.8	1.7	2.7	0.0	2.8	14.7	14.7	9.5	14.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	625	338	286	145	152	129	292	1015	546	656	2144	668
V/C Ratio(X)	0.61	0.70	0.69	0.33	0.51	0.00	0.52	0.80	0.80	0.79	0.64	0.00
Avail Cap(c_a), veh/h	1762	954	805	641	673	572	1037	1271	684	1037	2144	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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.0	25.5	25.4	28.8	29.2	0.0	29.1	21.5	21.5	25.6	15.2	0.0
Incr Delay (d2), s/veh	0.4	1.0	1.1	0.5	1.0	0.0	0.5	2.4	4.3	0.8	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	4.2	3.5	0.8	1.4	0.0	1.3	7.2	8.1	4.6	6.8	0.0
LnGrp Delay(d),s/veh	25.4	26.4	26.6	29.3	30.2	0.0	29.6	23.8	25.8	26.4	15.8	0.0
LnGrp LOS	C	C	C	C	C		C	C	C	C	B	
Approach Vol, veh/h		816			126			1404			1897	
Approach Delay, s/veh		26.0			29.9			25.1			18.7	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.8	24.0		16.2	8.6	32.1		9.5
Change Period (Y+Rc), s	4.1	* 4.1		4.1	3.0	4.1		4.1
Max Green Setting (Gmax), s	20.0	* 25		34.0	20.0	24.9		24.0
Max Q Clear Time (g_c+I1), s	11.5	16.7		9.9	4.8	16.3		4.7
Green Ext Time (p_c), s	1.2	3.2		1.3	0.1	4.4		0.2

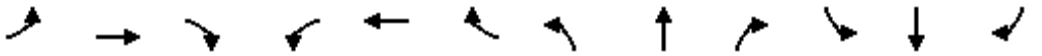
Intersection Summary	
HCM 2010 Ctrl Delay	22.5
HCM 2010 LOS	C

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	1	49	0	312	1	1036	119	255	1306	1
Future Volume (vph)	0	0	1	49	0	312	1	1036	119	255	1306	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.1	4.1	4.1	4.1		3.5	4.1	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00			1.00	0.98	1.00	0.99		1.00	1.00	
Flpb, ped/bikes		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt		0.85			1.00	0.85	1.00	0.98		1.00	1.00	
Flt Protected		1.00			0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		0			1593	1399	1593	4483		1593	4576	
Flt Permitted		1.00			0.95	1.00	0.19	1.00		0.95	1.00	
Satd. Flow (perm)		0			1593	1399	320	4483		1593	4576	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	1	51	0	322	1	1068	123	263	1346	1
RTOR Reduction (vph)	0	1	0	0	0	277	0	9	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	51	45	1	1182	0	263	1347	0
Confl. Peds. (#/hr)						3			19			22
Turn Type				Perm	NA	Perm	custom	NA		Prot	NA	
Protected Phases					1			2 8		7	2 3 4	
Permitted Phases				1		1	8					
Actuated Green, G (s)		0.0			23.1	23.1	45.9	86.0		28.8	118.9	
Effective Green, g (s)		0.0			23.1	23.1	45.9	86.0		28.8	118.9	
Actuated g/C Ratio		0.00			0.14	0.14	0.28	0.52		0.18	0.72	
Clearance Time (s)					4.1	4.1	4.1			3.5		
Vehicle Extension (s)					2.0	2.0	3.0			2.0		
Lane Grp Cap (vph)		0			224	196	89	2347		279	3313	
v/s Ratio Prot								c0.26		c0.17	0.29	
v/s Ratio Perm					0.03	c0.03	0.00					
v/c Ratio		0.00			0.23	0.23	0.01	0.50		0.94	0.41	
Uniform Delay, d1		82.1			62.6	62.7	42.7	25.3		66.9	8.9	
Progression Factor		1.00			1.00	1.00	0.93	0.78		1.00	1.00	
Incremental Delay, d2		0.0			0.2	0.2	0.0	0.2		38.2	0.1	
Delay (s)		82.1			62.8	62.9	39.7	20.0		105.0	9.0	
Level of Service		F			E	E	D	C		F	A	
Approach Delay (s)		82.1			62.9			20.0			24.7	
Approach LOS		F			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	27.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	164.2	Sum of lost time (s)	20.3
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	347	367	34	44	437	502	11	307	54	361	524	471
Future Volume (vph)	347	367	34	44	437	502	11	307	54	361	524	471
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5	4.1	4.1
Lane Util. Factor	0.97	1.00		1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	0.98		1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.98	1.00		0.98	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1832		1770	3539	1537	1734	3395		1735	1863	1497
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.42	1.00		0.41	1.00	1.00
Satd. Flow (perm)	3433	1832		1770	3539	1537	775	3395		745	1863	1497
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	351	371	34	44	441	507	11	310	55	365	529	476
RTOR Reduction (vph)	0	2	0	0	0	362	0	8	0	0	0	209
Lane Group Flow (vph)	351	403	0	44	441	145	11	357	0	365	529	267
Confl. Peds. (#/hr)			9			6	22		32	32		22
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		custom	NA	custom
Protected Phases	3	8		7	4			6!		5!	1 2 5 6	
Permitted Phases						4	6			2		2
Actuated Green, G (s)	54.5	45.9		28.8	20.2	20.2	50.6	50.6		46.1	77.8	40.1
Effective Green, g (s)	54.5	45.9		28.8	20.2	20.2	50.6	50.6		46.1	77.8	40.1
Actuated g/C Ratio	0.33	0.28		0.18	0.12	0.12	0.31	0.31		0.28	0.47	0.24
Clearance Time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5		4.1
Vehicle Extension (s)	2.5	3.0		2.0	3.0	3.0	3.0	3.0		3.0		4.0
Lane Grp Cap (vph)	1139	512		310	435	189	238	1046		245	882	365
v/s Ratio Prot	c0.10	c0.22		0.02	c0.12			0.11		c0.05	c0.28	
v/s Ratio Perm						0.09	0.01			c0.36		0.18
v/c Ratio	0.31	0.79		0.14	1.01	0.77	0.05	0.34		1.49	0.60	0.73
Uniform Delay, d1	40.8	54.6		57.3	72.0	69.7	39.9	43.9		62.2	31.8	57.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.99	0.99	1.00
Incremental Delay, d2	0.1	7.8		0.1	46.7	16.8	0.4	0.9		239.7	0.7	7.4
Delay (s)	40.9	62.5		57.3	118.7	86.5	40.2	44.8		301.5	32.0	64.4
Level of Service	D	E		E	F	F	D	D		F	C	E
Approach Delay (s)		52.5			99.5			44.7			115.1	
Approach LOS		D			F			D			F	

Intersection Summary			
HCM 2000 Control Delay	89.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	164.2	Sum of lost time (s)	20.3
Intersection Capacity Utilization	79.5%	ICU Level of Service	D
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	607	148	10	219	95	20
Future Volume (veh/h)	607	148	10	219	95	20
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	706	172	12	255	110	23
Adj No. of Lanes	2	0	1	1	0	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	1631	397	520	1077	256	53
Arrive On Green	0.58	0.58	0.58	0.58	0.18	0.18
Sat Flow, veh/h	2914	687	629	1863	1415	296
Grp Volume(v), veh/h	443	435	12	255	134	0
Grp Sat Flow(s),veh/h/ln	1770	1739	629	1863	1723	0
Q Serve(g_s), s	4.1	4.1	0.3	2.0	2.0	0.0
Cycle Q Clear(g_c), s	4.1	4.1	4.5	2.0	2.0	0.0
Prop In Lane		0.40	1.00		0.82	0.17
Lane Grp Cap(c), veh/h	1023	1005	520	1077	311	0
V/C Ratio(X)	0.43	0.43	0.02	0.24	0.43	0.00
Avail Cap(c_a), veh/h	1684	1654	754	1772	1288	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	3.5	3.5	4.8	3.0	10.7	0.0
Incr Delay (d2), s/veh	0.4	0.4	0.0	0.2	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	2.1	0.1	1.0	1.0	0.0
LnGrp Delay(d),s/veh	3.9	3.9	4.8	3.2	11.1	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h	878			267	134	
Approach Delay, s/veh	3.9			3.3	11.1	
Approach LOS	A			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		8.3		21.1				21.1
Change Period (Y+Rc), s		3.0		4.1				4.1
Max Green Setting (Gmax), s		22.0		28.0				28.0
Max Q Clear Time (g_c+I1), s		4.0		6.1				6.5
Green Ext Time (p_c), s		0.2		10.6				10.5

Intersection Summary	
HCM 2010 Ctrl Delay	4.5
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	487	28	469	286	22	43	27	113	56	64	52
Future Volume (veh/h)	51	487	28	469	286	22	43	27	113	56	64	52
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	1900	1863	1900
Adj Flow Rate, veh/h	61	587	34	565	345	27	42	46	136	67	77	63
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	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	101	859	50	605	1786	139	230	242	199	99	117	98
Arrive On Green	0.06	0.25	0.25	0.34	0.54	0.54	0.13	0.13	0.13	0.09	0.09	0.09
Sat Flow, veh/h	1774	3400	197	1774	3327	259	1774	1863	1532	1101	1292	1085
Grp Volume(v), veh/h	61	305	316	565	183	189	42	46	136	110	0	97
Grp Sat Flow(s),veh/h/ln	1774	1770	1827	1774	1770	1817	1774	1863	1532	1808	0	1671
Q Serve(g_s), s	3.0	13.8	13.8	27.3	4.7	4.8	1.9	2.0	7.5	5.2	0.0	5.0
Cycle Q Clear(g_c), s	3.0	13.8	13.8	27.3	4.7	4.8	1.9	2.0	7.5	5.2	0.0	5.0
Prop In Lane	1.00		0.11	1.00		0.14	1.00		1.00	0.61		0.65
Lane Grp Cap(c), veh/h	101	447	462	605	950	975	230	242	199	163	0	151
V/C Ratio(X)	0.61	0.68	0.68	0.93	0.19	0.19	0.18	0.19	0.68	0.67	0.00	0.64
Avail Cap(c_a), veh/h	401	800	826	1243	1639	1683	501	526	433	939	0	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.8	29.9	29.9	28.2	10.6	10.6	34.3	34.4	36.8	39.0	0.0	38.9
Incr Delay (d2), s/veh	2.2	1.8	1.8	3.1	0.1	0.1	0.1	0.1	1.6	1.8	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	6.9	7.2	13.9	2.3	2.4	0.9	1.0	3.3	2.7	0.0	2.4
LnGrp Delay(d),s/veh	43.0	31.7	31.7	31.3	10.7	10.7	34.5	34.5	38.3	40.8	0.0	40.6
LnGrp LOS	D	C	C	C	B	B	C	C	D	D		D
Approach Vol, veh/h		682			937			224			207	
Approach Delay, s/veh		32.7			23.1			36.8			40.7	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		15.5	34.2	26.9		12.0	9.0	52.0
Change Period (Y+Rc), s		4.0	4.0	4.5		4.0	4.0	4.5
Max Green Setting (Gmax), s		25.0	62.0	40.0		46.0	20.0	82.0
Max Q Clear Time (g_c+I1), s		9.5	29.3	15.8		7.2	5.0	6.8
Green Ext Time (p_c), s		0.4	0.9	6.5		0.8	0.0	7.5

Intersection Summary	
HCM 2010 Ctrl Delay	29.6
HCM 2010 LOS	C

Notes

Movement	EBT	EBR	WBL	WBT	NBL	NBR	NEL	NER
Lane Configurations								
Traffic Volume (veh/h)	403	46	710	87	72	541	0	0
Future Volume (veh/h)	403	46	710	87	72	541	0	0
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	438	50	841	0	78	91		
Adj No. of Lanes	2	0	2	1	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.90	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	819	93	1252	657	183	163		
Arrive On Green	0.26	0.26	0.35	0.00	0.10	0.10		
Sat Flow, veh/h	3297	364	3548	1863	1774	1583		
Grp Volume(v), veh/h	241	247	841	0	78	91		
Grp Sat Flow(s),veh/h/ln	1770	1799	1774	1863	1774	1583		
Q Serve(g_s), s	4.9	4.9	8.4	0.0	1.7	2.3		
Cycle Q Clear(g_c), s	4.9	4.9	8.4	0.0	1.7	2.3		
Prop In Lane		0.20	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	452	460	1252	657	183	163		
V/C Ratio(X)	0.53	0.54	0.67	0.00	0.43	0.56		
Avail Cap(c_a), veh/h	1093	1111	2064	1083	1023	913		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	13.3	13.4	11.4	0.0	17.5	17.8		
Incr Delay (d2), s/veh	1.4	1.4	0.9	0.0	2.2	4.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.5	2.6	4.2	0.0	1.0	1.2		
LnGrp Delay(d),s/veh	14.7	14.8	12.3	0.0	19.7	21.9		
LnGrp LOS	B	B	B		B	C		
Approach Vol, veh/h	488			841	169			
Approach Delay, s/veh	14.7			12.3	20.9			
Approach LOS	B			B	C			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		14.6				18.7		8.3
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		25.7				24.2		24.0
Max Q Clear Time (g_c+I1), s		6.9				10.4		4.3
Green Ext Time (p_c), s		3.7				4.3		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	14.1
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	86	825	748	43	107	50
Future Volume (veh/h)	86	825	748	43	107	50
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	89	851	771	44	110	52
Adj No. of Lanes	1	1	2	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	512	1077	922	812	209	177
Arrive On Green	0.41	0.41	0.27	0.44	0.11	0.11
Sat Flow, veh/h	1242	1583	3442	1863	1863	1576
Grp Volume(v), veh/h	89	851	771	44	110	52
Grp Sat Flow(s),veh/h/ln	1242	1583	1721	1863	1863	1576
Q Serve(g_s), s	2.8	23.3	13.2	0.9	3.5	1.9
Cycle Q Clear(g_c), s	2.8	23.3	13.2	0.9	3.5	1.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	512	1077	922	812	209	177
V/C Ratio(X)	0.17	0.79	0.84	0.05	0.53	0.29
Avail Cap(c_a), veh/h	536	1107	2667	2485	937	793
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.7	6.9	21.6	10.2	26.2	25.5
Incr Delay (d2), s/veh	0.1	3.5	0.8	0.0	2.9	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	20.4	6.3	0.4	2.0	0.9
LnGrp Delay(d),s/veh	11.7	10.4	22.4	10.2	29.1	26.8
LnGrp LOS	B	B	C	B	C	C
Approach Vol, veh/h	940			815	162	
Approach Delay, s/veh	10.5			21.7	28.4	
Approach LOS	B			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		32.3		30.3	20.3	12.0		
Change Period (Y+Rc), s		5.0		4.5	3.5	5.0		
Max Green Setting (Gmax), s		83.5		27.0	48.5	31.5		
Max Q Clear Time (g_c+I1), s		2.9		25.3	15.2	5.5		
Green Ext Time (p_c), s		0.4		0.5	1.6	1.0		

Intersection Summary	
HCM 2010 Ctrl Delay	16.8
HCM 2010 LOS	B



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	299	87	698	411	202	733
Future Volume (vph)	299	87	698	411	202	733
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	3.5	5.0		3.5	4.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.94		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3342		1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3342		1770	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	332	97	776	457	224	814
RTOR Reduction (vph)	0	46	54	0	0	0
Lane Group Flow (vph)	332	51	1179	0	224	814
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	
Permitted Phases		8				6
Actuated Green, G (s)	21.2	21.2	34.0		16.6	55.1
Effective Green, g (s)	21.2	21.2	34.0		16.6	55.1
Actuated g/C Ratio	0.23	0.23	0.37		0.18	0.60
Clearance Time (s)	3.5	3.5	5.0		3.5	4.0
Vehicle Extension (s)	2.0	2.0	4.0		2.0	4.0
Lane Grp Cap (vph)	406	363	1232		318	2114
v/s Ratio Prot	c0.19		c0.35		c0.13	
v/s Ratio Perm		0.03				0.23
v/c Ratio	0.82	0.14	0.96		0.70	0.39
Uniform Delay, d1	33.7	28.2	28.4		35.5	9.7
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	11.5	0.1	16.4		5.7	0.2
Delay (s)	45.1	28.3	44.8		41.2	9.9
Level of Service	D	C	D		D	A
Approach Delay (s)	41.3		44.8			16.6
Approach LOS	D		D			B

Intersection Summary			
HCM 2000 Control Delay	33.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	92.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	118	12	51	23	279	11	704	151	198	905	164
Future Volume (veh/h)	94	118	12	51	23	279	11	704	151	198	905	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		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	99	124	13	54	24	294	12	741	159	208	953	173
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	73	66	442	86	23	444	21	1212	260	255	1025	867
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.01	0.42	0.42	0.14	0.55	0.55
Sat Flow, veh/h	0	233	1564	0	83	1572	1774	2897	622	1774	1863	1576
Grp Volume(v), veh/h	223	0	13	78	0	294	12	453	447	208	953	173
Grp Sat Flow(s),veh/h/ln	233	0	1564	83	0	1572	1774	1770	1749	1774	1863	1576
Q Serve(g_s), s	0.0	0.0	0.4	0.0	0.0	11.7	0.5	14.1	14.2	8.1	33.4	3.9
Cycle Q Clear(g_c), s	20.0	0.0	0.4	20.0	0.0	11.7	0.5	14.1	14.2	8.1	33.4	3.9
Prop In Lane	0.44		1.00	0.69		1.00	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	139	0	442	109	0	444	21	740	732	255	1025	867
V/C Ratio(X)	1.60	0.00	0.03	0.71	0.00	0.66	0.57	0.61	0.61	0.82	0.93	0.20
Avail Cap(c_a), veh/h	139	0	442	109	0	444	501	1000	988	376	1025	867
HCM Platoon Ratio	1.00	1.00	1.00	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	26.5	0.0	18.4	29.5	0.0	22.4	34.8	16.1	16.1	29.4	14.7	8.0
Incr Delay (d2), s/veh	302.2	0.0	0.0	18.5	0.0	3.4	8.7	1.3	1.3	5.2	14.4	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	14.3	0.0	0.2	2.1	0.0	5.5	0.3	7.2	7.1	4.3	21.0	1.7
LnGrp Delay(d),s/veh	328.7	0.0	18.4	48.0	0.0	25.8	43.5	17.3	17.4	34.6	29.1	8.2
LnGrp LOS	F		B	D		C	D	B	B	C	C	A
Approach Vol, veh/h		236			372			912			1334	
Approach Delay, s/veh		311.6			30.5			17.7			27.2	
Approach LOS		F			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	13.2	34.1		23.5	3.8	43.5		23.5
Change Period (Y+Rc), s	3.0	4.5		3.5	3.0	4.5		3.5
Max Green Setting (Gmax), s	15.0	40.0		20.0	20.0	35.0		20.0
Max Q Clear Time (g_c+I1), s	10.1	16.2		22.0	2.5	35.4		22.0
Green Ext Time (p_c), s	0.1	13.5		0.0	0.0	0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay	48.1	
HCM 2010 LOS	D	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	253	168	38	64	217	19	73	286	38	96	533	103
Future Volume (veh/h)	253	168	38	64	217	19	73	286	38	96	533	103
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		0.99	1.00		0.99	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	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	275	183	41	70	236	21	79	311	41	104	579	112
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	478	630	141	503	721	64	176	709	93	419	667	129
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1114	1472	330	1147	1685	150	749	1611	212	1022	1515	293
Grp Volume(v), veh/h	275	0	224	70	0	257	79	0	352	104	0	691
Grp Sat Flow(s),veh/h/ln	1114	0	1801	1147	0	1835	749	0	1823	1022	0	1808
Q Serve(g_s), s	14.9	0.0	5.5	2.9	0.0	6.4	6.4	0.0	9.1	5.4	0.0	23.6
Cycle Q Clear(g_c), s	21.2	0.0	5.5	8.4	0.0	6.4	30.0	0.0	9.1	14.5	0.0	23.6
Prop In Lane	1.00		0.18	1.00		0.08	1.00		0.12	1.00		0.16
Lane Grp Cap(c), veh/h	478	0	771	503	0	785	176	0	802	419	0	796
V/C Ratio(X)	0.58	0.00	0.29	0.14	0.00	0.33	0.45	0.00	0.44	0.25	0.00	0.87
Avail Cap(c_a), veh/h	656	0	1057	686	0	1077	176	0	802	419	0	796
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.0	0.0	12.7	15.5	0.0	13.0	31.2	0.0	13.2	18.3	0.0	17.3
Incr Delay (d2), s/veh	1.6	0.0	0.3	0.2	0.0	0.3	2.5	0.0	0.5	0.4	0.0	10.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	2.8	0.9	0.0	3.3	1.6	0.0	4.7	1.6	0.0	14.0
LnGrp Delay(d),s/veh	21.6	0.0	13.0	15.7	0.0	13.3	33.8	0.0	13.8	18.7	0.0	27.7
LnGrp LOS	C		B	B		B	C		B	B		C
Approach Vol, veh/h		499			327			431			795	
Approach Delay, s/veh		17.8			13.8			17.4			26.5	
Approach LOS		B			B			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		33.7		34.5		33.7		34.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		40.0		30.0		40.0		30.0
Max Q Clear Time (g_c+I1), s		23.2		25.6		10.4		32.0
Green Ext Time (p_c), s		5.9		3.4		7.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	20.4
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	144	0	0	146	0	444	19	606	659	51
Future Vol, veh/h	0	0	144	0	0	146	0	444	19	606	659	51
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	150	0	0	152	0	463	20	631	686	53

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	713	-	-	472	-	0	0	482	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	0	432	0	0	592	0	-	-	1081	-	-
Stage 1	0	0	-	0	0	-	0	-	-	-	-	-
Stage 2	0	0	-	0	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	432	-	-	592	-	-	-	1081	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.7	13.2	0	5.9
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	432	592	1081	-	-
HCM Lane V/C Ratio	-	-	0.347	0.257	0.584	-	-
HCM Control Delay (s)	-	-	17.7	13.2	12.9	-	-
HCM Lane LOS	-	-	C	B	B	-	-
HCM 95th %tile Q(veh)	-	-	1.5	1	3.9	-	-

Intersection	
Int Delay, s/veh	1.1

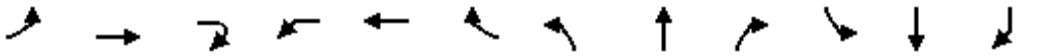
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	33	28	10	188	650	27
Future Vol, veh/h	33	28	10	188	650	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	110	-	-	-
Veh in Median Storage, #	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	36	30	11	204	707	29

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	846	368	736	0	-	0
Stage 1	722	-	-	-	-	-
Stage 2	124	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	301	629	865	-	-	-
Stage 1	442	-	-	-	-	-
Stage 2	888	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	297	629	865	-	-	-
Mov Cap-2 Maneuver	297	-	-	-	-	-
Stage 1	436	-	-	-	-	-
Stage 2	888	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16	0.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	865	-	392	-	-
HCM Lane V/C Ratio	0.013	-	0.169	-	-
HCM Control Delay (s)	9.2	-	16	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.6	-	-

CUMULATIVE PLUS PROJECT AM



Movement	EBL	EBT	EBR2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	319	110	1025	605	8	489	8	498	13	11	6
Future Volume (vph)	9	319	110	1025	605	8	489	8	498	13	11	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.1	5.1	4.0	4.1		4.1	4.1	4.1		3.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.92	0.85		0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.98	1.00		0.98	
Satd. Flow (prot)	1770	3539	1583	3433	3532		1681	1523	1504		1774	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.98	1.00		0.98	
Satd. Flow (perm)	1770	3539	1583	3433	3532		1681	1523	1504		1774	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	9	319	110	1025	605	8	489	8	498	13	11	6
RTOR Reduction (vph)	0	0	98	0	0	0	0	39	244	0	0	0
Lane Group Flow (vph)	9	319	12	1025	613	0	347	295	70	0	30	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases			6						4			
Actuated Green, G (s)	0.9	13.3	13.3	59.9	73.3		26.8	26.8	26.8		3.8	
Effective Green, g (s)	0.9	13.3	13.3	59.9	73.3		26.8	26.8	26.8		3.8	
Actuated g/C Ratio	0.01	0.11	0.11	0.50	0.61		0.22	0.22	0.22		0.03	
Clearance Time (s)	4.0	5.1	5.1	4.0	4.1		4.1	4.1	4.1		3.0	
Vehicle Extension (s)	0.2	0.2	0.2	0.2	0.2		0.2	0.2	0.2		0.2	
Lane Grp Cap (vph)	13	392	175	1713	2157		375	340	335		56	
v/s Ratio Prot	0.01	c0.09		c0.30	0.17		c0.21	0.19			c0.02	
v/s Ratio Perm			0.01						0.05			
v/c Ratio	0.69	0.81	0.07	0.60	0.28		0.93	0.87	0.21		0.54	
Uniform Delay, d1	59.4	52.1	47.8	21.5	11.0		45.6	44.9	38.0		57.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	82.4	11.6	0.1	1.6	0.3		27.8	19.6	0.1		4.9	
Delay (s)	141.8	63.7	47.9	23.0	11.3		73.5	64.5	38.1		62.1	
Level of Service	F	E	D	C	B		E	E	D		E	
Approach Delay (s)		61.4			18.6			59.3			62.1	
Approach LOS		E			B			E			E	

Intersection Summary			
HCM 2000 Control Delay	38.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		

