APPENDIX H

TRAFFIC REPORT

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WEST END SAND CITY
TRAFFIC IMPACT ANALYSIS

DRAFT REPORT

SAND CITY, CALIFORNIA

Prepared for
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Monterey, CA

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1 INTRODUCTION

This report summarizes the potential traffic circulation issues associated with the proposed West End project in Sand City, California. The project includes two hotels, two apartment buildings, a condominium building with 100 units and a 4,000-square foot quality restaurant. The two hotels would have a total of 216 rooms. The apartment buildings would have a total of 320 units. The project would have three access points – main driveways on Tioga Avenue and California Avenue and a secondary driveway on East Street. The project site currently consists of a total of approximately 20 businesses that will all be relocated as a part of the project. The project site is occupied by about 20 businesses including a variety of contractor yards, manufacturing, warehouses, recreational facilities, residences and vehicle and equipment rental facilities. All of these uses will be replaced by the proposed project.

Vehicular, pedestrian, bicycle and transit circulation issues were evaluated at the project site and the surrounding street network in Sand City and Seaside, along with an assessment of site access and on-site circulation. The project site is located at the westerly corner of the Tioga Avenue / California Avenue intersection. The location of the project site is indicated on **Exhibit 1**. The site plan is shown on **Exhibit 2**.

1.1 Scope of Work

This report addresses the following topics:

- Existing vehicular, pedestrian and bicycle circulation on the surrounding street network.
- Assessment of potential direct impacts to vehicular, pedestrian, bicycle and transit circulation due to the project, and recommendations to mitigate those impacts.
- Potential background and cumulative traffic impacts and recommended mitigations.
- Site access and on-site circulation.

1.2 Study Network

The AM and PM peak periods were analyzed at the following intersections:

1. California Avenue – Northbound State Route 1 (SR 1) Off Ramp – Monterey Road (Caltrans);
2. Fremont Boulevard – SR 1 Ramps / Monterey Road (Caltrans);
3. Fremont Boulevard / Del Monte Boulevard – Military Avenue (Seaside);
4. Del Monte Boulevard / Ord Grove Avenue (Seaside);

5. California Avenue / Playa Avenue (Sand City);
6. Del Monte Boulevard / Playa Avenue (Seaside);
7. Del Monte Boulevard / La Salle Avenue (Seaside);
8. Metz Road / Tioga Avenue (Sand City);
9. California Avenue / Tioga Avenue (Sand City);
10. Del Monte Avenue / Tioga Avenue – Auto Center Parkway (Seaside);
11. Holly Street / California Avenue (Sand City);
12. Contra Costa Street / California Avenue (Sand City);
13. Contra Costa Street / Ortiz Avenue (Sand City);
14. Del Monte Boulevard / Contra Costa Street (Seaside);
15. Del Monte Boulevard / Broadway Avenue (Seaside);
16. Canyon Del Rey Boulevard / Sand Dunes Drive (Seaside);
17. Canyon Del Rey Boulevard (SR 218) / Southbound SR 1 Ramps(Caltrans);
18. Canyon Del Rey Boulevard (SR 218) / Northbound SR 1 Ramps (Caltrans); and
19. Canyon Del Rey Boulevard (SR 218) / Del Monte Boulevard (Seaside).

In addition, the two project access points to Tioga and California Avenues are analyzed.

Exhibit 3 shows the existing traffic control and lane configurations at the study intersections.

Traffic operations for the following analysis scenarios were analyzed:

- Existing Conditions
- Existing Plus Project Conditions
- Background Conditions
- Background Plus Project Conditions
- Cumulative Conditions

Improvements recommended to offset impacts created by the proposed projects are recommended where warranted.

1.3 Traffic Operation Evaluation Methodologies

Intersection traffic operations were evaluated based upon the level of service (LOS) concept. LOS is a qualitative description of an intersection's operations, ranging from LOS A to LOS F. Level of Service "A" represents free flow uncongested traffic conditions. Level of Service "F" represents highly congested traffic conditions with unacceptable delay to vehicles at intersections. The intermediate levels of service represent incremental levels of congestion and delay between these two extremes. The

analysis was performed using the *2010 Highway Capacity Manual* methodologies. LOS descriptions for each type of existing traffic control at the study intersections (i.e., signal, all-way stop and one-/two-way stop) are included as **Appendix A**.

1.4 Level of Service Standards

The study area includes intersections under the jurisdictions of the City of Sand City, City of Seaside and Caltrans. The City of Sand City has an overall level of service (LOS) standard of LOS D (Sand City General Plan Policy No. 3.1.1 or as indicated in the Congestion Management Plan), which applies to Intersections #5, 8-9, and 11-13. The City of Seaside as an overall level of service standard of LOS C, which applies to Intersections #3-4, 6-7, 10, 14-16, and 19. The Caltrans' overall level of service standard is generally the transition from LOS C to LOS D (abbreviated as LOS C/D in this document), which applies to Intersections #1-2 and 17-18. Because LOS D is considered by Caltrans to be unacceptable, mitigations are recommended when this condition (LOS D) exists.

1.5 Significance Criteria

According to the California Environmental Quality Act (CEQA) guidelines, a project may have a significant effect on the environment if it would cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system. The following significance criteria has been used within this study, based upon the jurisdiction of each study intersection:

Cities of Sand City and Seaside

The City of Sand City does not have established, specific impact threshold criteria for transportation-related impacts. A variation of the City of Seaside significance criteria is used for all intersections in the City of Sand City, corresponding with the LOS D standard.

The following significance criteria have been used in this study at intersections under the jurisdiction of the Cities of Seaside and Sand City:

Signalized Intersection (Intersection #6, 10, and 14-15)

A significant impact at a **signalized study intersection** is defined to occur under either of the following three conditions:

- ***Sand City Intersections***
    - A significant impact would occur if an intersection operating at LOS A, B, C or D degrades to E or F; or

- For intersections already operating at unacceptable level E, a significant impact would occur if the project would cause overall delay to increase by at least 2.0 seconds.

- For intersections already operating at unacceptable level F, a significant impact would occur if the project would cause overall delay to increase by at least 1.0 second.

- ***Seaside and Caltrans Intersections***

  - A significant impact would occur if an intersection operating at LOS A, B, C or D degrades to E or F; or

  - For intersections already operating at unacceptable level D, a significant impact would occur if the project would cause overall delay to increase by at least 2.0 seconds.

  - For intersections already operating at unacceptable levels E or F, a significant impact would occur if the project would cause overall delay to increase by at least 1.0 second.

All-Way Stop-Controlled Intersection (Intersection #5, 8-9, and 11-13)

- ***Sand City Intersections***

A significant impact at an **all-way stop-controlled study intersection** is defined to occur under either of the following two conditions:

- A significant impact would occur if an intersection operating at LOS A, B, C or D degrades to E or F; or
- For intersections already operating at unacceptable levels E or F, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 seconds.

- ***Seaside and Caltrans Intersections***

A significant impact at an **all-way stop-controlled study intersection** is defined to occur under either of the following two conditions:

- A significant impact would occur if an intersection operating at LOS A, B, or C degrades to D, E or F; or

- For intersections already operating at unacceptable levels D, E or F, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 seconds.

One- or Two-Way Stop-Controlled Intersection (Seaside Intersections #3-4, 7, and 16)

A significant impact at a **one- or two-way stop-controlled study intersection** is defined to occur under either of the following two conditions:

- A significant impact would occur if any traffic movement operating at LOS A, B, C, D or E degrades to F; or
- For traffic movements already operating at unacceptable level F, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 seconds.

1.6 TAMC Regional Development Impact Fee

The Transportation Agency for Monterey County (TAMC) and its member jurisdictions have adopted a county-wide, regional development impact fee to cover the costs for studies and construction of many improvements throughout Monterey County. This impact fee, which went into effect on August 27, 2008, is applied to all new development within Monterey County. The governing document for the fee is the *Regional Impact Fee Nexus Study Update* (March 26, 2008) prepared by Kimley-Horn Associates, Inc. *The Regional Impact Fee Nexus Study Update* was updated again in June 2013 by Wood Rodgers. The project site is within a reduced fee Infill Area.

2 EXISTING TRAFFIC CONDITIONS

This chapter of the report evaluates Existing traffic conditions and includes a description of the project setting. As stated in the Introduction, a variety of uses are currently in operation at the project site. These will be described in more detail, including an estimate of their existing traffic generation, in the Existing Plus Project section of this report.

2.1 Existing Traffic Network

The project site is located at the corner of California Avenue and Tioga Avenue in central Sand City. Regional access to the project site is provided by SR 1 and Canyon Del Rey Boulevard (SR 218). Major roadways in the vicinity of the project site include Fremont Boulevard, Del Monte Boulevard and Broadway Avenue. Other roadways serving the

study area include California Avenue, Tioga Avenue, Playa Avenue, Contra Costa Street, Monterey Road, Sand Dunes Drive, La Salle Avenue, Military Avenue, Ord Grove Avenue, Ortiz Avenue, Auto Center Parkway, Holly Street and Metz Road. A brief description of each roadway can be found below.

SR 1 is a state highway providing statewide and regional circulation functions. In Monterey County, SR 1 traverses the coastal communities near Big Sur, Monterey and Moss Landing, extending northward to Watsonville, Santa Cruz and San Francisco and southward to San Luis Obispo County and Los Angeles. Through the study area, it is a four-lane freeway south of Fremont Boulevard and a six-lane freeway north of Fremont Boulevard. Interchanges near the study project are located at Fremont Boulevard and Canyon Del Rey Boulevard (SR 218). The speed limit on SR 1 is 65 miles per hour (mph).

Canyon Del Rey Boulevard (SR 218) is a two- to four-lane arterial street in Seaside and Del Rey Oaks through commercial and residential neighborhoods. Due to its connections to SR 1 and SR 68, it also provides regional circulation functions between the Monterey Peninsula and Salinas. The speed limit on Canyon Del Rey Boulevard (SR 218) in the study area is 35 mph.

Fremont Boulevard is a four-lane, north-south arterial street in Seaside. Fremont Boulevard extends through various commercial districts to Highway 68. At its southern end, it has a discontinuous segment that continues into downtown Monterey as Fremont Street. The speed limit on Fremont Boulevard in the study area is 35 mph.

Del Monte Boulevard is a four-lane, north-south arterial street in Seaside. It extends through various commercial districts. At its southern end, it continues into Monterey as Del Monte Avenue. The speed limit on Del Monte Boulevard is 35 mph.

Broadway Avenue is a four-lane, east-west arterial in Seaside. It is designated as a minor arterial between Del Monte Boulevard and Calaveras Avenue, and an arterial east of Calaveras Avenue. Broadway Avenue provides access to various commercial districts and residential neighborhoods. It is in the process of being converted into a complete street that is more oriented to pedestrian and bicycle circulation in the West Broadway Urban Village Specific Plan area between Del Monte Boulevard and Fremont Boulevard. The speed limit on Broadway Avenue is 30 mph.

Auto Center Parkway is a two-lane local street in Seaside that provides access to the northern end of the Seaside Auto Center, an auto-oriented commercial district. The speed limit on Auto Center Parkway is 20 mph.

California Avenue is a two-lane collector street in Sand City. At its southern end, it provides access to the residential and commercial areas of the southern portion of Sand City. At its northern end, it provides access to a regional shopping center and SR 1.

California Street is discontinuous due to a retail shopping center whose access points are opposite each portion of this street. The speed limit on California Avenue is 25 mph south of Tioga and 40 mph north of Playa Avenue.

Contra Costa Street is a two-lane collector street in the southern portion of Sand City. It provides access to various residential and commercial areas in the southern portion of the city. The speed limit on Contra Costa Street is 25 mph.

Holly Street is a two-lane, north-south local street in Sand City that provides access to residential and commercial neighborhoods. The speed limit on Holly Street is 25 mph.

La Salle Avenue is a two-lane, east-west street in Seaside, providing access to residential neighborhoods east of Fremont Boulevard. It is a collector street east of Fremont Boulevard and a local street west of Fremont Boulevard. The speed limit on La Salle Avenue is 30 mph.

Metz Road is a two-lane, north-south local street in Sand City. Metz Road connects Tioga Avenue and Playa Avenue on the rear side of a shopping center. The speed limit on Metz Road is 20 mph. It is a private street, although it is used as a public street.

Military Avenue is a two-lane, east-west collector street in Seaside, providing access to residential neighborhoods east of Fremont Boulevard. It also provides indirect access to Seaside High School. The speed limit on Military Avenue is 30 mph.

Monterey Road is a two lane, north-south collector street in Seaside. It connects the southern portion of Seaside with the former Fort Ord properties north of Military Avenue. The speed limit on Monterey Road is 35 mph.

Ord Grove Avenue is a two-lane, east-west collector street in Seaside, providing access to residential neighborhoods east of Fremont Boulevard and commercial areas west of Fremont Boulevard. The speed limit on Old Grove Avenue is 30 mph.

Ortiz Avenue is a two-lane, east-west arterial street in Sand City. It provides access to various residential and commercial neighborhoods in the southern part of the city. The speed limit on Ortiz Avenue is 25 mph.

Playa Avenue is a two-lane, east-west street in both Sand City and Seaside. It is designated as a collector street in Seaside and a collector street in Sand City. Playa Avenue connects the residential and commercial areas of Seaside with the commercial areas of Sand City. The speed limit on Playa Avenue is 25 mph in both cities.

Sand Dunes Drive is a two-lane, north-south collector street in Sand City. It is a frontage road to SR 1 between Tioga Avenue and Canyon Del Rey Boulevard that provides access

to the properties that front Monterey Bay in this area. The speed limit on Sand Dunes Drive is 35 mph.

Tioga Avenue is an east-west, collector street in Sand City. It forms the boundary between the retail shopping areas to the north and the commercial, industrial and residential areas to the south. The speed limit on Tioga Avenue is 25 mph.

2.2 Existing Pedestrian Network

Sidewalks are present along the project frontages of Tioga Avenue and California Avenue. The sidewalk on the south frontage of Tioga Avenue continues to Sand Dunes Drive and the adjacent Monterey Bay Coastal Recreation Trail. Sidewalks are more sporadic along the north side of Tioga Avenue, extending from east of Sand Dunes Drive to west of SR 1 and again from Metz Road to California Avenue. Sidewalks along both sides of Tioga Avenue continue into Seaside and connect with sidewalks on both sides of Del Monte Boulevard. Sidewalks along California Avenue extend south into southern Sand City along its western frontage, connecting with existing sidewalks along Contra Costa Avenue and Holly Street. There are gaps in the sidewalk along the western side of California Avenue between Afton Avenue and Fir Avenue, as well as south of East Street. Sidewalks along the eastern side of California are discontinuous, with gaps near Holly Street and directly opposite the project site. There is no pedestrian connection into the shopping center along the north side of Tioga Avenue.

Crosswalks are present across three of the four approaches at the California Avenue / Tioga Avenue intersection and across one of the Tioga Avenue approaches at the Metz Road / Tioga Avenue intersection.

2.3 Existing Bicycle Network

There are no existing bicycle facilities adjacent to the project site. The nearest facilities are bicycle lanes on Playa Avenue west of California Street, Metz Road between Tioga Avenue and Playa Avenue, and California Avenue between Playa Avenue and Monterey Road.
Bicycles are also allowed on the aforementioned Monterey Bay Coastal Recreation Trail,. This is a shared use, paved trail that extends 18 miles between Pacific Grove, Monterey and Castroville via Sand City, Seaside and Marina. It is accessed at the Tioga Avenue / Sand Dunes Drive intersection and at the end of Playa Avenue. There is a gap between these two points and the trail is temporarily routed via Tioga Avenue and Metz Road.

In addition, the shoulders on most roadways in the study area that do not have dedicated bicycle facilities are sufficiently wide enough to allow bicyclists to travel alongside vehicles.

2.4 Existing Transit Service

Monterey-Salinas Transit (MST) provides fixed-route transit service in Monterey County. The following routes currently traverse the study area near the project site. These are located on the MST bus line map included as **Appendix B**.

- Route 8 – Ryan Ranch – Sand City (Del Monte Boulevard)
- Route 10 – Marina – Monterey
- Route 11 – Carmel – Sand City
- Route 12 – The Dunes – Naval Postgraduate School (Del Monte Boulevard)
- Route 18 – Monterey – The Dunes (Del Monte Boulevard)
- Route 20 – Salinas – Monterey (Del Monte Boulevard)
- Route 55 – Monterey – San Jose Express (Del Monte Boulevard)
- Route 67 – Presidio – Marina (Del Monte Boulevard)
- Route 75 – Presidio – Marshall Park Express
- Route 78 – Presidio – Santa Cruz Express
- Route 91 – Sand City – Del Mesa Carmel
- Route 94 – Sand City – Carmel Rancho
- Jazz Routes A, B and C (Bus Rapid Transit)

The 2035 Metropolitan Transportation Program Sustainable Communities Strategy identifies Del Monte Boulevard as a high-quality transit corridor. As indicated above, Del Monte Boulevard is served by six bus lines, including direct service to downtown Monterey, Ryan Ranch, Marina, Salinas and San Jose, with combined commute period headways of about seven minutes.

The nearest bus stops to the project site are located on Del Monte Boulevard to the north and south of Tioga Avenue. This is about one-eighth of a mile from the center of the project and only 300 feet from the nearest corner of the project. In addition, a regional transit exchange – Sand City Station – is located on westbound Playa Avenue west of California Street, approximately one-quarter mile north of the project site.

The RIDES paratransit program is also available for persons with disabilities.

2.5 Existing Conditions Traffic Circulation

Vehicle Circulation

Intersection turning movement counts were conducted at the study intersections during the AM (7:00 – 9:00 AM) and PM (4:00 – 6:00) peak hours on Tuesday, June 13, 2017. Traffic data was collected for cars, trucks, buses, bicyclists, and pedestrians. From these counts, the AM and PM peak hour volumes were derived. **Appendix C** contains the traffic count data at the study intersections.

Exhibit 4 depicts the peak hour turning movement volumes for the study intersections under Existing Conditions.

Existing intersection levels of service are summarized on **Exhibit 5A**. The LOS calculation sheets for Existing conditions can be found in **Appendix D**.

Most of the study intersections currently operate at or better than their respective level of service standards. However, the following four intersections currently operate below their respective level of service standards:

1. Intersection #2: Fremont Boulevard-SR 1 Ramps / Monterey Road –The Caltrans level of service standard is LOS C/D . This intersection currently operates at an unacceptable LOS D during the AM peak hour (35.3 seconds of delay, just above the LOS C threshold of 35.0 seconds) and LOS D during the PM peak hour (37.8 seconds of delay). In order to achieve long term acceptable levels of service at this intersection, interchange modifications have been identified and are described in the SR 1 Project Study Report (PSR), which Caltrans approved in 2002. Currently, this project is not fully funded. However, the project is included in the Regional Transportation Impact Fee Program, adopted by TAMC in 2008. It is also included in the Fort Ord Reuse Authority (FORA) impact fee program. Finally, it could be eligible for some additional funding through Measure X (the Monterey County Transportation and Investment Plan sales tax measure) or California Senate Bill 1 (fuel tax and vehicle registration fee increase). The largest part of the project is the construction of the new SR 1 / Monterey Road interchange. The proposed improvements at the existing intersection include:
    a. Eliminating the east (Monterey Road) leg of the Fremont Boulevard/Monterey Road intersection,
    b. Prohibiting left-turns from Fremont Boulevard to Monterey Road,
    c. Realigning Monterey Road to connect with Fremont Boulevard at Military Avenue, and
    d. Widening SR 1 in the vicinity of the Fremont Boulevard interchange.
    e. Although a long-term project has been identified for this location, including several sources of funds, the interchange modification at the SR 1 / Fremont Boulevard interchange and construction of the new SR 1 / Monterey Road interchange do not have full funding. It is therefore uncertain when this major project will be implemented.
    f. In the meantime, short term improvements at the Fremont Boulevard / Monterey Road intersection could be considered. These would include the addition of a northbound Fremont Boulevard right turn lane and a westbound Monterey Road left turn lane. With these intersection modifications, the intersection would operate at LOS C (29.0 seconds of delay in the AM peak hour and 28.6 seconds for delay in the PM peak hour).

2. Intersection #3: Fremont Boulevard / Del Monte Boulevard – Military Avenue – The Northbound Del Monte Boulevard (Side Street) approach operates LOS F during the PM peak hour. As a part of the interchange project described for the Fremont Boulevard – SR 1 Ramps / Monterey Road intersection, this intersection will be combined with Military Avenue and signalized. An interim improvement is a half signal. A half signal would control the eastbound Fremont Boulevard approach and the northbound Del Monte Boulevard approach but provide a continuous green on the westbound Fremont Boulevard approach. The exiting westbound left turn movement could remain prohibited. The Military Avenue leg could remain with its current configuration and stop control.

3. Intersection #17: Canyon del Rey Boulevard (SR 218) / Southbound SR 1 Ramps – This intersection operates with an overall LOS D (46.7 seconds of delay) in the AM peak hour. It operates at an acceptable LOS C (34.2 seconds of delay) in the PM peak hour. With the addition of a southbound Canyon del Rey (SR 218) right turn lane to turn onto the southbound Highway 1 on-ramp, the intersection will improve to LOS D near C (36.3 seconds of delay) in the AM peak hour and LOS C (26.6 seconds of delay) in the PM peak hour. It appears that this lane can be added with some minor restriping which would involve relocating the centerline stripe perhaps 2 feet to the east, which would allow adding a channelizing stripe to create the southbound right turn lane. This would represent a noticeable improvement in delay, but would continue to be slightly worse than the Caltrans standard.

4. Intersection #19: Canyon Del Rey Boulevard (SR 218) / Del Monte Boulevard – LOS E (AM), LOS D (PM). The inclusion of right turn overlaps (right turn green arrows) on the four approaches would improve this intersection delay by 1.3 seconds in the AM peak hour and 3.2 seconds in the PM peak hour. However, the existing deficient levels of service would remain.

Pedestrian Circulation

There is relatively little pedestrian traffic at the study intersections. The highest level of pedestrian traffic – just over 10 pedestrians crossing at least one approach to the intersection – is concentrated at the following locations:

1. California Avenue / Playa Avenue (near the Sand City Station transit exchange);
2. Canyon Del Rey Boulevard / Sand Dunes Drive (near the parking area for Monterey State Beach);
3. Canyon Del Rey Boulevard corridor (entire); and
4. Del Monte Boulevard corridor (Tioga Avenue to Canyon Del Rey Boulevard (SR 218)).

Bicycle Circulation

There is little to no bicycle traffic at the study intersections, with the bulk of the bicycle traffic located on Del Monte Boulevard (entire length), Tioga Avenue (Metz Road to Sand Dunes Drive) and California Avenue (Tioga Avenue to Contra Costa Street).

3 EXISTING PLUS PROJECT CONDITIONS

3.1 Project Description

The project includes two hotels, two apartment buildings, a condominium building with 100 units and a 4,000 square foot quality restaurant . The two hotels would have a total of 216 rooms. The apartment buildings would have a total of 320 units. The project would have three access points – main driveways on Tioga Avenue and California Avenue and a secondary driveway on East Street.

3.2 Project Trip Generation

The project trip generation is based upon trip rates from Trip Generation Manual, 9th Edition, published by the Institute of Traffic Engineers in 2012.

Exhibit 6A summarizes the project trip activity. The project is estimated to generate about 4,996 gross daily trips, with 373 trips (140 in, 432 out) during the AM peak hour and 432 trips (257 in, 175 out) during the PM peak hour. The restaurant is proposed to be a quality restaurant, which are typically only open for lunch and dinner. The restaurant will be located on the top floor of a residential building and will have excellent views of Monterey Bay and the surrounding area. Because of its unique location, it is conservatively assumed that it could be open for breakfast. On that basis, morning restaurant trips are included by prorating the ratio of high-turnover sit-down restaurant morning and evening peak hour trips and applying this ratio to the quality restaurant evening peak hour trips.

The project site is occupied by 20 existing businesses. These are listed with estimates of their associated daily, morning peak hour and evening peak hour trip rates on **Exhibit 6B**. Their locations on the project site are included on **Exhibit 6C**. These businesses are estimated to generate about 667 daily trips, with 49 during the morning peak hour and 65 during the evening peak hour.

None of the existing businesses will remain on the site upon development of the project. Their traffic will no longer be generated from the project site. It is therefore reasonable to credit the project traffic generation by deducting existing traffic generated by the site to arrive at a net project traffic generation. This would result in about a 15% reduction in project impacts. However, these businesses will presumably relocate and continue to operate elsewhere in the greater Monterey Peninsula. Some may relocate to other places in Sand City. However, Sand City is in the process of completing a vibrancy plan that will result in a transition away from contractor yards to providing more residential uses as well as retail, entertainment and visitor serving uses. On that basis most of the existing businesses will likely relocate outside of Sand City.

To be conservative, a credit of only 30% is given for existing uses. The resulting project net traffic generation is estimated to include 4,795 daily trips with 358 (131 in and 227 out) during the morning peak hour and 413 (250 in and 163 out) during the evening peak hour as tabulated on the bottom row of **Exhibit 6A**.

3.3 Project Trip Distribution and Assignment

Exhibit 7 depicts the trip distribution for the project. This distribution was derived based upon likely destinations of the guests and residents of the site and complementary land uses. The trip distribution was combined with the trip generation to derive the project trip assignment also depicted on **Exhibit 7**. The trip assignment was added to the existing traffic volumes to create the Existing Plus Project volumes depicted on **Exhibit 8**.

3.4 Existing Plus Project Condition Traffic Circulation and Mitigations

Vehicle Circulation

Existing Plus Project intersection levels of service are summarized on **Exhibit 5A**. The LOS calculation sheets for Existing Plus Project conditions can be found in **Appendix E**.

All study intersections that operate acceptably under existing conditions will continue to operate acceptably with the project. The four study intersections that operate deficiently under existing conditions will continue to operate deficiently with the project.

The project will represent an increase in delay at the already-deficient Intersection #2 (Fremont Boulevard – SR 1 Ramps / Monterey Road) of 0.2 and 1.3 seconds in the AM and PM peak hours respectively. It will remain at LOS D. The increases in delay at this intersection will be less than the 2.0 second increase in delay threshold considered significant. No additional improvements are required at this intersection beyond those recommended under Existing conditions.

Intersection #19 (Canyon del Rey-SR 218 / Del Monte Boulevard) currently operates deficiently. Project traffic will cause it to experience an increase in delay of 0.0 seconds in the AM peak hour and 0.6 seconds in the PM peak hour and will remain at LOS E in the AM peak hour and D in the PM peak hour. The increases in delay at this intersection will be less than the 1.0 second delay threshold for LOS E and 2.0 second threshold considered significant. No additional improvements are required at this intersection beyond those recommended under Existing conditions.

However, the following intersections will require mitigation of Project impacts.

1. Intersection #3: Fremont Boulevard / Del Monte Boulevard – Military Avenue – The Northbound Del Monte Boulevard (Side Street) approach will continue to operate at LOS F during the PM peak hour. The project will increase the delay from the existing 25.2 seconds of delay to 30.4 seconds of delay, which

exceeds the 2.0 second threshold considered significant. As a part of the interchange project described for the Fremont Boulevard – SR 1 Ramps / Monterey Road intersection, this intersection will be combined with Military Avenue and signalized. An interim improvement is a half signal. A half signal would control the eastbound Fremont Boulevard approach and the northbound Del Monte Boulevard approach but provide a continuous green on the westbound Fremont Boulevard approach. The exiting westbound left turn movement could remain prohibited. The Military Avenue leg could remain with its current configuration and stop control. Without either the long-term interchange modification or an interim half signal, the project will have a significant impact.

2. Intersection #17: Canyon del Rey Boulevard (SR 218) / Southbound SR 1 Ramps – The project will cause this this intersection to decline to an overall LOS F in the AM peak hour and LOS E in the PM peak hour. With the addition of a southbound Canyon del Rey (SR 218) right turn lane, the intersection will remain at LOS D in the AM peak hour. However, the delay would improve from the exiting 46.7 seconds of delay to 25.4 seconds of delay. This will more than offset the project impact at this intersection.