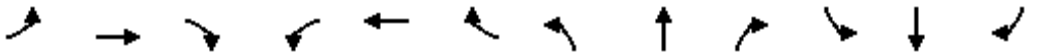
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	50	694	75	25	7	1533	441	325	4	93	136
Future Volume (veh/h)	85	50	694	75	25	7	1533	441	325	4	93	136
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		0.99	1.00		0.93	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	69	76	708	77	26	7	1564	450	332	4	95	139
Adj No. of Lanes	1	1	2	0	2	0	2	2	0	1	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	695	730	1230	138	108	29	954	774	568	7	405	175
Arrive On Green	0.39	0.39	0.39	0.08	0.08	0.08	0.28	0.40	0.40	0.00	0.11	0.11
Sat Flow, veh/h	1774	1863	3140	1774	1389	374	3442	1935	1420	1774	3539	1529
Grp Volume(v), veh/h	69	76	708	77	0	33	1564	411	371	4	95	139
Grp Sat Flow(s),veh/h/ln	1774	1863	1570	1774	0	1763	1721	1770	1585	1774	1770	1529
Q Serve(g_s), s	3.2	3.4	23.2	5.5	0.0	2.3	36.3	23.8	24.0	0.3	3.2	11.6
Cycle Q Clear(g_c), s	3.2	3.4	23.2	5.5	0.0	2.3	36.3	23.8	24.0	0.3	3.2	11.6
Prop In Lane	1.00		1.00	1.00		0.21	1.00		0.90	1.00		1.00
Lane Grp Cap(c), veh/h	695	730	1230	138	0	138	954	708	634	7	405	175
V/C Ratio(X)	0.10	0.10	0.58	0.56	0.00	0.24	1.64	0.58	0.58	0.55	0.23	0.80
Avail Cap(c_a), veh/h	695	730	1230	284	0	283	954	708	634	203	567	245
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.68	0.68	0.68	1.00	0.00	1.00	0.77	0.77	0.77	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	25.3	31.3	58.2	0.0	56.7	47.3	30.7	30.8	65.1	52.8	56.5
Incr Delay (d2), s/veh	0.0	0.0	0.3	15.2	0.0	4.1	291.7	0.6	0.7	21.3	0.1	7.5
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	1.8	10.1	3.3	0.0	1.3	55.9	11.8	10.6	0.2	1.6	5.3
LnGrp Delay(d),s/veh	25.2	25.3	31.6	73.4	0.0	60.8	339.0	31.3	31.5	86.4	52.9	64.0
LnGrp LOS	C	C	C	E		E	F	C	C	F	D	E
Approach Vol, veh/h		853			110			2346			238	
Approach Delay, s/veh		30.5			69.6			236.5			60.0	
Approach LOS		C			E			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		56.0	41.0	20.1		13.9	3.5	57.5
Change Period (Y+Rc), s		* 4.7	* 4.7	* 5.1		3.7	3.0	5.1
Max Green Setting (Gmax), s		* 36	* 36	* 21		21.0	15.0	32.9
Max Q Clear Time (g_c+I1), s		25.2	38.3	13.6		7.5	2.3	26.0
Green Ext Time (p_c), s		0.3	0.0	0.2		0.1	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	169.9
HCM 2010 LOS	F

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	730	0	826	0	0	0	0	1568	539	281	579	0
Future Volume (vph)	730	0	826	0	0	0	0	1568	539	281	579	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Lane Util. Factor		1.00	0.76					0.86	0.86	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.99	0.85	1.00	1.00	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1770	3610					4775	1362	3433	3539	
Flt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1770	3610					4775	1362	3433	3539	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	745	0	843	0	0	0	0	1600	550	287	591	0
RTOR Reduction (vph)	0	0	374	0	0	0	0	3	121	0	0	0
Lane Group Flow (vph)	0	745	469	0	0	0	0	1669	357	287	591	0
Confl. Peds. (#/hr)							11					11
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		25.2	25.2					70.4	70.4	12.7	79.1	
Effective Green, g (s)		25.2	25.2					70.4	70.4	12.7	79.1	
Actuated g/C Ratio		0.21	0.21					0.59	0.59	0.11	0.66	
Clearance Time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Vehicle Extension (s)		0.2	0.2					0.2	0.2	0.2	1.0	
Lane Grp Cap (vph)		371	758					2801	799	363	2332	
v/s Ratio Prot								c0.35		c0.08	0.17	
v/s Ratio Perm		0.42	0.13						0.26			
v/c Ratio		2.01	0.62					0.60	0.45	0.79	0.25	
Uniform Delay, d1		47.4	43.0					15.8	13.9	52.4	8.4	
Progression Factor		1.00	1.00					0.42	0.33	1.00	1.00	
Incremental Delay, d2		463.1	1.1					0.7	1.4	10.5	0.3	
Delay (s)		510.5	44.1					7.4	6.1	62.8	8.6	
Level of Service		F	D					A	A	E	A	
Approach Delay (s)		262.9			0.0			7.1			26.3	
Approach LOS		F			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	98.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	11.7
Intersection Capacity Utilization	93.3%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	63	108	116	205	447	207	1486	39	243	871	290
Future Volume (veh/h)	173	63	108	116	205	447	207	1486	39	243	871	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	182	66	114	122	216	0	218	1564	41	256	917	0
Adj No. of Lanes	2	1	1	1	1	1	2	3	0	2	3	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	336	182	154	232	244	207	277	1248	33	1341	2865	892
Arrive On Green	0.10	0.10	0.10	0.13	0.13	0.00	0.08	0.25	0.25	0.13	0.19	0.00
Sat Flow, veh/h	3442	1863	1574	1774	1863	1583	3442	5095	134	3442	5085	1583
Grp Volume(v), veh/h	182	66	114	122	216	0	218	1041	564	256	917	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1574	1774	1863	1583	1721	1695	1838	1721	1695	1583
Q Serve(g_s), s	6.0	4.0	8.5	7.7	13.7	0.0	7.5	29.4	29.4	8.0	18.7	0.0
Cycle Q Clear(g_c), s	6.0	4.0	8.5	7.7	13.7	0.0	7.5	29.4	29.4	8.0	18.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	336	182	154	232	244	207	277	831	450	1341	2865	892
V/C Ratio(X)	0.54	0.36	0.74	0.53	0.89	0.00	0.79	1.25	1.25	0.19	0.32	0.00
Avail Cap(c_a), veh/h	1030	557	471	235	247	210	574	831	450	1341	2865	892
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.77	0.77	0.00	0.72	0.72	0.72	0.82	0.82	0.00
Uniform Delay (d), s/veh	51.6	50.6	52.7	48.7	51.3	0.0	54.2	45.3	45.3	35.4	28.9	0.0
Incr Delay (d2), s/veh	0.5	0.4	2.6	0.8	23.4	0.0	1.4	121.1	126.7	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	2.1	3.8	3.8	8.6	0.0	3.6	27.7	30.7	3.8	8.8	0.0
LnGrp Delay(d),s/veh	52.1	51.1	55.3	49.4	74.7	0.0	55.5	166.4	172.0	35.4	29.0	0.0
LnGrp LOS	D	D	E	D	E		E	F	F	D	C	
Approach Vol, veh/h		362			338			1823			1173	
Approach Delay, s/veh		52.9			65.6			154.9			30.4	
Approach LOS		D			E			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	50.9	33.5		15.8	12.7	71.7		19.8
Change Period (Y+Rc), s	4.1	* 4.1		4.1	3.0	4.1		4.1
Max Green Setting (Gmax), s	23.5	* 29		35.9	20.0	32.9		15.9
Max Q Clear Time (g_c+I1), s	10.0	31.4		10.5	9.5	20.7		15.7
Green Ext Time (p_c), s	2.4	0.0		0.5	0.2	3.3		0.0

Intersection Summary		
HCM 2010 Ctrl Delay	97.2	
HCM 2010 LOS	F	

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	91	0	375	0	1356	192	147	949	0
Future Volume (vph)	0	0	0	91	0	375	0	1356	192	147	949	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.1	4.1		4.1		3.5	4.1	
Lane Util. Factor					1.00	1.00		0.91		1.00	0.91	
Frpb, ped/bikes					1.00	0.98		0.99		1.00	1.00	
Flpb, ped/bikes					1.00	1.00		1.00		1.00	1.00	
Frt					1.00	0.85		0.98		1.00	1.00	
Flt Protected					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)					1593	1399		4461		1593	4577	
Flt Permitted					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (perm)					1593	1399		4461		1593	4577	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	96	0	395	0	1427	202	155	999	0
RTOR Reduction (vph)	0	0	0	0	0	227	0	10	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	96	168	0	1619	0	155	999	0
Confl. Peds. (#/hr)						3			24			6
Turn Type				Perm	NA	Perm	custom	NA		Prot	NA	
Protected Phases					1			2 8		7	2 3 4	
Permitted Phases				1		1	8					
Actuated Green, G (s)					21.0	21.0		98.9		19.5	126.6	
Effective Green, g (s)					21.0	21.0		98.9		19.5	126.6	
Actuated g/C Ratio					0.14	0.14		0.64		0.13	0.82	
Clearance Time (s)					4.1	4.1				3.5		
Vehicle Extension (s)					2.0	2.0				2.0		
Lane Grp Cap (vph)					215	189		2842		200	3733	
v/s Ratio Prot								c0.36		c0.10	c0.22	
v/s Ratio Perm					0.06	c0.12						
v/c Ratio					0.45	0.89		0.57		0.78	0.27	
Uniform Delay, d1					61.8	66.0		16.0		65.7	3.4	
Progression Factor					1.00	1.00		0.62		1.00	1.00	
Incremental Delay, d2					0.5	36.1		0.2		15.6	0.1	
Delay (s)					62.3	102.0		10.1		81.3	3.4	
Level of Service					E	F		B		F	A	
Approach Delay (s)		0.0			94.3			10.1			13.9	
Approach LOS		A			F			B			B	

Intersection Summary			
HCM 2000 Control Delay	24.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	155.2	Sum of lost time (s)	20.3
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	492	370	24	51	420	565	3	490	32	328	312	402
Future Volume (vph)	492	370	24	51	420	565	3	490	32	328	312	402
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5	4.1	4.1
Lane Util. Factor	0.97	1.00		1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.96	1.00	1.00		1.00	1.00	0.94
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.97	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1841		1770	3539	1513	1715	3497		1770	1863	1495
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.56	1.00		0.22	1.00	1.00
Satd. Flow (perm)	3433	1841		1770	3539	1513	1015	3497		417	1863	1495
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	518	389	25	54	442	595	3	516	34	345	328	423
RTOR Reduction (vph)	0	1	0	0	0	297	0	3	0	0	0	284
Lane Group Flow (vph)	518	413	0	54	442	298	3	547	0	345	328	139
Confl. Peds. (#/hr)			7			12	24		8			24
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		custom	NA	custom
Protected Phases	3	8		7	4			6		5	1 2 5 6	
Permitted Phases						4	6			2		2
Actuated Green, G (s)	47.3	48.0		19.5	20.2	20.2	40.4	40.4		50.9	76.0	50.9
Effective Green, g (s)	47.3	48.0		19.5	20.2	20.2	40.4	40.4		50.9	76.0	50.9
Actuated g/C Ratio	0.30	0.31		0.13	0.13	0.13	0.26	0.26		0.33	0.49	0.33
Clearance Time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5		4.1
Vehicle Extension (s)	2.5	3.0		2.0	3.0	3.0	3.0	3.0		3.0		4.0
Lane Grp Cap (vph)	1046	569		222	460	196	264	910		189	912	490
v/s Ratio Prot	0.15	c0.22		0.03	0.12			0.16		c0.07	c0.18	
v/s Ratio Perm						c0.20	0.00			c0.53		0.09
v/c Ratio	0.50	0.73		0.24	0.96	1.52	0.01	0.60		1.83	0.36	0.28
Uniform Delay, d1	44.2	47.7		61.2	67.1	67.5	42.6	50.3		53.1	24.5	38.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.91	0.89	0.47
Incremental Delay, d2	0.3	4.6		0.2	32.0	257.4	0.1	2.9		391.0	0.1	0.4
Delay (s)	44.4	52.3		61.4	99.1	324.9	42.7	53.3		439.3	21.9	18.8
Level of Service	D	D		E	F	F	D	D		F	C	B
Approach Delay (s)		47.9			220.4			53.2			152.1	
Approach LOS		D			F			D			F	

Intersection Summary			
HCM 2000 Control Delay	131.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	155.2	Sum of lost time (s)	20.3
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	275	65	13	509	242	14
Future Volume (veh/h)	275	65	13	509	242	14
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	320	76	15	592	281	16
Adj No. of Lanes	2	0	1	1	0	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	1577	369	719	1033	362	21
Arrive On Green	0.55	0.55	0.55	0.55	0.22	0.22
Sat Flow, veh/h	2938	666	982	1863	1662	95
Grp Volume(v), veh/h	197	199	15	592	298	0
Grp Sat Flow(s),veh/h/ln	1770	1742	982	1863	1763	0
Q Serve(g_s), s	1.7	1.8	0.2	6.5	5.0	0.0
Cycle Q Clear(g_c), s	1.7	1.8	2.0	6.5	5.0	0.0
Prop In Lane		0.38	1.00		0.94	0.05
Lane Grp Cap(c), veh/h	981	966	719	1033	384	0
V/C Ratio(X)	0.20	0.21	0.02	0.57	0.78	0.00
Avail Cap(c_a), veh/h	1589	1564	1056	1672	1244	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	3.5	3.5	4.0	4.5	11.5	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.7	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.9	0.1	3.3	2.5	0.0
LnGrp Delay(d),s/veh	3.6	3.6	4.0	5.3	12.8	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h	396			607	298	
Approach Delay, s/veh	3.6			5.2	12.8	
Approach LOS	A			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		9.8		21.4				21.4
Change Period (Y+Rc), s		3.0		4.1				4.1
Max Green Setting (Gmax), s		22.0		28.0				28.0
Max Q Clear Time (g_c+I1), s		7.0		3.8				8.5
Green Ext Time (p_c), s		0.4		9.8				8.8

Intersection Summary	
HCM 2010 Ctrl Delay	6.5
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	717	36	144	224	31	39	40	205	13	27	20
Future Volume (veh/h)	116	717	36	144	224	31	39	40	205	13	27	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		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	1900	1863	1900
Adj Flow Rate, veh/h	127	788	40	158	246	34	43	44	225	14	30	22
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	1241	63	220	1189	162	324	341	288	33	71	53
Arrive On Green	0.11	0.36	0.36	0.12	0.38	0.38	0.18	0.18	0.18	0.05	0.05	0.05
Sat Flow, veh/h	1774	3427	174	1774	3126	427	1774	1863	1576	735	1580	1167
Grp Volume(v), veh/h	127	407	421	158	138	142	43	44	225	35	0	31
Grp Sat Flow(s),veh/h/ln	1774	1770	1831	1774	1770	1783	1774	1863	1576	1826	0	1657
Q Serve(g_s), s	4.0	11.0	11.0	4.9	3.0	3.1	1.2	1.1	7.9	1.1	0.0	1.1
Cycle Q Clear(g_c), s	4.0	11.0	11.0	4.9	3.0	3.1	1.2	1.1	7.9	1.1	0.0	1.1
Prop In Lane	1.00		0.09	1.00		0.24	1.00		1.00	0.40		0.70
Lane Grp Cap(c), veh/h	188	641	663	220	673	678	324	341	288	83	0	75
V/C Ratio(X)	0.68	0.63	0.64	0.72	0.20	0.21	0.13	0.13	0.78	0.42	0.00	0.42
Avail Cap(c_a), veh/h	614	1226	1268	1905	2513	2532	768	806	682	1455	0	1320
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.9	15.3	15.3	24.3	12.0	12.0	19.8	19.7	22.5	26.8	0.0	26.8
Incr Delay (d2), s/veh	1.6	1.0	1.0	1.6	0.1	0.2	0.1	0.1	1.8	1.3	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	5.5	5.7	2.5	1.5	1.5	0.6	0.6	3.5	0.6	0.0	0.5
LnGrp Delay(d),s/veh	26.5	16.3	16.3	26.0	12.2	12.2	19.8	19.8	24.2	28.1	0.0	28.2
LnGrp LOS	C	B	B	C	B	B	B	B	C	C		C
Approach Vol, veh/h		955			438			312			66	
Approach Delay, s/veh		17.6			17.2			23.0			28.1	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		14.6	11.2	25.4		6.6	10.1	26.5
Change Period (Y+Rc), s		4.0	4.0	4.5		4.0	4.0	4.5
Max Green Setting (Gmax), s		25.0	62.0	40.0		46.0	20.0	82.0
Max Q Clear Time (g_c+I1), s		9.9	6.9	13.0		3.1	6.0	5.1
Green Ext Time (p_c), s		0.5	0.2	7.9		0.2	0.1	9.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.9
HCM 2010 LOS	B

Notes

Movement	EBT	EBR	WBL	WBT	NBL	NBR	NEL	NER
Lane Configurations								
Traffic Volume (veh/h)	146	21	1076	139	285	958	0	0
Future Volume (veh/h)	146	21	1076	139	285	958	0	0
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	155	22	1255	0	303	422		
Adj No. of Lanes	2	0	2	1	1	1		
Peak Hour Factor	0.94	0.94	0.94	0.90	0.94	0.94		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	733	102	1153	605	515	459		
Arrive On Green	0.23	0.23	0.32	0.00	0.29	0.29		
Sat Flow, veh/h	3213	436	3548	1863	1774	1583		
Grp Volume(v), veh/h	87	90	1255	0	303	422		
Grp Sat Flow(s),veh/h/ln	1770	1786	1774	1863	1774	1583		
Q Serve(g_s), s	3.2	3.3	26.0	0.0	11.7	20.6		
Cycle Q Clear(g_c), s	3.2	3.3	26.0	0.0	11.7	20.6		
Prop In Lane		0.24	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	416	419	1153	605	515	459		
V/C Ratio(X)	0.21	0.21	1.09	0.00	0.59	0.92		
Avail Cap(c_a), veh/h	416	419	1153	605	532	475		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.09	0.00	1.00	1.00		
Uniform Delay (d), s/veh	24.6	24.7	27.0	0.0	24.3	27.5		
Incr Delay (d2), s/veh	1.1	1.2	41.4	0.0	2.0	23.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.7	1.7	19.3	0.0	6.0	12.0		
LnGrp Delay(d),s/veh	25.8	25.8	68.4	0.0	26.3	50.4		
LnGrp LOS	C	C	F		C	D		
Approach Vol, veh/h	177			1255	725			
Approach Delay, s/veh	25.8			68.4	40.3			
Approach LOS	C			E	D			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		22.8				30.0		27.2
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		18.0				26.0		24.0
Max Q Clear Time (g_c+I1), s		5.3				28.0		22.6
Green Ext Time (p_c), s		0.9				0.0		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	55.5
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	20	839	1206	40	14	8
Future Volume (veh/h)	20	839	1206	40	14	8
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	24	999	1436	48	17	10
Adj No. of Lanes	1	1	2	1	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	289	962	1291	1277	522	432
Arrive On Green	0.23	0.23	0.38	0.69	0.28	0.28
Sat Flow, veh/h	1242	1583	3442	1863	1863	1541
Grp Volume(v), veh/h	24	999	1436	48	17	10
Grp Sat Flow(s),veh/h/ln	1242	1583	1721	1863	1863	1541
Q Serve(g_s), s	1.8	27.0	43.5	1.0	0.8	0.5
Cycle Q Clear(g_c), s	1.8	27.0	43.5	1.0	0.8	0.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	289	962	1291	1277	522	432
V/C Ratio(X)	0.08	1.04	1.11	0.04	0.03	0.02
Avail Cap(c_a), veh/h	289	962	1291	1277	522	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.65	0.65	0.33	0.33	1.00	1.00
Uniform Delay (d), s/veh	34.8	22.8	36.3	5.9	30.3	30.2
Incr Delay (d2), s/veh	0.1	33.8	54.9	0.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	51.9	30.5	0.5	0.4	0.2
LnGrp Delay(d),s/veh	34.9	56.6	91.2	5.9	30.4	30.3
LnGrp LOS	C	F	F	A	C	C
Approach Vol, veh/h	1023			1484	27	
Approach Delay, s/veh	56.1			88.4	30.4	
Approach LOS	E			F	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		84.5		31.5	47.0	37.5		
Change Period (Y+Rc), s		5.0		4.5	3.5	5.0		
Max Green Setting (Gmax), s		79.0		27.0	43.5	32.0		
Max Q Clear Time (g_c+I1), s		3.0		29.0	45.5	2.8		
Green Ext Time (p_c), s		0.3		0.0	0.0	0.1		

Intersection Summary	
HCM 2010 Ctrl Delay	74.7
HCM 2010 LOS	E



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	331	197	1030	240	56	801
Future Volume (vph)	331	197	1030	240	56	801
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	3.5	5.0		3.5	4.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.97		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3424		1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3424		1770	3539
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	364	216	1132	264	62	880
RTOR Reduction (vph)	0	160	16	0	0	0
Lane Group Flow (vph)	364	56	1380	0	62	880
Confl. Peds. (#/hr)				2		
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	
Permitted Phases		8				6
Actuated Green, G (s)	21.6	21.6	35.4		5.6	45.5
Effective Green, g (s)	21.6	21.6	35.4		5.6	45.5
Actuated g/C Ratio	0.26	0.26	0.42		0.07	0.54
Clearance Time (s)	3.5	3.5	5.0		3.5	4.0
Vehicle Extension (s)	2.0	2.0	4.0		2.0	4.0
Lane Grp Cap (vph)	455	407	1442		118	1916
v/s Ratio Prot	c0.21		c0.40		0.04	
v/s Ratio Perm		0.04				c0.25
v/c Ratio	0.80	0.14	0.96		0.53	0.46
Uniform Delay, d1	29.2	24.0	23.6		37.9	11.7
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	9.2	0.1	15.5		1.9	0.8
Delay (s)	38.4	24.1	39.1		39.9	12.5
Level of Service	D	C	D		D	B
Approach Delay (s)	33.0		39.1			14.3
Approach LOS	C		D			B

Intersection Summary			
HCM 2000 Control Delay	29.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	84.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	145	8	85	55	302	2	989	151	222	822	143
Future Volume (veh/h)	72	145	8	85	55	302	2	989	151	222	822	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)	0.99		0.97	1.00		0.98	1.00		1.00	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	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	82	165	9	97	62	343	2	1124	172	252	934	162
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	62	80	397	75	31	402	4	1334	203	293	1111	933
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.00	0.43	0.43	0.17	0.60	0.60
Sat Flow, veh/h	0	310	1534	0	119	1554	1774	3078	470	1774	1863	1565
Grp Volume(v), veh/h	247	0	9	159	0	343	2	645	651	252	934	162
Grp Sat Flow(s),veh/h/ln	310	0	1534	119	0	1554	1774	1770	1778	1774	1863	1565
Q Serve(g_s), s	0.0	0.0	0.3	0.0	0.0	16.2	0.1	25.1	25.3	10.7	31.3	3.6
Cycle Q Clear(g_c), s	20.0	0.0	0.3	20.0	0.0	16.2	0.1	25.1	25.3	10.7	31.3	3.6
Prop In Lane	0.33		1.00	0.61		1.00	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	142	0	397	106	0	402	4	767	770	293	1111	933
V/C Ratio(X)	1.73	0.00	0.02	1.50	0.00	0.85	0.52	0.84	0.85	0.86	0.84	0.17
Avail Cap(c_a), veh/h	142	0	397	106	0	402	459	916	921	345	1111	933
HCM Platoon Ratio	1.00	1.00	1.00	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	28.3	0.0	21.3	33.0	0.0	27.2	38.5	19.5	19.6	31.4	12.6	7.0
Incr Delay (d2), s/veh	358.2	0.0	0.0	268.6	0.0	15.7	34.7	6.8	7.0	15.3	6.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.2	0.0	0.1	10.1	0.0	8.6	0.1	13.6	13.8	6.5	17.7	1.6
LnGrp Delay(d),s/veh	386.4	0.0	21.3	301.6	0.0	42.9	73.2	26.3	26.6	46.6	18.7	7.1
LnGrp LOS	F		C	F		D	E	C	C	D	B	A
Approach Vol, veh/h		256			502			1298			1348	
Approach Delay, s/veh		373.6			124.8			26.6			22.6	
Approach LOS		F			F			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	15.8	38.0		23.5	3.2	50.6		23.5
Change Period (Y+Rc), s	3.0	4.5		3.5	3.0	4.5		3.5
Max Green Setting (Gmax), s	15.0	40.0		20.0	20.0	35.0		20.0
Max Q Clear Time (g_c+I1), s	12.7	27.3		22.0	2.1	33.3		22.0
Green Ext Time (p_c), s	0.1	6.2		0.0	0.0	1.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	65.6
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	260	177	119	254	10	63	345	71	84	452	56
Future Volume (veh/h)	230	260	177	119	254	10	63	345	71	84	452	56
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)	0.99		0.97	1.00		0.97	1.00		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	240	271	184	124	265	10	66	359	74	88	471	58
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	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	504	471	320	353	821	31	248	605	125	312	659	81
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1086	1022	694	929	1781	67	870	1486	306	945	1618	199
Grp Volume(v), veh/h	240	0	455	124	0	275	66	0	433	88	0	529
Grp Sat Flow(s),veh/h/ln	1086	0	1716	929	0	1848	870	0	1792	945	0	1817
Q Serve(g_s), s	12.3	0.0	13.3	7.7	0.0	6.4	4.7	0.0	12.9	5.5	0.0	16.7
Cycle Q Clear(g_c), s	18.7	0.0	13.3	21.0	0.0	6.4	21.3	0.0	12.9	18.4	0.0	16.7
Prop In Lane	1.00		0.40	1.00		0.04	1.00		0.17	1.00		0.11
Lane Grp Cap(c), veh/h	504	0	791	353	0	852	248	0	730	312	0	740
V/C Ratio(X)	0.48	0.00	0.58	0.35	0.00	0.32	0.27	0.00	0.59	0.28	0.00	0.71
Avail Cap(c_a), veh/h	638	0	1003	468	0	1081	275	0	786	341	0	797
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.6	0.0	13.5	21.2	0.0	11.7	25.9	0.0	15.8	23.0	0.0	16.9
Incr Delay (d2), s/veh	1.0	0.0	0.9	0.8	0.0	0.3	0.8	0.0	1.3	0.7	0.0	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	3.8	0.0	6.4	2.0	0.0	3.4	1.2	0.0	6.6	1.5	0.0	8.9
LnGrp Delay(d),s/veh	18.6	0.0	14.5	22.1	0.0	12.0	26.7	0.0	17.2	23.7	0.0	20.1
LnGrp LOS	B		B	C		B	C		B	C		C
Approach Vol, veh/h		695			399			499			617	
Approach Delay, s/veh		15.9			15.1			18.4			20.6	
Approach LOS		B			B			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		36.0		32.4		36.0		32.4
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		40.0		30.0		40.0		30.0
Max Q Clear Time (g_c+I1), s		20.7		20.4		23.0		23.3
Green Ext Time (p_c), s		9.2		6.1		8.5		4.5

Intersection Summary	
HCM 2010 Ctrl Delay	17.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	54	0	0	246	0	617	23	218	504	39
Future Vol, veh/h	0	0	54	0	0	246	0	617	23	218	504	39
Conflicting Peds, #/hr	0	0	3	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	57	0	0	262	0	656	24	232	536	41

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	560	-	-	669	-	0	0	681	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	0	528	0	0	458	0	-	-	912	-	-
Stage 1	0	0	-	0	0	-	0	-	-	-	-	-
Stage 2	0	0	-	0	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	526	-	-	458	-	-	-	912	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.7	22.8	0	2.9
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	526	458	912	-	-
HCM Lane V/C Ratio	-	-	0.109	0.571	0.254	-	-
HCM Control Delay (s)	-	-	12.7	22.8	10.3	-	-
HCM Lane LOS	-	-	B	C	B	-	-
HCM 95th %tile Q(veh)	-	-	0.4	3.5	1	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	29	32	344	202	33
Future Vol, veh/h	17	29	32	344	202	33
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	-	110	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	31	34	362	213	35