Pedestrian Circulation

The project is anticipated to generate pedestrian traffic, especially between the project site and the retail area north of Tioga Avenue. Based on current modal split in the area, the project will add about 50 daily pedestrian trips, which is about 1% of project daily traffic generation, to the nearby street system. There are no sidewalks between Tioga Avenue and the store entrances within the Sand Dollar Shopping Center. However, a low volume parking aisle exists along the eastern side of the Costco Store that accommodates pedestrians travelling between parked cars and the sidewalks along the Costco building. The project will provide sidewalks along both its Tioga Avenue and California Avenue frontages. Sidewalks will be provided on both sides of internal streets as well.

Pedestrian traffic will also be generated outside the project limits along the south side of Tioga Avenue between Del Monte Boulevard and Sand Dunes Drive as well as along the west side of California Avenue. Sidewalks are already provided along both streets.

Bicycle Circulation

The project is anticipated to generate bicycle traffic along Tioga Avenue between Del Monte Boulevard and Sand Dunes Drive and along California Avenue. Based on current modal split in the area, the project will add about 50 daily bike trips, which is about 1% of project daily traffic generation, to the nearby street system. The project is proposing to restripe Tioga Avenue along both sides of Tioga Avenue and California Avenue in the

immediate project vicinity to provide either a bike lane or a dedicated shoulder for bicycles.

Transit Circulation

The project is anticipated to generate transit usage by hotel employees and apartment residents. As discussed under the Existing Conditions section of this report, transit stops and a regional transit exchange are located within one-quarter of a mile from the project site.

3.5 TAMC Regional Development Impact Fee

The project would be responsible for payment of the TAMC Regional Development Impact Fee, which would represent the project's contribution towards regional highway and roadway improvements funded by the fee program. The project is designated as an infill area with reduced impact fees in the TAMC Regional Fee Infill Development Areas The City of Sand City will determine the exact fee attributable to this project in consultation with TAMC.

4 BACKGROUND CONDITIONS

This chapter describes Background Conditions, which includes estimated traffic conditions from projects that are approved but not yet built on the greater Monterey Peninsula (Sand City, Monterey, Seaside, Marina and Monterey County). This scenario does not include trips from the study project.

4.1 Background Traffic Volumes

A list of Background projects was obtained from each of the cities listed above. **Exhibit 9** summarizes their trip generation. The Approved projects will generate about 39,857 gross daily trips with 2,401 during the AM peak hour and 3,537 trips during the PM peak hour. Sand City and Seaside projects, which will most directly impact the study area, will generate about 13,227 daily trips with 637 during the AM peak hour and 982 during the PM peak hour. Background projects in the Cities of Monterey and Del Rey Oaks and the County of Monterey would add minimal traffic to the study street network. Highway 1 traffic increases from regional background growth are discussed in Chapter 7 - Freeway Operations.

The trips from these projects were distributed through the study intersections and added to the Existing traffic volumes to create the Background conditions traffic volumes depicted in **Exhibit 10**.

4.2 Background Traffic Circulation

Background conditions intersection levels of service are summarized on **Exhibit 5A**. The LOS calculation sheets for Background conditions are in **Appendix F**.

Most of the study intersections would continue to operate at or better than their respective levels of service standards under Background Conditions with the following exceptions.

1. Intersection #1: California Avenue / Northbound SR 1 Off Ramp-Monterey Road – This intersection will operate acceptably when considered as an isolated intersection. However, because it is only a clear distance of 100 feet from Fremont Boulevard, it affects the operation of the Fremont Boulevard / Monterey Road intersection. Consideration should be given to restriping the northbound Off-Ramp to add an eastbound left turn lane at California Avenue. This would improve the overall interchange operation. This can be accomplished with simple striping. Rather than this being a mitigation, it should be implemented either as a capital project by Caltrans and/or the City of Seaside, or incorporated into the larger interchange improvement described for Intersection #2.

2. Intersection #2: Fremont Boulevard-SR 1 Ramps / Monterey Road –The City of Seaside, TAMC and Caltrans level of service standard is LOS C. This intersection

will operate at an unacceptable LOS E during the PM peak hour (75.0 seconds of delay). In order to achieve long term acceptable levels of service at this intersection, interchange modifications have been identified and are described in the SR 1 Project Study Report (PSR), which Caltrans approved in 2002. Currently, this project is not fully funded. However, the project is included in the Regional Transportation Impact Fee Program, adopted by TAMC in 2008. It is also included in the Fort Ord Reuse Authority (FORA) impact fee program. Finally, it could be eligible for some additional funding through Measure X (the Monterey County Transportation and Investment Plan sales tax measure) or California Senate Bill 1 (fuel tax and vehicle registration fee increase). The largest part of the project is the construction of the new SR 1 / Monterey Road interchange. The proposed improvements at the existing intersection include:

a. Eliminating the east (Monterey Road) leg of the Fremont Boulevard/Monterey Road intersection,
b. Prohibiting left-turns from Fremont Boulevard to Monterey Road,
c. Realigning Monterey Road to connect with Fremont Boulevard at Military Avenue, and
d. Widening SR 1 in the vicinity of the Fremont Boulevard interchange.

Although a long-term project has been identified for this location, including several sources of funds, the interchange modification at the SR 1 / Fremont Boulevard interchange and construction of the new SR 1 / Monterey Road interchange do not have full funding. It is therefore uncertain when this major project will be implemented.

In the meantime, short term improvements at the Fremont Boulevard / Monterey Road intersection could be considered. These would include the addition of a northbound Fremont Boulevard right turn lane and a westbound Monterey Road left turn lane. With these intersection modifications, the intersection would operate at LOS D (35.6 seconds of delay in the AM peak hour and 41.1 seconds for delay in the PM peak hour).

An alternative improvement being considered by the City of Seaside in its current General Plan Update is the construction of a roundabout. The City will compare the benefits and costs associated with a roundabout option with other capacity enhancements and / or as a part of the future interchange modification project.

2. Intersection #3: Fremont Boulevard / Del Monte Boulevard – Military Avenue – This intersection will continue to operate at LOS F (284.4 seconds of delay) on the Del Monte Avenue approach. The delay will largely be able to be offset by the distinct gaps created in traffic on Fremont Boulevard, as discussed under Existing conditions. However, the delay will more than double from existing levels, which

will be unlikely to be offset by existing gaps in traffic. A half traffic signal that would only control southbound Fremont Boulevard traffic will mitigate the impact and result in LOS A.

3. Intersection #17: Canyon del Rey Boulevard (SR 218) / Southbound SR 1 Ramps – This intersection will operate with an overall LOS E in the AM and PM peak hours. With the addition of a southbound Canyon del Rey (SR 218) right turn lane to turn onto the southbound Highway 1 on-ramp, the intersection will improve to LOS D in the AM peak hour and LOS C in the PM peak hour. It appears that this lane can be added with some minor restriping which would involve relocating the centerline stripe perhaps 2 feet to the east, which would allow adding a channelizing stripe to create the southbound right turn lane.

4. Intersection #19: Canyon Del Rey Boulevard (SR 218) / Del Monte Boulevard – LOS E with an increase in delay of 1.5 seconds above Existing (AM), LOS D with an increase in delay of 7.5 seconds (PM). As described under the Existing Conditions section, the inclusion of right turn overlaps (right turn green arrows) on the four approaches would improve delay to 0.1 seconds better than existing in the AM and an increase of 2.3 seconds in the PM.

5 BACKGROUND PLUS PROJECT CONDITIONS

This chapter describes Background Plus Project traffic conditions, which includes Background Conditions plus anticipated traffic from the buildout of the proposed project.

5.1 Background Plus Project Traffic Volumes

The project trip assignment (**Exhibit 7**) was added to the Background Condition volumes (**Exhibit 10**) to create Background Plus Project Condition volumes shown in **Exhibit 11**.

5.2 Background Plus Project Traffic Circulation

Vehicle Circulation

Background Plus Project intersection levels of service are summarized on Exhibit 5A. The LOS calculation sheets for Background Plus Project conditions can be found in **Appendix G**. A comparison of Background Plus Project conditions with the Existing Plus Project and Background scenarios on **Exhibits 5A** (Intersection Levels of Service) and **5B** (Recommended Intersection Improvements) indicate that no additional impacts or mitigations will result beyond those identified in the combination of the two preceding scenarios.

Intersection #17: Canyon del Rey Boulevard (SR 218) / Southbound SR 1 Ramps – This intersection will operate with an overall LOS F in the AM and PM peak hours. With the addition of a southbound Canyon del Rey (SR 218) right turn lane as described in the earlier development scenarios, the intersection will improve to LOS D (42.3 seconds of delay, which is better than the existing 46.7 seconds of delay) in the AM peak hour and LOS C in the PM peak hour. It appears that this lane can be added with some minor restriping which would involve relocating the centerline stripe perhaps 2 feet to the east, which would allow adding a channelizing stripe to create the southbound right turn lane.

Intersection #7 – Del Monte Boulevard / La Salle Avenue will experience an increase in side street delay on La Salle Avenue to 56.1 seconds. This is slightly above the LOS E threshold of 55.0 seconds. The calculation of delay for a one-way (side street) stop-controlled intersection assumes a random arrival rate. However, distinct gaps are created in the traffic flow along Del Monte Boulevard by the existing traffic signals at Playa Avenue and Tioga Avenue. It is not anticipated that signal control will be warranted at this intersection.

Pedestrian Circulation

Pedestrian conditions under Background Plus Project conditions will not significantly change from Existing Plus Project conditions in the immediate project vicinity. The discussion and recommendations under Existing Plus Project section of this report apply under Background Plus Project.

Bicycle Circulation

Bicycle conditions under Background Plus Project conditions will not significantly change from Existing Plus Project conditions in the immediate project vicinity. The discussion and recommendations under Existing Plus Project section of this report apply under Background Plus Project.

Transit Circulation

Transit conditions under Background Plus Project conditions will not significantly change from Existing Plus Project conditions in the immediate project vicinity. The discussion and recommendations under Existing Plus Project section of this report apply under Background Plus Project.

6 CUMULATIVE CONDITIONS

This chapter describes Cumulative Conditions, which includes the West End project plus estimated traffic from projects that are proposed but not approved on the greater Monterey Peninsula (Sand City, Monterey, Seaside, Marina and Monterey County).

6.1 Derivation of Cumulative Traffic Volumes

A list of Cumulative projects was obtained from each of the cities listed above. **Exhibit 12** summarizes their trip generation. These projects will generate about 83,286 gross daily trips with 2,401 during the AM peak hour and 3,537 trips during the PM peak hour. Sand City and Seaside projects within the study area, will most directly impact the study area. This Development will generate about 8,598 daily trips with 816 during the AM peak hour and 724 during the PM peak hour. Cumulative projects in the Cities of Monterey and Del Rey Oaks, the County of Monterey and Fort Ord would add minimal traffic to the study local and arterial street network. Highway 1 traffic increases from regional cumulative growth are discussed in Chapter 7 - Freeway Operations.

The trips from these projects were distributed through the study intersections and added to the Background traffic volumes and the project trip assignment to create the Cumulative Conditions traffic volumes depicted in Exhibit 13.

No roadway improvements were assumed to be constructed as a part of the unmitigated cumulative analysis.

6.2 Cumulative Traffic Conditions and Mitigations

Vehicle Circulation

Cumulative Conditions AM and PM intersection levels of service are summarized on **Exhibit 5A**. The LOS calculation sheets for Cumulative traffic conditions can be found in **Appendix H**.

Intersection #7 – Del Monte Boulevard / La Salle Avenue will experience an increase in side street delay on La Salle Avenue to 56.1 seconds. This is only slightly above the LOS E threshold of 55.0 seconds. The calculation of delay for a one-way (side street) stop-controlled intersection assumes a random arrival rate. However, distinct gaps are created in the traffic flow along Del Monte Boulevard by the existing traffic signals at Playa Avenue and Tioga Avenue. The calculations are therefore conservative. It is not anticipated that signal control or other mitigation will be warranted at this intersection.

A comparison of Cumulative Conditions with the Background Plus Project scenario on **Exhibits 5A** (Intersection Levels of Service) and **5B** (Recommended Intersection Improvements) indicate that additional impacts and associated mitigations will be required

beyond those identified in the Background and Background Plus Project scenario for the following intersections.

1. Intersection #5 – California Avenue / Playa Avenue – This intersection will operate at LOS E in the PM peak hour. With signalization, the intersection will improve to LOS B. This improvement was identified as "Collection at Monterey Bay" project mitigation. The West End project should contribute a pro-rata share to this improvement.

2. Intersection #17: Canyon del Rey Boulevard (SR 218) / Southbound SR 1 Ramps – This intersection will operate with an overall LOS F in the AM and PM peak hours. With the addition of a southbound Canyon del Rey (SR 218) right turn lane to turn onto the southbound Highway 1 on-ramp as described in the earlier developments scenarios. In addition, a second northbound left turn lane will be needed on Canyon del Rey Boulevard. A second southbound Highway 1 on-ramp lane will be needed to receive traffic flows from the two northbound left turn lanes. With these improvements, the intersection will operate at LOS D (41.6 seconds of delay in the AM and 38.6 seconds of delay in the PM). The delay will be less than the existing delay of 46.7 seconds in the AM, but slightly worse than the existing delay of 34.2 seconds (LOS C) in the PM. The project will contribute to this cumulative impact, but the improvement should be included in the Highway 1 freeway widening project that will be partially funded by the TAMC regional development fee. Payment of the fee will be the project's fair-share contribution to this improvement.

3. Intersection #18: Canyon del Rey Boulevard (SR 218) / Northbound SR 1 Ramps – This intersection will operate with an overall LOS E in the AM and PM peak hours. This intersection will warrant signalization. A southbound Canyon del Rey (SR 218) left turn lane to turn onto the northbound Highway 1 on-ramp will also be required. In addition, the northbound right turn lane should be converted into a free right turn lane onto the outside southbound Canyon del Rey Boulevard through lane. With these improvements, the intersection will operate at LOS A in the morning peak hour and LOS B in the PM peak hour. The project will contribute to this cumulative impact, but the improvement should be included in the Highway 1 freeway widening project that will be partially funded by the TAMC regional development fee. Payment of the fee will be the project's fair-share contribution to this improvement.

4. Intersections #6, 14 and 15: Del Monte Boulevard / Playa Avenue and Del Monte Boulevard / Contra Costa Avenue – Broadway Avenue are expected to operate at acceptable levels of service and not require mitigation. However, the City of Seaside is considering converting these intersections to

roundabouts as a part of a City-wide effort to make the street system more pedestrian and bicycle friendly.

5. Intersection #19: Canyon Del Rey Boulevard (SR 218) / Del Monte Boulevard – LOS E with an increase in delay above Existing Conditions of 15.0 seconds above (AM), LOS E with an increase in delay of 28.0 seconds (PM). As described under the Existing Conditions section, the inclusion of right turn overlaps (right turn green arrows) on the four approaches would improve delay by 8.6 seconds compared to existing in the AM. The Cumulative PM will improve compared to the unmitigated condition, but drop from the existing LOS D to LOS E. The West End project should contribute a proportional share to cumulative impact mitigation.

Pedestrian Circulation

Pedestrian conditions under Cumulative Conditions will not significantly change from Background Plus Project conditions in the immediate project vicinity. The discussion and recommendations under the Background Plus Project section of this report apply under Cumulative Conditions.

Bicycle Circulation

Bicycle conditions under Cumulative Conditions will not significantly change from Background Plus Project conditions in the immediate project vicinity. The discussion and recommendations under the Background Plus Project section of this report apply under Cumulative Conditions.

Transit Circulation

Transit conditions under Cumulative Conditions will not significantly change from Background Plus Project conditions in the immediate project vicinity. The discussion and recommendations under the Background Plus Project section of this report apply under Cumulative Conditions.

7 FREEWAY OPERATIONS

This chapter describes the analysis of freeway operations on State Route 1 from south of the Canyon del Rey (SR 218) interchange to north of the Fremont Boulevard interchange.

7.1 Freeway Segment Analysis and Mitigations

The following freeway segments were analyzed.
1. South of Canyon del Rey Boulevard (SR 218)
2. Between Canyon del Rey Boulevard (SR 218) and Fremont Boulevard
3. North of Fremont Boulevard

Volumes along SR 1 were obtained from the 2015 Caltrans Traffic Volumes Book, with AM and PM peak hour volumes estimated by applying a growth factor to the AM and PM peak hour volumes from "The Collection at Monterey Bay Transportation Impact Analysis," Fehr and Peers, April, 2012. That study used 2010 traffic volumes, which have increased about 1.4% over the past five years, which is an annual increase of about 0.27%. The results of the segment analysis are presented in **Exhibit 14**.

The existing four-lane sections of SR 1 from south of Canyon del Rey Boulevard (SR 1) to the Fremont Boulevard interchange currently operate deficiently. This section operates at LOS F in the southbound direction during the AM peak hour and LOS E the northbound direction in the PM peak hour. This section of SR 1 has long been recognized as needing widening to a six-lane freeway. The widening project is included in the TAMC Regional Development Fee as well as the Fort Ord Reuse Authority development impact fee. Funding may also be available from other sources due to the ability to provide some matching funds from Measure X, the sales tax ballot measure passed in November, 2016.

The West End Sand City project will add about 1.8% to traffic on the four-lane section south of Canyon del Rey Boulevard (SR 1). Caltrans considers the addition of a single trip on a facility operating at LOS F to be a significant impact. The project will, therefore, create a significant impact on this facility.

As mitigation, the project will be required to pay TAMC regional traffic impact fees that will represent the project's pro-rata contribution to the improvement.

Traffic volumes will continue to increase with the addition of Background and Cumulative traffic. Increases in through traffic will also occur, and are estimated to approximate the growth rate over the past five years, or an increase of about 2% in 20 years. Overall, Background development will represent an increase of about 4% in traffic on SR 1. Cumulative development will represent an increase of an additional 7%. The total increase above existing expected over the next 20 years is about 14%. This will result in increased congestion along SR 1 in the vicinity of Sand City. The project's payment of TAMC regional impact fees is its pro-rata contribution to Cumulative impacts.

8 PROJECT ACCESS AND INTERNAL CIRCULATION

This section addresses Project access and internal circulation.

8.1 Project Access

As indicated in the Cumulative Conditions section of this report, the Tioga Avenue / California Avenue intersection will operate at an overall B Level of Service with the existing lane configuration and all-way stop control. No improvements will be required at this intersection, including changes in traffic control or number of travel lanes.

Left turn lane warrants for the proposed project driveways on Tioga Avenue and California Avenue are based on the Cumulative Conditions volumes included in **Appendix I**. Cumulative Conditions are the long term, highest volume condition that will occur along the project frontage. Accommodation of this scenario will accommodate all incremental conditions.

The Tioga Avenue / Project Driveway ("A" Street) intersection will not meet warrants for a westbound Tioga Avenue left turn lane under Cumulative Conditions. However, median left turn lanes are already provided on Tioga Avenue at both Metz Road and California Avenue (about 100 feet to the west of "A" Street and 250 feet to the west end of the eastbound left turn lane at California Avenue). The provision of a median westbound left turn lane at "A" Street will provide a continuous median along Tioga Avenue consistent with the median left turns lanes to the east and west. Although the left turn lane will not be warranted, it is preferable from a traffic operations standpoint to include it. Therefore, the project includes a left turn lane as illustrated on the project site plan on **Exhibit 2**.

Using the Caltrans guideline of providing left turn storage to accommodate two minutes of left turn peak hour volume (with a minimum of 50 feet), the westbound left turn lane should be a minimum of 50 feet in length. Preferably, the left turn lane should be 75 feet in length to include some deceleration and to provide a safety factor. The distance between "A" Street and California Avenue is about 300 feet. This can accommodate a 75-foot westbound left turn lane into "A" Street and a 100-foot eastbound left turn lane at California Avenue (a 70-foot left turn lane is currently provided) plus a 60-foot bay taper in each direction.

The proposed typical street sections along the project frontage on Tioga Avenue, California Avenue as well as the project's internal streets are included on **Exhibit 15**. These will provide acceptable traffic operations. Tioga Avenue will be able to accommodate bike lanes in both directions. California Avenue will be able to accommodate a southbound bike lane and a shoulder that will provide the equivalent of an intermittent bike lane.

The California Avenue / Project Driveway ("A" Street) intersection traffic volumes will be substantially below warrants for a northbound left turn lane on California Avenue. A left turn lane is, therefore, clearly not required at this location. This intersection will operate acceptably with a single lane on each approach. This analysis is conservative in that it assumes no traffic will use the East Street driveway at the southwest corner of the project.

The East Street driveway will carry about one-third of Residential Parcel R-2 traffic. This is a total of about project peak hour traffic volumes. This is a total of about 709 daily trips with 54 (11 in and 43 out) in the AM peak hour and 66 (43 in and 23 out) in the PM peak hour. These volumes will be very low and will be well within the capacity of East Street.

The internal street intersections with California Avenue and Tioga Avenue are designed with curb returns and crosswalks with bulb-outs. The layouts are adequate as proposed. Stop signs should be provided on each internal street approach to California Avenue and Tioga Avenue.

In conclusion, left turn lanes will not be warranted at either project driveway. However, the westbound Tioga Avenue left turn lane proposed as a part of the project will be beneficial and can be easily accommodated along Tioga Avenue. The typical street sections and left turn provisions proposed as a part of the project will provide acceptable long-term traffic operations along the project frontage on Tioga Avenue, California Avenue and East Street.

8.2 Project Internal Circulation

The project site plan included as **Exhibit 2** indicates that there will be two internal streets that intersect at 90 degrees with a roundabout. The project's Entitlement Set dated June 5, 2017 includes truck templates indicating adequate geometry for trucks. Crosswalks are proposed at the two legs of the roundabout as well as at the driveway intersection about 100 feet east of the roundabout. Bulb-outs are provided at each crosswalk. Adequate sight distance is provided at all internal driveways. Vertical and horizontal alignments of the two internal streets appear adequate. The internal circulation is adequate as proposed.

9 PROJECT PARKING

Project parking is proposed to comply with Chapter 18.64, "Parking and Loading Areas," of the City of Sand City Municipal Code. The Code requires one parking space for each hotel room, 1.5 parking spaces for each multi-family residential unit of two bedrooms or less and one space for each 50 square feet of seating area in the restaurant.

Land Use	Parking Requirement per Unit	Size	Gross Parking Space Requirement	Parking Provided
Hotel (H1)	1 per Room	135 Rooms	135	143
Hotel (H2)	1 per Room	81 Rooms	81	81
Condominium (R1)	1.5 per Unit	100 Units	150	151
Apartment (R2)	1.5 per Unit	320 Units	480	486
Restaurant	1 per 50 S.F. Seating Area	2,000S.F. Seating Area	40	
TOTAL			**886**	**861**
"A"Street Parking				**18**
TOTAL with"A" Street			**886**	**879**

Table 1 – Project Parking Requirement Summary

Based on the Sand City Municipal Code gross parking requirements the project has a parking deficiency of 25 spaces (886 gross spaces required and 861 spaces provided). However, this is partly offset by the 18 parking spaces proposed along "A" Street. Including these spaces in the parking supply results in a deficiency of 7 spaces (886 gross spaces required and 879 spaces provided). A total of 38 additional parking spaces will be developed by the project along the project's California Avenue and East Avenue frontages. However, these are not on-site spaces and are not included in the project's parking supply.

The project parking supply described above is the gross supply determined by the sum total of the individual gross parking requirements for each use. However, the peak demand will not occur at the same time for each of the uses, thus allowing the same parking space to be used by complementary nearby land uses at different times of day. This concept has been recognized in the land planning and parking industry for many years and is known as "Shared Parking." Shared parking is defined by the Urban Land Institute (ULI) as "the use of a parking space to serve two or more individual land uses without conflict or encroachment. The ability to share parking spaces is the result of two conditions:

1. variations in the accumulation of vehicles by hour, by day, or by season at the individual land uses, and
2. relationships among the land uses that result in visiting multiple land uses on the same auto trip."

   Source: Shared Parking, Urban Land Institute, 2005.

The Shared Parking publication provides default parking demand values by time of day for the different land uses included in the project. **Exhibit 16A** provides the parking demand by percentage of peak demand for each hour of a typical day. Exhibit 16B then tabulates the parking demand for each component of the project by time of day as well as provides a parking demand for the entire project by adding together all of the project components. The peak parking demand is expected to occur at 10pm with a total of 837 cars parked on-site. This is an overall parking occupancy of about 97% (24 vacant spaces throughout the project). The project, therefore, will provide and adequate supply of parking.

The following are several additional considerations to this analysis.

1. A parking occupancy of 97% has very little safety factor if considered by itself. Parking design, especially with five separate parking facilities, are typically considered to have a practical capacity at 85% to 90% occupancy. This leaves some spaces unoccupied to minimize vehicles circulating through the parking lot.
2. This is largely mitigated by the provision of 18 parking spaces on "A" Street. These are technically off-site spaces, but are within the bounds of the project and will be used exclusively by the project. Including these spaces in the project parking supply results in an overall parking occupancy of 91%.
3. Hotel H1 demand at 9pm and 10 pm, respectively, will be about 105 and 103 spaces, assuming full occupancy. Available spaces will total 40 spaces at 9 pm and 38 spaces at 10 pm, which matches the restaurant parking demand at those hours. The restaurant parking should be provided at Hotel H1.
4. The hotel parking demand assumes full occupancy. Average occupancy will be in about 70%, based on local Monterey Peninsula hotel occupancy data. Offsetting this, however, is the low parking requirement for the hotels of only 1 space per room. This provides a minimal parking allowance for hotel employees. Employees generate .2 parking spaces during the day shift, but only about .05 parking spaces per room during the late evening project peak parking demand. Overall, typical hotel parking demand at the time of project peak demand will be about 20% lower than the demand indicated on **Exhibit 16B**. This will typically imply that as many as 30 additional spaces will be available at Hotel H1.
5. The ULI quote above described two phenomena that contribute to shared parking. The first is complementary times of peak parking demand. The second is visiting multiple land uses in the same auto trip. In the case of the West End project, hotel guests and residents of the condominiums and apartments will be able to walk to the restaurant while occupying their hotel room or dwelling unit. These restaurant patrons will already be counted as a parked vehicle. Assuming 20% of restaurant

patrons are hotel guests, 20 will be parked already at the hotel. Assuming 2.5 persons per vehicle, this represents 4 parked cars. Assuming an equal number of residents adds 4 more parked cars already on-site. Reducing the parking demand by 8 cars is approximately 1% of the parking demand.

6. In conclusion, the proposed parking supply will accommodate the parking demand. Accounting for "A" Street parking in the parking supply and the captured parking from residents and hotel guests results in a safety factor with the normal allowances recognized in the parking industry during full occupancy of the two hotels. Conditions with less than full occupancy will have more than adequate parking.