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	480	124	248	0	-	0
Stage 1	231	-	-	-	-	-
Stage 2	249	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	515	904	1315	-	-	-
Stage 1	785	-	-	-	-	-
Stage 2	769	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	502	904	1315	-	-	-
Mov Cap-2 Maneuver	502	-	-	-	-	-
Stage 1	765	-	-	-	-	-
Stage 2	769	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.5	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1315	-	698	-	-
HCM Lane V/C Ratio	0.026	-	0.069	-	-
HCM Control Delay (s)	7.8	-	10.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	0

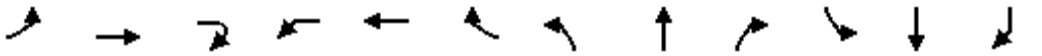
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	515	8	2	190	1	0
Future Vol, veh/h	515	8	2	190	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	560	9	2	207	1	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	568	0	775	564
Stage 1	-	-	-	-	564	-
Stage 2	-	-	-	-	211	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1004	-	366	525
Stage 1	-	-	-	-	569	-
Stage 2	-	-	-	-	824	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1004	-	365	525
Mov Cap-2 Maneuver	-	-	-	-	365	-
Stage 1	-	-	-	-	569	-
Stage 2	-	-	-	-	822	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	365	-	-	1004	-
HCM Lane V/C Ratio	0.003	-	-	0.002	-
HCM Control Delay (s)	14.9	-	-	8.6	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

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Movement	EBL	EBT	EBR2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	873	265	738	317	20	184	4	423	19	15	6
Future Volume (vph)	13	873	265	738	317	20	184	4	423	19	15	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.1	5.1	4.0	4.1		4.1	4.1	4.1		3.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.86	0.85		0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1770	3539	1583	3433	3508		1681	1460	1504		1783	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.98	
Satd. Flow (perm)	1770	3539	1583	3433	3508		1681	1460	1504		1783	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	13	873	265	738	317	20	184	4	423	19	15	6
RTOR Reduction (vph)	0	0	98	0	2	0	0	170	184	0	0	0
Lane Group Flow (vph)	13	873	167	738	335	0	166	55	36	0	40	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases			6						4			
Actuated Green, G (s)	1.2	31.2	31.2	30.4	61.4		16.0	16.0	16.0		4.8	
Effective Green, g (s)	1.2	31.2	31.2	30.4	61.4		16.0	16.0	16.0		4.8	
Actuated g/C Ratio	0.01	0.32	0.32	0.31	0.62		0.16	0.16	0.16		0.05	
Clearance Time (s)	4.0	5.1	5.1	4.0	4.1		4.1	4.1	4.1		3.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	21	1119	500	1058	2184		272	236	244		86	
v/s Ratio Prot	0.01	c0.25		c0.21	0.10		c0.10	0.04			c0.02	
v/s Ratio Perm			0.11						0.02			
v/c Ratio	0.62	0.78	0.33	0.70	0.15		0.61	0.23	0.15		0.47	
Uniform Delay, d1	48.5	30.6	25.8	30.0	7.8		38.4	36.0	35.4		45.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	43.9	3.6	0.4	2.0	0.0		4.0	0.5	0.3		3.9	
Delay (s)	92.4	34.2	26.1	32.1	7.8		42.4	36.5	35.7		49.6	
Level of Service	F	C	C	C	A		D	D	D		D	
Approach Delay (s)		33.0			24.5			37.8			49.6	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	98.6	Sum of lost time (s)	16.2
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		

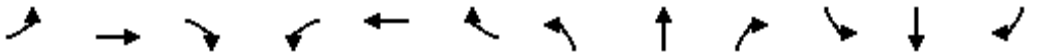
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	198	45	1076	88	25	8	987	296	115	4	184	173
Future Volume (veh/h)	198	45	1076	88	25	8	987	296	115	4	184	173
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		0.99	1.00		0.94	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	256	0	1196	98	28	9	1097	329	128	4	204	192
Adj No. of Lanes	2	0	2	0	2	0	2	2	0	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1386	0	1227	152	114	37	808	938	358	7	516	224
Arrive On Green	0.39	0.00	0.39	0.09	0.09	0.09	0.23	0.38	0.38	0.00	0.15	0.15
Sat Flow, veh/h	3548	0	3140	1774	1327	426	3442	2494	951	1774	3539	1541
Grp Volume(v), veh/h	256	0	1196	98	0	37	1097	231	226	4	204	192
Grp Sat Flow(s),veh/h/ln	1774	0	1570	1774	0	1753	1721	1770	1675	1774	1770	1541
Q Serve(g_s), s	6.1	0.0	47.9	6.8	0.0	2.5	30.0	12.0	12.4	0.3	6.7	15.5
Cycle Q Clear(g_c), s	6.1	0.0	47.9	6.8	0.0	2.5	30.0	12.0	12.4	0.3	6.7	15.5
Prop In Lane	1.00		1.00	1.00		0.24	1.00		0.57	1.00		1.00
Lane Grp Cap(c), veh/h	1386	0	1227	152	0	150	808	666	630	7	516	224
V/C Ratio(X)	0.18	0.00	0.97	0.64	0.00	0.25	1.36	0.35	0.36	0.54	0.40	0.86
Avail Cap(c_a), veh/h	1388	0	1229	416	0	412	808	692	655	139	831	362
HCM Platoon Ratio	1.00	1.00	1.00	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	25.6	0.0	38.3	56.5	0.0	54.6	48.9	28.6	28.7	63.5	49.5	53.3
Incr Delay (d2), s/veh	0.0	0.0	19.8	1.7	0.0	0.3	169.1	0.1	0.1	21.2	0.2	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	3.0	0.0	24.1	3.4	0.0	1.2	33.1	5.9	5.8	0.2	3.3	7.0
LnGrp Delay(d),s/veh	25.6	0.0	58.1	58.2	0.0	54.9	218.0	28.7	28.9	84.7	49.7	59.2
LnGrp LOS	C		E	E		D	F	C	C	F	D	E
Approach Vol, veh/h		1452			135			1554			400	
Approach Delay, s/veh		52.3			57.3			162.3			54.6	
Approach LOS		D			E			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		55.0	33.0	23.7		16.1	3.5	53.2
Change Period (Y+Rc), s		5.1	3.0	5.1		5.1	3.0	5.1
Max Green Setting (Gmax), s		50.0	30.0	30.0		30.0	10.0	50.0
Max Q Clear Time (g_c+I1), s		49.9	32.0	17.5		8.8	2.3	14.4
Green Ext Time (p_c), s		0.0	0.0	0.7		0.1	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	101.1
HCM 2010 LOS	F

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	270	0	1133	0	0	0	0	1128	608	524	824	0
Future Volume (vph)	270	0	1133	0	0	0	0	1128	608	524	824	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Lane Util. Factor		1.00	0.76					0.86	0.86	0.97	0.95	
Frpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					0.98	0.85	1.00	1.00	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1770	3610					4689	1362	3433	3539	
Flt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1770	3610					4689	1362	3433	3539	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	276	0	1156	0	0	0	0	1151	620	535	841	0
RTOR Reduction (vph)	0	0	898	0	0	0	0	26	238	0	0	0
Lane Group Flow (vph)	0	276	258	0	0	0	0	1348	159	535	841	0
Confl. Peds. (#/hr)							11					11
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		15.4	15.4					27.6	27.6	14.4	37.6	
Effective Green, g (s)		15.4	15.4					27.6	27.6	14.4	37.6	
Actuated g/C Ratio		0.22	0.22					0.40	0.40	0.21	0.54	
Clearance Time (s)		4.6	4.6					4.1	4.1	3.0	4.1	
Vehicle Extension (s)		0.2	0.2					0.2	0.2	0.2	1.0	
Lane Grp Cap (vph)		394	804					1872	544	715	1925	
v/s Ratio Prot								c0.29		c0.16	0.24	
v/s Ratio Perm		0.16	0.07						0.12			
v/c Ratio		0.70	0.32					0.72	0.29	0.75	0.44	
Uniform Delay, d1		24.7	22.5					17.5	14.1	25.7	9.4	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		4.5	0.1					1.1	0.1	3.8	0.1	
Delay (s)		29.3	22.6					18.6	14.2	29.4	9.5	
Level of Service		C	C					B	B	C	A	
Approach Delay (s)		23.9			0.0			17.6			17.2	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	69.1	Sum of lost time (s)	11.7
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	367	227	190	46	75	202	145	1168	46	496	1335	126
Future Volume (veh/h)	367	227	190	46	75	202	145	1168	46	496	1335	126
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	382	236	198	48	78	0	151	1217	48	517	1391	0
Adj No. of Lanes	2	1	1	1	1	1	2	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	624	338	285	144	151	129	291	1510	60	656	2154	671
Arrive On Green	0.18	0.18	0.18	0.08	0.08	0.00	0.08	0.30	0.30	0.19	0.42	0.00
Sat Flow, veh/h	3442	1863	1573	1774	1863	1583	3442	5018	198	3442	5085	1583
Grp Volume(v), veh/h	382	236	198	48	78	0	151	822	443	517	1391	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1573	1774	1863	1583	1721	1695	1825	1721	1695	1583
Q Serve(g_s), s	6.8	7.9	7.9	1.7	2.7	0.0	2.8	14.9	14.9	9.5	14.5	0.0
Cycle Q Clear(g_c), s	6.8	7.9	7.9	1.7	2.7	0.0	2.8	14.9	14.9	9.5	14.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	624	338	285	144	151	129	291	1020	549	656	2154	671
V/C Ratio(X)	0.61	0.70	0.69	0.33	0.52	0.00	0.52	0.81	0.81	0.79	0.65	0.00
Avail Cap(c_a), veh/h	1754	949	802	638	670	570	1032	1265	681	1032	2154	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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.1	25.6	25.6	28.9	29.4	0.0	29.2	21.5	21.5	25.7	15.3	0.0
Incr Delay (d2), s/veh	0.4	1.0	1.1	0.5	1.0	0.0	0.5	2.5	4.6	0.8	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	4.2	3.5	0.8	1.4	0.0	1.3	7.3	8.2	4.6	6.8	0.0
LnGrp Delay(d),s/veh	25.5	26.6	26.7	29.4	30.4	0.0	29.8	24.1	26.1	26.5	15.8	0.0
LnGrp LOS	C	C	C	C	C		C	C	C	C	B	
Approach Vol, veh/h		816			126			1416			1908	
Approach Delay, s/veh		26.1			30.0			25.3			18.7	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.8	24.2		16.2	8.6	32.4		9.5
Change Period (Y+Rc), s	4.1	* 4.1		4.1	3.0	4.1		4.1
Max Green Setting (Gmax), s	20.0	* 25		34.0	20.0	24.9		24.0
Max Q Clear Time (g_c+I1), s	11.5	16.9		9.9	4.8	16.5		4.7
Green Ext Time (p_c), s	1.2	3.1		1.3	0.1	4.4		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	22.6
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	1	49	0	312	1	1047	119	255	1315	1
Future Volume (vph)	0	0	1	49	0	312	1	1047	119	255	1315	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.1	4.1	4.1	4.1		3.5	4.1	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00			1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt		0.85			1.00	0.85	1.00	0.98		1.00	1.00	
Flt Protected		1.00			0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		0			1593	1399	1593	4484		1593	4576	
Flt Permitted		1.00			0.95	1.00	0.19	1.00		0.95	1.00	
Satd. Flow (perm)		0			1593	1399	316	4484		1593	4576	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	1	51	0	322	1	1079	123	263	1356	1
RTOR Reduction (vph)	0	1	0	0	0	277	0	9	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	51	45	1	1193	0	263	1357	0
Confl. Peds. (#/hr)						3			19			22
Turn Type				Perm	NA	Perm	custom	NA		Prot	NA	
Protected Phases					1			2 8		7	2 3 4	
Permitted Phases				1		1	8					
Actuated Green, G (s)		0.0			23.1	23.1	45.9	86.0		28.8	118.9	
Effective Green, g (s)		0.0			23.1	23.1	45.9	86.0		28.8	118.9	
Actuated g/C Ratio		0.00			0.14	0.14	0.28	0.52		0.18	0.72	
Clearance Time (s)					4.1	4.1	4.1			3.5		
Vehicle Extension (s)					2.0	2.0	3.0			2.0		
Lane Grp Cap (vph)		0			224	196	88	2348		279	3313	
v/s Ratio Prot								c0.27		c0.17	0.30	
v/s Ratio Perm					0.03	c0.03	0.00					
v/c Ratio		0.00			0.23	0.23	0.01	0.51		0.94	0.41	
Uniform Delay, d1		82.1			62.6	62.7	42.8	25.4		66.9	8.9	
Progression Factor		1.00			1.00	1.00	0.93	0.79		1.00	1.00	
Incremental Delay, d2		0.0			0.2	0.2	0.0	0.2		38.2	0.1	
Delay (s)		82.1			62.8	62.9	40.0	20.1		105.0	9.0	
Level of Service		F			E	E	D	C		F	A	
Approach Delay (s)		82.1			62.9			20.1			24.6	
Approach LOS		F			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	27.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	164.2	Sum of lost time (s)	20.3
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	348	367	34	44	437	506	11	313	54	363	530	472
Future Volume (vph)	348	367	34	44	437	506	11	313	54	363	530	472
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5	4.1	4.1
Lane Util. Factor	0.97	1.00		1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	0.98		1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.98	1.00		0.98	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1832		1770	3539	1537	1734	3397		1736	1863	1497
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.42	1.00		0.40	1.00	1.00
Satd. Flow (perm)	3433	1832		1770	3539	1537	761	3397		735	1863	1497
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	352	371	34	44	441	511	11	316	55	367	535	477
RTOR Reduction (vph)	0	2	0	0	0	360	0	8	0	0	0	206
Lane Group Flow (vph)	352	403	0	44	441	151	11	363	0	367	535	271
Confl. Peds. (#/hr)			9			6	22		32	32		22
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		custom	NA	custom
Protected Phases	3	8		7	4			6!		5!	1 2 5 6	
Permitted Phases						4	6			2		2
Actuated Green, G (s)	54.5	45.9		28.8	20.2	20.2	50.6	50.6		46.1	77.8	40.1
Effective Green, g (s)	54.5	45.9		28.8	20.2	20.2	50.6	50.6		46.1	77.8	40.1
Actuated g/C Ratio	0.33	0.28		0.18	0.12	0.12	0.31	0.31		0.28	0.47	0.24
Clearance Time (s)	3.5	4.1		3.5	4.1	4.1	4.1	4.1		4.5		4.1
Vehicle Extension (s)	2.5	3.0		2.0	3.0	3.0	3.0	3.0		3.0		4.0
Lane Grp Cap (vph)	1139	512		310	435	189	234	1046		242	882	365
v/s Ratio Prot	c0.10	c0.22		0.02	c0.12			0.11		c0.06	c0.29	
v/s Ratio Perm						0.10	0.01			c0.37		0.18
v/c Ratio	0.31	0.79		0.14	1.01	0.80	0.05	0.35		1.52	0.61	0.74
Uniform Delay, d1	40.8	54.6		57.3	72.0	70.0	39.9	44.0		62.3	31.9	57.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.99	0.99	0.99
Incremental Delay, d2	0.1	7.8		0.1	46.7	20.3	0.4	0.9		251.4	0.8	7.9
Delay (s)	40.9	62.5		57.3	118.7	90.3	40.3	44.9		313.3	32.2	64.8
Level of Service	D	E		E	F	F	D	D		F	C	E
Approach Delay (s)		52.5			101.4			44.8			118.3	
Approach LOS		D			F			D			F	

Intersection Summary			
HCM 2000 Control Delay	91.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	164.2	Sum of lost time (s)	20.3
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	608	148	10	219	95	20
Future Volume (veh/h)	608	148	10	219	95	20
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	707	172	12	255	110	23
Adj No. of Lanes	2	0	1	1	0	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	1632	397	519	1077	255	53
Arrive On Green	0.58	0.58	0.58	0.58	0.18	0.18
Sat Flow, veh/h	2915	686	628	1863	1415	296
Grp Volume(v), veh/h	443	436	12	255	134	0
Grp Sat Flow(s),veh/h/ln	1770	1739	628	1863	1723	0
Q Serve(g_s), s	4.1	4.2	0.3	2.0	2.0	0.0
Cycle Q Clear(g_c), s	4.1	4.2	4.5	2.0	2.0	0.0
Prop In Lane		0.39	1.00		0.82	0.17
Lane Grp Cap(c), veh/h	1023	1006	519	1077	311	0
V/C Ratio(X)	0.43	0.43	0.02	0.24	0.43	0.00
Avail Cap(c_a), veh/h	1683	1653	753	1771	1288	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	3.5	3.5	4.8	3.0	10.7	0.0
Incr Delay (d2), s/veh	0.4	0.4	0.0	0.2	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	2.1	0.1	1.0	1.0	0.0
LnGrp Delay(d),s/veh	3.9	3.9	4.8	3.2	11.1	0.0
LnGrp LOS	A	A	A	A	B	
Approach Vol, veh/h	879			267	134	
Approach Delay, s/veh	3.9			3.3	11.1	
Approach LOS	A			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		8.3		21.1				21.1
Change Period (Y+Rc), s		3.0		4.1				4.1
Max Green Setting (Gmax), s		22.0		28.0				28.0
Max Q Clear Time (g_c+I1), s		4.0		6.2				6.5
Green Ext Time (p_c), s		0.2		10.6				10.6

Intersection Summary	
HCM 2010 Ctrl Delay	4.5
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	495	33	479	288	22	43	27	139	56	64	52
Future Volume (veh/h)	51	495	33	479	288	22	43	27	139	56	64	52
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	1900	1863	1900
Adj Flow Rate, veh/h	61	596	40	577	347	27	42	46	167	67	77	63
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	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	98	844	57	614	1802	140	254	267	220	97	114	96
Arrive On Green	0.06	0.25	0.25	0.35	0.54	0.54	0.14	0.14	0.14	0.09	0.09	0.09
Sat Flow, veh/h	1774	3366	226	1774	3329	258	1774	1863	1537	1101	1292	1085
Grp Volume(v), veh/h	61	313	323	577	184	190	42	46	167	110	0	97
Grp Sat Flow(s),veh/h/ln	1774	1770	1822	1774	1770	1817	1774	1863	1537	1808	0	1671
Q Serve(g_s), s	3.2	15.4	15.5	30.2	5.1	5.1	2.0	2.1	10.0	5.7	0.0	5.4
Cycle Q Clear(g_c), s	3.2	15.4	15.5	30.2	5.1	5.1	2.0	2.1	10.0	5.7	0.0	5.4
Prop In Lane	1.00		0.12	1.00		0.14	1.00		1.00	0.61		0.65
Lane Grp Cap(c), veh/h	98	443	457	614	958	984	254	267	220	159	0	147
V/C Ratio(X)	0.63	0.71	0.71	0.94	0.19	0.19	0.17	0.17	0.76	0.69	0.00	0.66
Avail Cap(c_a), veh/h	370	739	761	1148	1514	1555	463	486	401	868	0	802
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.3	32.7	32.7	30.4	11.2	11.3	36.0	36.1	39.5	42.4	0.0	42.3
Incr Delay (d2), s/veh	2.4	2.1	2.0	3.5	0.1	0.1	0.1	0.1	2.0	2.0	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	7.8	8.1	15.3	2.5	2.6	1.0	1.1	4.4	2.9	0.0	2.6
LnGrp Delay(d),s/veh	46.7	34.8	34.7	33.9	11.3	11.4	36.1	36.2	41.5	44.4	0.0	44.2
LnGrp LOS	D	C	C	C	B	B	D	D	D	D		D
Approach Vol, veh/h		697			951			255			207	
Approach Delay, s/veh		35.8			25.0			39.6			44.3	
Approach LOS		D			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		17.7	37.1	28.5		12.4	9.3	56.4
Change Period (Y+Rc), s		4.0	4.0	4.5		4.0	4.0	4.5
Max Green Setting (Gmax), s		25.0	62.0	40.0		46.0	20.0	82.0
Max Q Clear Time (g_c+I1), s		12.0	32.2	17.5		7.7	5.2	7.1
Green Ext Time (p_c), s		0.4	0.9	6.5		0.8	0.0	7.7

Intersection Summary	
HCM 2010 Ctrl Delay	32.2
HCM 2010 LOS	C

Notes

Movement	EBT	EBR	WBL	WBT	NBL	NBR	NEL	NER
Lane Configurations								
Traffic Volume (veh/h)	435	47	710	97	74	541	0	0
Future Volume (veh/h)	435	47	710	97	74	541	0	0
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	473	51	847	0	80	91		
Adj No. of Lanes	2	0	2	1	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	860	92	1244	653	181	162		
Arrive On Green	0.27	0.27	0.35	0.00	0.10	0.10		
Sat Flow, veh/h	3318	346	3548	1863	1774	1583		
Grp Volume(v), veh/h	259	265	847	0	80	91		
Grp Sat Flow(s),veh/h/ln	1770	1802	1774	1863	1774	1583		
Q Serve(g_s), s	5.4	5.4	8.7	0.0	1.8	2.3		
Cycle Q Clear(g_c), s	5.4	5.4	8.7	0.0	1.8	2.3		
Prop In Lane		0.19	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	472	480	1244	653	181	162		
V/C Ratio(X)	0.55	0.55	0.68	0.00	0.44	0.56		
Avail Cap(c_a), veh/h	1063	1082	2007	1053	995	888		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	13.5	13.5	11.9	0.0	18.1	18.3		
Incr Delay (d2), s/veh	1.4	1.4	0.9	0.0	2.4	4.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.8	2.8	4.4	0.0	1.0	1.2		
LnGrp Delay(d),s/veh	14.9	14.9	12.8	0.0	20.4	22.6		
LnGrp LOS	B	B	B		C	C		
Approach Vol, veh/h	524			847	171			
Approach Delay, s/veh	14.9			12.8	21.6			
Approach LOS	B			B	C			

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		15.4				19.0		8.4
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		25.7				24.2		24.0
Max Q Clear Time (g_c+I1), s		7.4				10.7		4.3
Green Ext Time (p_c), s		4.0				4.3		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	14.5
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	86	857	758	43	107	50
Future Volume (veh/h)	86	857	758	43	107	50
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	89	884	781	44	110	52
Adj No. of Lanes	1	1	2	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	520	1091	929	807	204	172
Arrive On Green	0.42	0.42	0.27	0.43	0.11	0.11
Sat Flow, veh/h	1242	1583	3442	1863	1863	1576
Grp Volume(v), veh/h	89	884	781	44	110	52
Grp Sat Flow(s),veh/h/ln	1242	1583	1721	1863	1863	1576
Q Serve(g_s), s	2.9	25.3	13.8	0.9	3.6	2.0
Cycle Q Clear(g_c), s	2.9	25.3	13.8	0.9	3.6	2.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	520	1091	929	807	204	172
V/C Ratio(X)	0.17	0.81	0.84	0.05	0.54	0.30
Avail Cap(c_a), veh/h	520	1091	2591	2414	911	771
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.7	7.1	22.2	10.6	27.2	26.4
Incr Delay (d2), s/veh	0.1	4.4	0.8	0.0	3.1	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	22.0	6.6	0.5	2.0	0.9
LnGrp Delay(d),s/veh	11.8	11.4	23.0	10.6	30.3	27.8
LnGrp LOS	B	B	C	B	C	C
Approach Vol, veh/h	973			825	162	
Approach Delay, s/veh	11.5			22.4	29.5	
Approach LOS	B			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		32.9		31.5	20.9	12.0		
Change Period (Y+Rc), s		5.0		4.5	3.5	5.0		
Max Green Setting (Gmax), s		83.5		27.0	48.5	31.5		
Max Q Clear Time (g_c+I1), s		2.9		27.3	15.8	5.6		
Green Ext Time (p_c), s		0.4		0.0	1.6	1.0		

Intersection Summary	
HCM 2010 Ctrl Delay	17.5
HCM 2010 LOS	B



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	299	91	704	411	230	737
Future Volume (vph)	299	91	704	411	230	737
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	3.5	5.0		3.5	4.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.94		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3343		1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3343		1770	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	332	101	782	457	256	819
RTOR Reduction (vph)	0	49	54	0	0	0
Lane Group Flow (vph)	332	52	1185	0	256	819
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	
Permitted Phases		8				6
Actuated Green, G (s)	21.3	21.3	33.5		19.7	57.7
Effective Green, g (s)	21.3	21.3	33.5		19.7	57.7
Actuated g/C Ratio	0.22	0.22	0.35		0.21	0.61
Clearance Time (s)	3.5	3.5	5.0		3.5	4.0
Vehicle Extension (s)	2.0	2.0	4.0		2.0	4.0
Lane Grp Cap (vph)	396	354	1177		366	2147
v/s Ratio Prot	c0.19		c0.35		c0.14	
v/s Ratio Perm		0.03				0.23
v/c Ratio	0.84	0.15	1.01		0.70	0.38
Uniform Delay, d1	35.3	29.6	30.8		35.0	9.6
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	13.8	0.1	27.8		4.7	0.2
Delay (s)	49.0	29.7	58.6		39.6	9.7
Level of Service	D	C	E		D	A
Approach Delay (s)	44.5		58.6			16.8
Approach LOS	D		E			B