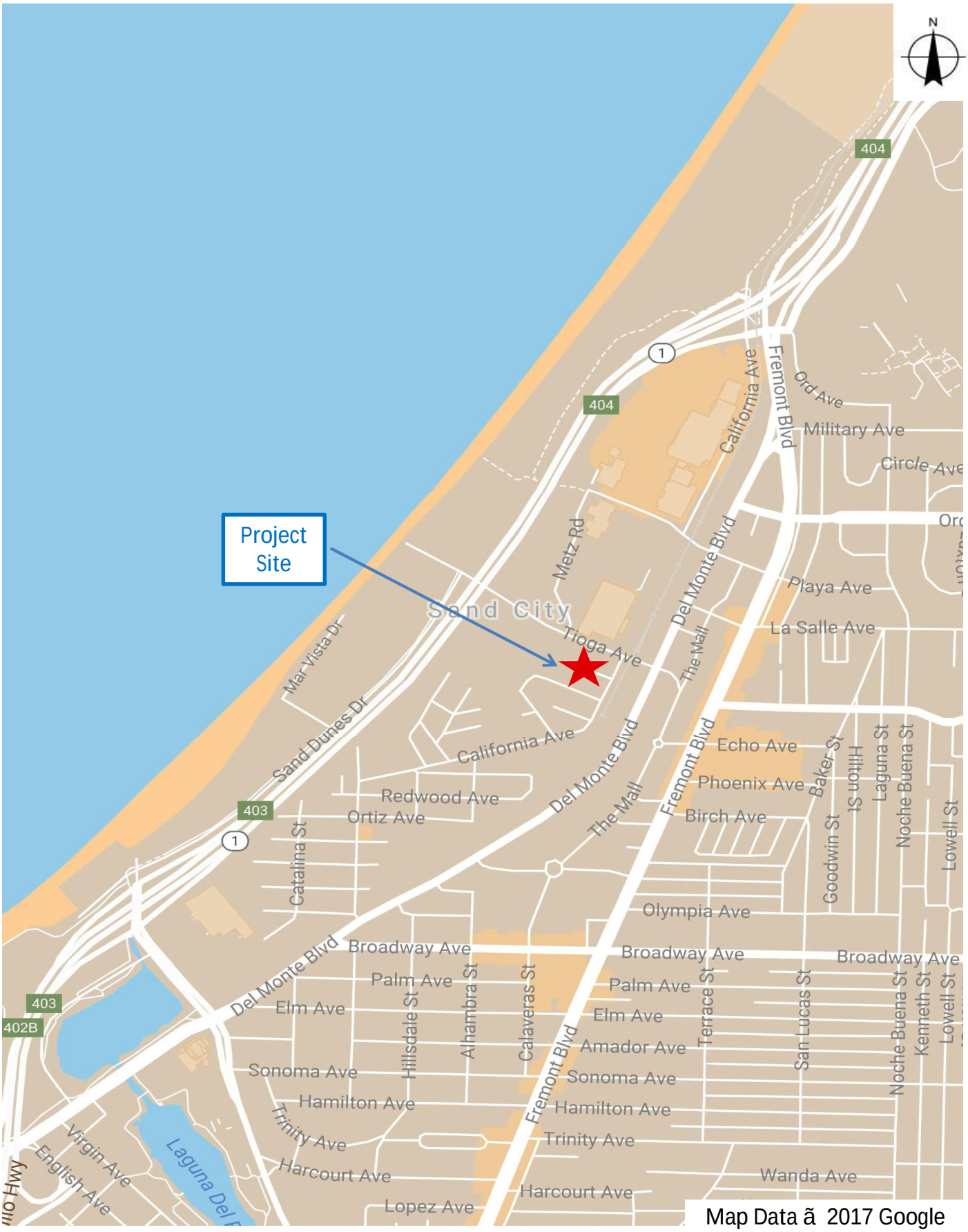
10 REFERENCES

10.1 List of References

1. *2010 Highway Capacity Manual,* Transportation Research Board, 2010.
2. *City of Seaside General Plan,* Cotton/Bridges/Associates, Adopted August 5, 2004.
3. Monterey-Salinas Transit web site, http://www.mst.org. Accessed August 10, 2017.
4. *Regional Fee Implementation Guidelines,* Transportation Agency for Monterey County, Updated October 28, 2009.
5. *Trip Generation Manual,* 9th Edition, Institute of Transportation Engineers, 2012.
6. *Seaside Senior Assisted Living*, Seaside, California, Hatch Mott MacDonald, October 8, 2015.
7. *The Collection at Monterey Bay Transportation Impact Analysis, Fehr & Peers, April, 2012*
8. *Focused Transportation Impact Analysis for the Proposed Monterey Bay Shores Resort Project in Sand City, California, Fehr & Peers, August 1, 2008*
9. *Traffic Impact Analysis – In-N-Out Burger Drive Through Restaurant, Seaside, California, March, 2011*
10. *Costco Gas Station Traffic and Circulation Study, Sand City, California, Associated Transportation Engineers, February 12, 2013*
11. *Regional Roundabout Study - Sand City for the Transportation Agency for Monterey County, Kittleson & Associates, 2016*
12. *Shared Parking*, 2nd Edition, Urban Land Institute, 2005

10.2 List of Contacts

1. Matt Nohr, DBO Development No. 30 Project Manager, Monterey, California
2. Charles Pooler, City of Sand City Planning Department, Sand City, California
3. Richard James, EMC Planning Group, Monterey, California
4. Rick Medina, Seaside Senior Planner, Seaside, California
5. Andy Hunter and Rich Weber, Whitson Engineers, Project Civil Engineer, Monterey, California



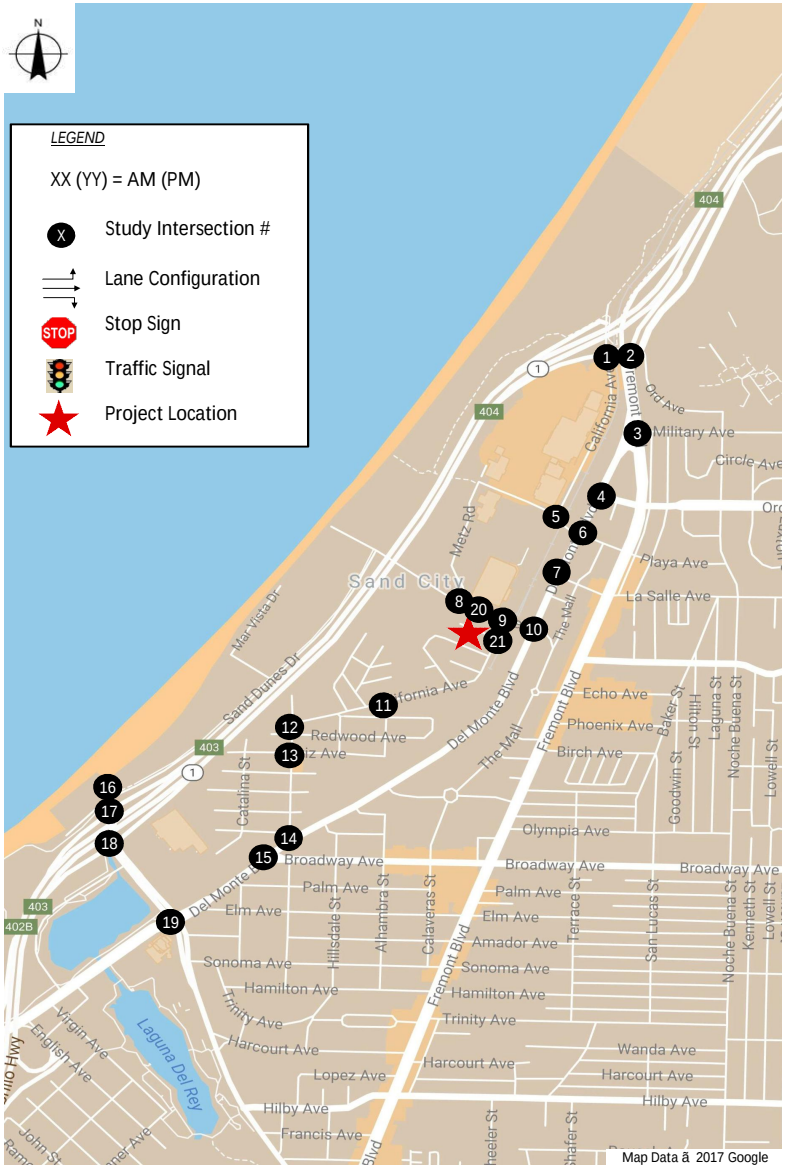
Keith Higgins
Traffic Engineer

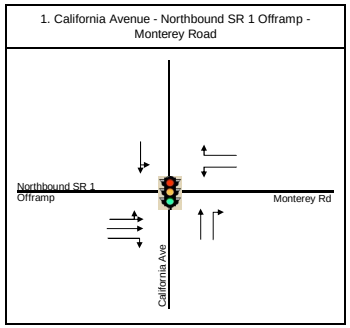
Exhibit 1
Project Location Map

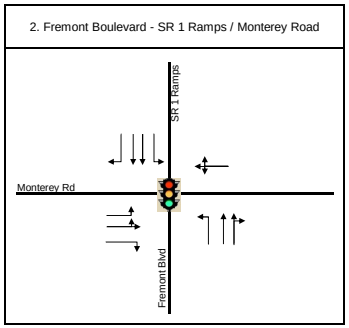
Source: TCA Architects, June 5, 2017. North arrow added by Mott MacDonald.

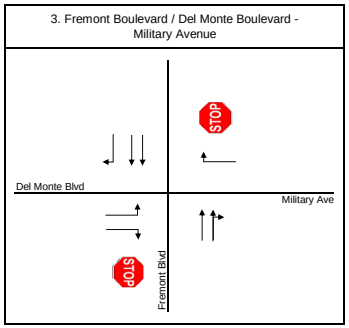
Exhibit 2
Project Site Plan

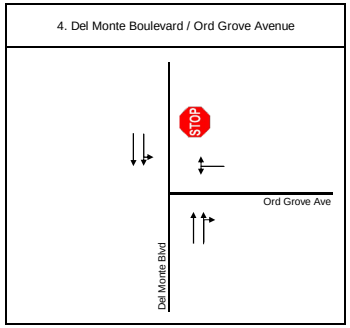
Keith Higgins
Traffic Engineer

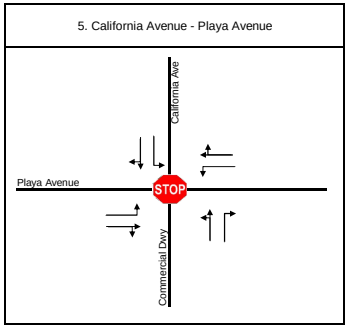


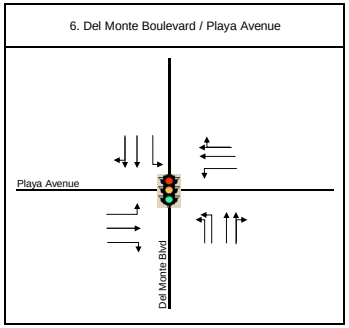


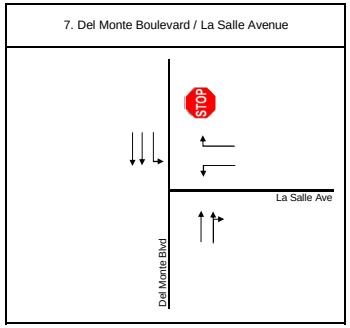


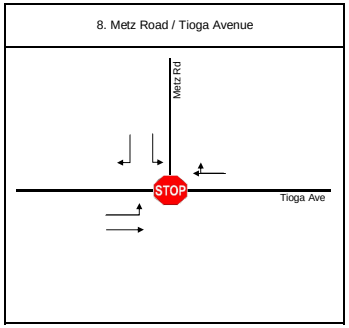


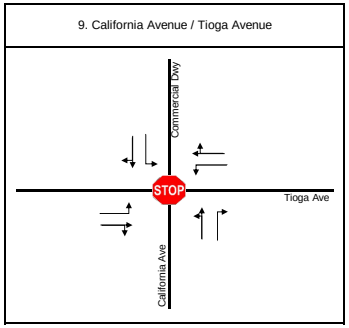












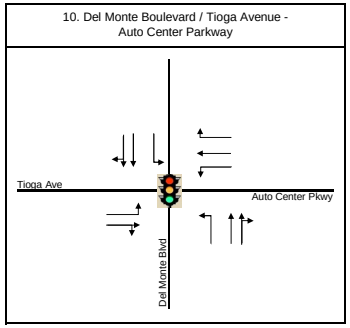
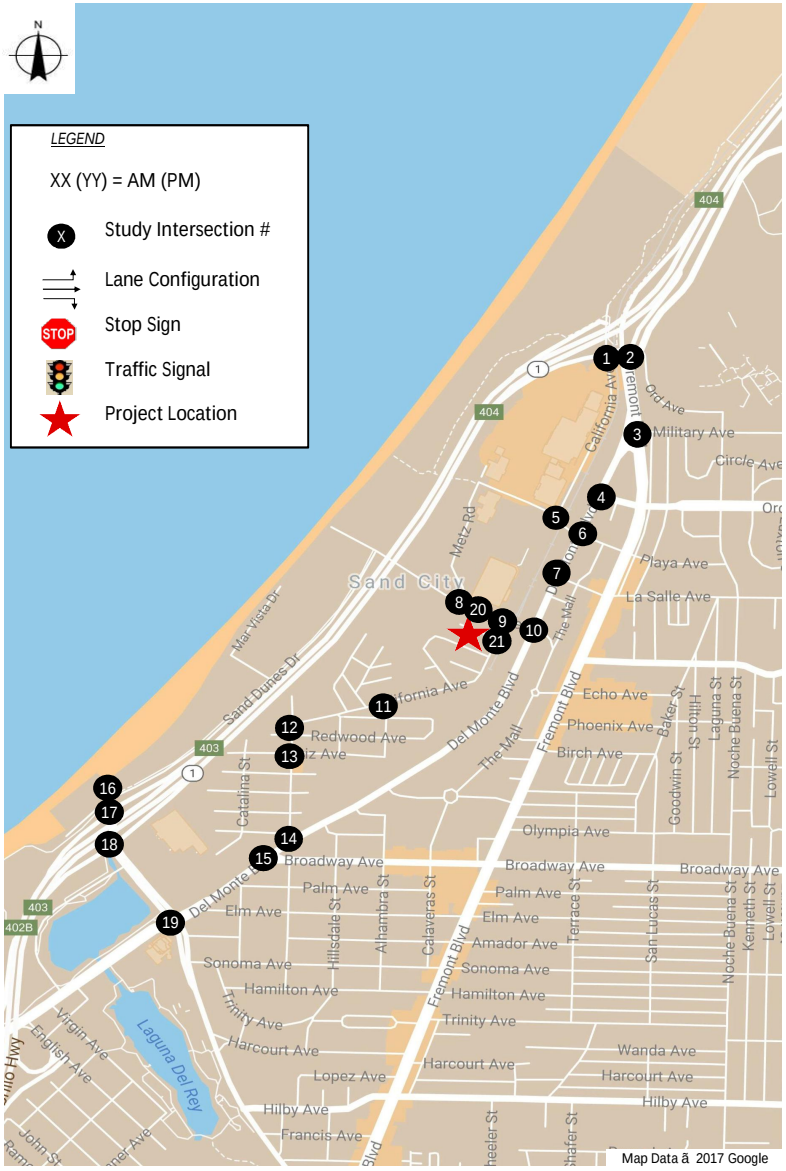
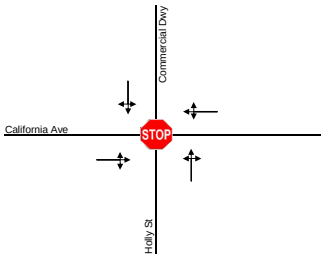


Exhibit 3
Intersection Traffic Control
and Lane Configurations
(Part 1 of 2)

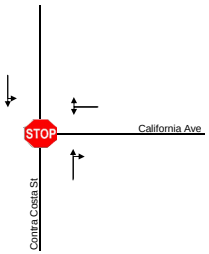
Keith Higgins
Traffic Engineer



11. Holly Street / California Avenue



12. Contra Costa Street / California Avenue



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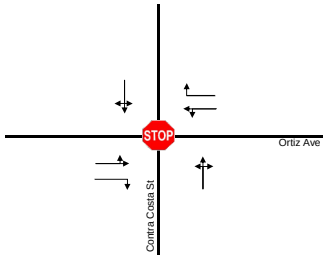
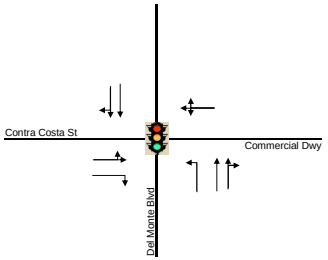
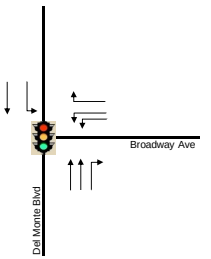


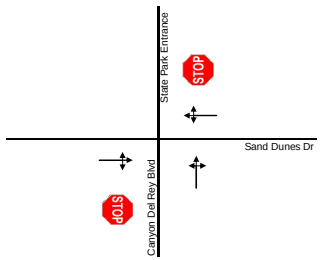
14. Del Monte Boulevard / Contra Costa Street



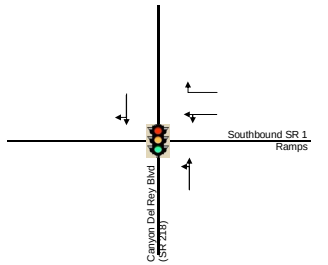
15. Del Monte Boulevard / Broadway Avenue



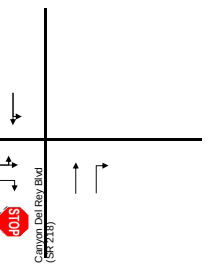
16. Canyon Del Rey Boulevard / Sand Dunes Drive



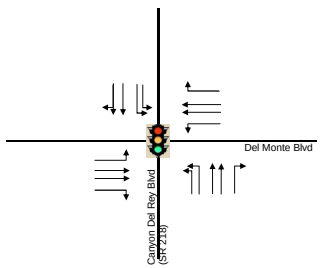
17. Canyon Del Rey Boulevard (SR 218) / Southbound SR 1 Ramps



18. Canyon Del Rey Boulevard (SR 218) / Northbound SR 1 Ramps



19. Canyon Del Rey Boulevard (SR 218) / Del Monte Boulevard



20. Project Driveway (North) / Tioga Avenue

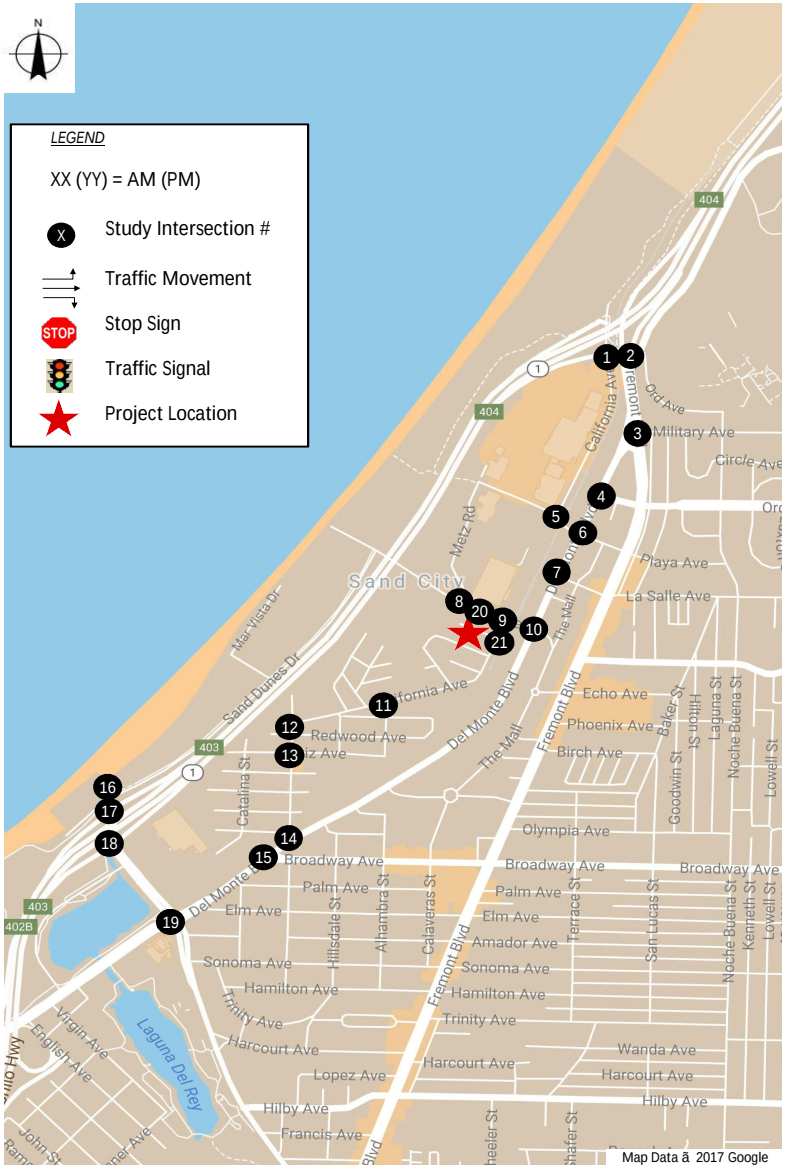
N/A
(Does not exist
under this scenario)

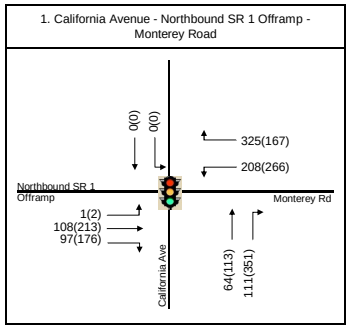
21. California Ave / Project Driveway (East)

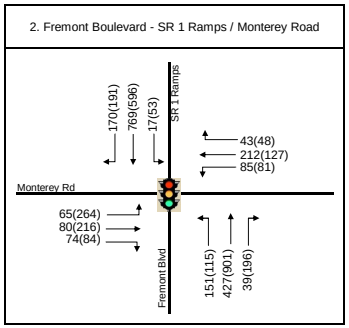
N/A
(Does not exist
under this scenario)

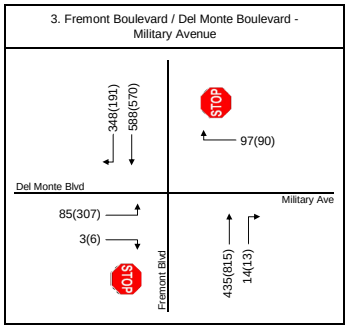
Exhibit 3
Intersection Traffic Control
and Lane Configurations
(Part 2 of 2)

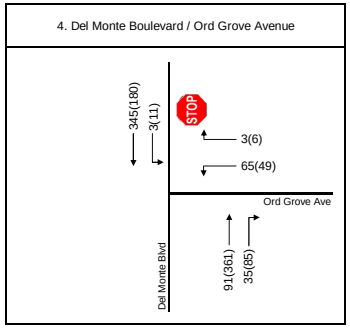
Keith Higgins
Traffic Engineer

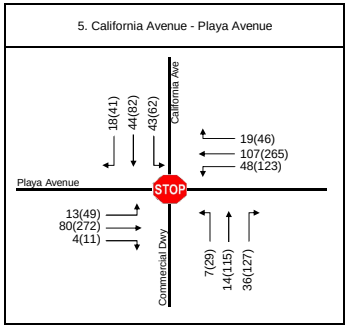


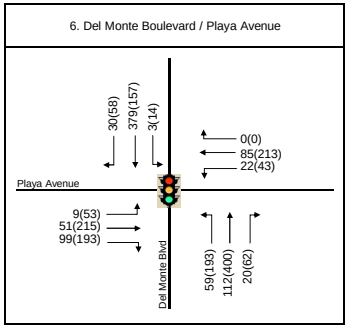


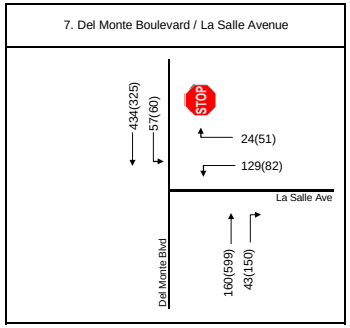


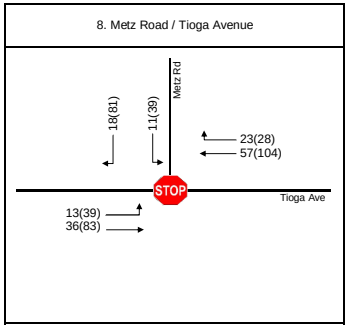


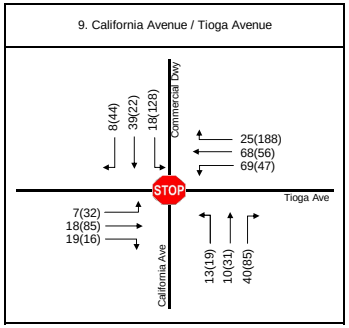












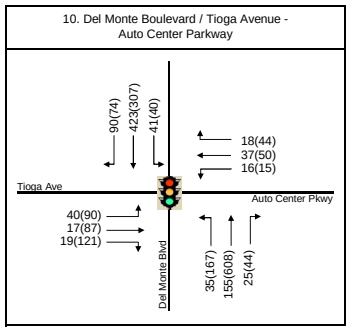


Exhibit 4

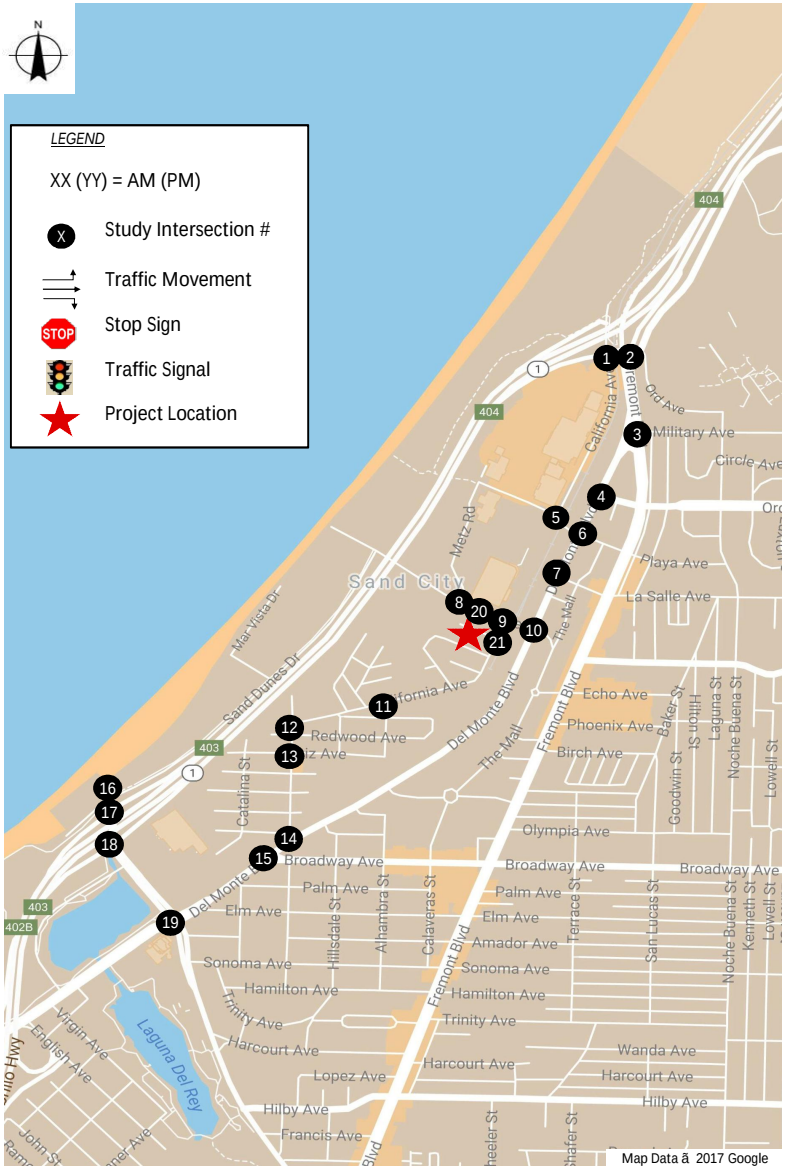
Existing Conditions

AM & PM Peak Hour Volumes

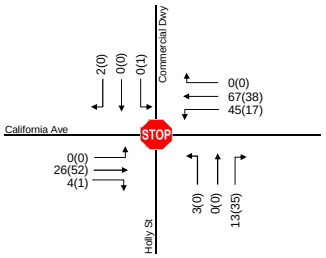
(Part 1 of 2)

Keith Higgins

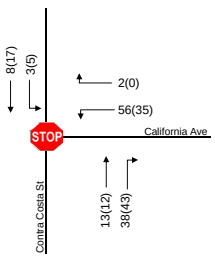
Traffic Engineer



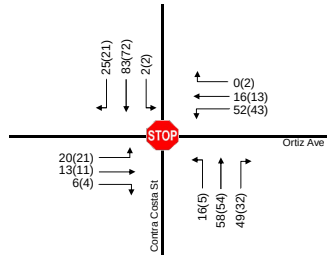
11. Holly Street / California Avenue



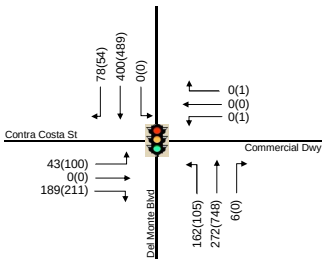
12. Contra Costa Street / California Avenue



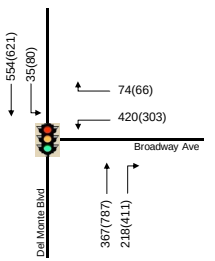
13. Contra Costa Street / Ortiz Avenue



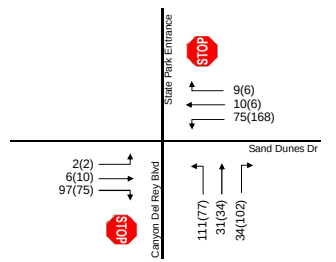
14. Del Monte Boulevard / Contra Costa Street