Intersection Summary			
HCM 2000 Control Delay	40.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	95.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	118	12	51	23	283	11	705	151	200	907	165
Future Volume (veh/h)	95	118	12	51	23	283	11	705	151	200	907	165
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	100	124	13	54	24	298	12	742	159	211	955	174
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	73	65	441	86	23	443	21	1209	259	258	1026	868
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.01	0.42	0.42	0.15	0.55	0.55
Sat Flow, veh/h	0	230	1564	0	83	1572	1774	2898	621	1774	1863	1576
Grp Volume(v), veh/h	224	0	13	78	0	298	12	453	448	211	955	174
Grp Sat Flow(s),veh/h/ln	230	0	1564	83	0	1572	1774	1770	1749	1774	1863	1576
Q Serve(g_s), s	0.0	0.0	0.4	0.0	0.0	11.9	0.5	14.2	14.2	8.2	33.5	4.0
Cycle Q Clear(g_c), s	20.0	0.0	0.4	20.0	0.0	11.9	0.5	14.2	14.2	8.2	33.5	4.0
Prop In Lane	0.45		1.00	0.69		1.00	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	138	0	441	109	0	443	21	738	730	258	1026	868
V/C Ratio(X)	1.62	0.00	0.03	0.71	0.00	0.67	0.57	0.61	0.61	0.82	0.93	0.20
Avail Cap(c_a), veh/h	138	0	441	109	0	443	501	999	987	375	1026	868
HCM Platoon Ratio	1.00	1.00	1.00	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	26.6	0.0	18.4	29.6	0.0	22.5	34.8	16.2	16.2	29.4	14.7	8.0
Incr Delay (d2), s/veh	308.6	0.0	0.0	18.6	0.0	3.6	8.7	1.3	1.3	5.7	14.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.5	0.0	0.2	2.1	0.0	5.6	0.3	7.2	7.1	4.4	21.1	1.7
LnGrp Delay(d),s/veh	335.2	0.0	18.4	48.2	0.0	26.2	43.5	17.4	17.5	35.1	29.2	8.2
LnGrp LOS	F		B	D		C	D	B	B	D	C	A
Approach Vol, veh/h		237			376			913			1340	
Approach Delay, s/veh		317.9			30.7			17.8			27.4	
Approach LOS		F			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	13.3	34.1		23.5	3.8	43.5		23.5
Change Period (Y+Rc), s	3.0	4.5		3.5	3.0	4.5		3.5
Max Green Setting (Gmax), s	15.0	40.0		20.0	20.0	35.0		20.0
Max Q Clear Time (g_c+I1), s	10.2	16.2		22.0	2.5	35.5		22.0
Green Ext Time (p_c), s	0.1	13.4		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	48.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	253	169	39	64	219	19	75	286	38	96	533	103
Future Volume (veh/h)	253	169	39	64	219	19	75	286	38	96	533	103
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		0.99	1.00		0.99	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	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	275	184	42	70	238	21	82	311	41	104	579	112
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	478	629	143	503	723	64	175	708	93	417	666	129
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1112	1466	335	1145	1686	149	749	1611	212	1022	1515	293
Grp Volume(v), veh/h	275	0	226	70	0	259	82	0	352	104	0	691
Grp Sat Flow(s),veh/h/ln	1112	0	1800	1145	0	1835	749	0	1823	1022	0	1808
Q Serve(g_s), s	14.9	0.0	5.6	2.9	0.0	6.4	6.3	0.0	9.2	5.4	0.0	23.7
Cycle Q Clear(g_c), s	21.3	0.0	5.6	8.5	0.0	6.4	30.0	0.0	9.2	14.5	0.0	23.7
Prop In Lane	1.00		0.19	1.00		0.08	1.00		0.12	1.00		0.16
Lane Grp Cap(c), veh/h	478	0	772	503	0	787	175	0	801	417	0	794
V/C Ratio(X)	0.58	0.00	0.29	0.14	0.00	0.33	0.47	0.00	0.44	0.25	0.00	0.87
Avail Cap(c_a), veh/h	652	0	1055	682	0	1075	175	0	801	417	0	794
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.1	0.0	12.7	15.5	0.0	13.0	31.5	0.0	13.3	18.3	0.0	17.4
Incr Delay (d2), s/veh	1.6	0.0	0.3	0.2	0.0	0.3	2.8	0.0	0.5	0.4	0.0	10.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	0.0	2.8	0.9	0.0	3.3	1.7	0.0	4.7	1.6	0.0	14.0
LnGrp Delay(d),s/veh	21.6	0.0	13.0	15.7	0.0	13.3	34.2	0.0	13.8	18.8	0.0	27.9
LnGrp LOS	C		B	B		B	C		B	B		C
Approach Vol, veh/h		501			329			434			795	
Approach Delay, s/veh		17.7			13.8			17.7			26.7	
Approach LOS		B			B			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		33.8		34.5		33.8		34.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		40.0		30.0		40.0		30.0
Max Q Clear Time (g_c+I1), s		23.3		25.7		10.5		32.0
Green Ext Time (p_c), s		6.0		3.3		7.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	20.6
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	144	0	0	146	0	444	19	606	659	51
Future Vol, veh/h	0	0	144	0	0	146	0	444	19	606	659	51
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	150	0	0	152	0	463	20	631	686	53

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	713	-	-	472	-	0	0	482	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	0	432	0	0	592	0	-	-	1081	-	-
Stage 1	0	0	-	0	0	-	0	-	-	-	-	-
Stage 2	0	0	-	0	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	432	-	-	592	-	-	-	1081	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.7	13.2	0	5.9
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	432	592	1081	-	-
HCM Lane V/C Ratio	-	-	0.347	0.257	0.584	-	-
HCM Control Delay (s)	-	-	17.7	13.2	12.9	-	-
HCM Lane LOS	-	-	C	B	B	-	-
HCM 95th %tile Q(veh)	-	-	1.5	1	3.9	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	59	59	38	188	650	42
Future Vol, veh/h	59	59	38	188	650	42
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	-	110	-	-	-
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	64	64	41	204	707	46

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	914	377	753	0	-	0
Stage 1	730	-	-	-	-	-
Stage 2	184	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	272	621	853	-	-	-
Stage 1	438	-	-	-	-	-
Stage 2	829	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	259	621	853	-	-	-
Mov Cap-2 Maneuver	259	-	-	-	-	-
Stage 1	417	-	-	-	-	-
Stage 2	829	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.1	1.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	853	-	366	-	-
HCM Lane V/C Ratio	0.048	-	0.35	-	-
HCM Control Delay (s)	9.4	-	20.1	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	1.5	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	440	36	2	277	12	8
Future Vol, veh/h	440	36	2	277	12	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	478	39	2	301	13	9

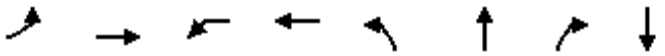
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	517	0	803	498
Stage 1	-	-	-	-	498	-
Stage 2	-	-	-	-	305	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1049	-	353	572
Stage 1	-	-	-	-	611	-
Stage 2	-	-	-	-	748	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1049	-	352	572
Mov Cap-2 Maneuver	-	-	-	-	352	-
Stage 1	-	-	-	-	611	-
Stage 2	-	-	-	-	747	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	416	-	-	1049	-
HCM Lane V/C Ratio	0.052	-	-	0.002	-
HCM Control Delay (s)	14.1	-	-	8.4	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

APPENDIX C: VEHICLE QUEUING





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	8	227	902	366	268	254	247	27
v/c Ratio	0.13	0.73	0.46	0.15	0.87	0.74	0.52	0.30
Control Delay	61.0	66.7	18.1	8.6	74.0	43.5	8.7	63.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.0	66.7	18.1	8.6	74.0	43.5	8.7	63.4
Queue Length 50th (ft)	6	92	213	49	214	139	0	21
Queue Length 95th (ft)	23	131	334	103	295	226	68	52
Internal Link Dist (ft)		461		550		513		73
Turn Bay Length (ft)	200				130			
Base Capacity (vph)	221	498	1963	2427	432	448	570	148
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.46	0.46	0.15	0.62	0.57	0.43	0.18

Intersection Summary



Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	39	40	591	35	1176	413	4	85	104
v/c Ratio	0.34	0.34	0.80	0.02	1.23	0.31	0.07	0.30	0.47
Control Delay	65.4	65.5	13.2	20.0	151.8	29.2	64.2	57.9	15.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.4	65.5	13.2	20.0	151.9	29.2	64.2	57.9	15.2
Queue Length 50th (ft)	33	34	0	6	~628	129	3	36	0
Queue Length 95th (ft)	71	73	60	21	#763	162	16	58	48
Internal Link Dist (ft)		550		236		442		218	
Turn Bay Length (ft)	350								120
Base Capacity (vph)	469	475	1204	1490	958	1315	204	552	330
Starvation Cap Reductn	0	0	0	0	9	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.08	0.49	0.02	1.24	0.31	0.02	0.15	0.32

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.



Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	370	703	1319	380	190	501
v/c Ratio	1.00	0.54	0.45	0.39	0.71	0.21
Control Delay	93.9	4.5	7.2	1.6	68.8	8.4
Queue Delay	0.0	0.0	0.1	0.2	0.0	0.0
Total Delay	93.9	4.5	7.4	1.8	68.8	8.4
Queue Length 50th (ft)	288	0	114	2	75	74
Queue Length 95th (ft)	#489	40	91	2	111	98
Internal Link Dist (ft)	1		291			442
Turn Bay Length (ft)		120		110		
Base Capacity (vph)	371	1313	2929	963	523	2332
Starvation Cap Reductn	0	0	534	161	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.00	0.54	0.55	0.47	0.36	0.21

Intersection Summary

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



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	155	60	103	111	193	372	197	1263	229	737	276
v/c Ratio	0.40	0.28	0.37	0.52	0.86	0.72	0.64	0.47	0.66	0.26	0.29
Control Delay	50.1	48.4	9.6	58.1	83.6	13.6	62.1	20.5	61.6	16.8	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.2	0.3
Total Delay	50.1	48.4	9.6	58.1	83.6	13.6	62.1	21.1	61.6	16.9	5.6
Queue Length 50th (ft)	60	45	0	81	147	0	77	198	93	112	32
Queue Length 95th (ft)	73	69	37	141	#262	96	113	382	122	200	64
Internal Link Dist (ft)		500			306			331		291	
Turn Bay Length (ft)	120		110			200	100		200		160
Base Capacity (vph)	1027	557	545	234	246	529	572	2716	672	2782	967
Starvation Cap Reductn	0	0	0	0	0	0	0	942	0	1093	288
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	0.11	0.19	0.47	0.78	0.70	0.34	0.71	0.34	0.44	0.41

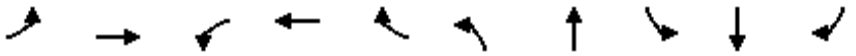
Intersection Summary

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



Lane Group	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	73	314	1326	108	842
v/c Ratio	0.38	0.74	0.45	0.68	0.22
Control Delay	65.8	20.1	3.1	85.2	3.2
Queue Delay	1.2	0.0	0.1	0.0	0.2
Total Delay	67.0	20.1	3.2	85.2	3.3
Queue Length 50th (ft)	66	20	54	103	55
Queue Length 95th (ft)	125	133	89	176	78
Internal Link Dist (ft)	236		134		331
Turn Bay Length (ft)		200		140	
Base Capacity (vph)	261	472	3186	340	4279
Starvation Cap Reductn	0	0	626	0	2253
Spillback Cap Reductn	79	0	0	0	267
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.40	0.67	0.52	0.32	0.42

Intersection Summary

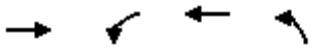


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	422	374	46	398	466	3	466	266	279	369
v/c Ratio	0.47	0.66	0.26	0.79	0.86	0.01	0.47	1.04	0.29	0.48
Control Delay	45.3	50.2	65.8	72.6	28.8	44.3	46.1	106.9	20.6	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	3.6	0.8
Total Delay	45.3	50.2	65.8	72.6	29.0	44.3	46.1	106.9	24.2	4.9
Queue Length 50th (ft)	171	304	42	201	80	2	200	~239	136	1
Queue Length 95th (ft)	228	460	87	#316	#300	11	283	#507	212	34
Internal Link Dist (ft)		203		378			521		134	
Turn Bay Length (ft)			100			70				
Base Capacity (vph)	1465	657	378	506	544	300	999	256	945	771
Starvation Cap Reductn	0	0	0	0	0	0	0	0	566	171
Spillback Cap Reductn	23	0	0	0	2	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.57	0.12	0.79	0.86	0.01	0.47	1.04	0.74	0.61

Intersection Summary

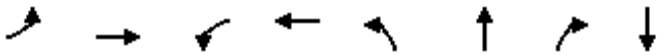
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	361	14	491	270
v/c Ratio	0.21	0.03	0.52	0.52
Control Delay	5.2	6.5	9.7	14.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	5.2	6.5	9.7	14.5
Queue Length 50th (ft)	12	1	49	35
Queue Length 95th (ft)	44	9	168	109
Internal Link Dist (ft)	306		81	168
Turn Bay Length (ft)		70		
Base Capacity (vph)	2708	783	1467	1104
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.13	0.02	0.33	0.24

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	115	395	51	162	34	44	54	59
v/c Ratio	0.34	0.36	0.20	0.17	0.12	0.15	0.17	0.11
Control Delay	27.0	18.2	28.6	18.4	24.3	24.3	5.5	16.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.0	18.2	28.6	18.4	24.3	24.3	5.5	16.9
Queue Length 50th (ft)	27	44	12	16	8	11	0	4
Queue Length 95th (ft)	117	144	65	64	44	52	18	25
Internal Link Dist (ft)		422		721		436		198
Turn Bay Length (ft)	90		240					
Base Capacity (vph)	936	2888	1651	3320	1028	1077	978	2962
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.14	0.03	0.05	0.03	0.04	0.06	0.02

Intersection Summary

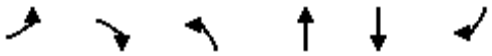


Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	114	546	561	187	724
v/c Ratio	0.10	1.00	1.01	0.51	0.80
Control Delay	21.7	68.1	68.9	32.0	9.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	21.7	68.1	68.9	32.0	9.9
Queue Length 50th (ft)	21	284	~294	84	0
Queue Length 95th (ft)	45	#501	#512	128	90
Internal Link Dist (ft)	201		614	289	
Turn Bay Length (ft)					
Base Capacity (vph)	1110	546	558	531	981
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.10	1.00	1.01	0.35	0.74

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.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	19	906	1220	42	15	8
v/c Ratio	0.22	0.76	0.95	0.03	0.02	0.01
Control Delay	54.9	5.9	50.4	1.7	19.7	11.1
Queue Delay	0.0	0.1	45.0	0.0	0.0	0.0
Total Delay	54.9	6.0	95.3	1.7	19.7	11.1
Queue Length 50th (ft)	20	7	446	3	6	0
Queue Length 95th (ft)	50	38	#491	11	20	10
Internal Link Dist (ft)	614			297	203	
Turn Bay Length (ft)			90			
Base Capacity (vph)	289	1201	1292	1677	887	706
Starvation Cap Reductn	0	11	376	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.76	1.33	0.03	0.02	0.01

Intersection Summary

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



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	304	164	1219	42	809
v/c Ratio	0.76	0.34	0.67	0.32	0.37
Control Delay	42.7	6.0	22.9	43.3	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	42.7	6.0	22.9	43.3	14.0
Queue Length 50th (ft)	150	0	212	21	78
Queue Length 95th (ft)	215	42	#741	53	#343
Internal Link Dist (ft)	489		460		297
Turn Bay Length (ft)		120		90	
Base Capacity (vph)	600	645	1811	130	2165
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.51	0.25	0.67	0.32	0.37

Intersection Summary

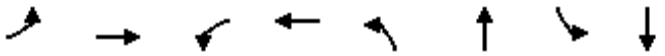
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	215	8	145	302	2	1080	224	809	145
v/c Ratio	0.67	0.02	0.74	0.56	0.02	0.67	0.72	0.66	0.14
Control Delay	39.4	0.1	52.9	8.4	38.0	17.8	45.1	11.9	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.4	0.1	52.9	8.4	38.0	17.8	45.1	11.9	3.5
Queue Length 50th (ft)	93	0	64	3	1	191	96	168	8
Queue Length 95th (ft)	171	0	#145	61	8	281	#208	432	37
Internal Link Dist (ft)	250		99			229		275	
Turn Bay Length (ft)		20		40	70		120		40
Base Capacity (vph)	460	527	281	654	514	2018	385	1235	1009
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.02	0.52	0.46	0.00	0.54	0.58	0.66	0.14

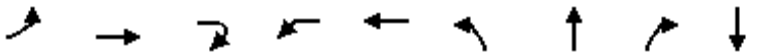
Intersection Summary

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



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	217	409	113	249	52	371	79	449
v/c Ratio	0.49	0.56	0.36	0.33	0.20	0.53	0.25	0.63
Control Delay	16.2	13.3	15.0	11.8	14.2	15.3	14.4	17.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.2	13.3	15.0	11.8	14.2	15.3	14.4	17.6
Queue Length 50th (ft)	41	66	20	43	9	69	14	90
Queue Length 95th (ft)	118	175	67	111	39	190	53	241
Internal Link Dist (ft)		1807		259		332		520
Turn Bay Length (ft)								
Base Capacity (vph)	880	1400	630	1510	449	1194	545	1216
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.29	0.18	0.16	0.12	0.31	0.14	0.37

Intersection Summary



Lane Group	EBL	EBT	EBR2	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	12	572	174	664	238	123	189	186	33
v/c Ratio	0.08	0.60	0.33	0.65	0.11	0.44	0.49	0.46	0.18
Control Delay	43.4	29.2	9.6	28.7	8.1	39.0	12.8	10.0	42.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.4	29.2	9.6	28.7	8.1	39.0	12.8	10.0	42.1
Queue Length 50th (ft)	5	128	11	145	22	57	8	0	15
Queue Length 95th (ft)	27	235	67	265	62	141	81	63	52
Internal Link Dist (ft)		461			549		531		79
Turn Bay Length (ft)	200		170			130			
Base Capacity (vph)	416	1562	779	2455	2913	742	739	767	418
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.37	0.22	0.27	0.08	0.17	0.26	0.24	0.08

Intersection Summary



Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	179	872	34	829	316	4	172	156
v/c Ratio	0.66	0.75	0.08	0.65	0.17	0.05	0.40	0.48
Control Delay	45.8	7.1	28.4	26.5	12.4	45.0	37.0	11.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.8	7.1	28.4	26.5	12.4	45.0	37.0	11.8
Queue Length 50th (ft)	80	0	5	158	36	2	41	0
Queue Length 95th (ft)	186	56	22	#393	103	15	87	56
Internal Link Dist (ft)	549		260		442		225	
Turn Bay Length (ft)								120
Base Capacity (vph)	1115	2071	1262	1290	2197	221	1330	667
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.42	0.03	0.64	0.14	0.02	0.13	0.23

Intersection Summary

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



Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	159	959	1093	324	387	580
v/c Ratio	0.45	0.64	0.65	0.47	0.60	0.36
Control Delay	23.5	3.9	15.5	4.8	25.2	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.5	3.9	15.5	4.8	25.2	9.8
Queue Length 50th (ft)	37	0	77	0	46	44
Queue Length 95th (ft)	112	34	217	60	141	125
Internal Link Dist (ft)	477		291			442
Turn Bay Length (ft)		120		110		
Base Capacity (vph)	1057	2542	3874	1185	1518	2449
Starvation Cap Reductn	0	0	59	3	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.38	0.29	0.27	0.25	0.24

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	344	213	179	44	70	175	136	972	415	1047	109
v/c Ratio	0.48	0.54	0.38	0.24	0.36	0.54	0.38	0.69	0.66	0.57	0.18
Control Delay	28.1	32.2	6.9	39.5	41.6	13.8	38.5	28.1	35.4	21.6	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Total Delay	28.1	32.2	6.9	39.5	41.6	13.8	38.5	28.1	35.4	21.7	8.7
Queue Length 50th (ft)	69	84	0	18	29	0	28	131	86	124	7
Queue Length 95th (ft)	127	174	47	63	89	63	75	279	186	265	52
Internal Link Dist (ft)		500			306			331		291	
Turn Bay Length (ft)	120		110			200	100		200		160
Base Capacity (vph)	1685	914	855	613	645	662	991	1818	991	2033	664
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	276	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	0.23	0.21	0.07	0.11	0.26	0.14	0.53	0.42	0.60	0.16

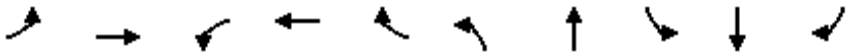
Intersection Summary



Lane Group	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	1	40	246	1	950	188	1069
v/c Ratio	0.01	0.18	0.61	0.01	0.39	0.81	0.33
Control Delay	0.0	64.0	13.9	45.0	7.2	90.4	5.0
Queue Delay	0.0	0.5	0.0	0.0	0.2	0.0	0.1
Total Delay	0.0	64.5	13.9	45.0	7.5	90.5	5.1
Queue Length 50th (ft)	0	36	0	0	48	187	89
Queue Length 95th (ft)	0	81	92	m2	217	292	102
Internal Link Dist (ft)	67	236			134		331
Turn Bay Length (ft)			200	40		140	
Base Capacity (vph)	138	246	424	144	2721	321	3676
Starvation Cap Reductn	0	0	0	0	911	1	1124
Spillback Cap Reductn	0	76	0	0	0	0	490
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.24	0.58	0.01	0.52	0.59	0.42

Intersection Summary

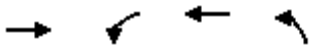
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	306	364	37	397	379	10	293	273	404	410
v/c Ratio	0.32	0.74	0.14	0.83	0.71	0.03	0.25	0.90	0.43	0.65
Control Delay	42.7	60.0	59.9	80.2	13.9	40.9	37.9	81.6	28.1	20.7
Queue Delay	0.0	0.0	0.0	0.0	0.2	0.0	0.0	4.5	9.1	2.4
Total Delay	42.7	60.0	59.9	80.2	14.1	40.9	37.9	86.1	37.1	23.1
Queue Length 50th (ft)	124	331	33	210	0	7	110	214	240	80
Queue Length 95th (ft)	165	477	73	#342	114	25	170	#429	349	169
Internal Link Dist (ft)		203		378			521		134	
Turn Bay Length (ft)			100			70				
Base Capacity (vph)	1385	618	357	479	535	323	1159	304	937	630
Starvation Cap Reductn	0	0	0	0	0	0	0	12	491	117
Spillback Cap Reductn	86	0	0	0	9	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.59	0.10	0.83	0.72	0.03	0.25	0.93	0.91	0.80

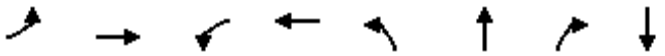
Intersection Summary

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



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	749	10	222	121
v/c Ratio	0.33	0.02	0.18	0.29
Control Delay	5.2	6.1	5.8	11.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	5.2	6.1	5.8	11.4
Queue Length 50th (ft)	23	1	14	17
Queue Length 95th (ft)	101	8	73	42
Internal Link Dist (ft)	306		68	168
Turn Bay Length (ft)		70		
Base Capacity (vph)	2673	531	1450	1074
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.28	0.02	0.15	0.11

Intersection Summary



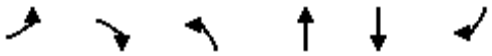
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	55	391	175	223	37	39	27	188
v/c Ratio	0.25	0.47	0.48	0.20	0.17	0.17	0.10	0.33
Control Delay	33.7	24.8	30.3	17.6	29.4	29.3	0.8	22.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.7	24.8	30.3	17.6	29.4	29.3	0.8	22.4
Queue Length 50th (ft)	16	57	50	26	11	12	0	24
Queue Length 95th (ft)	66	150	153	76	46	48	0	65
Internal Link Dist (ft)		422		721		427		198
Turn Bay Length (ft)	90		240					
Base Capacity (vph)	663	2518	1635	3346	787	818	745	2664
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.16	0.11	0.07	0.05	0.05	0.04	0.07

Intersection Summary



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	477	316	316	65	629
v/c Ratio	0.52	0.61	0.60	0.18	0.78
Control Delay	22.3	25.2	24.8	22.2	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	22.3	25.2	24.8	22.2	10.3
Queue Length 50th (ft)	67	87	87	18	6
Queue Length 95th (ft)	155	243	241	55	102
Internal Link Dist (ft)	200		614	314	
Turn Bay Length (ft)					
Base Capacity (vph)	1664	751	763	784	1040
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.29	0.42	0.41	0.08	0.60

Intersection Summary



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	90	931	572	79	86	27
v/c Ratio	0.36	0.71	0.38	0.06	0.20	0.07
Control Delay	25.4	5.8	17.5	5.3	20.2	9.4
Queue Delay	0.0	0.3	0.0	0.0	0.0	0.0
Total Delay	25.4	6.1	17.5	5.3	20.2	9.4
Queue Length 50th (ft)	28	20	58	7	18	0
Queue Length 95th (ft)	124	214	215	35	75	19
Internal Link Dist (ft)	614			297	203	
Turn Bay Length (ft)			90			
Base Capacity (vph)	776	1541	3048	1798	1285	1086
Starvation Cap Reductn	0	167	41	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.68	0.19	0.04	0.07	0.02

Intersection Summary



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	273	99	971	231	864
v/c Ratio	0.74	0.25	0.71	0.67	0.38
Control Delay	46.7	13.9	26.9	46.1	11.9
Queue Delay	0.0	0.0	0.0	0.0	0.3
Total Delay	46.7	13.9	26.9	46.1	12.2
Queue Length 50th (ft)	123	9	176	101	75
Queue Length 95th (ft)	312	64	#608	#344	361
Internal Link Dist (ft)	489		460		297
Turn Bay Length (ft)		120		90	
Base Capacity (vph)	696	668	1368	435	2457
Starvation Cap Reductn	0	0	0	0	926
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.39	0.15	0.71	0.53	0.56

Intersection Summary

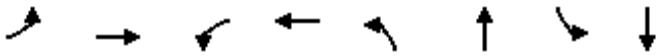
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	199	12	70	258	11	768	176	809	149
v/c Ratio	0.61	0.03	0.25	0.48	0.07	0.51	0.58	0.69	0.15
Control Delay	31.1	0.2	23.4	6.8	31.3	14.4	32.4	13.5	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.1	0.2	23.4	6.8	31.3	14.4	32.4	13.5	3.9
Queue Length 50th (ft)	59	0	19	0	3	91	53	140	7
Queue Length 95th (ft)	145	0	60	53	20	187	138	#540	43
Internal Link Dist (ft)	250		93			229		275	
Turn Bay Length (ft)		20		40	70		120		40
Base Capacity (vph)	530	580	450	708	601	2344	451	1176	994
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.02	0.16	0.36	0.02	0.33	0.39	0.69	0.15

Intersection Summary

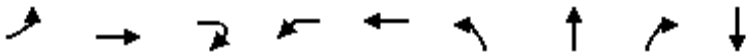
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	249	189	63	231	64	274	95	593
v/c Ratio	0.61	0.28	0.15	0.34	0.28	0.33	0.20	0.72
Control Delay	21.8	12.5	12.9	13.8	15.5	11.6	11.9	19.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.8	12.5	12.9	13.8	15.5	11.6	11.9	19.2
Queue Length 50th (ft)	66	39	14	52	12	48	16	134
Queue Length 95th (ft)	138	82	36	103	48	129	55	#350
Internal Link Dist (ft)		1813		259		332		520
Turn Bay Length (ft)								
Base Capacity (vph)	848	1382	896	1402	296	1088	634	1081
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.14	0.07	0.16	0.22	0.25	0.15	0.55

Intersection Summary

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



Lane Group	EBL	EBT	EBR2	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	8	227	88	902	366	268	255	247	27
v/c Ratio	0.13	0.73	0.40	0.46	0.15	0.87	0.74	0.52	0.30
Control Delay	61.0	66.7	15.8	18.1	8.6	74.0	43.4	8.7	63.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.0	66.7	15.8	18.1	8.6	74.0	43.4	8.7	63.4
Queue Length 50th (ft)	6	92	0	213	49	214	139	0	21
Queue Length 95th (ft)	23	131	49	334	103	295	226	68	52
Internal Link Dist (ft)		461			550		513		73
Turn Bay Length (ft)	200		170			130			
Base Capacity (vph)	221	498	298	1963	2427	432	448	570	148
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.46	0.30	0.46	0.15	0.62	0.57	0.43	0.18

Intersection Summary



Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	40	40	591	35	1176	421	4	86	104
v/c Ratio	0.35	0.35	0.80	0.02	1.24	0.32	0.08	0.31	0.47
Control Delay	66.7	66.5	13.4	19.8	157.5	30.0	65.0	58.7	15.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.7	66.5	13.4	19.8	157.6	30.0	65.0	58.7	15.6
Queue Length 50th (ft)	34	34	0	6	~640	135	3	37	0
Queue Length 95th (ft)	73	73	60	21	#775	167	16	60	49
Internal Link Dist (ft)		550		236		442		218	
Turn Bay Length (ft)	350								120
Base Capacity (vph)	464	470	1197	1504	948	1301	202	565	335
Starvation Cap Reductn	0	0	0	0	9	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.09	0.49	0.02	1.25	0.32	0.02	0.15	0.31

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.

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	377	703	1321	380	191	501
v/c Ratio	1.02	0.54	0.45	0.40	0.72	0.21
Control Delay	98.1	4.5	7.3	1.6	68.8	8.4
Queue Delay	0.0	0.0	0.1	0.2	0.0	0.0
Total Delay	98.1	4.5	7.4	1.8	68.8	8.4
Queue Length 50th (ft)	~301	0	114	2	75	74
Queue Length 95th (ft)	#502	40	91	2	112	98
Internal Link Dist (ft)	1		291			442
Turn Bay Length (ft)		120		110		
Base Capacity (vph)	371	1313	2927	962	523	2332
Starvation Cap Reductn	0	0	531	161	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.54	0.55	0.47	0.37	0.21

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.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	155	60	103	111	193	372	197	1265	229	737	276
v/c Ratio	0.40	0.28	0.37	0.52	0.86	0.72	0.64	0.47	0.66	0.26	0.29
Control Delay	50.1	48.4	9.6	58.1	83.6	13.6	62.1	20.6	61.6	16.8	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.2	0.3
Total Delay	50.1	48.4	9.6	58.1	83.6	13.6	62.1	21.1	61.6	17.0	5.6
Queue Length 50th (ft)	60	45	0	81	147	0	77	198	93	112	32
Queue Length 95th (ft)	73	69	37	141	#262	96	113	382	122	200	64
Internal Link Dist (ft)		500			306			331		291	
Turn Bay Length (ft)	120		110			200	100		200		160
Base Capacity (vph)	1027	557	545	234	246	529	572	2716	672	2782	967
Starvation Cap Reductn	0	0	0	0	0	0	0	942	0	1093	288
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	0.11	0.19	0.47	0.78	0.70	0.34	0.71	0.34	0.44	0.41

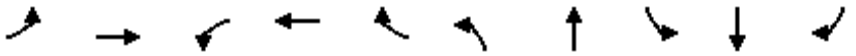
Intersection Summary

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



Lane Group	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	73	314	1328	108	842
v/c Ratio	0.38	0.74	0.45	0.68	0.22
Control Delay	65.8	20.3	3.1	85.2	3.2
Queue Delay	1.2	0.0	0.1	0.0	0.2
Total Delay	67.0	20.3	3.2	85.2	3.3
Queue Length 50th (ft)	66	21	54	103	55
Queue Length 95th (ft)	125	134	89	176	78
Internal Link Dist (ft)	236		134		331
Turn Bay Length (ft)		200		140	
Base Capacity (vph)	261	471	3186	340	4279
Starvation Cap Reductn	0	0	624	0	2253
Spillback Cap Reductn	79	0	0	0	267
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.40	0.67	0.52	0.32	0.42

Intersection Summary

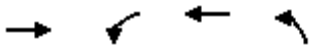


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	423	374	46	398	467	3	466	266	279	369
v/c Ratio	0.47	0.66	0.26	0.79	0.86	0.01	0.47	1.04	0.29	0.48
Control Delay	45.3	50.2	65.8	72.6	29.1	44.3	46.1	106.9	20.6	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	3.6	0.8
Total Delay	45.3	50.2	65.8	72.6	29.2	44.3	46.1	106.9	24.2	4.9
Queue Length 50th (ft)	171	304	42	201	81	2	200	~239	136	1
Queue Length 95th (ft)	229	460	87	#316	#302	11	283	#507	212	34
Internal Link Dist (ft)		203		378			521		134	
Turn Bay Length (ft)			100			70				
Base Capacity (vph)	1465	657	378	506	544	300	999	256	945	771
Starvation Cap Reductn	0	0	0	0	0	0	0	0	566	171
Spillback Cap Reductn	24	0	0	0	2	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.57	0.12	0.79	0.86	0.01	0.47	1.04	0.74	0.61

Intersection Summary

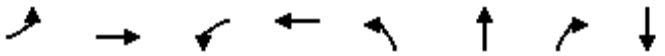
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	361	14	491	270
v/c Ratio	0.21	0.03	0.52	0.52
Control Delay	5.2	6.5	9.7	14.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	5.2	6.5	9.7	14.5
Queue Length 50th (ft)	12	1	49	35
Queue Length 95th (ft)	44	9	168	109
Internal Link Dist (ft)	306		81	168
Turn Bay Length (ft)		70		
Base Capacity (vph)	2708	783	1467	1104
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.13	0.02	0.33	0.24

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	115	396	57	164	34	44	55	59
v/c Ratio	0.34	0.37	0.21	0.18	0.12	0.15	0.17	0.11
Control Delay	27.0	18.5	28.4	18.5	24.3	24.3	5.7	16.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.0	18.5	28.4	18.5	24.3	24.3	5.7	16.9
Queue Length 50th (ft)	27	45	14	16	8	11	0	4
Queue Length 95th (ft)	117	146	70	65	44	52	19	25
Internal Link Dist (ft)		422		721		436		198
Turn Bay Length (ft)	90		240					
Base Capacity (vph)	874	2881	1651	3323	1026	1075	977	2959
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.14	0.03	0.05	0.03	0.04	0.06	0.02

Intersection Summary

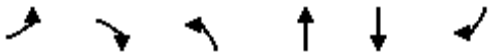


Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	115	555	560	188	724
v/c Ratio	0.10	1.02	1.00	0.51	0.80
Control Delay	21.7	72.1	68.5	32.0	9.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	21.7	72.1	68.5	32.0	9.9
Queue Length 50th (ft)	21	~297	~292	84	0
Queue Length 95th (ft)	45	#512	#511	128	90
Internal Link Dist (ft)	201		614	289	
Turn Bay Length (ft)					
Base Capacity (vph)	1108	546	558	531	981
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.10	1.02	1.00	0.35	0.74

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.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	19	907	1229	42	15	8
v/c Ratio	0.22	0.76	0.95	0.03	0.02	0.01
Control Delay	54.9	5.9	51.2	1.7	19.7	11.1
Queue Delay	0.0	0.1	44.4	0.0	0.0	0.0
Total Delay	54.9	6.0	95.7	1.7	19.7	11.1
Queue Length 50th (ft)	20	7	452	3	6	0
Queue Length 95th (ft)	50	38	#502	11	20	10
Internal Link Dist (ft)	614			297	203	
Turn Bay Length (ft)			90			
Base Capacity (vph)	289	1201	1292	1677	886	706
Starvation Cap Reductn	0	11	374	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.76	1.34	0.03	0.02	0.01

Intersection Summary

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



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	304	169	1221	43	809
v/c Ratio	0.76	0.35	0.68	0.33	0.37
Control Delay	42.7	6.0	23.0	43.4	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	42.7	6.0	23.0	43.4	14.0
Queue Length 50th (ft)	150	0	214	22	78
Queue Length 95th (ft)	215	43	#742	54	#343
Internal Link Dist (ft)	489		460		297
Turn Bay Length (ft)		120		90	
Base Capacity (vph)	600	648	1808	131	2165
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.51	0.26	0.68	0.33	0.37

Intersection Summary

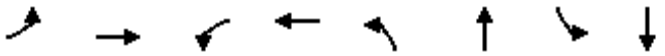
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	215	8	145	302	2	1082	224	809	145
v/c Ratio	0.67	0.02	0.74	0.56	0.02	0.67	0.72	0.66	0.14
Control Delay	39.4	0.1	52.8	8.4	38.0	17.8	45.1	11.9	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.4	0.1	52.8	8.4	38.0	17.8	45.1	11.9	3.5
Queue Length 50th (ft)	93	0	64	3	1	192	97	169	8
Queue Length 95th (ft)	171	0	#145	61	8	282	#208	432	37
Internal Link Dist (ft)	250		99			229		275	
Turn Bay Length (ft)		20		40	70		120		40
Base Capacity (vph)	460	527	281	654	514	2018	385	1235	1009
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.02	0.52	0.46	0.00	0.54	0.58	0.66	0.14

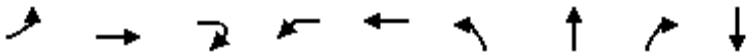
Intersection Summary

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



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	217	409	113	249	52	371	79	449
v/c Ratio	0.49	0.56	0.36	0.33	0.20	0.53	0.25	0.63
Control Delay	16.2	13.3	15.0	11.8	14.2	15.3	14.4	17.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.2	13.3	15.0	11.8	14.2	15.3	14.4	17.6
Queue Length 50th (ft)	41	66	20	43	9	69	14	90
Queue Length 95th (ft)	118	175	67	111	39	190	53	241
Internal Link Dist (ft)		1807		259		332		520
Turn Bay Length (ft)								
Base Capacity (vph)	880	1400	630	1510	449	1194	545	1216
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.29	0.18	0.16	0.12	0.31	0.14	0.37

Intersection Summary



Lane Group	EBL	EBT	EBR2	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	12	579	174	664	238	123	190	187	33
v/c Ratio	0.08	0.60	0.33	0.66	0.11	0.44	0.49	0.46	0.18
Control Delay	43.6	29.2	9.7	28.9	8.0	39.2	12.9	10.1	42.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.6	29.2	9.7	28.9	8.0	39.2	12.9	10.1	42.3
Queue Length 50th (ft)	6	131	11	148	22	58	8	0	15
Queue Length 95th (ft)	27	238	69	265	62	141	81	63	52
Internal Link Dist (ft)		461			549		531		79
Turn Bay Length (ft)	200		170			130			
Base Capacity (vph)	414	1553	774	2442	2899	737	737	765	416
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.37	0.22	0.27	0.08	0.17	0.26	0.24	0.08

Intersection Summary



Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	95	94	872	34	829	316	4	184	157
v/c Ratio	0.44	0.43	0.78	0.08	0.63	0.17	0.04	0.41	0.48
Control Delay	40.0	39.7	8.3	26.5	24.8	11.2	42.5	35.2	11.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.0	39.7	8.3	26.5	24.8	11.2	42.5	35.2	11.2
Queue Length 50th (ft)	43	42	0	5	145	32	2	42	0
Queue Length 95th (ft)	113	112	57	21	#356	96	14	89	55
Internal Link Dist (ft)		549		260		442		225	
Turn Bay Length (ft)	350								120
Base Capacity (vph)	1090	1100	2113	1298	1335	2274	229	1376	685
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.09	0.41	0.03	0.62	0.14	0.02	0.13	0.23

Intersection Summary

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



Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	181	959	1104	324	388	590
v/c Ratio	0.49	0.64	0.66	0.47	0.61	0.37
Control Delay	24.5	3.8	15.9	4.8	25.7	9.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.5	3.8	15.9	4.8	25.7	9.9
Queue Length 50th (ft)	44	0	82	0	48	46
Queue Length 95th (ft)	127	34	221	61	142	127
Internal Link Dist (ft)	477		291			442
Turn Bay Length (ft)		120		110		
Base Capacity (vph)	1036	2510	3818	1173	1488	2406
Starvation Cap Reductn	0	0	62	4	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.38	0.29	0.28	0.26	0.25

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	344	213	179	44	70	175	136	984	416	1056	109
v/c Ratio	0.48	0.55	0.38	0.24	0.36	0.55	0.38	0.69	0.66	0.57	0.18
Control Delay	28.3	32.4	6.9	39.7	41.8	13.8	38.7	28.1	35.6	21.5	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Total Delay	28.3	32.4	6.9	39.7	41.8	13.8	38.7	28.1	35.6	21.7	8.8
Queue Length 50th (ft)	69	85	0	18	29	0	29	133	87	126	8
Queue Length 95th (ft)	127	174	47	63	89	63	75	282	186	268	52
Internal Link Dist (ft)		500			306			331		291	
Turn Bay Length (ft)	120		110			200	100		200		160
Base Capacity (vph)	1674	908	851	609	641	659	984	1807	984	2033	664
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	293	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	0.21	0.23	0.21	0.07	0.11	0.27	0.14	0.54	0.42	0.61	0.16

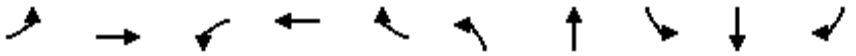
Intersection Summary



Lane Group	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	1	40	246	1	961	188	1078
v/c Ratio	0.01	0.18	0.60	0.01	0.40	0.81	0.33
Control Delay	0.0	63.9	13.8	45.0	7.3	90.5	5.0
Queue Delay	0.0	0.5	0.0	0.0	0.2	0.0	0.1
Total Delay	0.0	64.5	13.8	45.0	7.5	90.5	5.1
Queue Length 50th (ft)	0	36	0	0	48	187	90
Queue Length 95th (ft)	0	81	92	m2	217	292	103
Internal Link Dist (ft)	67	236			134		331
Turn Bay Length (ft)			200	40		140	
Base Capacity (vph)	138	246	424	142	2722	321	3674
Starvation Cap Reductn	0	0	0	0	906	1	1121
Spillback Cap Reductn	0	76	0	0	0	0	494
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.24	0.58	0.01	0.53	0.59	0.42

Intersection Summary

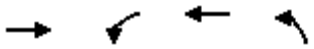
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	307	364	37	397	383	10	300	275	410	411
v/c Ratio	0.32	0.74	0.14	0.83	0.71	0.03	0.26	0.92	0.43	0.66
Control Delay	42.8	60.1	60.0	80.3	14.0	40.9	38.0	84.6	28.2	21.2
Queue Delay	0.0	0.0	0.0	0.0	0.2	0.0	0.0	4.5	9.4	2.5
Total Delay	42.8	60.1	60.0	80.3	14.1	40.9	38.0	89.2	37.6	23.8
Queue Length 50th (ft)	124	331	33	210	0	7	112	218	243	83
Queue Length 95th (ft)	165	477	73	#342	114	25	174	#441	354	173
Internal Link Dist (ft)		203		378			521		134	
Turn Bay Length (ft)			100			70				
Base Capacity (vph)	1383	617	357	478	539	321	1159	300	936	626
Starvation Cap Reductn	0	0	0	0	0	0	0	10	486	115
Spillback Cap Reductn	87	0	0	0	9	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.59	0.10	0.83	0.72	0.03	0.26	0.95	0.91	0.80

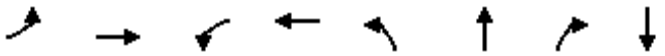
Intersection Summary

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



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	750	10	222	121
v/c Ratio	0.33	0.02	0.18	0.29
Control Delay	5.2	6.1	5.8	11.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	5.2	6.1	5.8	11.4
Queue Length 50th (ft)	23	1	14	17
Queue Length 95th (ft)	101	8	73	42
Internal Link Dist (ft)	306		68	168
Turn Bay Length (ft)		70		
Base Capacity (vph)	2673	531	1450	1074
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.28	0.02	0.15	0.11

Intersection Summary



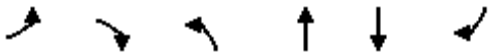
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	55	407	187	225	37	39	58	188
v/c Ratio	0.26	0.49	0.50	0.19	0.17	0.17	0.22	0.33
Control Delay	34.5	25.3	30.5	17.3	30.3	30.2	7.3	23.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.5	25.3	30.5	17.3	30.3	30.2	7.3	23.0
Queue Length 50th (ft)	17	61	55	26	11	12	0	24
Queue Length 95th (ft)	67	157	164	76	47	48	17	67
Internal Link Dist (ft)		422		721		427		198
Turn Bay Length (ft)	90		240					
Base Capacity (vph)	645	2473	1630	3335	766	796	728	2618
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.16	0.11	0.07	0.05	0.05	0.08	0.07

Intersection Summary



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	515	322	321	67	629
v/c Ratio	0.53	0.63	0.62	0.18	0.79
Control Delay	22.3	26.8	26.3	23.2	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	22.3	26.8	26.3	23.2	11.3
Queue Length 50th (ft)	75	91	90	20	9
Queue Length 95th (ft)	167	257	254	58	115
Internal Link Dist (ft)	200		614	314	
Turn Bay Length (ft)					
Base Capacity (vph)	1614	728	740	760	1020
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.32	0.44	0.43	0.09	0.62

Intersection Summary



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	90	965	582	79	86	27
v/c Ratio	0.36	0.74	0.37	0.06	0.20	0.07
Control Delay	26.7	6.4	17.0	5.1	21.4	10.1
Queue Delay	0.0	0.3	0.0	0.0	0.0	0.0
Total Delay	26.7	6.7	17.0	5.1	21.4	10.1
Queue Length 50th (ft)	28	24	60	7	18	0
Queue Length 95th (ft)	134	250	217	34	81	20
Internal Link Dist (ft)	614			297	203	
Turn Bay Length (ft)			90			
Base Capacity (vph)	770	1532	3025	1781	1275	1078
Starvation Cap Reductn	0	167	89	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.71	0.20	0.04	0.07	0.03

Intersection Summary



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	273	103	978	262	870
v/c Ratio	0.76	0.27	0.75	0.65	0.38
Control Delay	49.6	13.9	29.2	43.5	11.7
Queue Delay	0.0	0.0	0.0	0.0	0.5
Total Delay	49.6	13.9	29.2	43.5	12.3
Queue Length 50th (ft)	130	10	193	117	76
Queue Length 95th (ft)	312	65	#617	#409	364
Internal Link Dist (ft)	489		460		297
Turn Bay Length (ft)		120		90	
Base Capacity (vph)	662	641	1305	414	2337
Starvation Cap Reductn	0	0	0	0	964
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.41	0.16	0.75	0.63	0.63

Intersection Summary

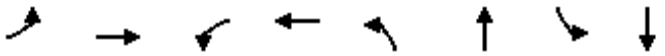
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	200	12	70	262	11	769	178	812	151
v/c Ratio	0.61	0.03	0.25	0.49	0.07	0.51	0.58	0.69	0.15
Control Delay	31.2	0.2	23.4	6.8	31.4	14.5	32.5	13.7	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.2	0.2	23.4	6.8	31.4	14.5	32.5	13.7	3.9
Queue Length 50th (ft)	59	0	19	0	3	93	54	144	7
Queue Length 95th (ft)	146	0	60	54	20	188	139	#544	44
Internal Link Dist (ft)	250		93			229		275	
Turn Bay Length (ft)		20		40	70		120		40
Base Capacity (vph)	528	579	449	710	600	2339	450	1176	993
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.02	0.16	0.37	0.02	0.33	0.40	0.69	0.15

Intersection Summary

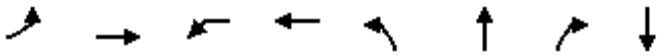
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	249	192	63	233	66	274	95	593
v/c Ratio	0.61	0.28	0.15	0.34	0.29	0.33	0.20	0.72
Control Delay	21.7	12.4	12.8	13.8	16.0	11.8	12.1	19.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.7	12.4	12.8	13.8	16.0	11.8	12.1	19.5
Queue Length 50th (ft)	66	39	14	52	12	48	16	134
Queue Length 95th (ft)	138	82	36	104	51	132	57	#381
Internal Link Dist (ft)		1813		259		332		520
Turn Bay Length (ft)								
Base Capacity (vph)	842	1378	892	1399	296	1086	633	1079
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.14	0.07	0.17	0.22	0.25	0.15	0.55

Intersection Summary

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



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	8	237	931	373	279	266	258	27
v/c Ratio	0.13	0.74	0.48	0.16	0.88	0.72	0.52	0.30
Control Delay	61.0	67.0	19.1	8.9	73.5	36.9	8.5	63.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.0	67.0	19.1	8.9	73.5	36.9	8.5	63.4
Queue Length 50th (ft)	6	95	227	51	223	126	0	21
Queue Length 95th (ft)	23	136	354	106	304	215	69	52
Internal Link Dist (ft)		461		550		513		73
Turn Bay Length (ft)	200				130			
Base Capacity (vph)	221	498	1932	2404	432	465	578	148
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.48	0.48	0.16	0.65	0.57	0.45	0.18

Intersection Summary



Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	60	61	594	104	1223	730	4	85	104
v/c Ratio	0.51	0.50	0.80	0.07	1.28	0.55	0.07	0.30	0.47
Control Delay	73.3	72.0	13.1	21.9	171.5	25.7	64.2	57.9	15.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
Total Delay	73.3	72.0	13.1	21.9	171.6	26.1	64.2	57.9	15.2
Queue Length 50th (ft)	52	53	0	23	~671	197	3	36	0
Queue Length 95th (ft)	100	101	60	51	#806	243	16	58	48
Internal Link Dist (ft)		550		236		442		218	
Turn Bay Length (ft)	350								120
Base Capacity (vph)	469	489	1206	1495	958	1324	204	552	330
Starvation Cap Reductn	0	0	0	0	9	219	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.12	0.49	0.07	1.29	0.66	0.02	0.15	0.32

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.



Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	616	753	1427	410	239	514
v/c Ratio	1.66	0.65	0.50	0.44	0.76	0.22
Control Delay	340.5	16.2	8.3	2.1	68.5	8.4
Queue Delay	0.0	0.0	0.1	0.2	0.0	0.0
Total Delay	340.5	16.2	8.4	2.3	68.5	8.4
Queue Length 50th (ft)	~693	71	122	5	94	76
Queue Length 95th (ft)	#919	127	119	2	134	101
Internal Link Dist (ft)	1		291			442
Turn Bay Length (ft)		120		110		
Base Capacity (vph)	371	1161	2866	942	523	2332
Starvation Cap Reductn	0	0	438	135	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.66	0.65	0.59	0.51	0.46	0.22

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.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	155	60	103	111	196	414	197	1362	227	803	276
v/c Ratio	0.40	0.28	0.37	0.51	0.86	0.75	0.64	0.50	0.65	0.29	0.29
Control Delay	50.1	48.4	9.6	57.8	84.4	13.9	62.1	21.5	58.7	18.4	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.2	0.4
Total Delay	50.1	48.4	9.6	57.8	84.4	13.9	62.1	22.3	58.7	18.6	6.9
Queue Length 50th (ft)	60	45	0	81	149	0	77	219	77	106	6
Queue Length 95th (ft)	73	69	37	141	#269	102	113	430	119	223	73
Internal Link Dist (ft)		500			306			331		291	
Turn Bay Length (ft)	120		110			200	100		200		160
Base Capacity (vph)	1027	557	545	234	246	565	572	2702	672	2778	966
Starvation Cap Reductn	0	0	0	0	0	0	0	904	0	1102	307
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	0.11	0.19	0.47	0.80	0.73	0.34	0.76	0.34	0.48	0.42

Intersection Summary

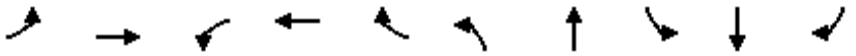
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	86	335	1406	131	886
v/c Ratio	0.43	0.80	0.48	0.73	0.24
Control Delay	68.7	27.3	4.0	87.5	3.4
Queue Delay	1.8	0.0	0.1	0.0	0.2
Total Delay	70.5	27.3	4.2	87.5	3.5
Queue Length 50th (ft)	81	50	75	129	62
Queue Length 95th (ft)	145	182	m155	208	82
Internal Link Dist (ft)	236		134		331
Turn Bay Length (ft)		200		140	
Base Capacity (vph)	252	458	3095	329	4208
Starvation Cap Reductn	0	0	593	0	2243
Spillback Cap Reductn	77	0	0	0	328
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.49	0.73	0.56	0.40	0.45

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

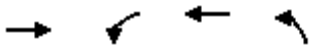


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	458	375	47	399	501	3	476	300	292	380
v/c Ratio	0.48	0.67	0.23	0.81	0.95	0.01	0.49	1.26	0.31	0.50
Control Delay	45.3	52.1	64.6	77.1	46.1	46.0	48.8	180.1	21.9	4.1
Queue Delay	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	3.9	0.8
Total Delay	45.3	52.1	64.6	77.1	47.5	46.0	48.8	180.1	25.8	4.9
Queue Length 50th (ft)	190	317	44	209	152	2	214	~346	150	3
Queue Length 95th (ft)	247	474	88	#328	#418	12	297	#638	230	33
Internal Link Dist (ft)		203		378			521		134	
Turn Bay Length (ft)			100			70				
Base Capacity (vph)	1417	636	365	490	527	287	967	239	933	766
Starvation Cap Reductn	0	0	0	0	0	0	0	0	547	160
Spillback Cap Reductn	54	0	0	0	5	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.59	0.13	0.81	0.96	0.01	0.49	1.26	0.76	0.63

Intersection Summary

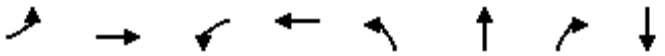
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	359	14	541	270
v/c Ratio	0.20	0.03	0.56	0.52
Control Delay	5.2	6.5	10.3	15.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	5.2	6.5	10.3	15.1
Queue Length 50th (ft)	12	1	57	37
Queue Length 95th (ft)	44	9	192	109
Internal Link Dist (ft)	306		81	168
Turn Bay Length (ft)		70		
Base Capacity (vph)	2636	763	1427	1065
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.14	0.02	0.38	0.25

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	115	778	146	236	34	44	219	59
v/c Ratio	0.49	0.51	0.54	0.15	0.19	0.23	0.61	0.16
Control Delay	42.5	20.2	41.3	15.2	37.2	37.9	13.4	25.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.5	20.2	41.3	15.2	37.2	37.9	13.4	25.7
Queue Length 50th (ft)	46	122	57	28	14	18	0	8
Queue Length 95th (ft)	143	332	172	91	54	66	69	32
Internal Link Dist (ft)		422		721		436		198
Turn Bay Length (ft)	90		240					
Base Capacity (vph)	491	1948	1491	3236	582	610	680	2126
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.40	0.10	0.07	0.06	0.07	0.32	0.03

Intersection Summary

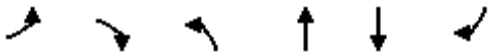


Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	155	699	733	222	730
v/c Ratio	0.15	1.28	1.29	0.56	0.79
Control Delay	22.7	166.8	171.5	32.1	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	22.7	166.8	171.5	32.1	9.3
Queue Length 50th (ft)	29	~473	~498	99	0
Queue Length 95th (ft)	58	#688	#716	150	90
Internal Link Dist (ft)	201		614	289	
Turn Bay Length (ft)					
Base Capacity (vph)	1049	546	567	531	985
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.15	1.28	1.29	0.42	0.74

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.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	19	957	1568	42	15	8
v/c Ratio	0.22	0.80	1.21	0.03	0.02	0.01
Control Delay	54.9	7.8	136.6	1.7	19.7	11.1
Queue Delay	0.0	0.1	1.2	0.0	0.0	0.0
Total Delay	54.9	7.9	137.8	1.7	19.7	11.1
Queue Length 50th (ft)	20	27	~736	3	6	0
Queue Length 95th (ft)	50	57	#779	11	20	10
Internal Link Dist (ft)	614			297	203	
Turn Bay Length (ft)			90			
Base Capacity (vph)	289	1201	1292	1677	886	706
Starvation Cap Reductn	0	10	313	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.80	1.60	0.03	0.02	0.01

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.