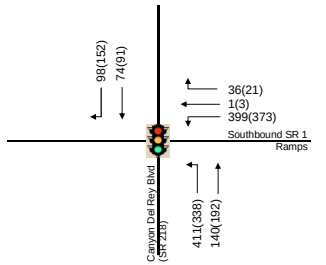
15. Del Monte Boulevard / Broadway Avenue



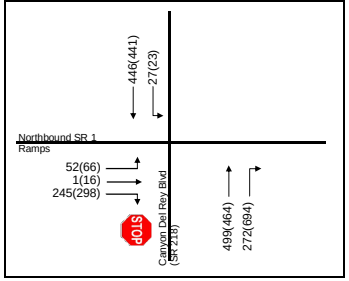
16. Canyon Del Rey Boulevard / Sand Dunes Drive



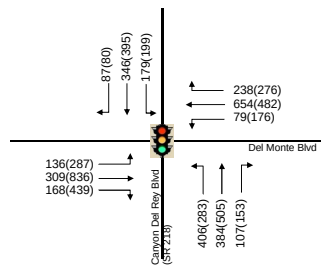
17. Canyon Del Rey Boulevard (SR 218) / Southbound SR 1 Ramps



18. Canyon Del Rey Boulevard (SR 218) / Northbound SR 1 Ramps



19. Canyon Del Rey Boulevard (SR 218) / Del Monte Boulevard



20. Project Driveway (North) / Tioga Avenue

N/A
(Does not exist
under this scenario)

21. California Ave / Project Driveway (East)

N/A
(Does not exist
under this scenario)

Exhibit 4
Existing Conditions
AM & PM Peak Hour Volumes
(Part 2 of 2)

Keith Higgins
Traffic Engineer

	N-S Street	E-W Street	Existing Intersection Control	LOS Stnd.	Peak Hour	Existing Conditions Delay (sec)	Existing Conditions LOS	Existing Plus Project Conditions Delay (sec)	Existing Plus Project Conditions LOS	Background Conditions Delay (sec)	Background Conditions LOS	Background Plus Project Conditions Delay (sec)	Background Plus Project Conditions LOS	Cumulative Conditions Delay (sec)	Cumulative Conditions LOS
1	California Avenue	Northbound SR 1 Offramp - Monterey Road	Signal	C/D	AM	5.7	A	5.7	A	5.8	A	5.9	A	6.5	A
					PM	7.2	A	7.3	A	7.6	A	7.9	A	9.7	A
			With Improvement		AM									*6.1*	*A*
					PM									*8.7*	*A*
2	Fremont Boulevard - SR 1 Ramps	Monterey Road	Signal	C/D	AM	35.3	D	35.5	D	53.9	D	**56.3**	**E**	**180.6**	**F**
					PM	37.8	D	39.1	D	75.0	E	**76.6**	**E**	**469.7**	**F**
			With Improvement		AM	*29.0*	*C*			*35.6*	*D*	*39.0*	*D*	*18.1*	*B*
					PM	*28.6*	*C*			*41.1*	*D*	*45.0*	*D*	*24.7*	*C*
3	Fremont Boulevard	Del Monte Boulevard - Military Avenue	Two-Way Stop	C (E/E)	AM	2.3 (20.9/10.5)	A (C/B)	2.9 (22.9/10.5)	A (C/B)	3.5 (26.2/10.6)	A (D/B)	4.2 (29.6/10.6)	A (D/B)	**13.9 (92.6/11.8)**	**B (F/B)**
					PM	25.2 (141.4/12.7)	D (F/B)	**30.4 (164.2/12.7)**	**D (F/B)**	55.9 (284.4/13.0)	F (F/B)	**63.7 (313.3/13.0)**	**F (F/B)**	**167.1 (856.4/14.6)**	**F (F/B)**
			With Improvement		AM	*4.6*	*A*	*5.1*	*A*	*5.5*	*A*	*5.6*	*A*	*16.4*	*B*
					PM	*6.8*	*A*	*7.0*	*A*	*7.7*	*A*	*7.8*	*A*	*29.6*	*C*
4	Del Monte Boulevard	Ord Grove Avenue	One-Way Stop	C (E)	AM	1.5 (11.5)	A (B)	1.5 (12.0)	A (B)	1.4 (12.5)	A (B)	1.4 (13.1)	A (B)	1.3 (15.2)	A (C)
					PM	1.3 (14.1)	A (B)	1.4 (14.9)	A (B)	1.2 (16.2)	A (C)	1.3 (17.3)	A (C)	1.4 (20.7)	A (C)
5	California Avenue	Playa Avenue	All-Way Stop	D	AM	9.0	A	9.3	A	9.5	A	9.9	A	10.7	B
					PM	17.4	C	19.2	C	22.3	C	26.1	D	**49.0**	**E**
			With Improvement		AM									*11.7*	*B*
					PM									*17.6*	*B*
6	Del Monte Boulevard	Playa Avenue	Signal	C	AM	13.9	B	13.9	B	14.2	B	14.3	B	15.0	B
					PM	19.4	B	20.2	C	21.8	C	22.7	C	28.0	C
7	Del Monte Boulevard	La Salle Avenue	One-Way Stop	C (E)	AM	3.5 (16.7)	A (C)	3.7 (18.8)	A (C)	3.9 (19.8)	A (C)	4.1 (22.7)	A (C)	4.9 (31.5)	A (D)
					PM	2.9 (23.2)	A (C)	3.2 (27.0)	A (D)	3.6 (31.4)	A (D)	6.0 (56.1)	A (F)	5.4 (55.5)	A (F)
8	Metz Road	Tioga Avenue	All-Way Stop	D	AM	7.6	A	8.4	A	7.8	A	8.7	A	8.9	A
					PM	8.2	A	9.1	A	8.5	A	9.5	A	9.8	A
9	California Avenue	Tioga Avenue	All-Way Stop	D	AM	8.5	A	9.5	A	8.8	A	9.9	A	10.0	A
					PM	10.4	B	11.9	B	11.1	B	13.0	A	14.2	B
10	Del Monte Boulevard	Tioga Avenue - Auto Center Parkway	Signal	C	AM	12.4	B	14.7	B	13.8	B	15.9	B	16.7	B
					PM	17.7	B	19.2	B	20.5	C	24.7	C	31.6	C

Notes:

1. LOS Stnd. = Level of Service Standard.
2. Actual traffic control at this intersection has stop signs on just southbound and westbound movements. However, this type of traffic control is not supported by the 2010 Highway Capacity Manual methodologies. Therefore, this intersection has been analyzed as an all-way stop intersection, resulting in a more conservative analysis.
3. XX (YY) = Overall (Side Street).
4. N/A = Not Applicable. Intersection does not exist under this scenario.
5. Analysis performed using *2010 Highway Capacity Manual* methodologies.
6. Overall level of service standard for the City of Sand City is LOS D. Overall level of service standard for the City of Seaside is LOS C. Overall level of service standard for Caltrans is the transition between LOS C and LOS D (LOS C/D).
7. ! = Delay exceeds ability for 2010 HCM to quantify.
8. Worst approach level of service standard is generally LOS E. Level of service "F" is the level of service at which improvements would normally be required.
9. Above delays and levels of service are summarized from calculations in appendix.
10. Items in **bold** represent significant impacts.

Keith Higgins
Traffic Engineer

Exhibit 5A
Intersection
Levels of Service
(1 of 2)

	N-S Street	E-W Street	Existing Intersection Control	LOS Stnd.	Peak Hour	Existing Conditions		Existing Plus Project Conditions		Background Conditions		Background Plus Project Conditions		Cumulative Conditions	
						Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
11	Holly Street	California Avenue	All-Way Stop	D	AM	7.7	A	7.8	A	7.7	A	7.9	A	8.0	A
					PM	7.4	A	7.5	A	7.4	A	7.6	A	7.8	A
12	Contra Costa Street	California Avenue	All-Way Stop[2]	D	AM	7.3	A	7.3	A	7.3	A	7.4	A	7.5	A
					PM	7.1	A	7.2	A	7.2	A	7.2	A	7.4	A
13	Contra Costa Street	Ortiz Avenue	All-Way Stop	D	AM	8.5	A	8.5	A	8.6	A	8.7	A	8.8	A
					PM	8.0	A	8.0	A	8.0	A	8.1	A	8.3	A
14	Del Monte Boulevard	Contra Costa Street	Signal	C	AM	9.8	A	9.7	A	9.5	A	9.5	A	10.4	B
					PM	8.8	A	8.7	A	8.9	A	8.8	A	10.2	B
15	Del Monte Boulevard	Broadway Avenue	Signal	C	AM	10.8	B	11.1	B	11.9	B	12.2	B	14.2	B
					PM	10.2	B	10.4	B	11.8	B	12.1	B	14.4	B
16	Canyon Del Rey Boulevard	Sand Dunes Drive	Two-Way Stop	C (E/E)	AM	8.8 (9.4/15.9)	A (A/C)	12.5 (9.5/25.2)	B (A/D)	9.0 (9.4/17.6)	A (A/C)	14.1 (9.5/30.4)	B (A/D)	14.6 (9.5/32.2)	B (A/D)
					PM	8.2 (9.3/14.1)	A (A/B)	9.1 (9.5/17.8)	A (A/C)	8.6 (9.4/15.5)	A (A/C)	10.1 (9.5/20.5)	B (A/C)	10.6 (9.6/22.3)	B (A/C)
17	Canyon Del Rey Boulevard (SR 218)	Southbound SR 1 Ramps	Signal	C/D	AM	46.7	D	**99.3**	**F**	64.6	E	**124.5**	**F**	**156.5**	**F**
					PM	34.2	C	**68.0**	**E**	56.7	E	**103.4**	**F**	**169.9**	**F**
			With Improvement		AM	*36.3*	*D*	*35.4*	*D*	*39.0*	*D*	*42.3*	*D*	*41.6*	*D*
					PM	*26.6*	*C*	*25.4*	*C*	*26.9*	*C*	*28.8*	*C*	*38.6*	*D*
18	Canyon Del Rey Boulevard (SR 218)	Northbound SR 1 Ramps	One-Way Stop	C/D (E)	AM	3.7 (18.1)	A (C)	4.9 (22.0)	A (C)	4.6 (21.1)	A (C)	6.7 (28.2)	A (D)	9.0 (36.3)	A (E)
					PM	3.8 (19.6)	A (C)	6.6 (28.7)	A (D)	5.5 (25.6)	A (D)	11.7 (47.1)	A (E)	**22.2 (86.9)**	**C (F)**
			With Improvement		AM									*9.9*	*A*
					PM									*10.1*	*B*
19	Canyon Del Rey Boulevard (SR 218)	Del Monte Boulevard	Signal	C/D	AM	58.3	E	58.3	E	59.8	E	60.2	E	**73.3**	**E**
					PM	45.4	D	46.0	D	53.0	D	54.0	D	**73.4**	**E**
			With Improvement		AM	*57.0*	*E*			*58.2*	*E*			*46.7*	*D*
					PM	*42.2*	*D*			*47.7*	*D*			*58.0*	*E*
20	Project Driveway (North)	Tioga Avenue	N/A	C (E)	AM	N/A		4.1 (10.2)	A (B)	N/A		3.7 (10.5)	A (B)	3.5 (10.7)	A (B)
					PM			2.7 (11.9)	A (B)			2.4 (13.0)	A (B)	2.4 (13.1)	A (B)
			With Improvement		AM										
					PM										
21	California Avenue	Project Driveway (East)	N/A	C (E)	AM	N/A		3.4 (10.8)	A (B)	N/A		3.2 (11.0)	A (B)	3.2 (11.0)	A (B)
					PM			2.8 (11.2)	A (B)			2.6 (11.6)	A (B)	2.6 (11.7)	A (B)
			With Improvement		AM										
					PM										

Notes:

1. LOS Stnd. = Level of Service Standard.
2. Actual traffic control at this intersection has stop signs on just southbound and westbound movements. However, this type of traffic control is not supported by the 2010 Highway Capacity Manual methodologies. Therefore, this intersection has been analyzed as an all-way stop intersection, resulting in a more conservative analysis.
3. XX (YY) = Overall (Side Street).
4. N/A = Not Applicable. Intersection does not exist under this scenario.
5. Analysis performed using *2010 Highway Capacity Manual* methodologies.
6. Overall level of service standard for the City of Sand City is LOS D. Overall level of service standard for the City of Seaside is LOS C. Overall level of service standard for Caltrans is the transition between LOS C and LOS D (LOS C/D).
7. ! = Delay exceeds ability for 2010 HCM to quantify.
8. Worst approach level of service standard is generally LOS E. Level of service "F" is the level of service at which improvements would normally be required.
9. Above delays and levels of service are summarized from calculations in appendix.

Items in **bold** represent significant impacts.

Keith Higgins
Traffic Engineer

Exhibit 5A
Intersection
Levels of Service
(2 of 2)

	N-S Street	E-W Street	Existing Intersection Control	Existing Conditions	Existing Plus Project Conditions	Background Conditions	Background Plus Project Conditions	Cumulative Conditions
1	California Avenue	Northbound SR 1 Offramp - Monterey Road	Signal	None Required	None Required	Consider Restriping EB L	Consider Restriping EB L	a. Implement Project Study Report Improvements b. Consider Restriping EB L
2	Fremont Boulevard - SR 1 Ramps	Monterey Road	Signal	Add NB R, WB L	None Required	Add NB R, WB L	Add NB R, WB L	Implement Project Study Report Improvements
3	Fremont Boulevard	Del Monte Boulevard - Military Avenue	Two-Way Stop	Signalize Intersection (Half Signal)	Signalize Intersection (Half Signal)	Signalize Intersection (Half Signal)	Signalize Intersection (Half Signal)	Implement Project Study Report Improvements
4	Del Monte Boulevard	Ord Grove Avenue	One-Way Stop	None Required	None Required	None Required	None Required	None Required
5	California Avenue	Playa Avenue	All-Way Stop	None Required	None Required	None Required	None Required	Signalize Intersection
6	Del Monte Boulevard	Playa Avenue	Signal	None Required	None Required	None Required	None Required	None Required
7	Del Monte Boulevard	La Salle Avenue	One-Way Stop	None Required	None Required	None Required	No Improvement	No Improvement
8	Metz Road	Tioga Avenue	All-Way Stop	None Required	None Required	None Required	None Required	None Required
9	California Avenue	Tioga Avenue	All-Way Stop	None Required	None Required	None Required	None Required	None Required
10	Del Monte Boulevard	Tioga Avenue - Auto Center Parkway	Signal	None Required	None Required	None Required	None Required	None Required

Notes:

1. Actual traffic control at this intersection has stop signs on just southbound and westbound movements. However, this type of traffic control is not supported by the 2010 Highway Capacity Manual methodologies. Therefore, this intersection has been analyzed as an all-way stop intersection, resulting in a more conservative analysis.
2. N/A = Not Applicable. Intersection does not exist under this scenario.
3. L, T, R, EB, WB, NB, SB, SR, TWLTL, Accel., RTO = Left, Through, Right, Eastbound, Westbound, Northbound, Southbound, State Route, Two-Way Left Turn Lane, Acceleration, Right Turn Overlap signal phase.

Exhibit 5B
Recommended Intersection Improvements
(1 of 2)

Keith Higgins
Traffic Engineer

	N-S Street	E-W Street	Existing Intersection Control	Existing Conditions	Existing Plus Project Conditions	Background Conditions	Background Plus Project Conditions	Cumulative Conditions
11	Holly Street	California Avenue	All-Way Stop	None Required	None Required	None Required	None Required	None Required
12	Contra Costa Street	California Avenue	All-Way Stop[1]	None Required	None Required	None Required	None Required	None Required
13	Contra Costa Street	Ortiz Avenue	All-Way Stop	None Required	None Required	None Required	None Required	None Required
14	Del Monte Boulevard	Contra Costa Street	Signal	None Required	None Required	None Required	None Required	None Required
15	Del Monte Boulevard	Broadway Avenue	Signal	None Required	None Required	None Required	None Required	None Required
16	Canyon Del Rey Boulevard	Sand Dunes Drive	Two-Way Stop	None Required	None Required	None Required	None Required	None Required
17	Canyon Del Rey Boulevard (SR 218)	Southbound SR 1 Ramps	Signal	Add SB R (Free)	Add SB R (Free)	Add SB R (Free)	Add SB R (Free)	a. Add SB R, 2nd NB L b. Widen SB SR 1 Onramp
18	Canyon Del Rey Boulevard (SR 218)	Northbound SR 1 Ramps	One-Way Stop	None Required	None Required	None Required	None Required	a. Signalize Intersection b. Add SB L c. Convert NB R to Free Right Turn
19	Canyon Del Rey Boulevard (SR 218)	Del Monte Boulevard	Signal	Add NB RTO, EB RTO, WB RTO	None Required	Add NB RTO, EB RTO, WB RTO	None Required	Add NB RTO, EB RTO, WB RTO
20	Project Driveway (North)	Tioga Avenue	N/A	N/A	None Required	N/A	None Required	None Required
21	California Avenue	Project Driveway (East)	N/A	N/A	None Required	N/A	None Required	None Required

Notes:

1. Actual traffic control at this intersection has stop signs on just southbound and westbound movements. However, this type of traffic control is not supported by the 2010 Highway Capacity Manual methodologies. Therefore, this intersection has been analyzed as an all-way stop intersection, resulting in a more conservative analysis.
2. N/A = Not Applicable. Intersection does not exist under this scenario.
3. L, T, R, EB, WB, NB, SB, SR, TWLTL, Accel., RTO = Left, Through, Right, Eastbound, Westbound, Northbound, Southbound, State Route, Two-Way Left Turn Lane, Acceleration, Right Turn Overlap signal phase.

Exhibit 5B
Recommended Intersection Improvements
(2 of 2)

Keith Higgins
Traffic Engineer

TRIP GENERATION RATES (per person)[1]	LAND USE CODE	DAILY TRIP RATE	AM PEAK HOUR				PM PEAK HOUR			
			PEAK HOUR RATE	% OF ADT	% IN	% OUT	PEAK HOUR RATE	% OF ADT	% IN	% OUT
Extended Stay Hotel (H-1)	310	8.92	0.67	7.5%	58%	42%	0.70	7.8%	49%	51%
Hotel (H-2)	310	8.92	0.67	7.5%	58%	42%	0.70	7.8%	49%	51%
Condominium (R-1)	230	5.81	0.44	7.6%	19%	81%	0.52	9.0%	64%	36%
Apartment (R-2)	220	6.65	0.51	7.7%	20%	80%	0.62	9.3%	65%	35%
Quality Restaurant (Assumes breakfast also served)	931	89.95	5.40	6.0%	75%	25%	7.49	8.3%	67%	33%
PROPOSED USE	PROJECT SIZE	DAILY TRIPS	PEAK HOUR TRIPS	% OF ADT	TRIPS IN	TRIPS OUT	PEAK HOUR TRIPS	% OF ADT	TRIPS IN	TRIPS OUT
A. HOTELS										
1. Hotel (H1)	135 Rooms	1,204	90	7.5%	52	38	95	7.9%	47	48
2. Hotel (H2)	81 Rooms	722.52	54	7.5%	31	23	57	7.9%	28	29
Hotel Subtotal	**216**	**1,927**	**144**	**7.5%**	**83**	**61**	**152**	**7.9%**	**75**	**77**
B. RESIDENTIAL										
3. Residential - Parcel R-1 (Condominium)	100 Units	581	44	7.6%	8	36	52	9.0%	33	19
4. Residential - Parcel R-2 (Apartment)	320 Units	2,128	163	7.7%	33	130	198	9.3%	129	69
Apartment Subtotal	**420 Units**	**2,709**	**207**	**7.6%**	**41**	**166**	**250**	**9.2%**	**162**	**88**
C. RESTAURANT										
Quality Restaurant Subtotal	**4,000 Sq. Ft.**	**360**	**22**	**6.0%**	**16**	**5**	**30**	**8.3%**	**20**	**10**
GROSS TRAFFIC GENERATION		**4,996**	**373**	**7.5%**	**140**	**232**	**432**	**8.6%**	**257**	**175**
TRIPS FROM EXISTING USES (Exhibit 6B)		**667**	**49**	**7.4%**	**31**	**18**	**65**	**9.7%**	**25**	**40**
Credit of 30% of Existing Trips		**200**	**15**	**7.4%**	**9**	**6**	**19**	**9.7%**	**7**	**12**
NET TRAFFIC GENERATION		**4,795**	**358**	**7.5%**	**131**	**227**	**413**	**8.6%**	**250**	**163**

Notes:
1. Trip generation rates published by Institute of Transportation Engineers (ITE), "Trip Generation Manual," 9th Edition, 2012.

Keith Higgins
Traffic Engineer

Exhibit 6A
Project
Trip Generation

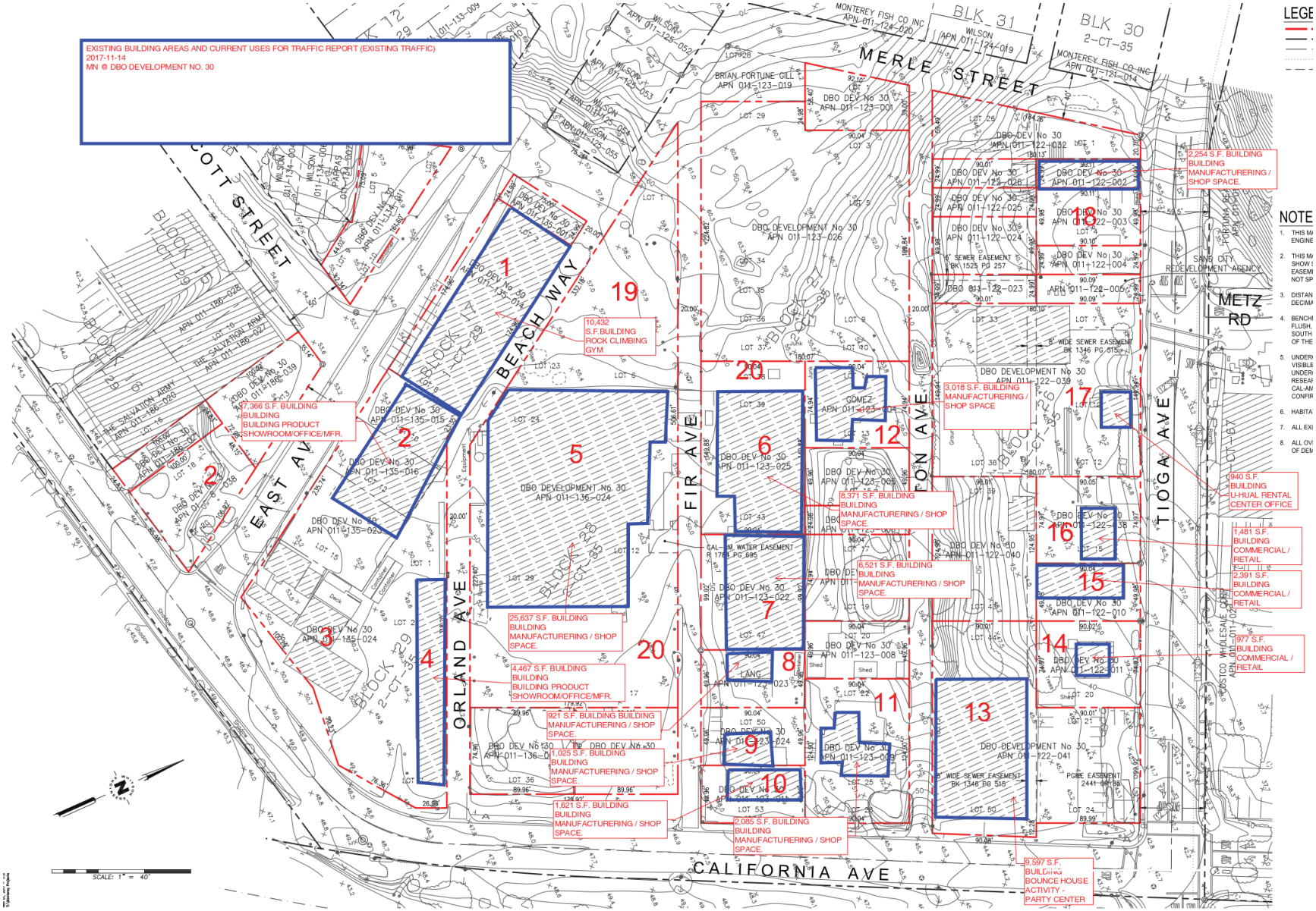
TRIP GENERATION RATES (per person)[1]	LAND USE CODE	DAILY TRIP RATE	AM PEAK HOUR PEAK HOUR RATE	AM PEAK HOUR % OF ADT	AM PEAK HOUR % IN	AM PEAK HOUR % OUT	PM PEAK HOUR PEAK HOUR RATE	PM PEAK HOUR % OF ADT	PM PEAK HOUR % IN	PM PEAK HOUR % OUT
Manufacturing	140	3.93	0.62	15.8%	77%	23%	0.67	17.0%	31%	69%
Warehousing	150	1.74	0.17	9.8%	77%	23%	0.19	10.9%	27%	73%
Single Family Detached Housing	210	9.52	0.75	7.9%	25%	75%	1.00	10.5%	63%	37%
Rock Climbing Gym	434	20	1.40	7.0%	33%	67%	1.64	8.2%	57%	43%
Trampoline Park	436	20	1.00	5.0%	75%	25%	1.50	7.5%	48%	52%
Nursery (Garden Center)	817	68.1	2.43	3.6%	75%	25%	6.94	10.2%	50%	50%
Automobile Sales (Used)	841	27.06	2.13	7.9%	76%	24%	3.75	13.9%	47%	53%

EXISTING USE	LAND USE CODE	PROJECT SIZE	DAILY TRIPS	PEAK HOUR TRIPS	% OF ADT	TRIPS IN	TRIPS OUT	PEAK HOUR TRIPS	% OF ADT	TRIPS IN	TRIPS OUT
1. Sanctuary Rock Gym	434	10,432 Sq. Ft.	209	15	7.0%	5	10	17	8.2%	10	7
2. CL Frost Stoneworks	150	7,366 Sq. Ft.	29	5	15.8%	4	1	5	17.0%	1	4
3. Donnelly Contractor Shop	150	5,000 Sq. Ft.	9	1	9.8%	1	0	1	10.9%	0	1
4. Monterey Sculpture Center	150	4,467 Sq. Ft.	8	1	9.8%	1	0	1	10.9%	0	1
5. Manufacturing / Shop / Warehouse	150	25,637 Sq. Ft.	45	4	9.8%	3	1	5	10.9%	1	4
6. Manufacturing / Shop / Warehouse	150	8,371 Sq. Ft.	15	1	9.8%	1	0	2	10.9%	0	2
7. Booniez Outdoor Specialty Shop	150	6,521 Sq. Ft.	11	1	9.8%	1	0	1	10.9%	0	1
8. Lang's Roofing	150	921 Sq. Ft.	2	0	9.8%	0	0	0	10.9%	0	0
9. 877 Fir Avenue	150	1,025 Sq. Ft.	2	0	9.8%	0	0	0	10.9%	0	0
10. 1830 California Avenue	150	1,621 Sq. Ft.	3	0	9.8%	0	0	0	10.9%	0	0
11. 884 Afton Avenue	150	2,085 Sq. Ft.	4	0	9.8%	0	0	0	10.9%	0	0
12. End of Afton Avenue	150	3,018 Sq. Ft.	5	1	9.8%	0	0	1	10.9%	0	1
13. Jumpnaround Bounce House	436	9,597 Sq. Ft.	192	10	5.0%	7	2	14	7.5%	7	7
14. Red Door Garden Gallery	817	977 Sq. Ft.	67	2	3.6%	2	1	7	10.2%	3	4
15. Structural Services, Inc.	140	2,391 Sq. Ft.	9	1	15.8%	1	0	2	17.0%	0	2
16. Residence	210	1 Home	10	1	7.9%	0	1	1	10.5%	1	0
17. U-Haul Rentals	841	940 Sq. Ft.	25	2	7.9%	2	0	4	13.9%	2	2
18. Kelcon, Higuera and PM Landscaping	140	2,254 Sq. Ft.	9	1	15.8%	1	0	2	17.0%	0	2
19. Iverson Tree Services (open lot - square footage equivalent)	140	2,000 Sq. Ft.	8	1	15.8%	1	0	1	17.0%	0	1
20. John Lee Tree Services (open lot - square footage equivalent)	140	2,000 Sq. Ft.	8	1	15.8%	1	0	1	17.0%	0	1
TOTAL			**667**	**49**	**7.4%**	**31**	**18**	**65**	**9.7%**	**25**	**40**

Notes:
1. Trip generation rates published by Institute of Transportation Engineers (ITE), "Trip Generation Manual," 9th Edition, 2012, and 10th Edition, 2017.
2. Business Location Numbers refer to map of existing uses illustrated on Exhibit 6C.

Keith Higgins
Traffic Engineer

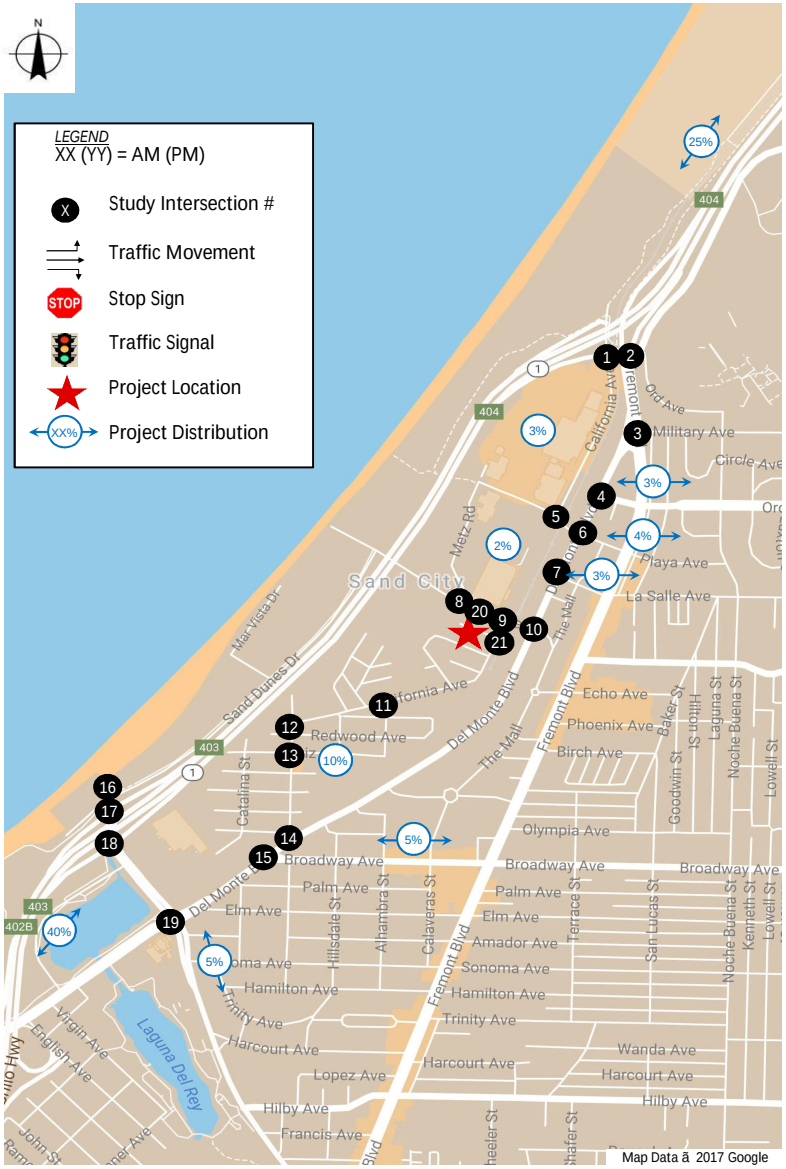
Exhibit 6B
Existing Site
Trip Activity



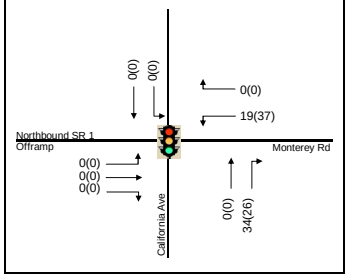
Source: TCA Architects and Whitson Engineers, November 3, 2017.

Keith Higgins
Traffic Engineer

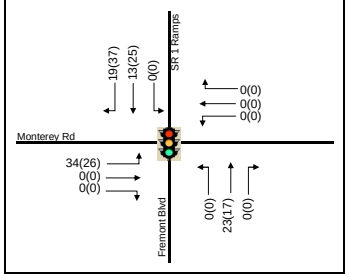
Exhibit 6C
Locations of
Existing Site Uses



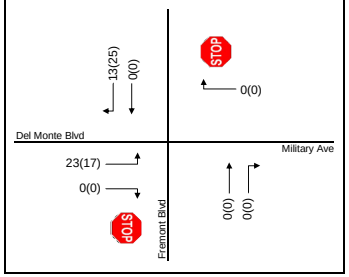
1. California Avenue - Northbound SR 1 Offramp - Monterey Road



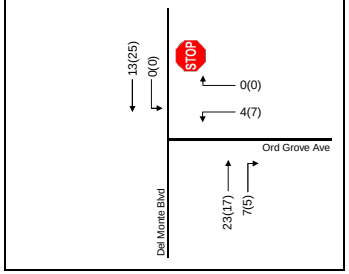
2. Fremont Boulevard - SR 1 Ramps / Monterey Road



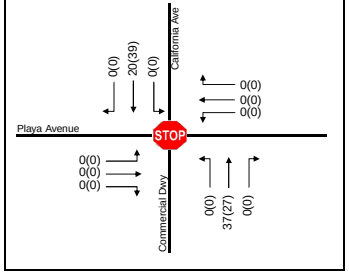
3. Fremont Boulevard / Del Monte Boulevard - Military Avenue



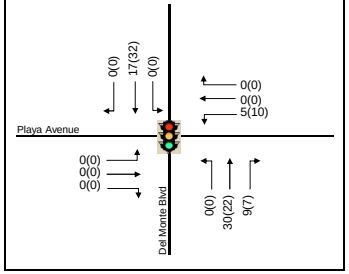
4. Del Monte Boulevard / Ord Grove Avenue



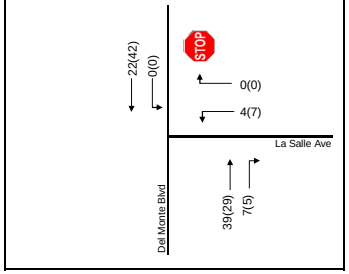
5. California Avenue - Playa Avenue



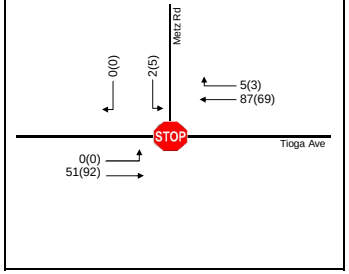
6. Del Monte Boulevard / Playa Avenue



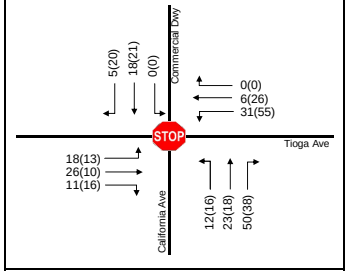
7. Del Monte Boulevard / La Salle Avenue



8. Metz Road / Tioga Avenue



9. California Avenue / Tioga Avenue



10. Del Monte Boulevard / Tioga Avenue - Auto Center Parkway

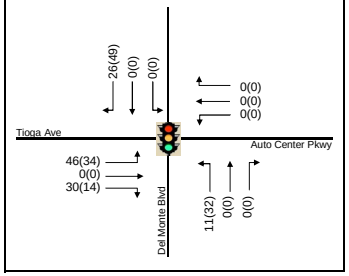


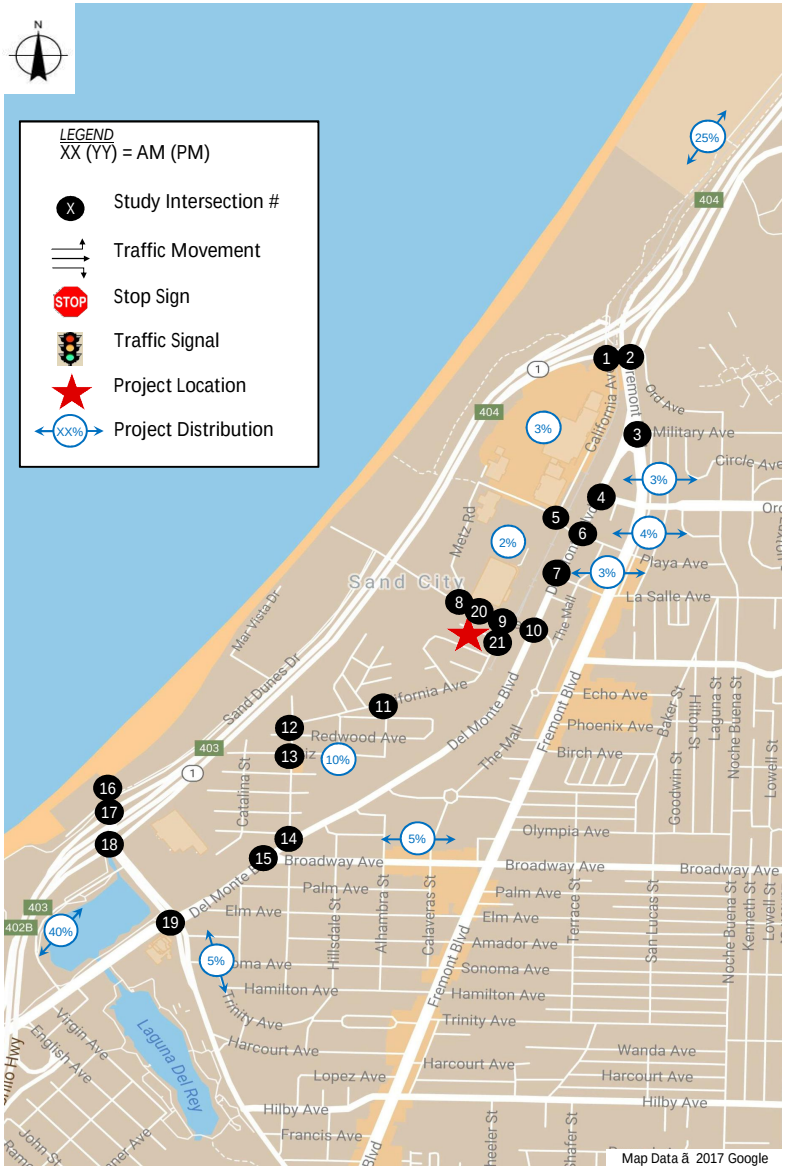
Exhibit 7

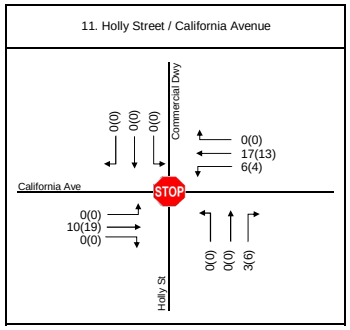
Project Trip Distribution and Assignment

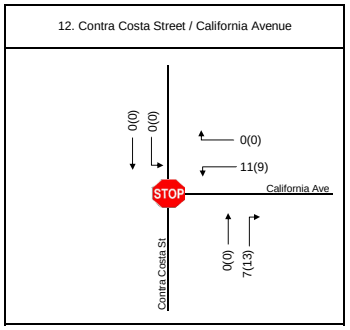
AM & PM Peak Hour Volumes

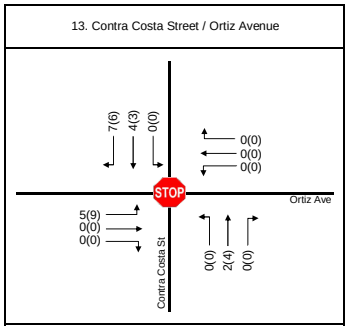
(Part 1 of 2)

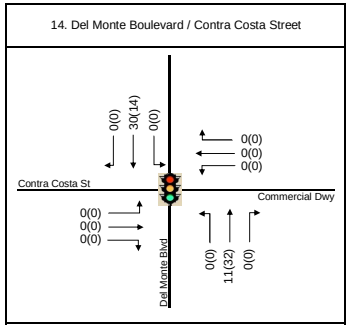
Keith Higgins
Traffic Engineer

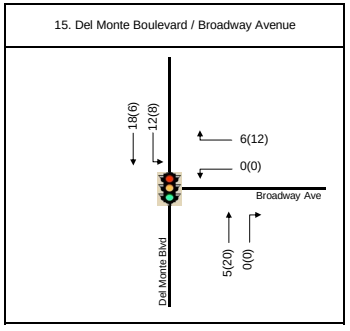


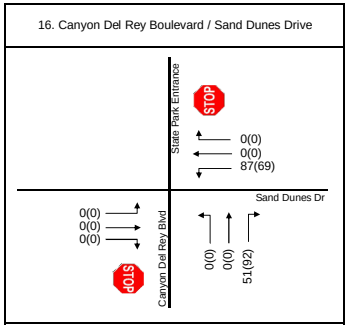


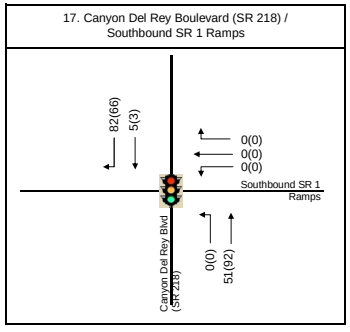


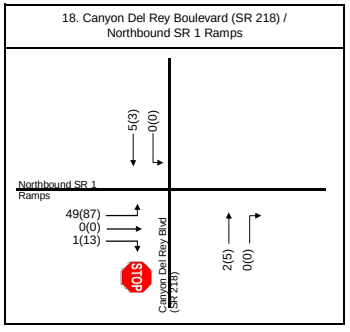


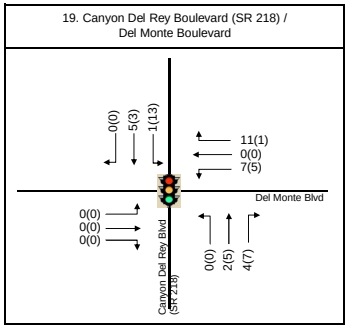


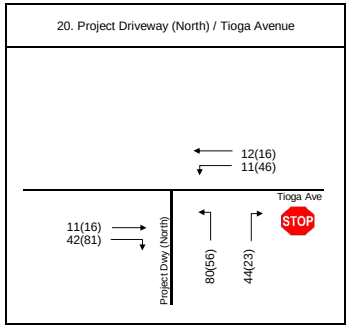












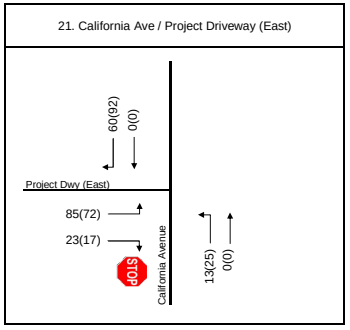


Exhibit 7

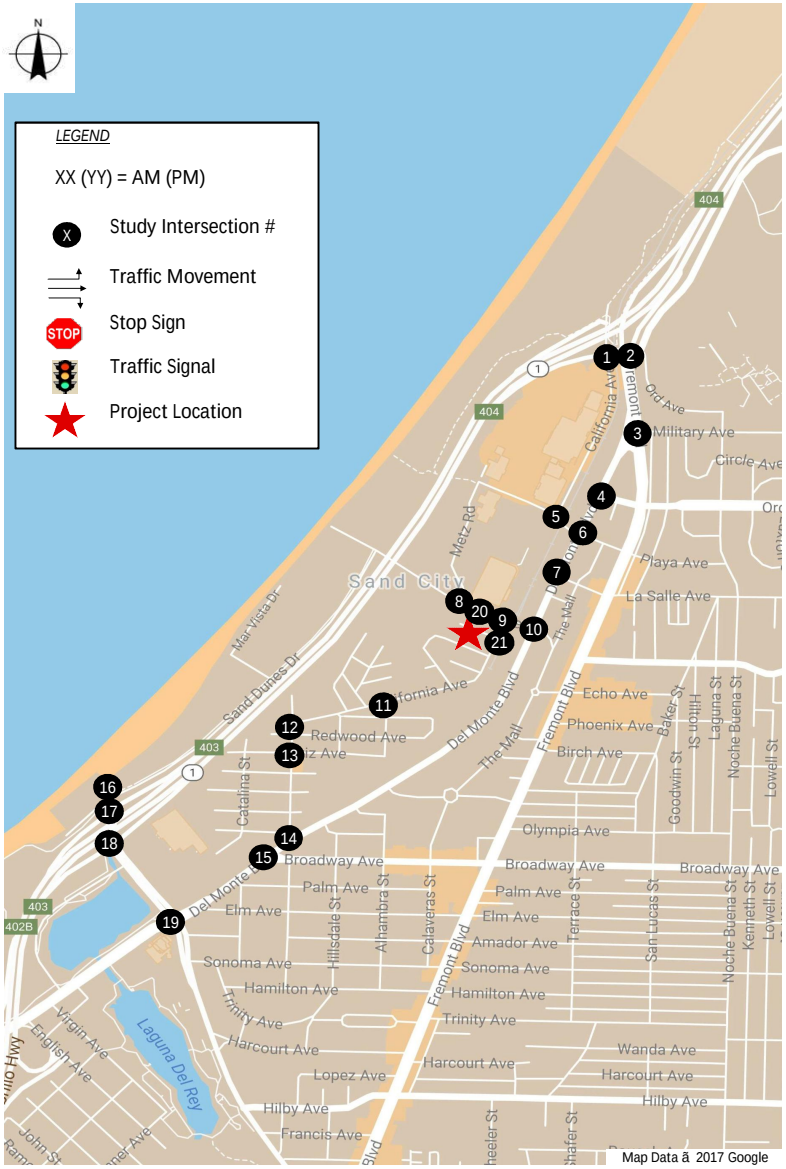
Project Trip Distribution and Assignment

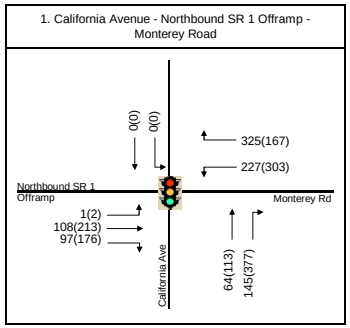
AM & PM Peak Hour Volumes

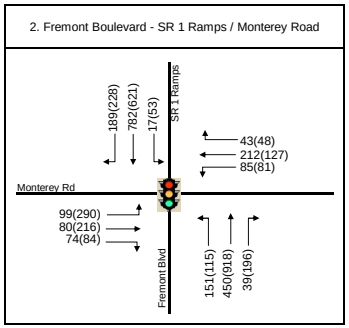
(Part 2 of 2)

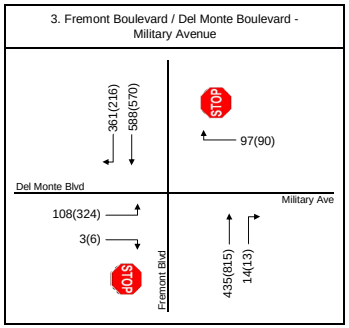
Keith Higgins

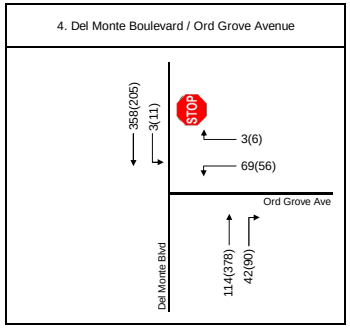
Traffic Engineer

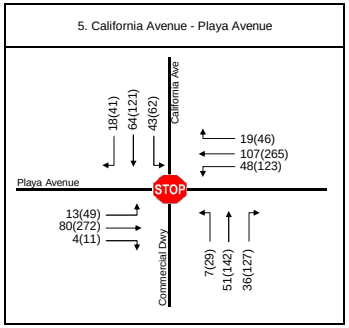


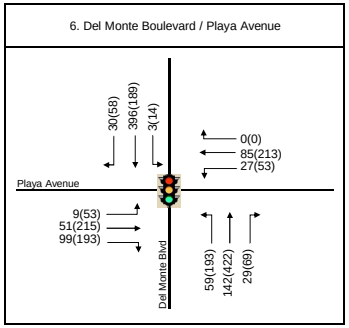


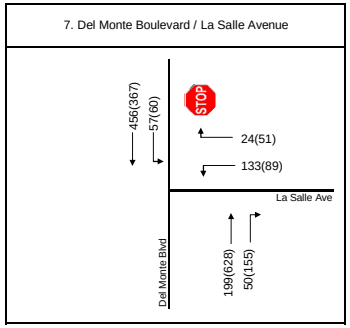


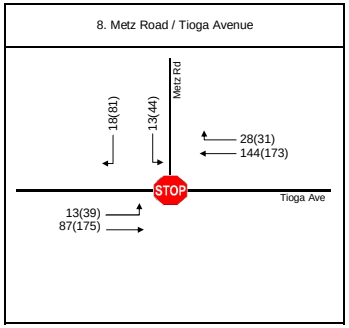


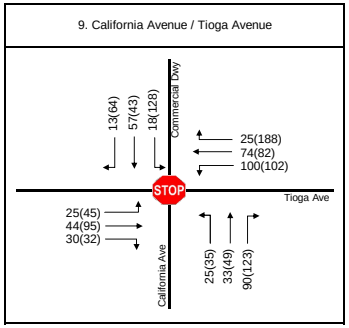












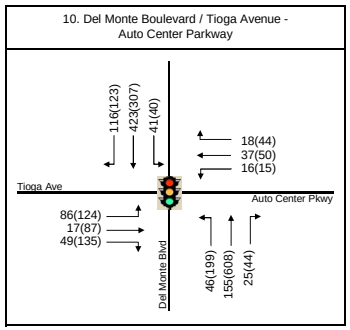


Exhibit 8

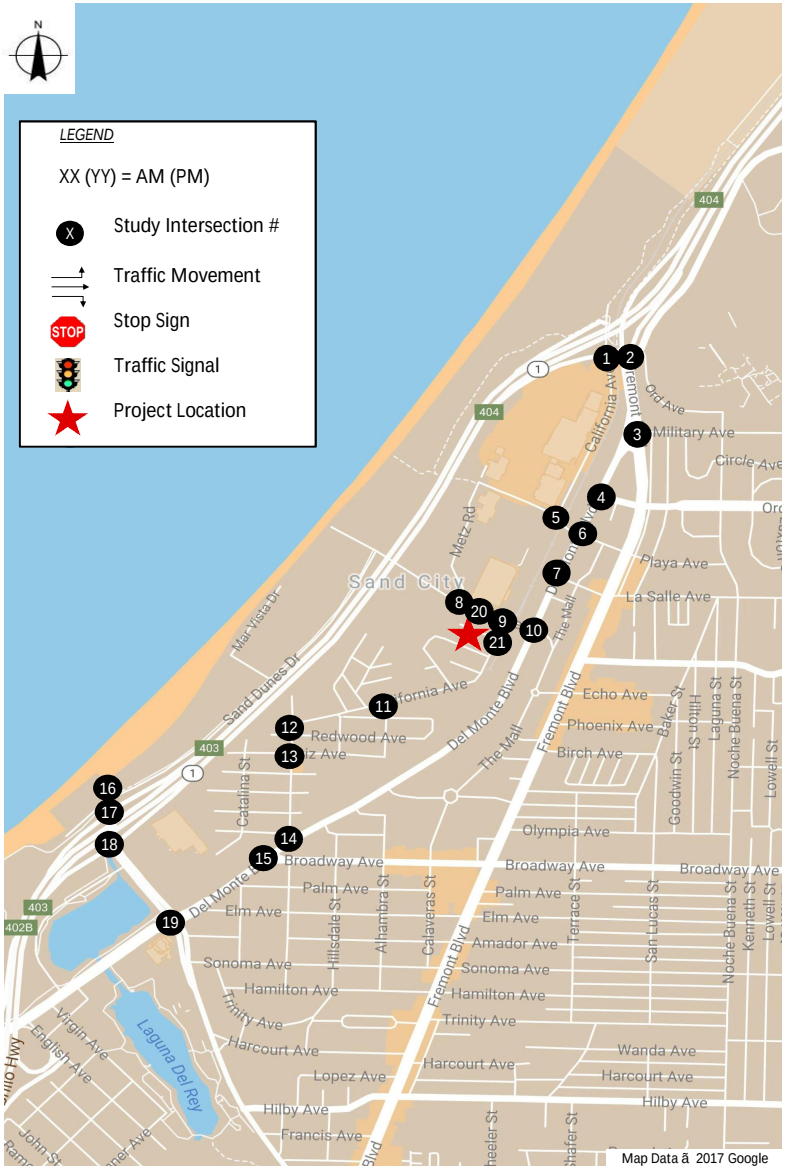
Existing Plus Project Conditions

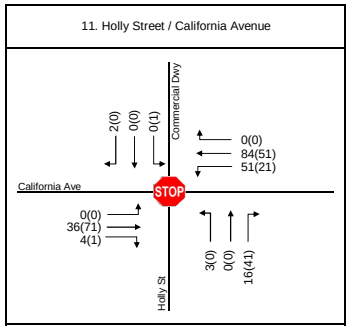
AM & PM Peak Hour Volumes

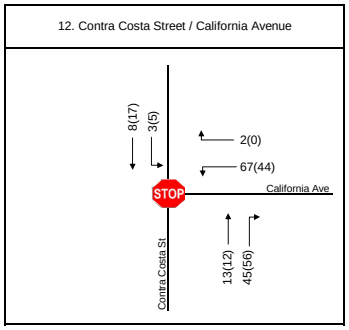
(Part 1 of 2)

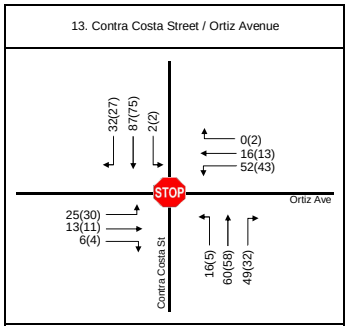
Keith Higgins

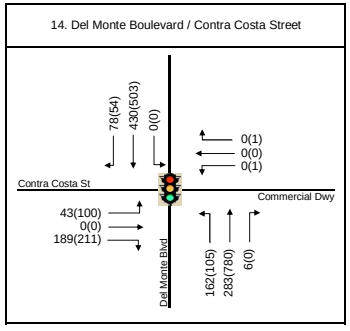
Traffic Engineer

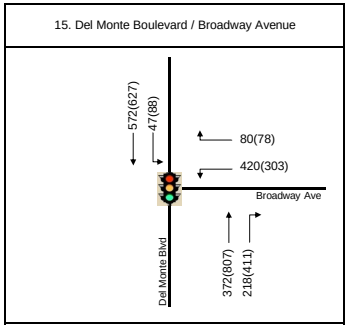


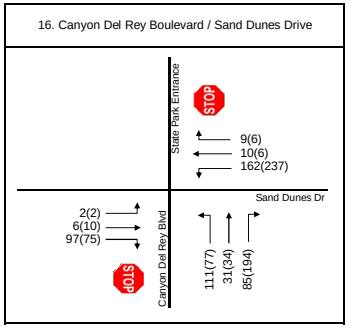


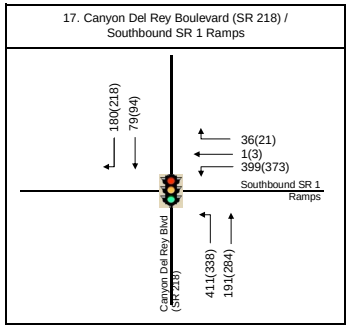


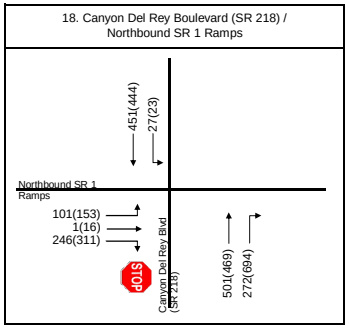


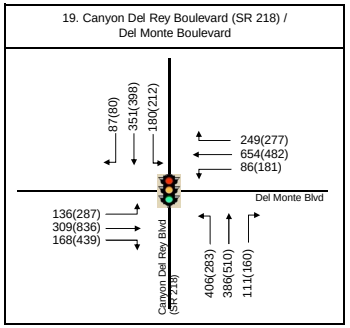


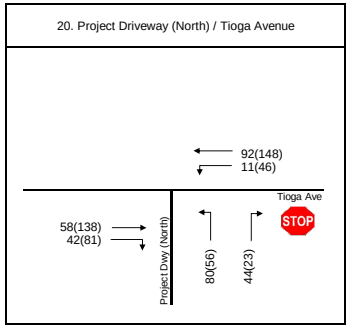












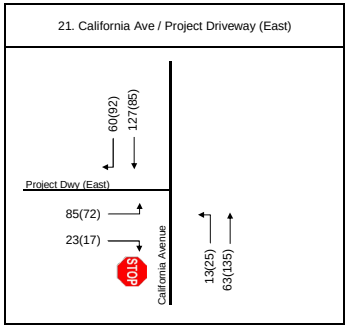


Exhibit 8

Existing Plus Project Conditions

AM & PM Peak Hour Volumes

(Part 2 of 2)