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	325	392	1316	73	825
v/c Ratio	0.78	0.58	0.84	0.45	0.39
Control Delay	42.4	6.4	29.9	46.5	14.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	42.4	6.4	29.9	46.5	14.9
Queue Length 50th (ft)	160	0	268	36	84
Queue Length 95th (ft)	226	60	#801	#99	#366
Internal Link Dist (ft)	489		460		297
Turn Bay Length (ft)		120		90	
Base Capacity (vph)	600	796	1571	163	2124
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.54	0.49	0.84	0.45	0.39

Intersection Summary

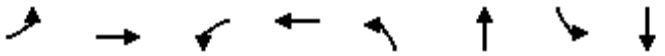
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	224	8	145	311	2	1163	228	841	148
v/c Ratio	0.73	0.02	0.76	0.56	0.02	0.72	0.74	0.68	0.15
Control Delay	43.7	0.1	56.1	8.3	38.5	19.1	47.1	12.6	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.7	0.1	56.1	8.3	38.5	19.1	47.1	12.6	3.5
Queue Length 50th (ft)	106	0	69	3	1	225	107	194	9
Queue Length 95th (ft)	181	0	#150	62	8	313	#214	464	38
Internal Link Dist (ft)	250		99			229		275	
Turn Bay Length (ft)		20		40	70		120		40
Base Capacity (vph)	424	514	263	649	498	1959	373	1237	1010
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.02	0.55	0.48	0.00	0.59	0.61	0.68	0.15

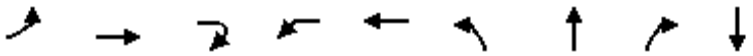
Intersection Summary

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



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	217	413	113	249	60	377	79	474
v/c Ratio	0.50	0.57	0.37	0.33	0.24	0.53	0.25	0.65
Control Delay	16.6	13.6	15.6	12.1	15.0	15.3	14.4	18.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.6	13.6	15.6	12.1	15.0	15.3	14.4	18.2
Queue Length 50th (ft)	43	69	21	45	10	71	14	99
Queue Length 95th (ft)	118	177	68	111	44	194	53	260
Internal Link Dist (ft)		1807		259		332		520
Turn Bay Length (ft)								
Base Capacity (vph)	868	1390	612	1497	415	1179	532	1201
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.30	0.18	0.17	0.14	0.32	0.15	0.39

Intersection Summary



Lane Group	EBL	EBT	EBR2	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	12	597	174	669	242	123	201	199	36
v/c Ratio	0.08	0.61	0.32	0.66	0.11	0.44	0.51	0.48	0.20
Control Delay	44.5	29.8	10.2	29.5	8.2	39.9	12.8	10.0	43.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.5	29.8	10.2	29.5	8.2	39.9	12.8	10.0	43.1
Queue Length 50th (ft)	6	137	13	153	22	60	8	0	17
Queue Length 95th (ft)	28	253	72	272	65	142	84	65	57
Internal Link Dist (ft)		461			549		531		79
Turn Bay Length (ft)	200		170			130			
Base Capacity (vph)	400	1501	751	2368	2875	713	724	752	403
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.40	0.23	0.28	0.08	0.17	0.28	0.26	0.09

Intersection Summary



Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	215	897	131	903	393	4	174	156
v/c Ratio	0.70	0.74	0.32	0.72	0.23	0.05	0.41	0.49
Control Delay	46.7	6.6	36.4	29.2	12.0	46.5	38.5	12.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.7	6.6	36.4	29.2	12.0	46.5	38.5	12.2
Queue Length 50th (ft)	99	0	31	185	43	2	43	0
Queue Length 95th (ft)	219	55	71	#472	120	15	91	57
Internal Link Dist (ft)	549		260		442		225	
Turn Bay Length (ft)								120
Base Capacity (vph)	1098	2053	1241	1260	2063	216	1299	655
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.44	0.11	0.72	0.19	0.02	0.13	0.24

Intersection Summary

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



Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	227	1005	1182	343	394	679
v/c Ratio	0.60	0.64	0.67	0.48	0.63	0.40
Control Delay	28.7	3.8	16.9	4.6	28.5	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.7	3.8	16.9	4.6	28.5	10.3
Queue Length 50th (ft)	64	0	104	0	57	62
Queue Length 95th (ft)	170	36	247	61	151	147
Internal Link Dist (ft)	477		291			442
Turn Bay Length (ft)		120		110		
Base Capacity (vph)	939	2387	3554	1115	1349	2245
Starvation Cap Reductn	0	0	101	15	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.42	0.34	0.31	0.29	0.30

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	344	215	179	44	71	183	136	1074	457	1151	109
v/c Ratio	0.50	0.58	0.39	0.26	0.39	0.57	0.41	0.67	0.72	0.56	0.16
Control Delay	30.4	35.0	7.1	41.1	44.0	14.4	40.6	28.2	38.6	21.1	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
Total Delay	30.4	35.0	7.1	41.1	44.0	14.4	40.6	28.2	38.6	21.5	8.9
Queue Length 50th (ft)	76	94	0	20	32	0	31	155	104	142	9
Queue Length 95th (ft)	127	176	48	63	91	65	75	#336	205	298	55
Internal Link Dist (ft)		500			306			331		291	
Turn Bay Length (ft)	120		110			200	100		200		160
Base Capacity (vph)	1539	835	797	560	589	626	905	1663	905	2052	667
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	430	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	0.22	0.26	0.22	0.08	0.12	0.29	0.15	0.65	0.50	0.71	0.16

Intersection Summary

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

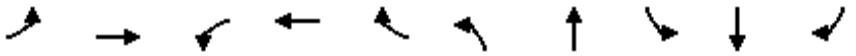


Lane Group	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	1	44	274	1	1034	209	1150
v/c Ratio	0.01	0.19	0.63	0.01	0.43	0.85	0.35
Control Delay	0.0	65.3	13.8	45.0	8.1	93.7	5.2
Queue Delay	0.0	0.7	0.0	0.0	0.3	0.0	0.1
Total Delay	0.0	66.0	13.8	45.0	8.4	93.7	5.3
Queue Length 50th (ft)	0	41	0	0	58	214	98
Queue Length 95th (ft)	0	88	98	m2	231	#335	112
Internal Link Dist (ft)	67	236			134		331
Turn Bay Length (ft)			200	40		140	
Base Capacity (vph)	138	239	443	128	2645	312	3621
Starvation Cap Reductn	0	0	0	0	868	1	1143
Spillback Cap Reductn	0	74	0	0	0	0	563
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.27	0.62	0.01	0.58	0.67	0.46

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.

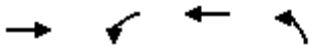


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	311	365	39	399	429	10	321	286	467	418
v/c Ratio	0.31	0.74	0.14	0.86	0.75	0.03	0.28	1.02	0.50	0.70
Control Delay	42.2	61.2	59.7	84.9	14.5	41.8	40.0	109.9	30.6	26.6
Queue Delay	0.0	0.0	0.0	0.0	0.5	0.0	0.0	3.2	12.5	3.6
Total Delay	42.3	61.2	59.7	84.9	14.9	41.8	40.0	113.1	43.0	30.2
Queue Length 50th (ft)	126	342	35	219	0	7	128	~282	294	108
Queue Length 95th (ft)	168	479	75	#345	121	25	186	#494	397	200
Internal Link Dist (ft)		203		378			521		134	
Turn Bay Length (ft)			100			70				
Base Capacity (vph)	1345	600	347	465	574	297	1129	281	929	593
Starvation Cap Reductn	0	0	0	0	0	0	0	3	437	101
Spillback Cap Reductn	147	0	0	0	18	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.61	0.11	0.86	0.77	0.03	0.28	1.03	0.95	0.85

Intersection Summary

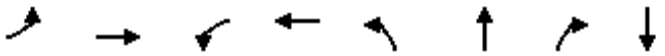
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	800	10	231	121
v/c Ratio	0.35	0.02	0.19	0.30
Control Delay	5.2	6.0	5.7	12.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	5.2	6.0	5.7	12.0
Queue Length 50th (ft)	26	1	14	18
Queue Length 95th (ft)	110	8	75	43
Internal Link Dist (ft)	306		68	168
Turn Bay Length (ft)		70		
Base Capacity (vph)	2612	487	1413	1046
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.31	0.02	0.16	0.12

Intersection Summary



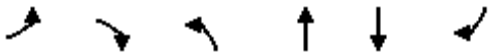
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	55	550	547	328	37	39	134	188
v/c Ratio	0.39	0.66	0.76	0.17	0.27	0.28	0.55	0.48
Control Delay	63.4	43.5	37.5	12.3	58.6	58.5	18.4	44.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.4	43.5	37.5	12.3	58.6	58.5	18.4	44.5
Queue Length 50th (ft)	35	170	294	47	25	26	0	51
Queue Length 95th (ft)	96	309	581	105	71	73	51	107
Internal Link Dist (ft)		422		721		427		198
Turn Bay Length (ft)	90		240					
Base Capacity (vph)	349	1388	1084	2764	415	431	471	1530
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.40	0.50	0.12	0.09	0.09	0.28	0.12

Intersection Summary



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	810	329	338	74	632
v/c Ratio	0.70	0.69	0.70	0.21	0.83
Control Delay	25.8	32.8	32.8	25.5	15.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	25.8	32.8	32.8	25.5	15.9
Queue Length 50th (ft)	157	134	138	29	34
Queue Length 95th (ft)	277	266	272	63	164
Internal Link Dist (ft)	200		614	314	
Turn Bay Length (ft)					
Base Capacity (vph)	1381	621	634	649	926
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.59	0.53	0.53	0.11	0.68

Intersection Summary



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	90	1249	603	79	86	27
v/c Ratio	0.51	0.89	0.28	0.05	0.30	0.10
Control Delay	45.9	14.5	13.0	4.0	36.0	13.2
Queue Delay	0.0	0.6	0.2	0.0	0.0	0.0
Total Delay	45.9	15.2	13.2	4.0	36.0	13.2
Queue Length 50th (ft)	61	83	71	8	40	0
Queue Length 95th (ft)	152	#1024	221	33	94	23
Internal Link Dist (ft)	614			297	203	
Turn Bay Length (ft)			90			
Base Capacity (vph)	440	1392	2123	1738	760	653
Starvation Cap Reductn	0	25	742	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.91	0.44	0.05	0.11	0.04

Intersection Summary

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



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	282	113	1016	524	914
v/c Ratio	0.78	0.29	0.78	1.28	0.40
Control Delay	50.7	14.1	30.4	176.3	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.6
Total Delay	50.7	14.1	30.4	176.3	12.7
Queue Length 50th (ft)	135	12	204	~328	83
Queue Length 95th (ft)	322	71	#647	#923	387
Internal Link Dist (ft)	489		460		297
Turn Bay Length (ft)		120		90	
Base Capacity (vph)	654	637	1295	408	2309
Starvation Cap Reductn	0	0	0	0	943
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.43	0.18	0.78	1.28	0.67

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

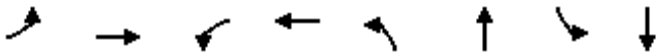
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	202	12	70	266	11	800	191	843	157
v/c Ratio	0.63	0.03	0.26	0.49	0.08	0.53	0.61	0.71	0.16
Control Delay	32.5	0.2	24.4	6.9	32.4	14.8	34.2	14.2	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.5	0.2	24.4	6.9	32.4	14.8	34.2	14.2	4.0
Queue Length 50th (ft)	62	0	20	0	4	102	60	157	8
Queue Length 95th (ft)	152	0	61	55	21	197	154	#580	45
Internal Link Dist (ft)	250		93			229		275	
Turn Bay Length (ft)		20		40	70		120		40
Base Capacity (vph)	517	572	434	705	590	2304	443	1183	999
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.02	0.16	0.38	0.02	0.35	0.43	0.71	0.16

Intersection Summary

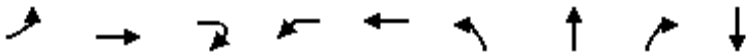
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	249	204	63	231	73	302	95	603
v/c Ratio	0.62	0.31	0.15	0.34	0.33	0.36	0.20	0.72
Control Delay	22.3	12.7	13.1	14.0	16.8	12.1	12.2	19.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.3	12.7	13.1	14.0	16.8	12.1	12.2	19.5
Queue Length 50th (ft)	70	44	14	55	14	55	16	138
Queue Length 95th (ft)	138	87	37	102	57	147	57	#392
Internal Link Dist (ft)		1813		259		332		520
Turn Bay Length (ft)								
Base Capacity (vph)	834	1360	873	1385	286	1072	593	1064
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.15	0.07	0.17	0.26	0.28	0.16	0.57

Intersection Summary

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



Lane Group	EBL	EBT	EBR2	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	8	237	88	931	373	279	267	258	27
v/c Ratio	0.13	0.74	0.39	0.48	0.16	0.88	0.72	0.52	0.30
Control Delay	61.0	67.0	15.5	19.1	8.9	73.5	37.1	8.5	63.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.0	67.0	15.5	19.1	8.9	73.5	37.1	8.5	63.4
Queue Length 50th (ft)	6	95	0	227	51	223	127	0	21
Queue Length 95th (ft)	23	136	49	354	106	304	216	69	52
Internal Link Dist (ft)		461			550		513		73
Turn Bay Length (ft)	200		170			130			
Base Capacity (vph)	221	498	298	1932	2404	432	464	578	148
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.48	0.30	0.48	0.16	0.65	0.58	0.45	0.18

Intersection Summary



Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	60	62	594	104	1223	738	4	86	104
v/c Ratio	0.52	0.51	0.80	0.07	1.29	0.56	0.08	0.31	0.47
Control Delay	74.3	73.5	13.2	21.7	177.5	26.7	65.0	58.7	15.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
Total Delay	74.3	73.5	13.2	21.7	177.6	27.2	65.0	58.7	15.6
Queue Length 50th (ft)	53	54	0	23	~683	206	3	37	0
Queue Length 95th (ft)	101	103	60	52	#819	253	16	60	49
Internal Link Dist (ft)		550		236		442		218	
Turn Bay Length (ft)	350								120
Base Capacity (vph)	464	484	1199	1513	948	1310	202	565	335
Starvation Cap Reductn	0	0	0	0	9	219	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.13	0.50	0.07	1.30	0.68	0.02	0.15	0.31

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.



Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	622	753	1429	410	240	514
v/c Ratio	1.68	0.65	0.50	0.44	0.76	0.22
Control Delay	347.3	16.5	8.3	2.1	68.5	8.4
Queue Delay	0.0	0.0	0.1	0.2	0.0	0.0
Total Delay	347.3	16.5	8.4	2.4	68.5	8.4
Queue Length 50th (ft)	~703	72	122	5	94	76
Queue Length 95th (ft)	#929	129	119	2	134	101
Internal Link Dist (ft)	1		291			442
Turn Bay Length (ft)		120		110		
Base Capacity (vph)	371	1157	2864	941	523	2332
Starvation Cap Reductn	0	0	435	135	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.68	0.65	0.59	0.51	0.46	0.22

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.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	155	60	103	111	196	414	197	1364	227	803	276
v/c Ratio	0.40	0.28	0.37	0.51	0.86	0.75	0.64	0.50	0.65	0.29	0.29
Control Delay	50.1	48.4	9.6	57.8	84.4	13.9	62.1	21.5	58.8	18.5	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.2	0.4
Total Delay	50.1	48.4	9.6	57.8	84.4	13.9	62.1	22.3	58.8	18.7	7.0
Queue Length 50th (ft)	60	45	0	81	149	0	77	219	77	105	6
Queue Length 95th (ft)	73	69	37	141	#269	102	113	431	119	224	73
Internal Link Dist (ft)		500			306			331		291	
Turn Bay Length (ft)	120		110			200	100		200		160
Base Capacity (vph)	1027	557	545	234	246	565	572	2702	672	2778	966
Starvation Cap Reductn	0	0	0	0	0	0	0	904	0	1102	308
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	0.11	0.19	0.47	0.80	0.73	0.34	0.76	0.34	0.48	0.42

Intersection Summary

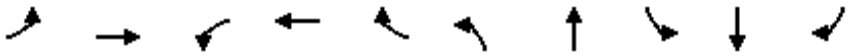
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	86	335	1408	131	886
v/c Ratio	0.43	0.80	0.48	0.73	0.24
Control Delay	68.7	27.3	4.0	87.5	3.4
Queue Delay	1.8	0.0	0.1	0.0	0.2
Total Delay	70.5	27.3	4.2	87.5	3.5
Queue Length 50th (ft)	81	50	75	129	62
Queue Length 95th (ft)	145	182	m156	208	82
Internal Link Dist (ft)	236		134		331
Turn Bay Length (ft)		200		140	
Base Capacity (vph)	252	458	3095	329	4208
Starvation Cap Reductn	0	0	592	0	2243
Spillback Cap Reductn	77	0	0	0	328
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.49	0.73	0.56	0.40	0.45

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

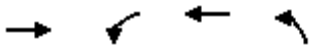


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	459	375	47	399	502	3	476	300	292	380
v/c Ratio	0.48	0.67	0.23	0.81	0.95	0.01	0.49	1.26	0.31	0.50
Control Delay	45.3	52.1	64.6	77.1	47.1	46.0	48.8	180.1	21.9	4.1
Queue Delay	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	3.9	0.8
Total Delay	45.4	52.1	64.6	77.1	48.5	46.0	48.8	180.1	25.8	4.9
Queue Length 50th (ft)	190	317	44	209	155	2	214	~346	150	3
Queue Length 95th (ft)	248	474	88	#328	#422	12	297	#638	230	33
Internal Link Dist (ft)		203		378			521		134	
Turn Bay Length (ft)			100			70				
Base Capacity (vph)	1417	636	365	490	526	287	967	239	933	766
Starvation Cap Reductn	0	0	0	0	0	0	0	0	547	160
Spillback Cap Reductn	54	0	0	0	5	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.59	0.13	0.81	0.96	0.01	0.49	1.26	0.76	0.63

Intersection Summary

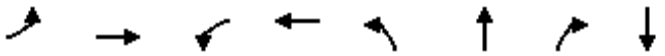
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	359	14	541	270
v/c Ratio	0.20	0.03	0.56	0.52
Control Delay	5.2	6.5	10.3	15.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	5.2	6.5	10.3	15.1
Queue Length 50th (ft)	12	1	57	37
Queue Length 95th (ft)	44	9	192	109
Internal Link Dist (ft)	306		81	168
Turn Bay Length (ft)		70		
Base Capacity (vph)	2636	763	1427	1065
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.14	0.02	0.38	0.25

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	115	779	153	239	34	44	220	59
v/c Ratio	0.50	0.51	0.55	0.15	0.19	0.24	0.61	0.17
Control Delay	42.9	20.4	41.6	15.2	37.6	38.1	13.4	26.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.9	20.4	41.6	15.2	37.6	38.1	13.4	26.0
Queue Length 50th (ft)	46	124	61	28	14	18	0	8
Queue Length 95th (ft)	144	334	180	92	55	67	69	32
Internal Link Dist (ft)		422		721		436		198
Turn Bay Length (ft)	90		240					
Base Capacity (vph)	486	1930	1481	3236	577	605	677	2107
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.40	0.10	0.07	0.06	0.07	0.32	0.03

Intersection Summary

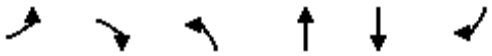


Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	156	708	731	223	730
v/c Ratio	0.15	1.30	1.29	0.56	0.79
Control Delay	22.7	173.6	170.0	32.2	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	22.7	173.6	170.0	32.2	9.3
Queue Length 50th (ft)	30	~483	~496	100	0
Queue Length 95th (ft)	58	#698	#713	151	90
Internal Link Dist (ft)	201		614	289	
Turn Bay Length (ft)					
Base Capacity (vph)	1049	546	567	531	985
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.15	1.30	1.29	0.42	0.74

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.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	19	958	1576	42	15	8
v/c Ratio	0.22	0.80	1.22	0.03	0.02	0.01
Control Delay	54.9	7.8	139.2	1.7	19.7	11.1
Queue Delay	0.0	0.1	1.2	0.0	0.0	0.0
Total Delay	54.9	7.9	140.4	1.7	19.7	11.1
Queue Length 50th (ft)	20	28	~742	3	6	0
Queue Length 95th (ft)	50	57	#785	11	20	10
Internal Link Dist (ft)	614			297	203	
Turn Bay Length (ft)			90			
Base Capacity (vph)	289	1201	1292	1677	886	706
Starvation Cap Reductn	0	10	311	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.80	1.61	0.03	0.02	0.01

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.



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	325	398	1319	74	825
v/c Ratio	0.77	0.59	0.84	0.45	0.39
Control Delay	41.9	6.3	30.1	47.7	15.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	41.9	6.3	30.1	47.7	15.1
Queue Length 50th (ft)	160	0	270	37	84
Queue Length 95th (ft)	223	60	#803	#107	#374
Internal Link Dist (ft)	489		460		297
Turn Bay Length (ft)		120		90	
Base Capacity (vph)	600	800	1567	163	2119
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.54	0.50	0.84	0.45	0.39

Intersection Summary

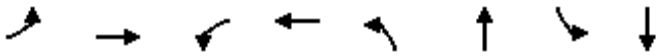
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	224	8	145	311	2	1165	228	841	148
v/c Ratio	0.73	0.02	0.76	0.56	0.02	0.72	0.74	0.68	0.15
Control Delay	43.7	0.1	56.0	8.3	38.5	19.1	47.1	12.6	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.7	0.1	56.0	8.3	38.5	19.1	47.1	12.6	3.5
Queue Length 50th (ft)	106	0	69	3	1	226	108	195	9
Queue Length 95th (ft)	181	0	#150	62	8	314	#214	464	38
Internal Link Dist (ft)	250		99			229		275	
Turn Bay Length (ft)		20		40	70		120		40
Base Capacity (vph)	424	513	263	649	498	1959	373	1237	1010
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.02	0.55	0.48	0.00	0.59	0.61	0.68	0.15

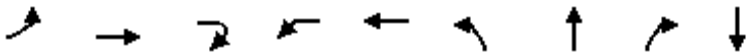
Intersection Summary

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



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	217	413	113	249	60	377	79	474
v/c Ratio	0.50	0.57	0.37	0.33	0.24	0.53	0.25	0.65
Control Delay	16.6	13.6	15.6	12.1	15.0	15.3	14.4	18.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.6	13.6	15.6	12.1	15.0	15.3	14.4	18.2
Queue Length 50th (ft)	43	69	21	45	10	71	14	99
Queue Length 95th (ft)	118	177	68	111	44	194	53	260
Internal Link Dist (ft)		1807		259		332		520
Turn Bay Length (ft)								
Base Capacity (vph)	868	1390	612	1497	415	1179	532	1201
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.30	0.18	0.17	0.14	0.32	0.15	0.39

Intersection Summary



Lane Group	EBL	EBT	EBR2	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	12	604	174	669	242	123	202	200	36
v/c Ratio	0.08	0.61	0.32	0.66	0.11	0.44	0.51	0.48	0.20
Control Delay	44.6	29.8	10.4	29.6	8.1	40.0	12.9	10.0	43.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.6	29.8	10.4	29.6	8.1	40.0	12.9	10.0	43.2
Queue Length 50th (ft)	6	139	14	154	22	60	8	0	17
Queue Length 95th (ft)	28	256	74	272	65	142	84	65	57
Internal Link Dist (ft)		461			549		531		79
Turn Bay Length (ft)	200		170			130			
Base Capacity (vph)	398	1495	747	2362	2872	710	722	750	402
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.40	0.23	0.28	0.08	0.17	0.28	0.27	0.09

Intersection Summary



Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	111	114	897	131	903	428	4	187	157
v/c Ratio	0.50	0.50	0.78	0.31	0.69	0.24	0.04	0.42	0.48
Control Delay	42.1	41.9	8.2	33.6	26.1	10.7	43.2	36.0	11.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.1	41.9	8.2	33.6	26.1	10.7	43.2	36.0	11.4
Queue Length 50th (ft)	50	51	0	28	165	42	2	43	0
Queue Length 95th (ft)	129	132	58	65	#423	121	14	90	55
Internal Link Dist (ft)		549		260		442		225	
Turn Bay Length (ft)	350								120
Base Capacity (vph)	1075	1100	2106	1295	1318	2159	226	1358	678
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.10	0.43	0.10	0.69	0.20	0.02	0.14	0.23

Intersection Summary

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



Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	248	1005	1188	348	395	689
v/c Ratio	0.63	0.64	0.67	0.48	0.63	0.41
Control Delay	29.9	3.8	17.3	4.7	29.0	10.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.9	3.8	17.3	4.7	29.0	10.5
Queue Length 50th (ft)	72	0	109	0	59	66
Queue Length 95th (ft)	185	36	249	61	151	150
Internal Link Dist (ft)	477		291			442
Turn Bay Length (ft)		120		110		
Base Capacity (vph)	921	2360	3497	1103	1323	2217
Starvation Cap Reductn	0	0	103	15	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.43	0.35	0.32	0.30	0.31

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	344	215	179	44	71	183	136	1086	458	1160	109
v/c Ratio	0.50	0.58	0.40	0.26	0.39	0.58	0.41	0.67	0.72	0.56	0.16
Control Delay	30.6	35.2	7.1	41.2	44.1	14.4	40.7	28.2	38.9	21.0	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
Total Delay	30.6	35.2	7.1	41.2	44.1	14.4	40.7	28.2	38.9	21.5	8.9
Queue Length 50th (ft)	76	94	0	20	32	0	31	157	104	144	9
Queue Length 95th (ft)	127	176	48	63	91	65	75	#342	206	301	55
Internal Link Dist (ft)		500			306			331		291	
Turn Bay Length (ft)	120		110			200	100		200		160
Base Capacity (vph)	1525	828	791	555	584	622	897	1648	897	2073	673
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	429	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	0.23	0.26	0.23	0.08	0.12	0.29	0.15	0.66	0.51	0.71	0.16

Intersection Summary

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

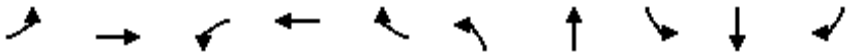


Lane Group	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	1	44	274	1	1045	209	1160
v/c Ratio	0.01	0.19	0.63	0.01	0.44	0.85	0.36
Control Delay	0.0	65.3	13.8	45.0	8.2	93.7	5.2
Queue Delay	0.0	0.7	0.0	0.0	0.3	0.0	0.1
Total Delay	0.0	65.9	13.8	45.0	8.5	93.7	5.3
Queue Length 50th (ft)	0	41	0	0	59	214	99
Queue Length 95th (ft)	0	88	98	m2	233	#335	113
Internal Link Dist (ft)	67	236			134		331
Turn Bay Length (ft)			200	40		140	
Base Capacity (vph)	138	239	443	126	2643	312	3621
Starvation Cap Reductn	0	0	0	0	858	1	1139
Spillback Cap Reductn	0	74	0	0	0	0	566
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.27	0.62	0.01	0.59	0.67	0.47

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.