Keith Higgins

Traffic Engineer

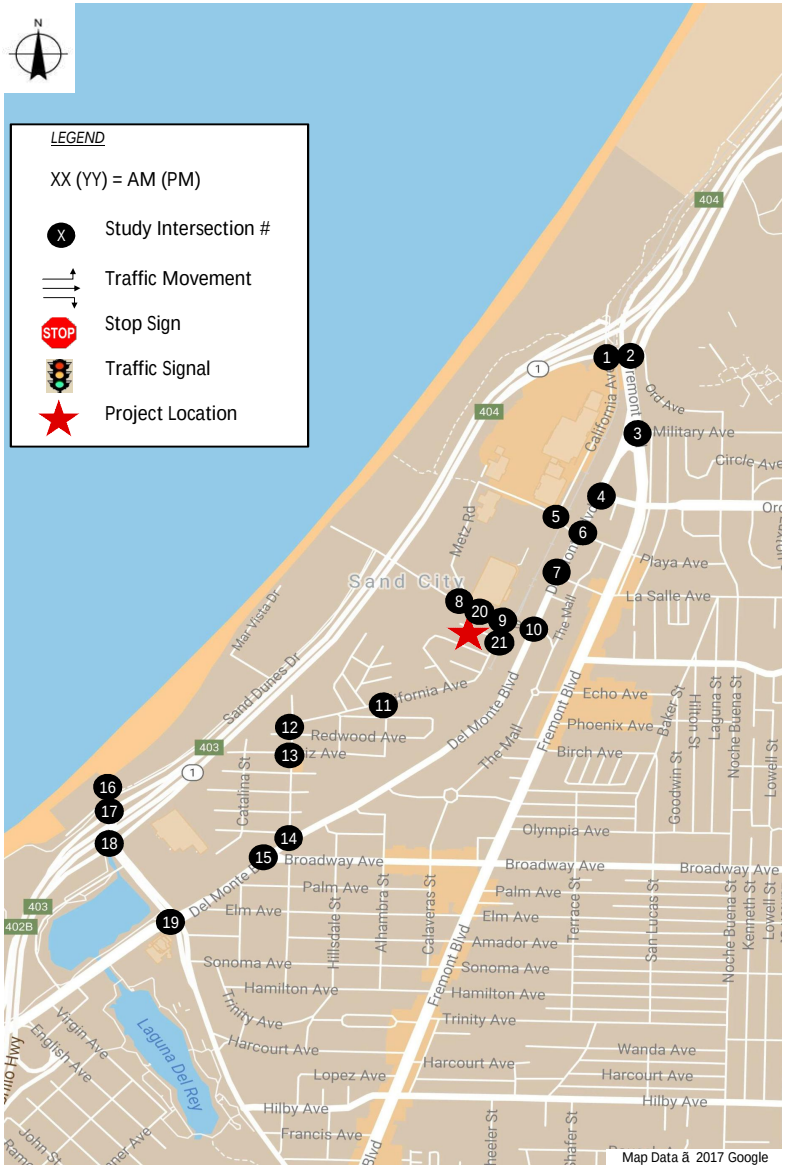
Project	Size	Daily Trips	AM PEAK HOUR Total	AM PEAK HOUR In	AM PEAK HOUR Out	PM PEAK HOUR Total	PM PEAK HOUR In	PM PEAK HOUR Out
City of Marina:								
1. The Dunes on Monterey Bay [2]								
Phase 1 (Remainder)	-	11,434	542	284	258	1,021	537	484
2. CSUMB North Campus Housing [3]	492 Units	2,188	172	34	138	211	139	72
3. CSUMB Students (2015-2025) [4]	3,054 Students	2,959	262	210	53	262	79	183
4. Marina Heights	1,050 Units	10,049	788	197	591	1,061	711	350
City of Seaside:								
5. Seaside Resort [5]	-	5,672	267	145	122	362	180	182
6. Seaside Senior Assisted Living [6]	144 Units	447	2	1	1	2	1	1
7. Veterans Cemetery	164 Acres	776	28	20	8	138	46	92
City of Sand City								
8. The Collection at Monterey Bay [7]	-	3,669	194	112	82	279	141	138
9. Monterey Bay Shores [8]	-	2,032	117	51	66	155	76	79
10. Park Avenue / Ocean View Avenue Residential								
Single-Family (Part 1)	10 units	95	8	2	6	10	6	4
Single-Family (Part 2)	2 units	19	2	1	1	2	1	1
11. Catalina Lofts [9, 11]								
Residential (Apartments)	8 units	53	4	1	3	5	3	2
Commercial (Retail)	7,500 sq. ft.	332	10	6	4	20	9	11
12. Stepanek Mixed-Use [10 ,11]								
Residential (Apartments)	1 unit	7	1	0	1	1	1	0
Commercial (Retail)	2,810 sq. ft.	125	4	2	2	8	4	4
Total Approved Projects:		39,857	2,401	1,066	1,335	3,537	1,934	1,603

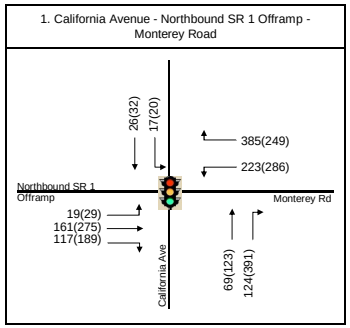
Notes:

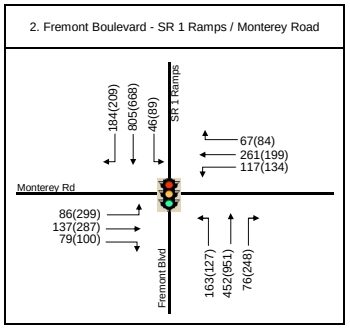
1. Traffic volumes are based on trip generation rates quoted by the Institute of Transportation Engineers, *Trip Generation Manual,* 9th Edition, 2012, unless otherwise noted.
2. Trip generation from *Marina University Villages Mixed Use Development Traffic Impact Study Report* , Higgins Associates, December 17, 2004.
3. Trip generation from *CSUMB 2007 Master Plan Traffic Impact Analysis* , Higgins Associates, November 5, 2007.
4. Trip generation from *CSUMB 2007 Master Plan Traffic Impact Analysis* , Higgins Associates, November 5, 2007.
5. Trip generation from *Transportation Impact Analysis for Seaside Resort* , Fehr & Peers, May 2004.
6. Trip generation from *Seaside Senior Assisted Living* letter report, Hatch Mott MacDonald, October, 2015, and adjusted per letter from Seasons Management, LLC to Mr. John Dunn, December 2, 2015.
7. Trip generation from *The Collection at Monterey Bay Transportation Impact Analysis,* Fehr & Peers, April 2012. The project consists of 234 Condo Hotel units, 108 Resort Hotel Units and three restaurants.
8. Trip generation from *Focused Transportation Impact Analysis for the Propsed Monterey Bay Shores Resort Project in Sand City, California,* Fehr & Peers, August 2008.
   The project consists of 56 Condo Hotel units, 162 Hotel units, 42 visitor serving condo hotel unitsand 96 residential condominiums.
9. Project building size not available. Trip generation assumes total floor-area ratio is 1.5, commercial space comprises all of first floor and residential is all of second and third floors.
10. Project building size not available. Trip generation assumes total floor-area ratio is 1.0, commercial space comprises all of first floor and residential is all of second floor.
11. ITE does not provide trip rates for "Specialty Retail Center" for the AM peak hour. Trip rate used is from *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region,* San Diego Association of Governments, April 2002.

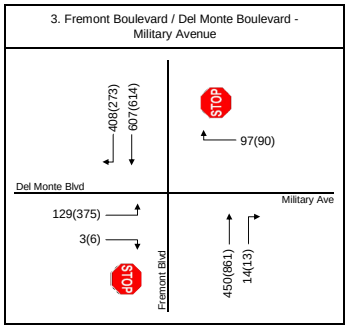
Keith Higgins
Traffic Engineer

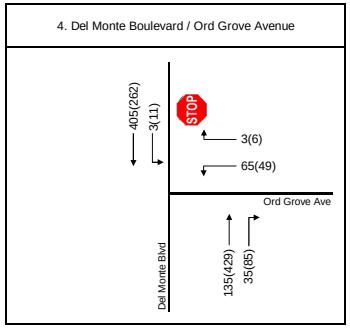
Exhibit 9
Approved Projects
Trip Generation

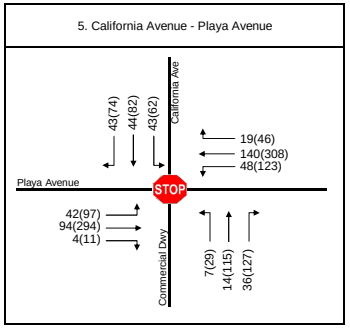


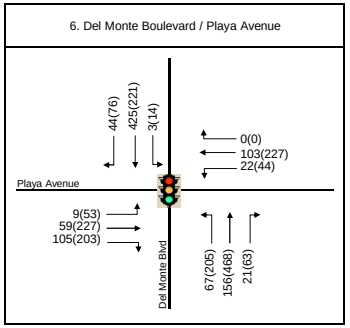


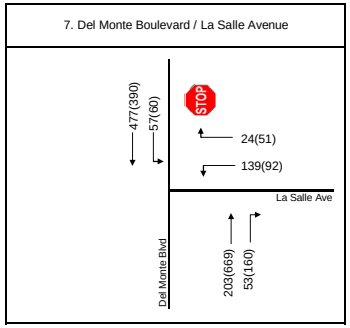


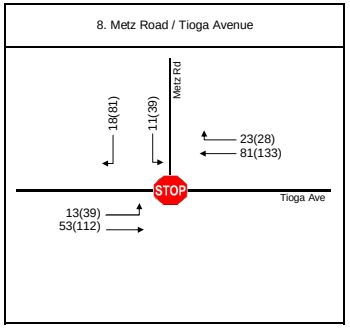


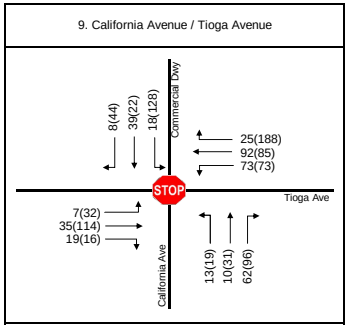












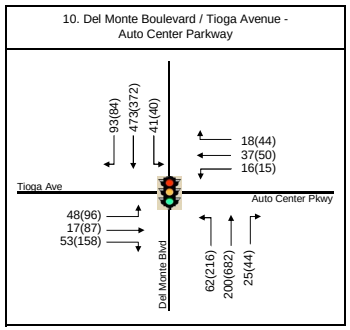
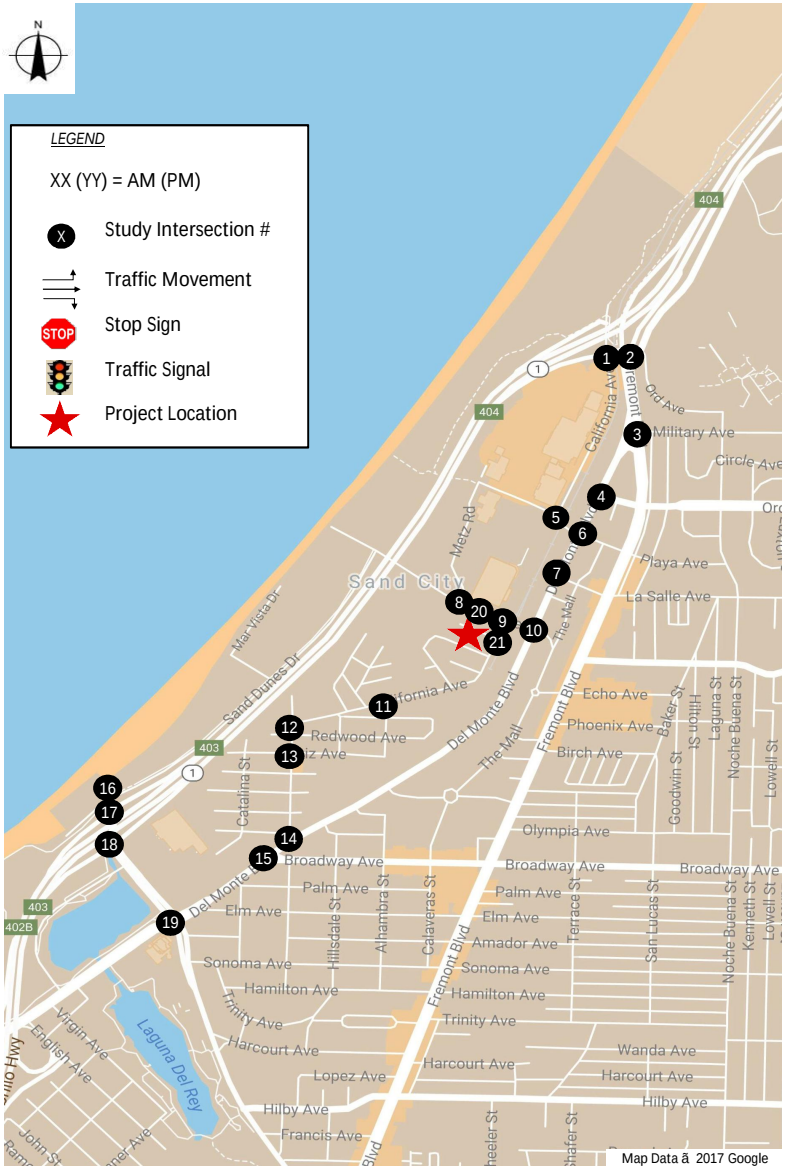
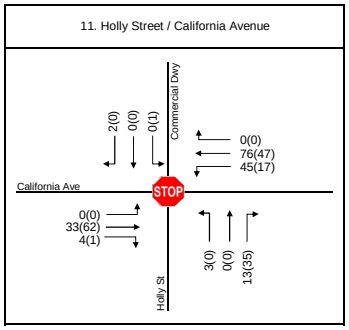
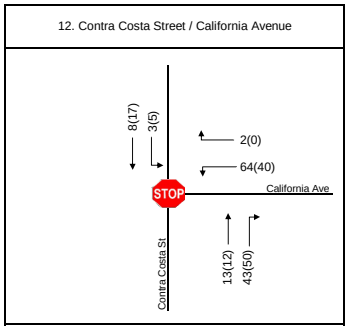


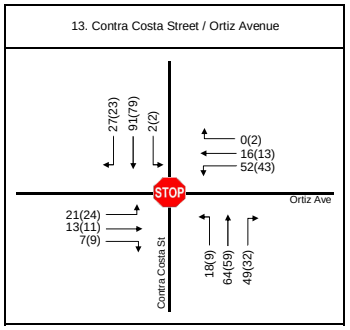
Exhibit 10
Background Conditions
AM & PM Peak Hour Volumes
(Part 1 of 2)

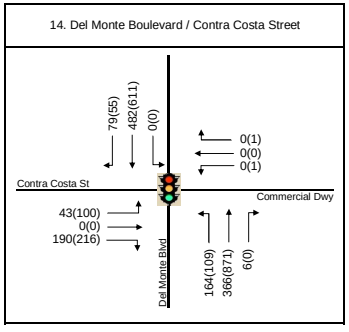
Keith Higgins
Traffic Engineer

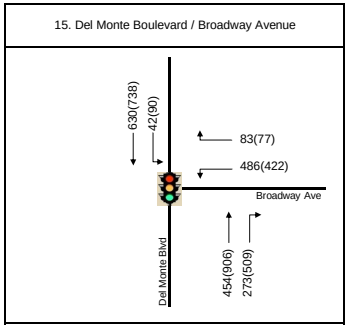


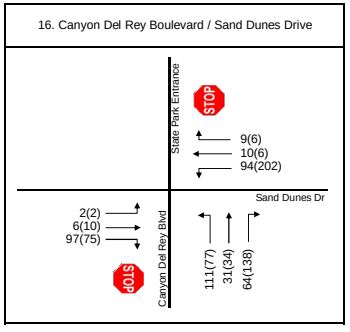


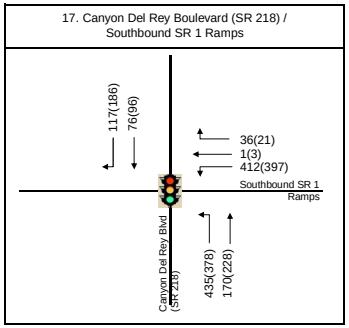


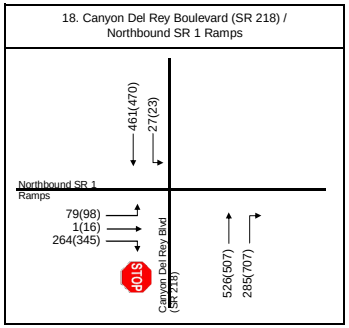


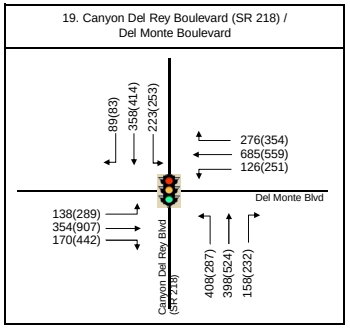


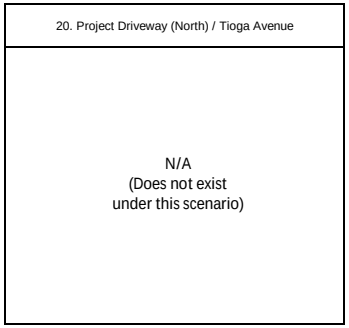












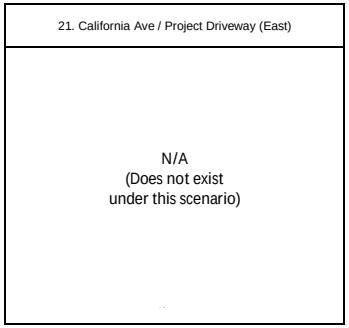
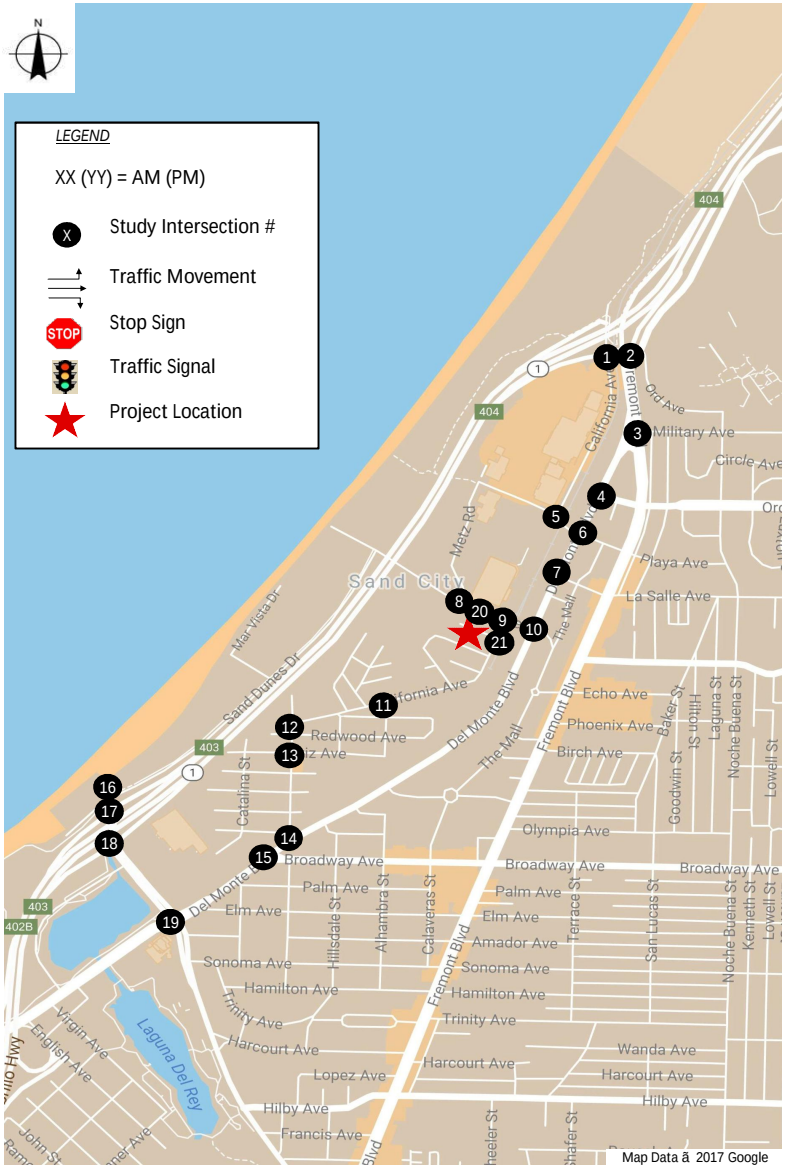
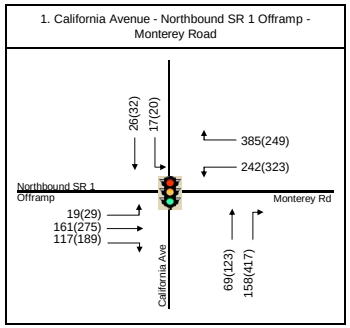
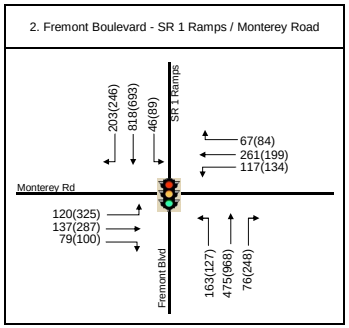


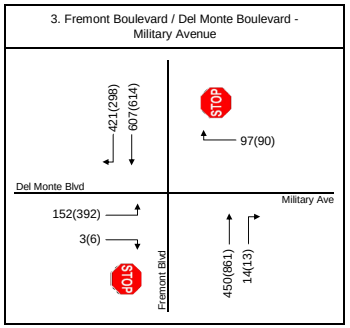
Exhibit 10
Background Conditions
AM & PM Peak Hour Volumes
(Part 2 of 2)

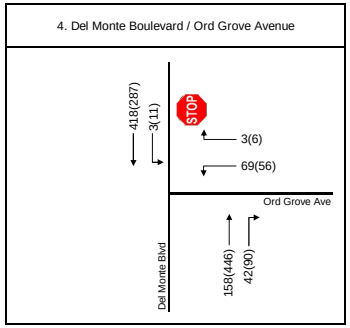
Keith Higgins
Traffic Engineer

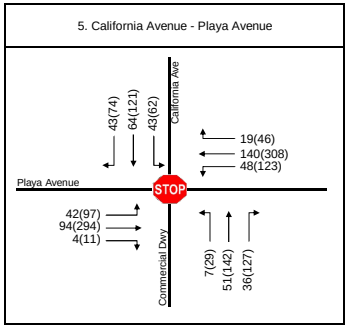


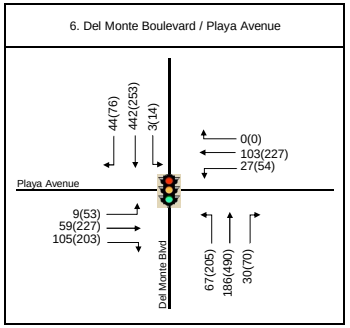


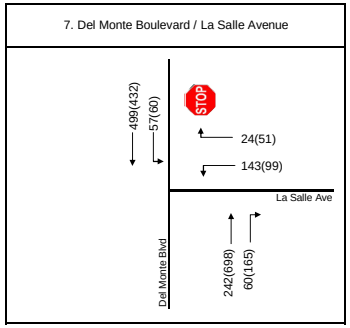


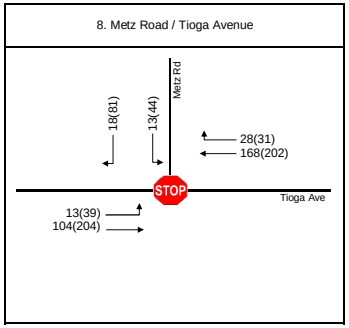


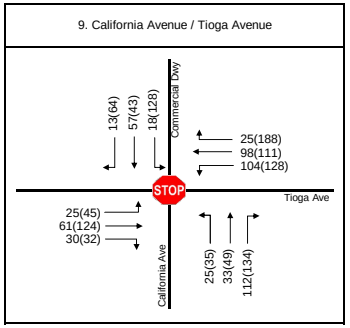












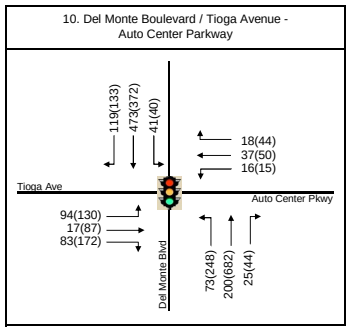


Exhibit 11

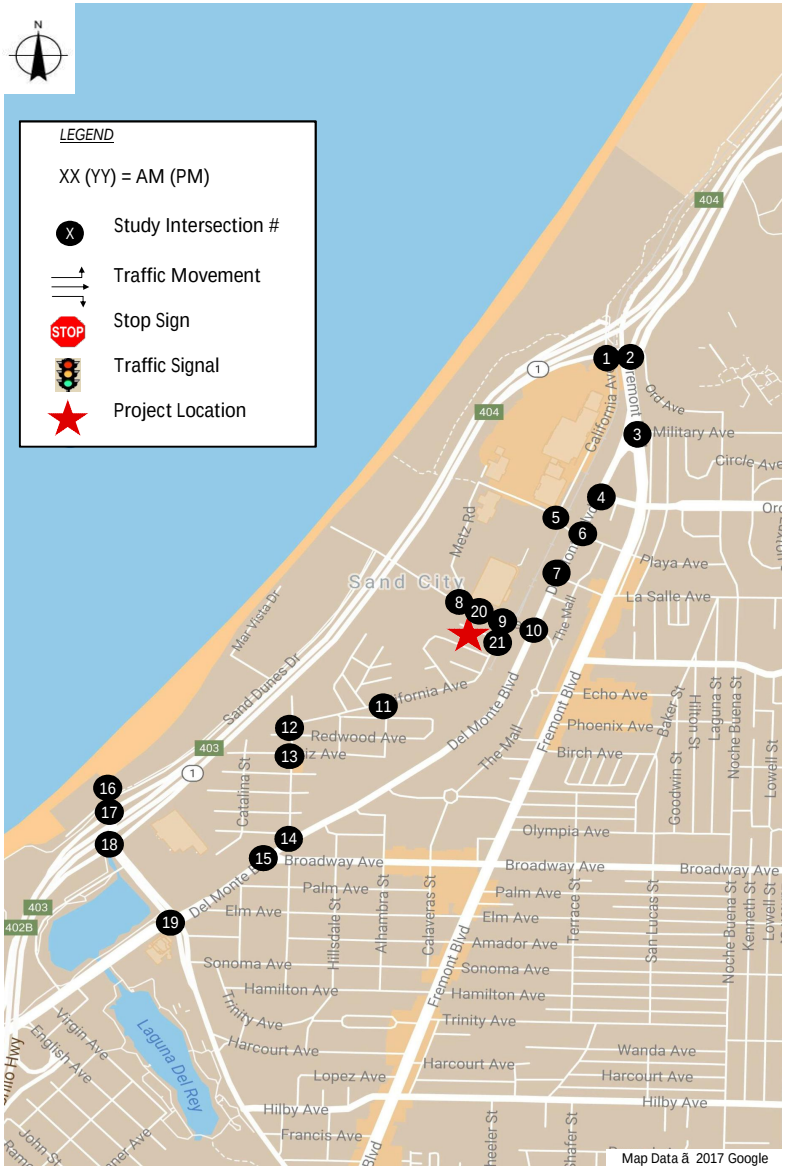
Background Plus Project Conditions

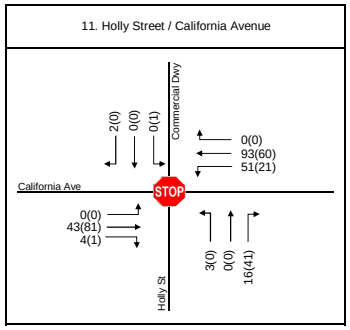
AM & PM Peak Hour Volumes

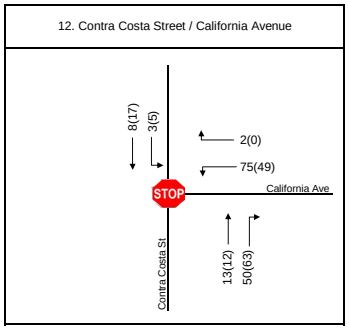
(Part 1 of 2)

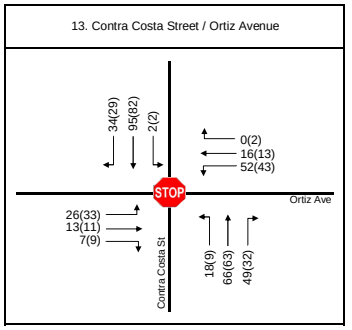
Keith Higgins

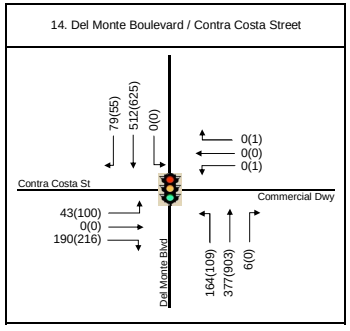
Traffic Engineer

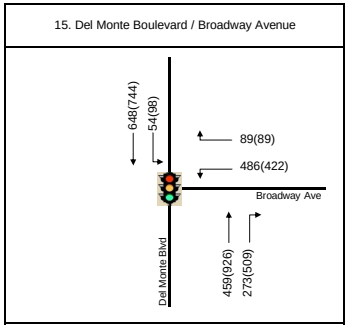


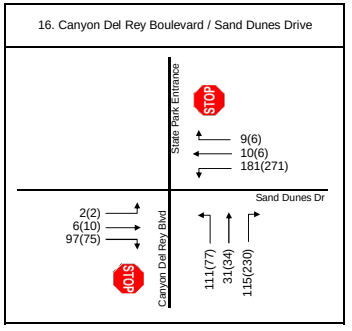


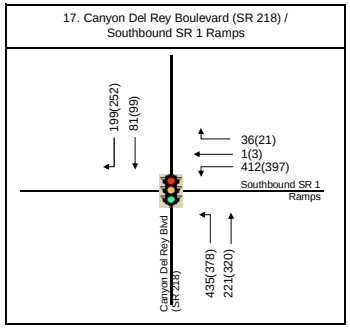


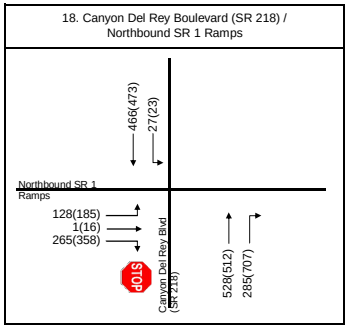


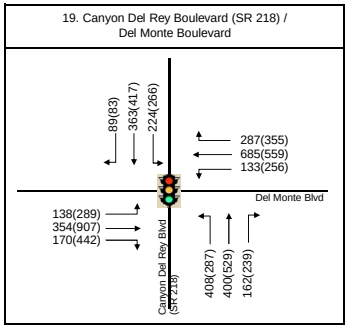


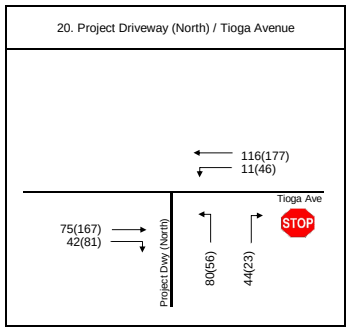












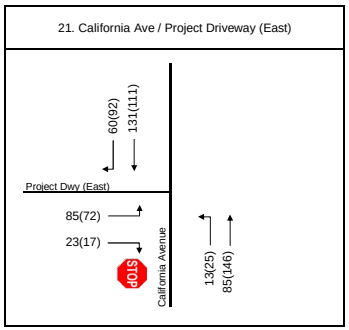


Exhibit 11

Background Plus Project Conditions

AM & PM Peak Hour Volumes

(Part 2 of 2)

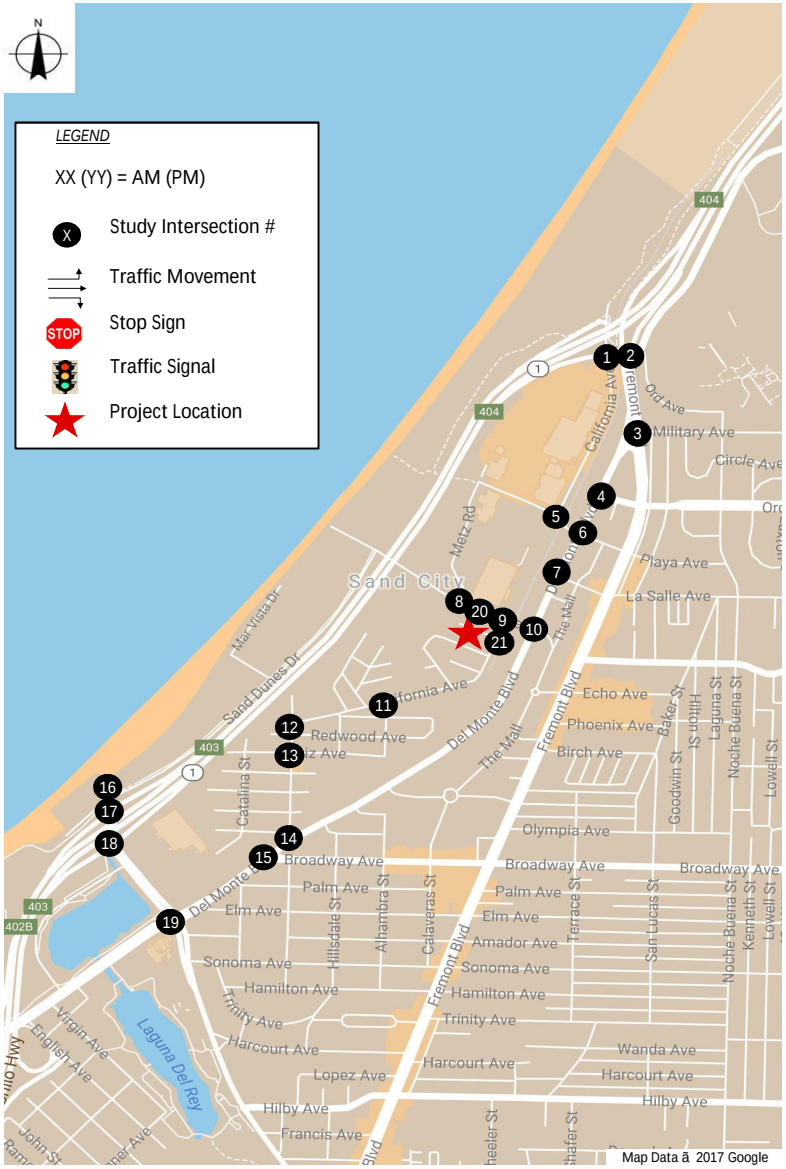
Keith Higgins

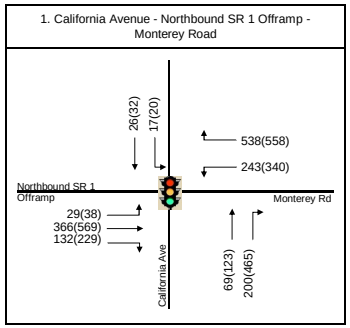
Traffic Engineer

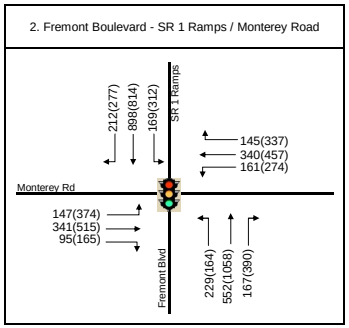
Project	Size		Daily Trips	AM PEAK HOUR Total	AM PEAK HOUR In	AM PEAK HOUR Out	PM PEAK HOUR Total	PM PEAK HOUR In	PM PEAK HOUR Out
City of Marina:									
13. The Dunes on Monterey Bay [2]									
Phases 2 & 3	-		45,662	2,896	1,762	1,134	4,561	2,127	2,434
14. CSUMB Students (2025-2035) [3]	3,054	Students	2,959	262	210	53	262	79	183
City of Seaside:									
15. The Projects at Main Gate [4]	-		26,067	716	437	279	1,931	934	997
16. West Broadway Corridor [5]	-		3,783	350	191	159	362	134	228
17. Dadwal proposed hotel and restaurant									
Hotel	110	Rooms	611	58	34	24	66	32	34
Restaurant	8,000	SF	1,017	86	47	39	79	47	32
18. 1000 Playa Avenue									
Retail	13,343	SF							
19. Coffee Shop (Drive-Through)[6]	880	SF	1,584	267	134	133	66	33	33
City of Sand City:									
20. San Juan Pools (Retail)[7]	7,000	sq. ft.	310	9	5	4	19	8	11
Total Cumulative Projects:			81,993	4,644	2,820	1,824	7,346	3,394	3,952

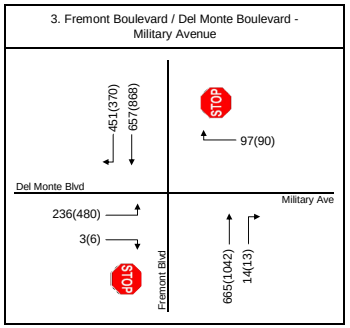
Notes:

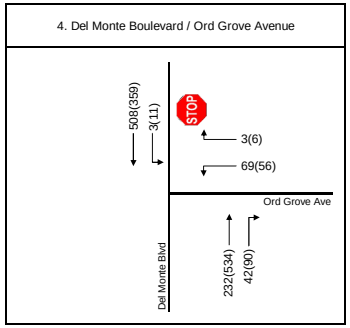
1. Traffic volumes are based on trip generation rates quoted by the Institute of Transportation Engineers, *Trip Generation Manual,* 9th Edition, unless otherwise noted.
2. Trip generation from *Marina University Villages Mixed Use Development Traffic Impact Study Report* , Higgins Associates, December 17, 2004.
3. Trip generation from *CSUMB 2007 Master Plan Traffic Impact Analysis* , Higgins Associates, November 5, 2007.
4. Trip generation from *Seaside Main Gate Retail Development Traffic Impact Analysis* , Hexagon Transportation Consultants, March 26, 2008.
5. Trip generation from *West Broadway Urban Village Specific Plan Transportation Study* , Fehr & Peers, May 2004. . Includes proposed library opportunity site
6. Trip generation from *Coffee Shop Development, City of Seaside, CA - Traffic Impact Analysis* , Mott MacDonald, November 4, 2016.
7. ITE does not provide trip rates for "Specialty Retail Center" for the AM peak hour. Trip rate used is from *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region,* San Diego Association of Governments, April 2002.

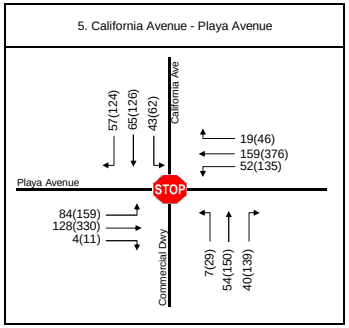


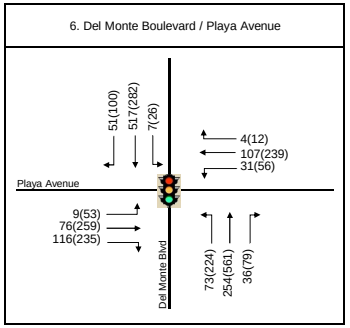


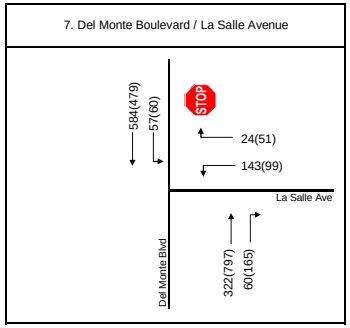


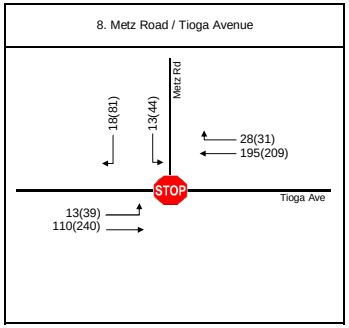


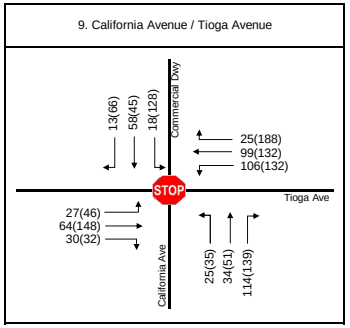












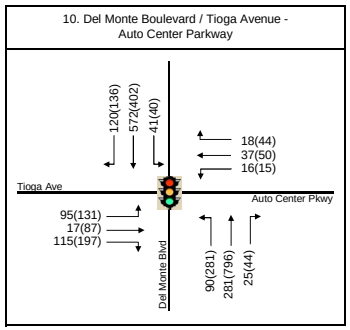


Exhibit 13

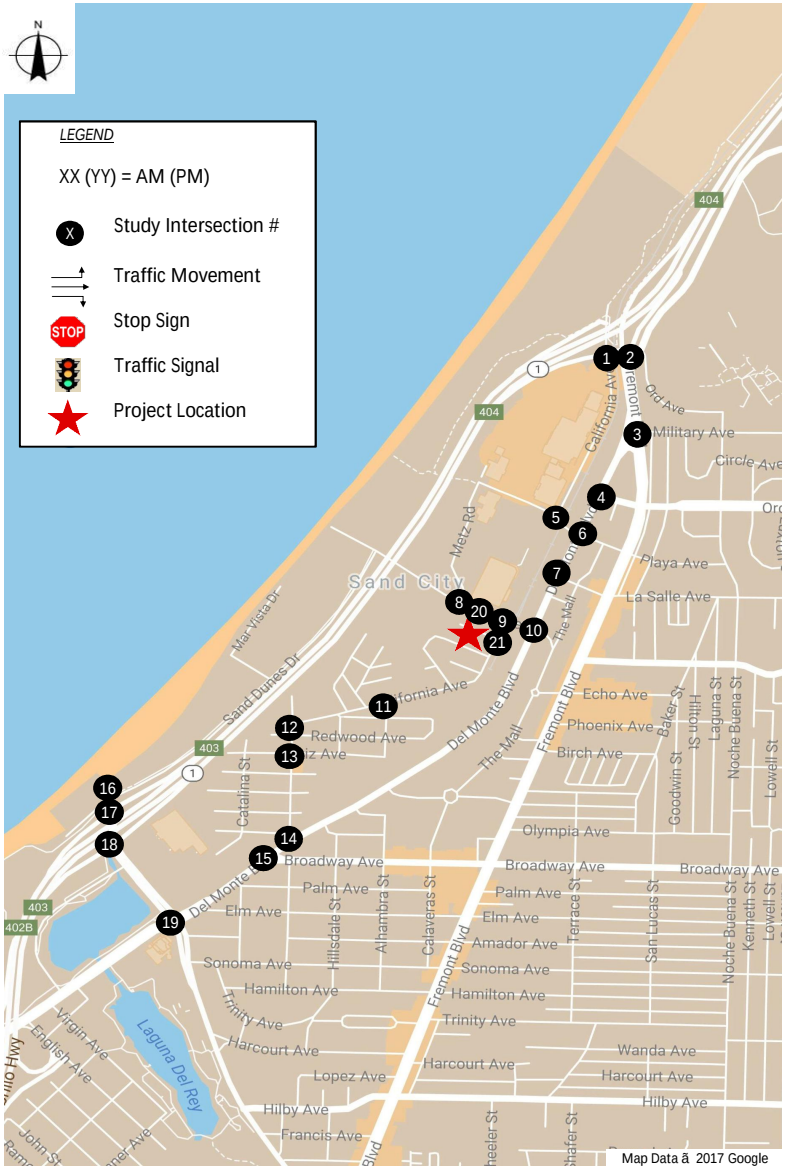
Cumulative Conditions

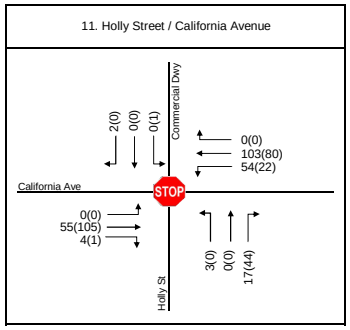
AM & PM Peak Hour Volumes

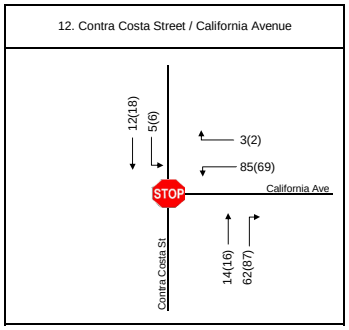
(Part 1 of 2)

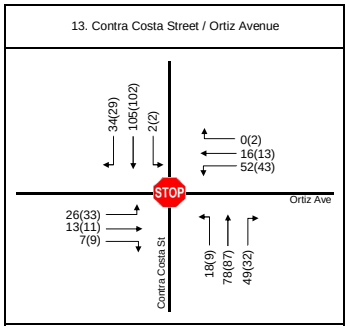
Keith Higgins

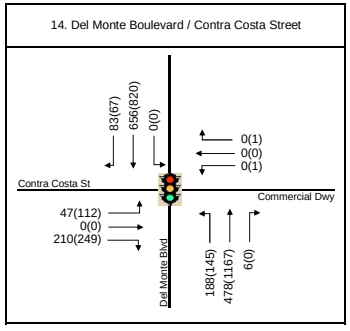
Traffic Engineer

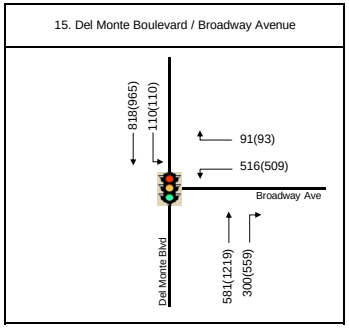


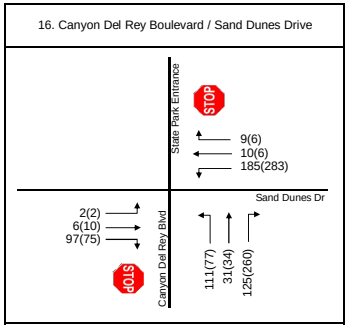


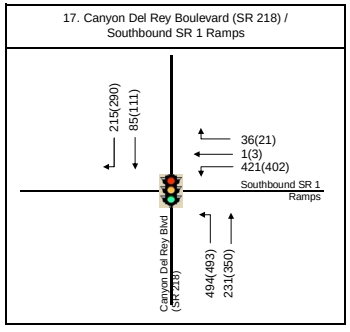


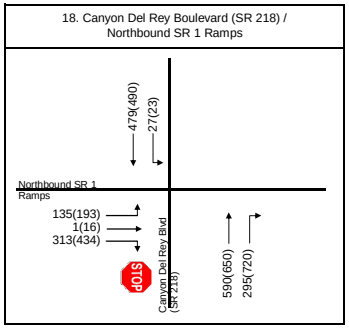


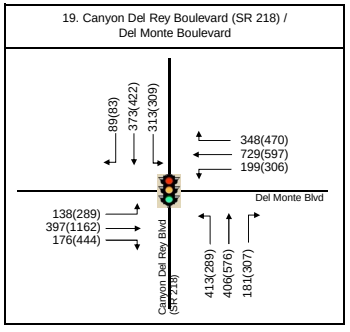


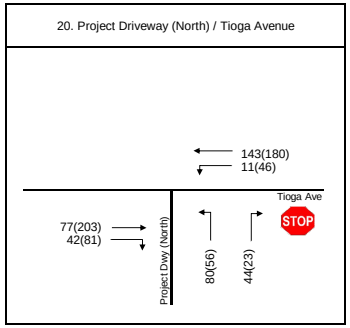












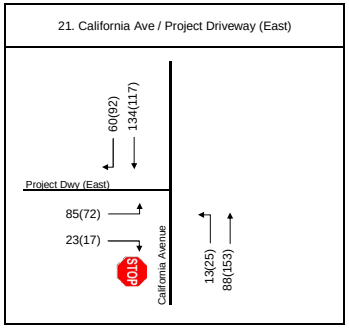


Exhibit 13

Cumulative Conditions

AM & PM Peak Hour Volumes

(Part 2 of 2)

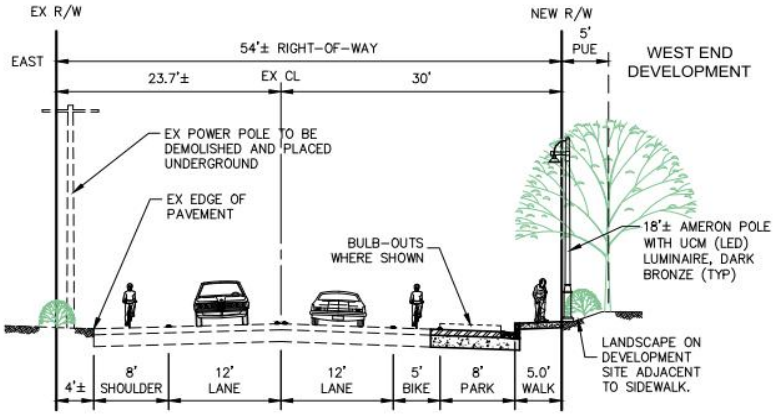
Keith Higgins

Traffic Engineer

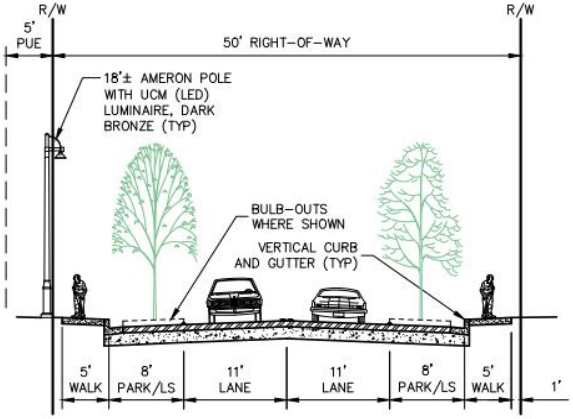
SR 1 Freeway Segment	Direction	No. of Lanes	Existing		Existing + Project		Background		Background + Project		Cumulative + Project	
			Volume	LOS	Volume	LOS	Volume	LOS	Volume	LOS	Volume	LOS
Morning Peak Hour												
Del Monte Boulevard to	Northbound	2	2,008	B	2,058	B	2,176	B	2,226	B	2,533	C
Canyon del Rey (SR 218)	Southbound	2	4,469	F	4,551	F	4,644	F	4,726	F	4,952	F
Canyon del Rey (SR 218) to	Northbound	2	1,979	B	1,979	B	2,114	B	2,114	B	2,362	C
Fremont Boulevard	Southbound	2	4,406	F	4,406	F	4,528	F	4,528	F	4,682	F
North of Fremont Boulevard	Northbound	3	2,319	B	2,376	C	2,402	C	2,459	C	2,625	C
	Southbound	3	5,161	D	5,193	D	5,253	D	5,285	D	5,403	D
Evening Peak Hour												
Del Monte Boulevard to	Northbound	2	3,951	E	4,051	E	4,086	E	4,186	F	4,543	F
Canyon del Rey (SR 218)	Southbound	2	2,526	C	2,592	C	2,666	C	2,732	C	3,108	C
Canyon del Rey (SR 218) to	Northbound	2	3,895	E	3,895	E	4,031	E	4,031	E	4,373	F
Fremont Boulevard	Southbound	2	2,490	C	2,490	C	2,580	C	2,580	C	2,880	C
North of Fremont Boulevard	Northbound	3	4,563	C	4,606	C	4,698	C	4,741	C	5,155	D
	Southbound	3	2,917	B	2,979	B	3,067	B	3,129	B	3,484	C

Keith Higgins
Traffic Engineer

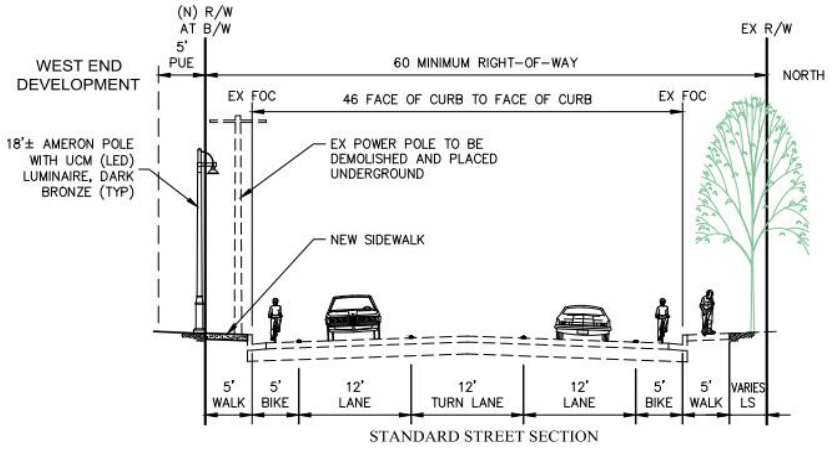
Exhibit 14
Freeway Level of Service Summary



CALIFORNIA AVENUE

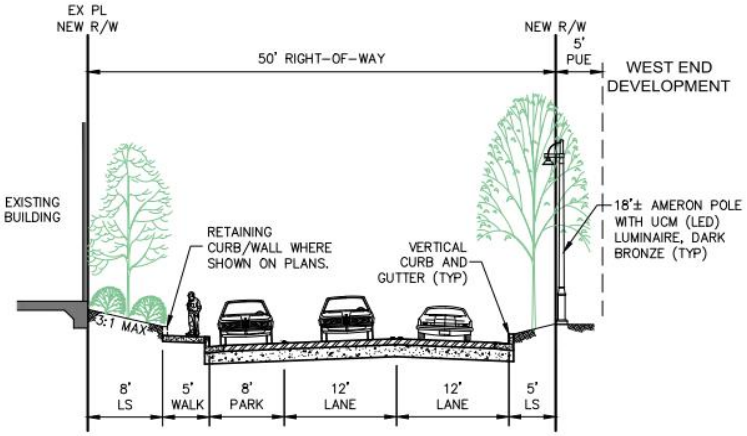


INTERIOR ROAD 'A'



STANDARD STREET SECTION

TIOGA AVENUE



EAST AVENUE

Keith Higgins
Traffic Engineer

Exhibit 15
Typical Street Sections

West End Shared Parking Analysis - Parking Supply

Percentage of Parking Space Occupancy by Use

Time of Day	Business Hotel Guest	Leisure Hotel Guest	Average Hotel - H1 Guest	Average Hotel - H1 Employee	Average Hotel - H2 Guest	Average Hotel - H2 Employee	Condominiums (R1) Resident	Condominiums (R1) Reserved	Condominiums (R1) Guest	Apartments (R2) Resident	Apartments (R2) Reserved	Apartments (R2) Guest	Quality Restaurant Customer	Quality Restaurant Employee
12:00 AM	100%	100%	100%	5%	100%	5%	100%	100%	50%	100%	100%	50%	25%	35%
1:00 AM	100%	100%	100%	5%	100%	5%	100%	100%	10%	100%	100%	10%	10%	10%
2:00 AM	100%	100%	100%	5%	100%	5%	100%	100%	10%	100%	100%	10%	0%	0%
3:00 AM	100%	100%	100%	5%	100%	5%	100%	100%	10%	100%	100%	10%	0%	0%
4:00 AM	100%	100%	100%	5%	100%	5%	100%	100%	10%	100%	100%	10%	0%	0%
5:00 AM	100%	100%	100%	5%	100%	5%	100%	100%	10%	100%	100%	10%	0%	0%
6:00 AM	95%	95%	95%	5%	95%	5%	100%	100%	10%	100%	100%	10%	0%	0%
7:00 AM	90%	95%	93%	30%	93%	30%	90%	100%	10%	90%	100%	10%	0%	20%
8:00 AM	80%	90%	85%	90%	85%	90%	85%	100%	10%	85%	100%	10%	0%	50%
9:00 AM	70%	80%	75%	90%	75%	90%	80%	100%	20%	80%	100%	20%	0%	75%
10:00 AM	60%	70%	65%	100%	65%	100%	75%	100%	20%	75%	100%	20%	15%	90%
11:00 AM	60%	70%	65%	100%	65%	100%	70%	100%	20%	70%	100%	20%	40%	90%
12:00 PM	55%	65%	60%	100%	60%	100%	65%	100%	20%	65%	100%	20%	75%	90%
1:00 PM	55%	65%	60%	100%	60%	100%	70%	100%	20%	70%	100%	20%	75%	90%
2:00 PM	60%	70%	65%	100%	65%	100%	70%	100%	20%	70%	100%	20%	65%	90%
3:00 PM	60%	70%	65%	100%	65%	100%	70%	100%	20%	70%	100%	20%	40%	75%
4:00 PM	65%	75%	70%	90%	70%	90%	75%	100%	20%	75%	100%	20%	50%	75%
5:00 PM	70%	80%	75%	70%	75%	70%	85%	100%	40%	85%	100%	40%	75%	100%
6:00 PM	75%	85%	80%	40%	80%	40%	90%	100%	60%	90%	100%	60%	95%	100%
7:00 PM	75%	85%	80%	20%	80%	20%	97%	100%	100%	97%	100%	100%	100%	100%
8:00 PM	80%	90%	85%	20%	85%	20%	98%	100%	100%	98%	100%	100%	100%	100%
9:00 PM	85%	95%	90%	20%	90%	20%	99%	100%	100%	99%	100%	100%	100%	100%
10:00 PM	95%	95%	95%	10%	95%	10%	100%	100%	100%	100%	100%	100%	95%	100%
11:00 PM	100%	100%	100%	5%	100%	5%	100%	100%	80%	100%	100%	80%	75%	85%

Units			135 Rooms		81 Rooms		100 Condos			320 Apartments			2,000 Gross Sq. Ft. Seating Area	
Required Parking Ratios			1 per Room		1 per Room		1.5 per Unit 1 covered per Unit			1.5 per Unit 1 covered per Unit			1 per 50 sq. ft. or 1 per 2.5 Seats	
Parking Ratio by Employee/Customer/Guest			0.8	0.2	0.8	0.2	0.92	0.0	0.08	0.91	0.0	0.09	0.85	0.15
Total Parking Requirement			135 spaces		81 spaces		150 spaces			480 spaces			40 spaces	
Parking Required Employee/Customer/Guest			108	27	65	16	138		12	437	0	43	34	6
On-Site Parking Supply			143 Spaces		81 Spaces		151 Spaces			486 Spaces			0 Spaces	
Total:	861 Spaces													
On-Street Parking Supply			"A" Street	18 Spaces	California Ave.	32 Spaces	East Ave.	6 Spaces						
Total:	56 Spaces													
Grand Total:	917 Spaces													

Notes:
1. Parking occupancies by land use cited from *Shared Parking* , Urban Land Institutue.
2. Number of on-site and on-street parking sapces are from site plan on Exhibit 2.
3. Sq. Ft. = Square Feet.