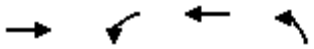


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	312	365	39	399	433	10	327	288	473	419
v/c Ratio	0.31	0.74	0.14	0.86	0.75	0.03	0.29	1.04	0.51	0.71
Control Delay	42.3	61.2	59.7	84.9	14.5	41.8	40.1	114.2	30.6	27.1
Queue Delay	0.0	0.0	0.0	0.0	0.5	0.0	0.0	2.4	12.7	3.7
Total Delay	42.3	61.2	59.7	84.9	15.0	41.8	40.1	116.6	43.3	30.8
Queue Length 50th (ft)	126	342	35	219	0	7	131	~289	298	112
Queue Length 95th (ft)	168	479	75	#345	123	25	190	#502	400	202
Internal Link Dist (ft)		203		378			521		134	
Turn Bay Length (ft)			100			70				
Base Capacity (vph)	1344	600	347	465	578	295	1129	278	930	591
Starvation Cap Reductn	0	0	0	0	0	0	0	2	433	100
Spillback Cap Reductn	147	0	0	0	18	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.61	0.11	0.86	0.77	0.03	0.29	1.04	0.95	0.85

Intersection Summary

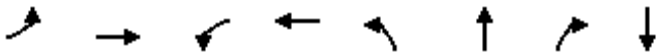
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	801	10	231	121
v/c Ratio	0.35	0.02	0.19	0.30
Control Delay	5.2	6.0	5.6	12.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	5.2	6.0	5.6	12.2
Queue Length 50th (ft)	26	1	14	18
Queue Length 95th (ft)	110	8	75	45
Internal Link Dist (ft)	306		68	168
Turn Bay Length (ft)		70		
Base Capacity (vph)	2606	486	1410	1044
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.31	0.02	0.16	0.12

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	55	566	559	330	37	39	165	188
v/c Ratio	0.40	0.68	0.75	0.16	0.28	0.28	0.61	0.49
Control Delay	65.6	45.1	37.3	12.0	60.4	60.2	18.9	45.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.6	45.1	37.3	12.0	60.4	60.2	18.9	45.9
Queue Length 50th (ft)	36	184	308	48	26	27	0	53
Queue Length 95th (ft)	97	318	605	105	71	74	53	107
Internal Link Dist (ft)		422		721		427		198
Turn Bay Length (ft)	90		240					
Base Capacity (vph)	335	1328	1039	2701	398	413	482	1468
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.43	0.54	0.12	0.09	0.09	0.34	0.13

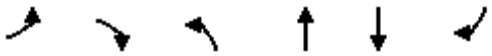
Intersection Summary



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	848	334	341	76	632
v/c Ratio	0.72	0.70	0.70	0.21	0.84
Control Delay	26.8	33.5	33.3	25.6	16.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	26.8	33.5	33.3	25.6	16.2
Queue Length 50th (ft)	170	137	141	30	35
Queue Length 95th (ft)	293	#272	#274	65	166
Internal Link Dist (ft)	200		614	314	
Turn Bay Length (ft)					
Base Capacity (vph)	1363	613	626	640	919
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.62	0.54	0.54	0.12	0.69

Intersection Summary

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



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	90	1284	613	79	86	27
v/c Ratio	0.52	0.92	0.28	0.05	0.31	0.11
Control Delay	46.7	17.1	12.9	4.0	36.3	13.2
Queue Delay	0.0	0.7	0.2	0.0	0.0	0.0
Total Delay	46.7	17.8	13.0	4.0	36.3	13.2
Queue Length 50th (ft)	61	109	72	8	40	0
Queue Length 95th (ft)	152	#1082	224	33	94	23
Internal Link Dist (ft)	614			297	203	
Turn Bay Length (ft)			90			
Base Capacity (vph)	409	1403	2167	1738	706	609
Starvation Cap Reductn	0	21	739	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.93	0.43	0.05	0.12	0.04

Intersection Summary

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



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	282	118	1023	556	920
v/c Ratio	0.78	0.30	0.79	1.36	0.40
Control Delay	50.7	14.0	30.6	208.0	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.7
Total Delay	50.7	14.0	30.6	208.0	12.7
Queue Length 50th (ft)	135	13	207	~362	84
Queue Length 95th (ft)	322	73	#655	#984	391
Internal Link Dist (ft)	489		460		297
Turn Bay Length (ft)		120		90	
Base Capacity (vph)	654	640	1294	408	2309
Starvation Cap Reductn	0	0	0	0	941
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.43	0.18	0.79	1.36	0.67

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

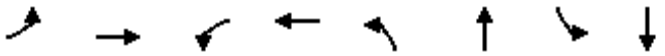
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	204	12	70	271	11	801	193	845	158
v/c Ratio	0.63	0.03	0.26	0.50	0.08	0.53	0.62	0.71	0.16
Control Delay	32.8	0.2	24.4	7.0	32.5	14.9	34.4	14.3	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.8	0.2	24.4	7.0	32.5	14.9	34.4	14.3	4.0
Queue Length 50th (ft)	63	0	20	0	4	103	61	158	8
Queue Length 95th (ft)	154	0	61	56	21	197	154	#581	46
Internal Link Dist (ft)	250		93			229		275	
Turn Bay Length (ft)		20		40	70		120		40
Base Capacity (vph)	514	570	431	707	589	2298	441	1183	998
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.02	0.16	0.38	0.02	0.35	0.44	0.71	0.16

Intersection Summary

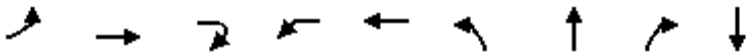
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	249	206	63	233	75	302	95	603
v/c Ratio	0.62	0.31	0.15	0.35	0.33	0.36	0.20	0.72
Control Delay	22.5	12.7	13.1	14.1	17.0	12.1	12.2	19.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.5	12.7	13.1	14.1	17.0	12.1	12.2	19.5
Queue Length 50th (ft)	70	44	14	56	14	55	16	138
Queue Length 95th (ft)	138	87	37	104	58	147	57	#392
Internal Link Dist (ft)		1813		259		332		520
Turn Bay Length (ft)								
Base Capacity (vph)	829	1360	872	1385	286	1072	593	1064
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.15	0.07	0.17	0.26	0.28	0.16	0.57

Intersection Summary

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



Lane Group	EBL	EBT	EBR2	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	9	319	110	1025	613	347	334	313	30
v/c Ratio	0.15	0.81	0.40	0.59	0.27	0.93	0.88	0.54	0.33
Control Delay	61.4	68.4	13.2	24.7	11.1	76.6	62.5	7.7	64.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.4	68.4	13.2	24.7	11.1	76.6	62.5	7.7	64.5
Queue Length 50th (ft)	7	128	0	304	107	273	235	0	23
Queue Length 95th (ft)	25	174	52	420	181	#420	#382	75	55
Internal Link Dist (ft)		461			550		513		73
Turn Bay Length (ft)	200		170			130			
Base Capacity (vph)	221	498	317	1747	2285	432	429	619	147
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.64	0.35	0.59	0.27	0.80	0.78	0.51	0.20

Intersection Summary

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



Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	67	70	708	110	1564	774	4	94	139
v/c Ratio	0.52	0.53	0.82	0.07	1.63	0.59	0.07	0.33	0.56
Control Delay	71.7	71.3	12.4	22.6	321.2	27.5	64.2	58.5	17.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Total Delay	71.7	71.3	12.4	22.6	321.3	28.1	64.2	58.5	17.2
Queue Length 50th (ft)	58	62	0	25	~978	222	3	41	0
Queue Length 95th (ft)	106	109	60	56	#1114	270	16	63	59
Internal Link Dist (ft)		550		236		442		218	
Turn Bay Length (ft)	350								120
Base Capacity (vph)	469	487	1288	1473	958	1320	204	552	355
Starvation Cap Reductn	0	0	0	0	7	220	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.14	0.55	0.07	1.64	0.70	0.02	0.17	0.39

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.



Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	739	843	1670	478	286	591
v/c Ratio	1.99	0.74	0.60	0.52	0.79	0.25
Control Delay	482.8	23.2	7.6	3.5	67.9	8.7
Queue Delay	0.0	0.0	0.2	0.3	0.0	0.0
Total Delay	482.8	23.3	7.8	3.9	67.9	8.7
Queue Length 50th (ft)	~892	117	117	2	113	90
Queue Length 95th (ft)	#1129	181	92	95	154	117
Internal Link Dist (ft)	1		291			442
Turn Bay Length (ft)		120		110		
Base Capacity (vph)	371	1134	2806	920	523	2332
Starvation Cap Reductn	0	0	364	116	0	0
Spillback Cap Reductn	0	7	0	0	0	54
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.99	0.75	0.68	0.59	0.55	0.26

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.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	182	66	114	122	216	471	218	1603	256	917	305
v/c Ratio	0.44	0.30	0.40	0.54	0.91	0.77	0.66	0.62	0.65	0.34	0.32
Control Delay	50.5	48.2	11.1	58.4	91.3	13.9	62.0	25.1	63.3	24.2	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.3	0.5
Total Delay	50.5	48.2	11.1	58.4	91.3	13.9	62.0	27.0	63.3	24.6	11.3
Queue Length 50th (ft)	71	49	0	89	166	0	85	285	100	171	25
Queue Length 95th (ft)	85	74	44	154	#306	111	123	#652	m136	282	m126
Internal Link Dist (ft)		500			306			331		291	
Turn Bay Length (ft)	120		110			200	100		200		160
Base Capacity (vph)	1027	557	546	234	246	614	572	2581	672	2690	945
Starvation Cap Reductn	0	0	0	0	0	0	0	773	0	1069	306
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	0.18	0.12	0.21	0.52	0.88	0.77	0.38	0.89	0.38	0.57	0.48

Intersection Summary

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

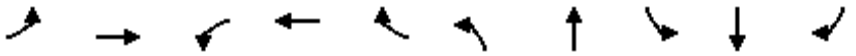
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	96	395	1627	155	999
v/c Ratio	0.45	0.95	0.57	0.78	0.27
Control Delay	70.6	55.4	5.7	91.8	3.8
Queue Delay	3.1	0.0	0.2	0.0	0.3
Total Delay	73.6	55.4	6.0	91.8	4.1
Queue Length 50th (ft)	92	152	110	159	82
Queue Length 95th (ft)	164	#382	m280	243	94
Internal Link Dist (ft)	236		134		331
Turn Bay Length (ft)		200		140	
Base Capacity (vph)	237	431	2914	310	4054
Starvation Cap Reductn	0	0	520	0	2169
Spillback Cap Reductn	74	0	0	0	397
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.59	0.92	0.68	0.50	0.53

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.

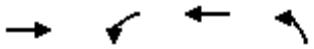


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	517	414	54	442	594	3	550	345	328	423
v/c Ratio	0.50	0.73	0.24	0.96	1.20	0.01	0.60	1.84	0.36	0.55
Control Delay	45.7	57.2	64.6	99.5	132.0	47.7	55.0	423.4	24.2	4.5
Queue Delay	0.1	0.0	0.0	0.0	0.2	0.0	0.0	0.0	6.4	0.8
Total Delay	45.8	57.2	64.6	99.5	132.2	47.7	55.0	423.4	30.6	5.2
Queue Length 50th (ft)	225	380	52	245	~425	2	267	~533	181	6
Queue Length 95th (ft)	280	548	97	#394	#704	12	356	#805	267	32
Internal Link Dist (ft)		203		378			521		134	
Turn Bay Length (ft)			100			70				
Base Capacity (vph)	1333	598	344	461	494	262	910	188	912	772
Starvation Cap Reductn	0	0	0	0	0	0	0	0	522	131
Spillback Cap Reductn	148	0	0	0	14	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.69	0.16	0.96	1.24	0.01	0.60	1.84	0.84	0.66

Intersection Summary

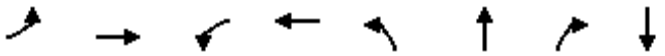
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	396	15	592	297
v/c Ratio	0.22	0.03	0.62	0.56
Control Delay	5.4	6.6	11.5	16.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	5.4	6.6	11.5	16.1
Queue Length 50th (ft)	15	1	71	45
Queue Length 95th (ft)	48	10	217	120
Internal Link Dist (ft)	306		81	168
Turn Bay Length (ft)		70		
Base Capacity (vph)	2557	714	1383	1032
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.15	0.02	0.43	0.29

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	127	826	152	278	39	48	224	66
v/c Ratio	0.54	0.51	0.58	0.17	0.23	0.27	0.62	0.19
Control Delay	44.7	20.1	44.2	15.4	39.3	39.9	13.8	27.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.7	20.1	44.2	15.4	39.3	39.9	13.8	27.0
Queue Length 50th (ft)	55	134	65	35	17	22	0	10
Queue Length 95th (ft)	154	358	179	108	61	71	69	35
Internal Link Dist (ft)		422		721		436		198
Turn Bay Length (ft)	90		240					
Base Capacity (vph)	453	1800	1406	3241	538	565	649	1971
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.46	0.11	0.09	0.07	0.08	0.35	0.03

Intersection Summary

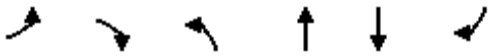


Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	166	763	786	241	807
v/c Ratio	0.16	1.40	1.39	0.58	0.82
Control Delay	23.4	215.9	210.7	31.9	9.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	23.4	215.9	210.7	31.9	9.7
Queue Length 50th (ft)	32	~544	~558	106	0
Queue Length 95th (ft)	61	#765	#781	163	101
Internal Link Dist (ft)	201		614	289	
Turn Bay Length (ft)					
Base Capacity (vph)	1010	546	567	531	1039
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.16	1.40	1.39	0.45	0.78

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.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	21	1055	1698	46	17	10
v/c Ratio	0.24	0.88	1.31	0.03	0.02	0.01
Control Delay	55.6	14.1	178.8	1.7	19.7	10.5
Queue Delay	0.0	0.2	1.1	0.0	0.0	0.0
Total Delay	55.6	14.3	179.8	1.7	19.7	10.5
Queue Length 50th (ft)	21	88	~839	4	7	0
Queue Length 95th (ft)	52	175	#876	11	21	10
Internal Link Dist (ft)	614			297	203	
Turn Bay Length (ft)			90			
Base Capacity (vph)	289	1197	1292	1676	885	706
Starvation Cap Reductn	0	7	289	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.89	1.69	0.03	0.02	0.01

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.



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	364	410	1462	77	912
v/c Ratio	0.80	0.58	0.98	0.47	0.44
Control Delay	42.2	5.9	44.9	49.5	16.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	42.2	5.9	44.9	49.5	16.6
Queue Length 50th (ft)	179	0	340	38	104
Queue Length 95th (ft)	248	59	#891	#124	#441
Internal Link Dist (ft)	489		460		297
Turn Bay Length (ft)		120		90	
Base Capacity (vph)	600	807	1498	164	2051
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.61	0.51	0.98	0.47	0.44

Intersection Summary

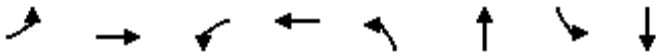
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	247	9	160	343	2	1294	252	934	163
v/c Ratio	0.80	0.02	0.88	0.60	0.02	0.79	0.82	0.76	0.16
Control Delay	51.5	0.1	76.5	10.4	38.5	22.5	55.3	15.9	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.5	0.1	76.5	10.4	38.5	22.5	55.3	15.9	3.9
Queue Length 50th (ft)	125	0	82	17	1	295	133	286	13
Queue Length 95th (ft)	#226	0	#185	85	8	369	#246	#647	43
Internal Link Dist (ft)	250		99			229		275	
Turn Bay Length (ft)		20		40	70		120		40
Base Capacity (vph)	368	480	217	621	457	1803	343	1233	1007
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.02	0.74	0.55	0.00	0.72	0.73	0.76	0.16

Intersection Summary

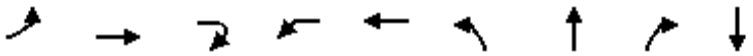
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	240	455	124	275	66	433	88	529
v/c Ratio	0.58	0.61	0.45	0.36	0.31	0.59	0.31	0.71
Control Delay	19.5	15.2	18.5	12.9	18.9	18.0	17.6	21.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.5	15.2	18.5	12.9	18.9	18.0	17.6	21.7
Queue Length 50th (ft)	59	96	28	59	14	98	18	130
Queue Length 95th (ft)	135	199	77	121	57	260	68	#346
Internal Link Dist (ft)		1807		259		332		520
Turn Bay Length (ft)								
Base Capacity (vph)	742	1278	496	1372	306	1055	406	1074
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.36	0.25	0.20	0.22	0.41	0.22	0.49

Intersection Summary

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



Lane Group	EBL	EBT	EBR2	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	13	866	265	738	337	166	224	219	40
v/c Ratio	0.11	0.74	0.43	0.76	0.15	0.58	0.54	0.50	0.26
Control Delay	51.4	36.1	16.8	37.1	8.9	47.1	13.0	9.7	50.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.4	36.1	16.8	37.1	8.9	47.1	13.0	9.7	50.8
Queue Length 50th (ft)	8	257	55	215	38	101	13	0	24
Queue Length 95th (ft)	31	#491	164	324	99	195	94	68	66
Internal Link Dist (ft)		461			549		531		79
Turn Bay Length (ft)	200		170			130			
Base Capacity (vph)	313	1173	622	1898	2530	557	619	645	315
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.74	0.43	0.39	0.13	0.30	0.36	0.34	0.13

Intersection Summary

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



Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	260	1196	135	1097	421	4	192	191
v/c Ratio	0.69	0.83	0.35	0.92	0.25	0.05	0.47	0.56
Control Delay	43.0	9.7	39.3	42.4	14.3	49.2	42.0	12.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.0	9.7	39.3	42.4	14.3	49.2	42.0	12.9
Queue Length 50th (ft)	123	26	33	263	53	2	50	0
Queue Length 95th (ft)	262	122	76	#676	144	15	105	64
Internal Link Dist (ft)	549		260		442		225	
Turn Bay Length (ft)								120
Base Capacity (vph)	1040	2073	1178	1196	1963	205	1233	652
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.58	0.11	0.92	0.21	0.02	0.16	0.29

Intersection Summary

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



Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	254	1156	1363	397	534	831
v/c Ratio	0.68	0.69	0.72	0.51	0.75	0.44
Control Delay	37.1	4.3	20.3	4.6	35.2	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.1	4.3	20.4	4.7	35.2	10.3
Queue Length 50th (ft)	95	0	165	0	102	92
Queue Length 95th (ft)	215	40	315	65	221	183
Internal Link Dist (ft)	477		291			442
Turn Bay Length (ft)		120		110		
Base Capacity (vph)	763	2214	3009	1013	1096	2098
Starvation Cap Reductn	0	0	181	30	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.52	0.48	0.40	0.49	0.40

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	382	236	198	48	78	210	151	1253	516	1381	131
v/c Ratio	0.54	0.61	0.42	0.28	0.44	0.62	0.46	0.81	0.74	0.66	0.19
Control Delay	32.1	37.2	7.3	43.1	46.9	14.7	42.9	33.7	39.8	23.5	10.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0
Total Delay	32.1	37.2	7.3	43.1	46.9	14.7	42.9	33.7	39.8	24.7	10.5
Queue Length 50th (ft)	91	111	2	23	38	0	37	208	123	191	16
Queue Length 95th (ft)	142	194	52	67	98	69	82	#436	#246	380	72
Internal Link Dist (ft)		500			306			331		291	
Turn Bay Length (ft)	120		110			200	100		200		160
Base Capacity (vph)	1437	780	765	523	550	615	845	1553	845	2104	682
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	458	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	0.27	0.30	0.26	0.09	0.14	0.34	0.18	0.81	0.61	0.84	0.19

Intersection Summary

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

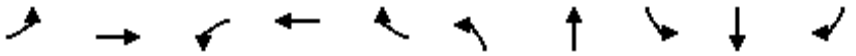


Lane Group	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	1	51	322	1	1191	263	1347
v/c Ratio	0.01	0.23	0.68	0.01	0.51	0.95	0.41
Control Delay	0.0	67.8	14.1	40.0	10.8	107.8	5.5
Queue Delay	0.0	1.1	0.0	0.0	0.6	1.5	0.2
Total Delay	0.0	68.9	14.1	40.0	11.5	109.2	5.7
Queue Length 50th (ft)	0	51	0	0	236	292	122
Queue Length 95th (ft)	0	98	105	m2	m273	#473	137
Internal Link Dist (ft)	67	236			134		331
Turn Bay Length (ft)			200	40		140	
Base Capacity (vph)	138	223	473	97	2472	291	3450
Starvation Cap Reductn	0	0	0	0	821	4	1157
Spillback Cap Reductn	0	72	0	0	0	0	585
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.34	0.68	0.01	0.72	0.92	0.59

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.

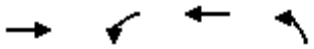


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	351	405	44	441	507	11	365	365	529	476
v/c Ratio	0.31	0.79	0.14	1.02	0.92	0.05	0.35	1.53	0.60	0.83
Control Delay	41.2	66.3	60.0	116.7	37.2	43.2	44.5	295.9	35.8	37.3
Queue Delay	0.1	0.0	0.0	0.0	7.8	0.0	0.0	0.0	37.6	8.1
Total Delay	41.3	66.3	60.0	116.7	45.0	43.2	44.5	295.9	73.3	45.4
Queue Length 50th (ft)	144	406	42	~278	114	9	162	~503	369	171
Queue Length 95th (ft)	188	541	83	#398	#347	26	213	#721	441	#257
Internal Link Dist (ft)		203		378			521		134	
Turn Bay Length (ft)			100			70				
Base Capacity (vph)	1255	560	324	434	551	238	1054	239	882	573
Starvation Cap Reductn	0	0	0	0	0	0	0	0	381	70
Spillback Cap Reductn	273	0	0	0	32	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.72	0.14	1.02	0.98	0.05	0.35	1.53	1.06	0.95

Intersection Summary

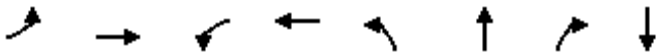
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	878	12	255	133
v/c Ratio	0.38	0.03	0.20	0.32
Control Delay	5.4	6.0	5.6	13.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	5.4	6.0	5.6	13.0
Queue Length 50th (ft)	31	1	17	19
Queue Length 95th (ft)	123	9	82	52
Internal Link Dist (ft)	306		68	168
Turn Bay Length (ft)		70		
Base Capacity (vph)	2580	433	1396	1032
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.34	0.03	0.18	0.13

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	61	621	565	372	42	43	136	207
v/c Ratio	0.45	0.71	0.76	0.18	0.33	0.32	0.56	0.54
Control Delay	69.3	47.1	39.3	12.3	64.1	63.7	19.2	49.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.3	47.1	39.3	12.3	64.1	63.7	19.2	49.7
Queue Length 50th (ft)	44	220	338	58	31	32	0	64
Queue Length 95th (ft)	105	352	625	120	78	81	51	121
Internal Link Dist (ft)		422		721		427		198
Turn Bay Length (ft)	90		240					
Base Capacity (vph)	312	1240	968	2556	371	385	437	1368
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.50	0.58	0.15	0.11	0.11	0.31	0.15

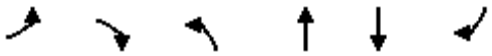
Intersection Summary



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	861	364	371	80	703
v/c Ratio	0.77	0.77	0.77	0.19	0.89
Control Delay	30.7	38.8	38.6	25.1	22.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	30.7	38.8	38.6	25.1	22.8
Queue Length 50th (ft)	215	181	184	33	72
Queue Length 95th (ft)	#300	#327	#331	67	#304
Internal Link Dist (ft)	200		614	314	
Turn Bay Length (ft)					
Base Capacity (vph)	1247	561	572	586	886
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.69	0.65	0.65	0.14	0.79

Intersection Summary

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



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	99	1352	665	88	95	30
v/c Ratio	0.55	0.97	0.31	0.06	0.33	0.11
Control Delay	47.7	25.8	13.4	4.1	36.8	12.8
Queue Delay	0.0	1.4	0.2	0.0	0.0	0.0
Total Delay	47.7	27.2	13.6	4.1	36.8	12.8
Queue Length 50th (ft)	68	226	84	9	45	0
Queue Length 95th (ft)	165	#1209	246	36	103	24
Internal Link Dist (ft)	614			297	203	
Turn Bay Length (ft)			90			
Base Capacity (vph)	405	1396	2150	1732	700	606
Starvation Cap Reductn	0	14	716	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.98	0.46	0.05	0.14	0.05

Intersection Summary

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



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	332	123	1140	549	1010
v/c Ratio	0.82	0.29	0.90	1.39	0.45
Control Delay	52.4	15.9	38.6	220.9	13.5
Queue Delay	0.0	0.0	0.0	0.0	1.0
Total Delay	52.4	15.9	38.6	220.9	14.4
Queue Length 50th (ft)	164	19	263	~380	113
Queue Length 95th (ft)	#405	86	#761	#971	441
Internal Link Dist (ft)	489		460		297
Turn Bay Length (ft)		120		90	
Base Capacity (vph)	632	615	1260	395	2233
Starvation Cap Reductn	0	0	0	0	878
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.53	0.20	0.90	1.39	0.75

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

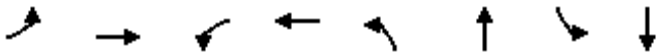
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	223	13	78	294	12	900	208	953	173
v/c Ratio	0.69	0.03	0.32	0.52	0.09	0.59	0.66	0.80	0.17
Control Delay	37.3	0.2	28.0	7.2	35.6	16.1	38.9	17.5	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.3	0.2	28.0	7.2	35.6	16.1	38.9	17.5	4.1
Queue Length 50th (ft)	80	0	26	0	5	134	76	223	11
Queue Length 95th (ft)	183	0	73	61	23	226	#192	#714	51
Internal Link Dist (ft)	250		93			229		275	
Turn Bay Length (ft)		20		40	70		120		40
Base Capacity (vph)	482	543	365	698	555	2167	416	1193	1007
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.02	0.21	0.42	0.02	0.42	0.50	0.80	0.17

Intersection Summary

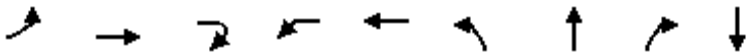
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	275	224	70	257	79	352	104	691
v/c Ratio	0.73	0.33	0.17	0.38	0.45	0.40	0.24	0.79
Control Delay	28.7	13.2	13.2	14.7	26.5	14.1	14.6	24.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.7	13.2	13.2	14.7	26.5	14.1	14.6	24.7
Queue Length 50th (ft)	87	53	17	66	18	76	21	198
Queue Length 95th (ft)	162	94	39	112	#91	194	71	#537
Internal Link Dist (ft)		1813		259		332		520
Turn Bay Length (ft)								
Base Capacity (vph)	661	1183	709	1202	177	899	445	892
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.19	0.10	0.21	0.45	0.39	0.23	0.77

Intersection Summary

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



Lane Group	EBL	EBT	EBR2	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	9	319	110	1025	613	347	334	314	30
v/c Ratio	0.15	0.81	0.40	0.59	0.27	0.93	0.88	0.54	0.33
Control Delay	61.4	68.4	13.2	24.7	11.1	76.6	62.5	7.7	64.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.4	68.4	13.2	24.7	11.1	76.6	62.5	7.7	64.5
Queue Length 50th (ft)	7	128	0	304	107	273	235	0	23
Queue Length 95th (ft)	25	174	52	420	181	#420	#382	76	55
Internal Link Dist (ft)		461			550		513		73
Turn Bay Length (ft)	200		170			130			
Base Capacity (vph)	221	498	317	1747	2285	432	429	620	147
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.64	0.35	0.59	0.27	0.80	0.78	0.51	0.20

Intersection Summary

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



Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	68	70	708	110	1564	782	4	95	139
v/c Ratio	0.54	0.53	0.82	0.07	1.65	0.60	0.08	0.34	0.56
Control Delay	73.1	72.2	12.5	22.6	328.9	28.6	65.0	59.4	17.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Total Delay	73.1	72.2	12.5	22.6	329.0	29.2	65.0	59.4	17.3
Queue Length 50th (ft)	61	62	0	25	~994	231	3	42	0
Queue Length 95th (ft)	108	110	61	56	#1131	281	16	65	60
Internal Link Dist (ft)		550		236		442		218	
Turn Bay Length (ft)	350								120
Base Capacity (vph)	464	482	1282	1489	948	1305	202	565	360
Starvation Cap Reductn	0	0	0	0	7	217	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.15	0.55	0.07	1.66	0.72	0.02	0.17	0.39

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.

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	745	843	1672	478	287	591
v/c Ratio	2.01	0.75	0.60	0.52	0.79	0.25
Control Delay	489.9	23.5	7.6	3.5	68.0	8.7
Queue Delay	0.0	0.0	0.2	0.4	0.0	0.0
Total Delay	489.9	23.6	7.8	3.9	68.0	8.7
Queue Length 50th (ft)	~901	119	117	2	113	90
Queue Length 95th (ft)	#1138	182	92	95	155	117
Internal Link Dist (ft)	1		291			442
Turn Bay Length (ft)		120		110		
Base Capacity (vph)	371	1131	2805	919	523	2332
Starvation Cap Reductn	0	0	362	117	0	0
Spillback Cap Reductn	0	7	0	0	0	54
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	2.01	0.75	0.68	0.60	0.55	0.26

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.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	182	66	114	122	216	471	218	1605	256	917	305
v/c Ratio	0.44	0.30	0.40	0.54	0.91	0.77	0.66	0.62	0.65	0.34	0.32
Control Delay	50.5	48.2	11.1	58.4	91.3	13.9	62.0	25.1	63.7	24.5	10.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.3	0.5
Total Delay	50.5	48.2	11.1	58.4	91.3	13.9	62.0	27.0	63.7	24.8	11.4
Queue Length 50th (ft)	71	49	0	89	166	0	85	285	100	171	25
Queue Length 95th (ft)	85	74	44	154	#306	111	123	#652	m136	282	m126
Internal Link Dist (ft)		500			306			331		291	
Turn Bay Length (ft)	120		110			200	100		200		160
Base Capacity (vph)	1027	557	546	234	246	614	572	2581	672	2690	945
Starvation Cap Reductn	0	0	0	0	0	0	0	773	0	1070	307
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	0.18	0.12	0.21	0.52	0.88	0.77	0.38	0.89	0.38	0.57	0.48

Intersection Summary

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

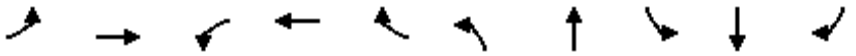
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	96	395	1629	155	999
v/c Ratio	0.45	0.95	0.57	0.78	0.27
Control Delay	70.6	55.4	5.7	91.8	3.8
Queue Delay	3.1	0.0	0.2	0.0	0.3
Total Delay	73.6	55.4	6.0	91.8	4.1
Queue Length 50th (ft)	92	152	110	159	82
Queue Length 95th (ft)	164	#382	m280	243	94
Internal Link Dist (ft)	236		134		331
Turn Bay Length (ft)		200		140	
Base Capacity (vph)	237	431	2915	310	4054
Starvation Cap Reductn	0	0	518	0	2169
Spillback Cap Reductn	74	0	0	0	397
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.59	0.92	0.68	0.50	0.53

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.

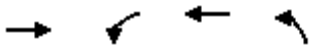


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	518	414	54	442	595	3	550	345	328	423
v/c Ratio	0.50	0.73	0.24	0.96	1.20	0.01	0.60	1.84	0.36	0.55
Control Delay	45.7	57.2	64.6	99.5	132.8	47.7	55.0	423.4	24.2	4.5
Queue Delay	0.1	0.0	0.0	0.0	0.2	0.0	0.0	0.0	6.4	0.8
Total Delay	45.8	57.2	64.6	99.5	133.0	47.7	55.0	423.4	30.6	5.2
Queue Length 50th (ft)	225	380	52	245	~427	2	267	~533	181	6
Queue Length 95th (ft)	281	548	97	#394	#706	12	356	#805	267	32
Internal Link Dist (ft)		203		378			521		134	
Turn Bay Length (ft)			100			70				
Base Capacity (vph)	1333	598	344	461	494	262	910	188	912	772
Starvation Cap Reductn	0	0	0	0	0	0	0	0	522	131
Spillback Cap Reductn	148	0	0	0	14	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.69	0.16	0.96	1.24	0.01	0.60	1.84	0.84	0.66

Intersection Summary

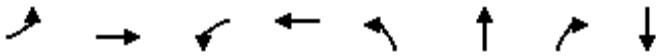
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	396	15	592	297
v/c Ratio	0.22	0.03	0.62	0.56
Control Delay	5.4	6.6	11.5	16.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	5.4	6.6	11.5	16.1
Queue Length 50th (ft)	15	1	71	45
Queue Length 95th (ft)	48	10	217	120
Internal Link Dist (ft)	306		81	168
Turn Bay Length (ft)		70		
Base Capacity (vph)	2557	714	1383	1032
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.15	0.02	0.43	0.29

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	127	828	158	280	39	48	225	66
v/c Ratio	0.54	0.51	0.59	0.17	0.23	0.27	0.62	0.19
Control Delay	45.3	20.2	44.7	15.3	39.8	40.4	13.9	27.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.3	20.2	44.7	15.3	39.8	40.4	13.9	27.3
Queue Length 50th (ft)	55	137	68	35	17	22	0	10
Queue Length 95th (ft)	155	361	185	110	62	71	70	35
Internal Link Dist (ft)		422		721		436		198
Turn Bay Length (ft)	90		240					
Base Capacity (vph)	449	1783	1393	3239	533	559	645	1953
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.46	0.11	0.09	0.07	0.09	0.35	0.03

Intersection Summary

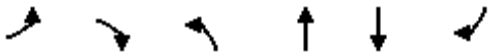


Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	167	763	794	243	807
v/c Ratio	0.17	1.40	1.40	0.58	0.82
Control Delay	23.5	215.9	216.7	32.0	9.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	23.5	215.9	216.7	32.0	9.7
Queue Length 50th (ft)	33	~544	~567	107	0
Queue Length 95th (ft)	62	#765	#790	165	101
Internal Link Dist (ft)	201		614	289	
Turn Bay Length (ft)					
Base Capacity (vph)	1008	546	567	531	1039
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.17	1.40	1.40	0.46	0.78

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.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	21	1056	1706	46	17	10
v/c Ratio	0.24	0.88	1.32	0.03	0.02	0.01
Control Delay	55.6	14.2	181.4	1.7	19.7	10.5
Queue Delay	0.0	0.2	1.1	0.0	0.0	0.0
Total Delay	55.6	14.4	182.5	1.7	19.7	10.5
Queue Length 50th (ft)	21	89	~846	4	7	0
Queue Length 95th (ft)	52	175	#881	11	21	10
Internal Link Dist (ft)	614			297	203	
Turn Bay Length (ft)			90			
Base Capacity (vph)	289	1197	1292	1676	885	706
Starvation Cap Reductn	0	7	287	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.89	1.70	0.03	0.02	0.01

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.



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	364	415	1464	78	912
v/c Ratio	0.80	0.58	0.98	0.47	0.44
Control Delay	42.2	5.9	45.6	49.5	16.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	42.2	5.9	45.6	49.5	16.6
Queue Length 50th (ft)	179	0	342	39	104
Queue Length 95th (ft)	248	60	#892	#127	#441
Internal Link Dist (ft)	489		460		297
Turn Bay Length (ft)		120		90	
Base Capacity (vph)	600	811	1495	166	2051
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.61	0.51	0.98	0.47	0.44

Intersection Summary

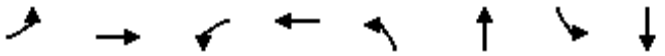
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	247	9	160	343	2	1296	252	934	163
v/c Ratio	0.80	0.02	0.88	0.60	0.02	0.80	0.81	0.76	0.16
Control Delay	51.5	0.1	76.5	10.4	38.5	22.5	55.1	15.9	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.5	0.1	76.5	10.4	38.5	22.5	55.1	15.9	3.9
Queue Length 50th (ft)	125	0	82	17	1	296	133	286	13
Queue Length 95th (ft)	#226	0	#185	85	8	370	#246	#647	43
Internal Link Dist (ft)	250		99			229		275	
Turn Bay Length (ft)		20		40	70		120		40
Base Capacity (vph)	368	480	217	621	457	1802	343	1233	1007
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.02	0.74	0.55	0.00	0.72	0.73	0.76	0.16

Intersection Summary

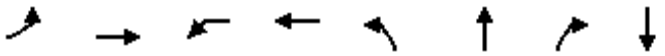
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	240	455	124	275	66	433	88	529
v/c Ratio	0.58	0.61	0.45	0.36	0.31	0.59	0.31	0.71
Control Delay	19.5	15.2	18.5	12.9	18.9	18.0	17.6	21.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.5	15.2	18.5	12.9	18.9	18.0	17.6	21.7
Queue Length 50th (ft)	59	96	28	59	14	98	18	130
Queue Length 95th (ft)	135	199	77	121	57	260	68	#346
Internal Link Dist (ft)		1807		259		332		520
Turn Bay Length (ft)								
Base Capacity (vph)	742	1278	496	1372	306	1055	406	1074
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.36	0.25	0.20	0.22	0.41	0.22	0.49

Intersection Summary

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



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	13	1138	738	337	166	225	220	40
v/c Ratio	0.11	1.01	0.76	0.15	0.58	0.54	0.50	0.26
Control Delay	51.4	63.0	37.1	8.9	47.1	12.9	9.7	50.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.4	63.0	37.1	8.9	47.1	12.9	9.7	50.8
Queue Length 50th (ft)	8	~418	215	38	101	13	0	24
Queue Length 95th (ft)	31	#742	324	99	195	94	68	66
Internal Link Dist (ft)		461		549		531		79
Turn Bay Length (ft)	200				130			
Base Capacity (vph)	313	1132	1898	2530	557	620	645	315
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	1.01	0.39	0.13	0.30	0.36	0.34	0.13

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.



Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	134	136	1196	135	1097	457	4	204	192
v/c Ratio	0.47	0.46	0.88	0.34	0.87	0.26	0.05	0.48	0.55
Control Delay	37.4	37.2	12.6	37.4	36.2	13.4	48.0	40.3	12.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.4	37.2	12.6	37.4	36.2	13.4	48.0	40.3	12.5
Queue Length 50th (ft)	62	63	30	31	230	50	2	48	0
Queue Length 95th (ft)	148	150	132	76	#670	159	15	110	64
Internal Link Dist (ft)		549		260		442		225	
Turn Bay Length (ft)	350								120
Base Capacity (vph)	1027	1048	2120	1237	1259	2070	216	1297	677
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.13	0.56	0.11	0.87	0.22	0.02	0.16	0.28

Intersection Summary

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

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	276	1156	1374	397	535	841
v/c Ratio	0.71	0.68	0.73	0.51	0.76	0.44
Control Delay	38.2	4.1	21.2	4.7	36.4	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.2	4.1	21.2	4.7	36.4	10.8
Queue Length 50th (ft)	107	0	174	0	107	97
Queue Length 95th (ft)	234	39	323	66	224	191
Internal Link Dist (ft)	477		291			442
Turn Bay Length (ft)		120		110		
Base Capacity (vph)	743	2186	2934	997	1067	2068
Starvation Cap Reductn	0	0	209	30	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.53	0.50	0.41	0.50	0.41

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	382	236	198	48	78	210	151	1265	517	1391	131
v/c Ratio	0.54	0.61	0.42	0.28	0.44	0.62	0.46	0.82	0.74	0.66	0.19
Control Delay	32.1	37.2	7.3	43.1	46.9	14.7	42.9	34.0	39.9	23.6	10.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0
Total Delay	32.1	37.2	7.3	43.1	46.9	14.7	42.9	34.0	39.9	24.9	10.5
Queue Length 50th (ft)	91	111	2	23	38	0	37	211	124	193	16
Queue Length 95th (ft)	142	194	52	67	98	69	82	#442	#246	384	72
Internal Link Dist (ft)		500			306			331		291	
Turn Bay Length (ft)	120		110			200	100		200		160
Base Capacity (vph)	1437	780	765	523	550	615	845	1552	845	2104	682
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	457	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	0.27	0.30	0.26	0.09	0.14	0.34	0.18	0.82	0.61	0.84	0.19

Intersection Summary

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

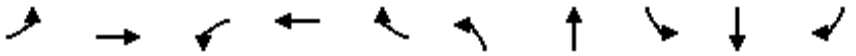


Lane Group	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	1	51	322	1	1202	263	1357
v/c Ratio	0.01	0.23	0.68	0.01	0.51	0.95	0.41
Control Delay	0.0	67.8	14.1	40.0	10.9	107.8	5.5
Queue Delay	0.0	1.1	0.0	0.0	0.6	1.5	0.2
Total Delay	0.0	68.9	14.1	40.0	11.6	109.2	5.8
Queue Length 50th (ft)	0	51	0	0	239	292	123
Queue Length 95th (ft)	0	98	105	m2	m274	#473	139
Internal Link Dist (ft)	67	236			134		331
Turn Bay Length (ft)			200	40		140	
Base Capacity (vph)	138	223	473	96	2472	291	3450
Starvation Cap Reductn	0	0	0	0	815	4	1154
Spillback Cap Reductn	0	72	0	0	0	0	589
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.34	0.68	0.01	0.73	0.92	0.59

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.

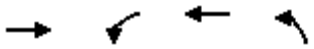


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	352	405	44	441	511	11	371	367	535	477
v/c Ratio	0.31	0.79	0.14	1.02	0.93	0.05	0.35	1.56	0.61	0.84
Control Delay	41.2	66.3	60.0	116.7	39.4	43.3	44.6	306.9	36.0	38.0
Queue Delay	0.1	0.0	0.0	0.0	9.5	0.0	0.0	0.0	38.7	8.2
Total Delay	41.3	66.3	60.0	116.7	48.9	43.3	44.6	306.9	74.6	46.3
Queue Length 50th (ft)	144	406	42	~278	123	9	165	~511	373	173
Queue Length 95th (ft)	189	541	83	#398	#361	26	216	#729	446	#248
Internal Link Dist (ft)		203		378			521		134	
Turn Bay Length (ft)			100			70				
Base Capacity (vph)	1255	560	324	434	549	235	1055	236	882	571
Starvation Cap Reductn	0	0	0	0	0	0	0	0	377	68
Spillback Cap Reductn	278	0	0	0	33	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.72	0.14	1.02	0.99	0.05	0.35	1.56	1.06	0.95

Intersection Summary

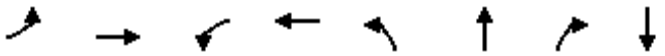
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	879	12	255	133
v/c Ratio	0.38	0.03	0.20	0.32
Control Delay	5.4	6.0	5.6	13.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	5.4	6.0	5.6	13.0
Queue Length 50th (ft)	31	1	17	19
Queue Length 95th (ft)	123	9	82	52
Internal Link Dist (ft)	306		68	168
Turn Bay Length (ft)		70		
Base Capacity (vph)	2580	433	1396	1032
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.34	0.03	0.18	0.13

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	61	636	577	374	42	43	167	207
v/c Ratio	0.46	0.73	0.75	0.18	0.34	0.33	0.63	0.55
Control Delay	71.8	49.2	38.9	12.0	66.0	65.5	19.6	51.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.8	49.2	38.9	12.0	66.0	65.5	19.6	51.6
Queue Length 50th (ft)	46	235	361	59	33	33	0	67
Queue Length 95th (ft)	105	361	642	121	78	81	54	121
Internal Link Dist (ft)		422		721		427		198
Turn Bay Length (ft)	90		240					
Base Capacity (vph)	296	1176	919	2429	352	366	446	1301
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.54	0.63	0.15	0.12	0.12	0.37	0.16

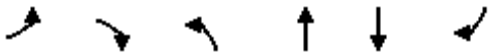
Intersection Summary



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	898	370	373	83	703
v/c Ratio	0.80	0.77	0.76	0.20	0.90
Control Delay	32.0	39.4	38.5	25.3	23.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	32.0	39.4	38.5	25.3	23.3
Queue Length 50th (ft)	228	185	185	34	74
Queue Length 95th (ft)	#340	#336	#334	69	#306
Internal Link Dist (ft)	200		614	314	
Turn Bay Length (ft)					
Base Capacity (vph)	1224	550	562	575	878
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.73	0.67	0.66	0.14	0.80

Intersection Summary

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



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	99	1386	675	88	95	30
v/c Ratio	0.55	0.99	0.31	0.06	0.33	0.11
Control Delay	47.7	31.3	13.4	4.1	36.8	12.8
Queue Delay	0.0	2.0	0.2	0.0	0.0	0.0
Total Delay	47.7	33.3	13.7	4.1	36.8	12.8
Queue Length 50th (ft)	68	~353	85	9	45	0
Queue Length 95th (ft)	165	#1265	250	36	103	24
Internal Link Dist (ft)	614			297	203	
Turn Bay Length (ft)			90			
Base Capacity (vph)	405	1396	2150	1732	700	606
Starvation Cap Reductn	0	12	713	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.24	1.00	0.47	0.05	0.14	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.



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	332	128	1146	580	1016
v/c Ratio	0.82	0.30	0.91	1.47	0.45
Control Delay	52.4	16.0	39.2	253.6	13.5
Queue Delay	0.0	0.0	0.0	0.0	1.0
Total Delay	52.4	16.0	39.2	253.6	14.5
Queue Length 50th (ft)	164	20	265	~415	114
Queue Length 95th (ft)	#405	89	#768	#1029	444
Internal Link Dist (ft)	489		460		297
Turn Bay Length (ft)		120		90	
Base Capacity (vph)	632	617	1259	395	2233
Starvation Cap Reductn	0	0	0	0	876
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.53	0.21	0.91	1.47	0.75

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

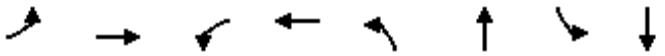
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	224	13	78	298	12	901	211	955	174
v/c Ratio	0.69	0.03	0.32	0.52	0.09	0.59	0.67	0.80	0.17
Control Delay	37.4	0.2	28.0	7.2	35.7	16.2	39.2	17.6	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.4	0.2	28.0	7.2	35.7	16.2	39.2	17.6	4.1
Queue Length 50th (ft)	81	0	26	0	5	135	77	225	11
Queue Length 95th (ft)	184	0	73	62	23	226	#195	#716	51
Internal Link Dist (ft)	250		93			229		275	
Turn Bay Length (ft)		20		40	70		120		40
Base Capacity (vph)	480	542	365	700	554	2166	415	1192	1006
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.02	0.21	0.43	0.02	0.42	0.51	0.80	0.17

Intersection Summary

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



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	275	226	70	259	82	352	104	691
v/c Ratio	0.74	0.33	0.17	0.38	0.47	0.40	0.24	0.79
Control Delay	28.9	13.2	13.2	14.7	27.7	14.1	14.6	24.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.9	13.2	13.2	14.7	27.7	14.1	14.6	24.9
Queue Length 50th (ft)	87	53	17	67	19	77	21	199
Queue Length 95th (ft)	163	95	39	113	#97	196	72	#540
Internal Link Dist (ft)		1813		259		332		520
Turn Bay Length (ft)								
Base Capacity (vph)	656	1179	704	1199	176	897	443	890
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.19	0.10	0.22	0.47	0.39	0.23	0.78

Intersection Summary

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

APPENDIX D: TRIP GENERATION



Trip Generation (Approved Projects)

#	Project	Landuse	Quantity	Unit	Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
1	1433 Floribunda Ave	Condominium	10	DU	54	1	3	4	3	2	4
2	1491-1493 Oak Grove Avenue	Condominium	10	DU	54	1	3	4	3	2	4
3	21 Park Road	Condominium	7	DU	38	1	2	3	2	1	3
4	225 California Drive	Office	46.42	KSF	452	46	8	54	9	44	53
		Retail	1.82	KSF	69	1	1	2	3	4	7
		Total			521	47	8	56	12	48	60
5	240 Lorton Avenue	Office	13.801	KSF	134	14	2	16	3	13	16
		Retail	1.375	KSF	52	1	0	1	3	3	6
		Total			186	15	3	17	5	16	22
6	250 California Drive	Office	28.458	KSF	277	28	5	33	5	28	33
		Retail	5.387	KSF	203	3	2	5	10	11	21
		Total			481	32	7	38	15	39	53
7	988 Howard Avenue	Office	22.295	KSF	217	22	4	26	4	22	26
		Retail	1.325	KSF	50	1	0	1	2	3	5
		Total			267	23	4	27	7	24	31
8	Douglas Avenue Multi-Family Residential Development	Condominium			147	3	8	11	9	4	13
9	300 Airport (Burlingame Point)	Mixed Use			8215	789	199	988	276	737	1013
10	Carolan Avenue/Rollins Road Residential Development	Condominium				-4	96	92	82	18	10

Trip Generation (Proposed Projects)

#	Project	Landuse	Quantity	Unit	Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
1	1214 Donnelly Avenue	Residential	14	DU	76	1	4	5	4	2	6
		Retail	5	KSF	189	3	2	5	9	10	19
		Total			265	4	6	10	13	12	25
2	220 Park Road	Residential	128	DU	696	12	35	46	34	22	56
		Retail	22.8	KSF	861	13	8	21	42	45	87
		Total			1557	25	43	68	76	67	143
3	Village at Burlingame	Residential	132	DU	718	12	36	48	35	23	58
4	920 Bayswater Ave (TIA Report)	Residential			519	4	21	25	20	10	30
5	619-625 California Drive (TIA Report)	Mixed Use			123	2	5	7	7	2	9
6	1300 Bayshore Highway (TIA Report)	Mixed Use				262	24	286	95	265	360
7	1499 Bayshore Highway Hotel (TIA Report)	Mixed Use			2799	103	56	159	87	87	174

APPENDIX E: PARKING OCCUPANCY DATA



Topgolf Scottsdale
Parking Lot Counts

Area	**Friday PM**		**Saturday Evening**				**Sunday Morning**		
	5:00 PM	6:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	10:00 AM	11:00 AM	12:00 AM
Lot 1	125	131	136	140	142	148	75	99	109
Lot 2	126	145	168	178	174	177	68	99	112
Lot 3	11	12	14	45	55	72	11	12	13
Total	262	288	318	363	371	397	154	210	234

Traffic Research & Analysis, Inc.

Topgolf - Scottsdale Parking Study

Date: Friday 8/22/14 **NAME:**

LOT #1					
TIME					
17:00	**125**				
18:00	**131**				

LOT #2					
TIME					
17:00	**126**				
18:00	**145**				

Overflow Parking - All section 3					
TIME					
17:00	**11**				
18:00	**12**				

REMARKS:

Overflow Parking includes roadway from Topgolf to Hampton Inn.

Topgolf - Scottsdale Parking Study

Date: Saturday 8/23/14 **NAME:**

LOT #1					
TIME					
16:00	**136**				
17:00	**140**				
18:00	**142**				
19:00	**148**				

LOT #2					
TIME					
16:00	**168**				
17:00	**178**				
18:00	**174**				
19:00	**177**				

Overflow Parking - All section 3					
TIME					
16:00	**14**				
17:00	**45**				
18:00	**55**				
19:00	**72**				

REMARKS:

Overflow Parking includes roadway from Topgolf to Hampton Inn.

Topgolf - Scottsdale Parking Study

Date: Sunday 8/24/14 **NAME:**

LOT #1					
TIME					
10:00	**75**				
11:00	**99**				
12:00	**109**				

LOT #2					
TIME					
10:00	**68**				
11:00	**99**				
12:00	**112**				

Overflow Parking - All section 3					
TIME					
10:00	**11**				
11:00	**12**				
12:00	**13**				

REMARKS:

Overflow Parking includes roadway from Topgolf to Hampton Inn.