Keith Higgins
Traffic Engineer

Exhibit 16A
Project Parking Supply

West End Shared Parking Analysis - Parking Demand

	Percentage of Parking Space Occupancy by Use																				
Time of Day	Average Hotel - H1			Average Hotel - H2			Condominiums (R1)				Apartments (R2)				Quality Restaurant			TOTAL PARKING DEMAND	ON-SITE PARKING OCCUPANCY RATE	PARKING OCCUPANCY RATE INCLUDING STREET FRONTAGE
	Guest	Employee	Total	Guest	Employee	Total	Resident	Reserved	Guest	Total	Resident	Reserved	Guest	Total	Customer	Employee	Total			
12:00 AM	108	1	109	65	1	66	138	0	6	144	437	0	22	459	9	2	11	788	92%	86%
1:00 AM	108	1	109	65	1	66	138	0	1	139	437	0	4	441	3	1	4	760	88%	83%
2:00 AM	108	1	109	65	1	66	138	0	1	139	437	0	4	441	0	0	0	756	88%	82%
3:00 AM	108	1	109	65	1	66	138	0	1	139	437	0	4	441	0	0	0	756	88%	82%
4:00 AM	108	1	109	65	1	66	138	0	1	139	437	0	4	441	0	0	0	756	88%	82%
5:00 AM	108	1	109	65	1	66	138	0	1	139	437	0	4	441	0	0	0	756	88%	82%
6:00 AM	103	1	104	62	1	63	138	0	1	139	437	0	4	441	0	0	0	747	87%	81%
7:00 AM	100	8	108	60	5	65	124	0	1	125	393	0	4	398	0	1	1	697	81%	76%
8:00 AM	92	24	116	55	14	70	117	0	1	119	371	0	4	376	0	3	3	683	79%	74%
9:00 AM	81	24	105	49	14	63	110	0	2	113	350	0	9	358	0	5	5	644	75%	70%
10:00 AM	70	27	97	42	16	58	104	0	2	106	328	0	9	336	5	5	11	608	71%	66%
11:00 AM	70	27	97	42	16	58	97	0	2	99	306	0	9	315	14	5	19	588	68%	64%
12:00 PM	65	27	92	39	16	55	90	0	2	92	284	0	9	293	26	5	31	562	65%	61%
1:00 PM	65	27	92	39	16	55	97	0	2	99	306	0	9	315	26	5	31	591	69%	64%
2:00 PM	70	27	97	42	16	58	97	0	2	99	306	0	9	315	22	5	28	596	69%	65%
3:00 PM	70	27	97	42	16	58	97	0	2	99	306	0	9	315	14	5	18	587	68%	64%
4:00 PM	76	24	100	46	14	60	104	0	2	106	328	0	9	336	17	5	22	624	72%	68%
5:00 PM	81	19	100	49	11	60	117	0	5	122	371	0	17	389	26	6	32	702	82%	77%
6:00 PM	86	11	97	52	6	58	124	0	7	131	393	0	26	419	32	6	38	744	86%	81%
7:00 PM	86	5	92	52	3	55	134	0	12	146	424	0	43	467	34	6	40	800	93%	87%
8:00 PM	92	5	97	55	3	58	135	0	12	147	428	0	43	471	34	6	40	814	95%	89%
9:00 PM	97	5	103	59	3	62	137	0	12	149	433	0	43	476	34	6	40	829	96%	90%
10:00 PM	103	3	105	62	2	63	138	0	12	150	437	0	43	480	32	6	38	837	97%	91%
11:00 PM	108	1	109	65	1	66	138	0	10	148	437	0	34	471	26	5	31	825	96%	90%
Units	135 Rooms			81 Rooms			100 Condos				320 Apartments				4,000 Square Feet					
Parking Supply	143 Spaces			81 Spaces			151 Spaces				486 Spaces				0 Spaces			866 Spaces		917 Spaces

Notes:
1. Number of occupied spaces quantified using occupancy percentages on Exhibit 16A.
2. Number of on-site and on-street parking sapces are from site plan on Exhibit 2.

Keith Higgins
Traffic Engineer

Exhibit 16B
Project Parking Demand

Appendix A

Level of Service
Descriptions

APPENDIX A1

LEVEL OF SERVICE (LOS) DESCRIPTION
SIGNALIZED INTERSECTIONS

The capacity of an urban street is related primarily to the signal timing and the geometric characteristics of the facility as well as to the composition of traffic on the facility. Geometrics are a fixed characteristic of a facility. Thus, while traffic composition may vary somewhat over time, the capacity of a facility is generally a stable value that can be significantly improved only by initiating geometric improvements. A traffic signal essentially allocates time among conflicting traffic movements that seek to use the same space. The way in which time is allocated significantly affects the operation and the capacity of the intersection and its approaches.

The methodology for signalized intersection is designed to consider individual intersection approaches and individual lane groups within approaches. A lane group consists of one or more lanes on an intersection approach. The outputs from application of the method described in the HCM 2010 are reported on the basis of each lane. For a given lane group at a signalized intersection, three indications are displayed: green, yellow and red. The red indication may include a short period during which all indications are red, referred to as an all-red interval and the yellow indication forms the change and clearance interval between two green phases.

The methodology for analyzing the capacity and level of service must consider a wide variety of prevailing conditions, including the amount and distribution of traffic movements, traffic composition, geometric characteristics, and details of intersection signalization. The methodology addresses the capacity, LOS, and other performance measures for lane groups and the intersection approaches and the LOS for the intersection as a whole.

Capacity is evaluated in terms of the ratio of demand flow rate to capacity (v/c ratio), whereas LOS is evaluated on the basis of control delay per vehicle (in seconds per vehicle). The methodology does not take into account the potential impact of downstream congestion on intersection operation, nor does the methodology detect and adjust for the impacts of turn-pocket overflows on through traffic and intersection operation.

LEVEL OF SERVICE (LOS) CRITERIA FOR SIGNALIZED INTERSECTIONS

(Reference 2010 Highway Capacity Manual)

Level of Service	Control Delay (seconds / vehicle)
A	**<10**
B	**>10 - 20**
C	**>20 - 35**
D	**>35 - 55**
E	**>55 - 80**
F	**>80**

APPENDIX A2

LEVEL OF SERVICE (LOS) DESCRIPTION
UNSIGNALIZED INTERSECTIONS WITH ALL-WAY STOP CONTROL (AWSC)

AWSC intersections require every vehicle to stop at the intersection before proceeding. Since each driver must stop, the judgement as to whether to proceed into the intersection is a function of traffic conditions on the other approaches. While giving priority to the driver on the right is a recognized rule in some areas, it is not a good descriptor of actual intersection operations. What happens is the development of a consensus of right-of-way that alternates between the drivers on the intersection approaches, a consensus that depends primarily on the intersection geometry and the arrival patterns at the stop line.

If no traffic is present on the other approaches, a driver can proceed immediately after the stop is made. If there is traffic on one or more of the other approaches, a driver proceeds only after determining that there are no vehicles currently in the intersection and that it is the driver's turn to proceed. Since no traffic signal controls the stream movement or allocates the right-of-way to each conflicting stream, the rate of departure is controlled by the interaction between the traffic streams themselves.

For AWSC intersections, the average control delay (in seconds per vehicle) is used as the primary measure of performance. Control delay is the increased time of travel for a vehicle approaching and passing through an AWSC intersection, compared with a free-flow vehicle if it were not required to slow down or stop at the intersection.

The criteria for AWSC intersections have different threshold values than do those for signalized intersections, primarily because drivers expect different levels of performance from different kinds of traffic control devices (i.e., traffic signals, two way stop or all way stop, etc.). The expectation is that a signalized intersection is designed to carry higher traffic volumes than an AWSC intersection and a higher level of control delay is acceptable at a signalized intersection for the same LOS.

For AWSC analysis using the HCM 2010 method, the LOS shown reflects the weighted average of the delay on each of the approaches.

LEVEL OF SERVICE (LOS) CRITERIA FOR AWSC INTERSECTIONS
(Reference 2010 Highway Capacity Manual)

Level of Service	Control Delay (seconds / vehicle)
A	**0 - 10**
B	**>10 - 15**
C	**>15 - 25**
D	**>25 - 35**
E	**>35 - 50**
F	**>50**

APPENDIX A3

LEVEL OF SERVICE (LOS) DESCRIPTION
UNSIGNALIZED INTERSECTIONS WITH TWO-WAY STOP CONTROL (TWSC)

TWSC intersections are widely used and stop signs are used to control vehicle movements at such intersections. At TWSC intersections, the stop-controlled approaches are referred to as the minor street approaches; they can be either public streets or private driveways. The intersection approaches that are not controlled by stop signs are referred to as the major street approaches. A three-leg intersection is considered to be a standard type of TWSC intersection if the single minor street approach (i.e. the stem of the T configuration) is controlled by a stop sign. Three-leg intersections where two of the three approaches are controlled by stop signs are a special form of unsignalized intersection control.

At TWSC intersections, drivers on the controlled approaches are required to select gaps in the major street flow through which to execute crossing or turning maneuvers on the basis of judgment. In the presence of a queue, each driver on the controlled approach must use some time to move into the front-of-queue position and prepare to evaluate gaps in the major street flow. Capacity analysis at TWSC intersections depends on a clear description and understanding of the interaction of drivers on the minor or stop-controlled approach with drivers on the major street. Both gap acceptance and empirical models have been developed to describe this interaction.

Thus, the capacity of the controlled legs is based on three factors:

- the distribution of gaps in the major street traffic stream;
- driver judgment in selecting gaps through which to execute the desired maneuvers; and
- the follow-up time required by each driver in a queue.

The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions, in the absence of incident, control, traffic or geometric delay. Average control delay for any particular minor movement is a function of the capacity of the approach and the degree of saturation and referred to as level of service.

LEVEL OF SERVICE (LOS) CRITERIA FOR TWSC INTERSECTIONS

(Reference 2010 Highway Capacity Manual)

Level of Service	Control Delay (seconds / vehicle)
A	**0 - 10**
B	**>10 - 15**
C	**>15 - 25**
D	**>25 - 35**
E	**>35 - 50**
F	**>50**

APPENDIX A4
LEVEL OF SERVICE THRESHOLD VOLUMES FOR VARIOUS ROADWAY TYPES
TOTAL PEAK HOUR VOLUME IN BOTH DIRECTIONS (PHV)

ROADWAY TYPE	CODE	LOS A	LOS B	LOS C	LOS D	LOS E
10-Lane Freeway	10F	6,400	9,900	13,900	16,000	18,200
8-Lane Freeway	8F	5,100	7,900	11,200	13,600	14,600
6-Lane Freeway	6F	3,900	5,900	8,500	10,200	11,000
8-Lane Expressway	8E	3,500	5,400	7,500	9,000	9,800
6-Lane Expressway	6E	2,800	4,200	5,600	6,700	7,400
4-Lane Freeway	4F	2,600	4,000	5,700	6,900	7,400
8-Lane Divided Arterial (w/ left-turn lane)	9	4,000	4,700	5,400	6,100	6,800
6-Lane Divided Arterial (w/ left-turn lane)	7	3,200	3,800	4,300	4,900	5,400
4-Lane Expressway	4E	1,800	2,700	3,600	4,500	5,000
4-Lane Divided Arterial (w/ left-turn lane)	5	2,200	2,500	2,900	3,250	3,600
4-Lane Undivided Arterial (no left-turn lane)	4	1,600	1,900	2,200	2,400	2,700
2-Lane Rural Highway	2R	400	800	1,200	1,700	2,500
2-Lane Arterial (w/left turn lane)	3	1,100	1,250	1,450	1,600	1,800
2-Lane Collector	2	600	750	900	1,050	1,200
2-Lane Local	1	120	140	160	180	200
1-Lane Freeway Diamond Ramp	1D	1,320	1,540	1,760	1,980	2,200
2-Lane Freeway Diamond Ramp	2D	2,640	3,080	3,520	3,960	4,400
1- Lane Freeway Loop Ramp	1L	1,080	1,260	1,440	1,620	1,800
2- Lane Freeway Loop Ramp	2L	1,920	2,240	2,560	2,880	3,200

Notes:

1. The above threshold volumes for preliminary planning purposes only. If available, the results of detailed level of service analyses will typically have priority over the levels of service derived from this table. In that case this table can be used by the analyst for providing additional considerations for recommending the appropriate general roadway type for the specific condition being analyzed.
2. All above facilities assume a 60%/40% peak hour directional split, with the peak hour representing approximately 10% of the Average Daily Traffic (ADT).
3. Based on *Highway Capacity Manual*, Transportation Research Board, 2010.
4. Freeway thresholds are consistent with conditions utilizing a .95 peak hour factor, with 2% trucks and slightly over a one-mile average interchange spacing.
5. Expressways are consistent with the average of a multi-lane highway (with no signals) and Class 1 arterial (with an average signal spacing of 0.8 signals per mile and a .45 G/C ratio).
6. Arterial thresholds are consistent with the average of Class 1 and Class 2 arterials with an assumed signal density of two signals per mile. This assumes a divided arterial with left-turn lanes. Thresholds for four-lane undivided arterials assume approximately two-thirds the capacity of a four-lane divided arterial due to the impedance in traffic flow resulting from left-turning vehicles waiting in the inside through lane, thus significantly reducing the capacity of the roadway.
7. Rural highways are generally consistent with the *2010 Highway Capacity Manual* rural highway, assuming 8% trucks, 4% RV's, 20% no-passing, and level terrain. The greatest difference is that it assumes a maximum capacity (upper end of LOS E) of 25,000 rather than the 28,000 calculated using the new *Highway Capacity Manual*.
8. Two-lane collectors assume approximately three-fourths of the capacity of a two-lane arterial with left-turn lanes. This is based on the assumption that left-turn channelization is not provided on a two-lane collector.
9. Local street level of service thresholds are based upon "Neighborhood Traffic Related Quality-of-Life Considerations" which assumes a standard suburban neighborhood, 40-foot roadway width, and 25 mile per hour speed limit with normal speed violation rates.
10. Capacities for Diamond Ramps and Loop Ramps may be slightly higher or lower than the planning level capacities indicated above. The *2010 Highway Capacity Manual* (2010 HCM) states that the capacity of a one-lane diamond to be 2,200 vehicles per hour (vph), and 1,800 vph for a small radius loop ramp. Two-lane freeway ramp capacities are estimated in the 2010 HCM to be 4,400vph for a two-lane diamond, and 3,200vph 20 for a two-lane small radius loop. Varying intermediate capacities are provided for incremental conditions between these extremes. Capacities given for each service level assume the same level of service for the adjoining merging roadway as well as level of service being determined by volume-to-capacity and not attainable speed. Level of service will be controlled by freeway level of service if worse than ramp. Mitigations of level of service deficiencies may include the addition of a lane on the freeway ramp, the addition of an auxiliary lane on the freeway mainline, the addition of approach lanes at the ramp junction with the local intersecting street, and/or geometric modifications to improve the efficiency of the ramp itself or its termini. The appropriate mitigation should be determined on a case-by-case basis, considering freeway main line volumes and weaving, the extent that the freeway ramp volume exceeds the above planning thresholds, and the level of service of the ramp intersection with the local street.
11. All volumes are approximate and assume ideal roadway characteristics.

Basemap Source: Monterey-Salinas Transit, October 2, 2017.

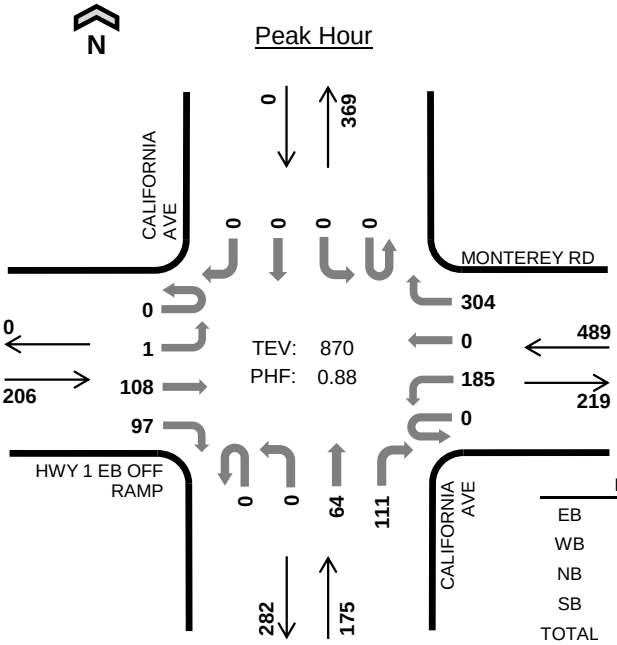
Appendix B
MST Transit Lines
in Project Vicinity

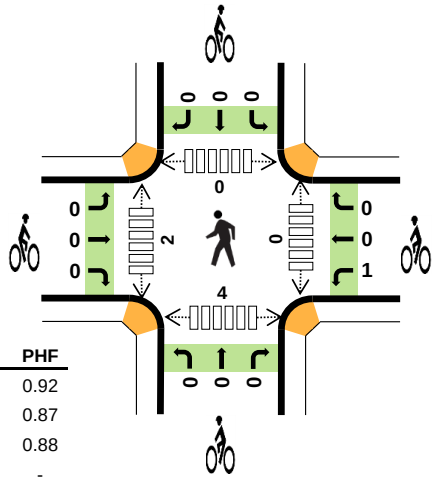
Appendix C

Intersection
Traffic Volume
Counts

CALIFORNIA AVE
HWY 1 EB OFF RAMP

Date: 06/13/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM





	HV %:	PHF
EB	2.9%	0.92
WB	2.7%	0.87
NB	5.7%	0.88
SB	-	-
TOTAL	3.3%	0.88

Two-Hour Count Summaries

Interval Start	HWY 1 EB OFF RAMP Eastbound				MONTEREY RD Westbound				CALIFORNIA AVE Northbound				CALIFORNIA AVE Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	12	9	0	61	0	73	0	0	14	14	0	0	0	0	183	0
7:15 AM	0	0	19	15	0	53	0	75	0	0	13	22	0	0	0	0	197	0
7:30 AM	0	0	21	18	0	57	0	99	0	0	18	18	0	0	0	0	231	0
7:45 AM	0	0	28	20	0	48	0	78	0	0	12	13	0	0	0	0	199	810
8:00 AM	**0**	**0**	**24**	**23**	**0**	**49**	**0**	**72**	**0**	**0**	**11**	**34**	**0**	**0**	**0**	**0**	**213**	840
8:15 AM	**0**	**0**	**32**	**22**	**0**	**40**	**0**	**74**	**0**	**0**	**11**	**19**	**0**	**0**	**0**	**0**	**198**	841
8:30 AM	**0**	**0**	**23**	**26**	**0**	**38**	**0**	**75**	**0**	**0**	**21**	**29**	**0**	**0**	**0**	**0**	**212**	822
8:45 AM	**0**	**1**	**29**	**26**	**0**	**58**	**0**	**83**	**0**	**0**	**21**	**29**	**0**	**0**	**0**	**0**	**247**	**870**
Count Total	0	1	188	159	0	404	0	629	0	0	121	178	0	0	0	0	1,680	0
Peak Hour All	**0**	**1**	**108**	**97**	**0**	**185**	**0**	**304**	**0**	**0**	**64**	**111**	**0**	**0**	**0**	**0**	**870**	**0**
Peak Hour HV	**0**	**0**	**1**	**5**	**0**	**6**	**0**	**7**	**0**	**0**	**3**	**7**	**0**	**0**	**0**	**0**	**29**	**0**
Peak Hour HV%	**-**	**0%**	**1%**	**5%**	**-**	**3%**	**-**	**2%**	**-**	**-**	**5%**	**6%**	**-**	**-**	**-**	**-**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	5	1	0	*6*	0	0	0	0	*0*	0	0	0	1	*1*
7:15 AM	1	2	1	0	*4*	0	0	0	0	*0*	0	0	0	1	*1*
7:30 AM	1	4	1	0	*6*	0	0	0	0	*0*	0	0	0	2	*2*
7:45 AM	3	2	0	0	*5*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	**1**	**5**	**4**	**0**	***10***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**2**	*2*
8:15 AM	**2**	**3**	**0**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**0**	*2*
8:30 AM	**2**	**4**	**3**	**0**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	*2*
8:45 AM	**1**	**1**	**3**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Count Total	11	26	13	0	*50*	0	1	0	0	*1*	0	2	0	8	*10*
Peak Hour	**6**	**13**	**10**	**0**	***29***	**0**	**1**	**0**	**0**	***1***	**0**	**2**	**0**	**4**	***6***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	HWY 1 EB OFF RAMP				MONTEREY RD				CALIFORNIA AVE				CALIFORNIA AVE				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	4	0	1	0	0	0	1	0	0	0	0	6	0
7:15 AM	0	0	0	1	0	2	0	0	0	0	0	1	0	0	0	0	4	0
7:30 AM	0	0	0	1	0	2	0	2	0	0	1	0	0	0	0	0	6	0
7:45 AM	0	0	1	2	0	1	0	1	0	0	0	0	0	0	0	0	5	21
8:00 AM	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**3**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**10**	25
8:15 AM	**0**	**0**	**0**	**2**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	26
8:30 AM	**0**	**0**	**0**	**2**	**0**	**2**	**0**	**2**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**9**	29
8:45 AM	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**5**	**29**
Count Total	0	0	2	9	0	15	0	11	0	0	4	9	0	0	0	0	50	0
Peak Hour	**0**	**0**	**1**	**5**	**0**	**6**	**0**	**7**	**0**	**0**	**3**	**7**	**0**	**0**	**0**	**0**	**29**	**0**

Two-Hour Count Summaries - Bikes

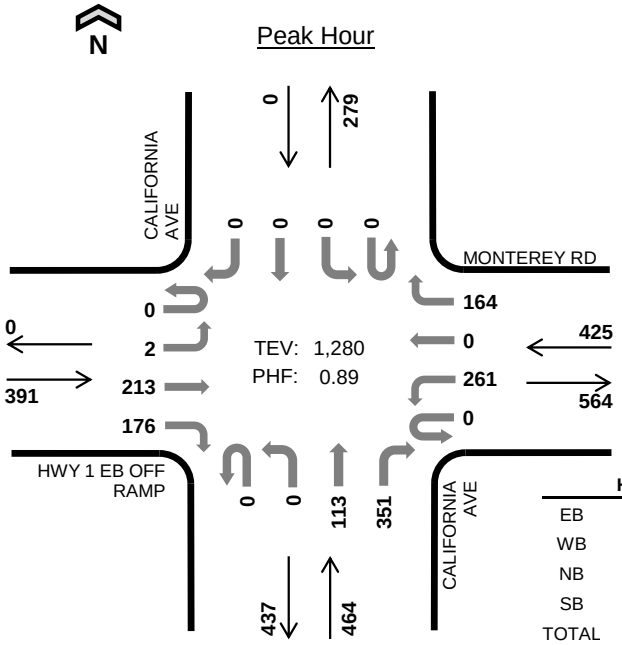
Interval Start	HWY 1 EB OFF RAMP			MONTEREY RD			CALIFORNIA AVE			CALIFORNIA AVE			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Count Total	0	0	0	1	0	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

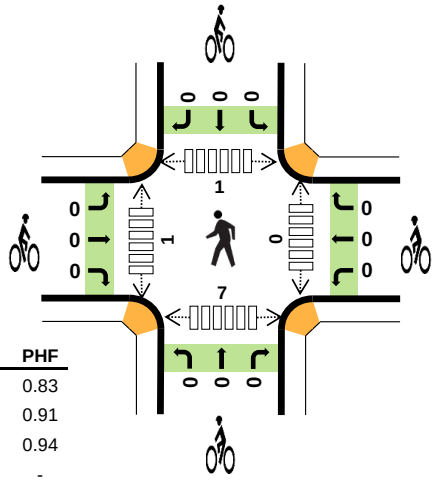
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

CALIFORNIA AVE
HWY 1 EB OFF RAMP

Date: 06/13/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM





	HV %:	PHF
EB	0.8%	0.83
WB	0.5%	0.91
NB	1.1%	0.94
SB	-	-
TOTAL	0.8%	0.89

Two-Hour Count Summaries

Interval Start		HWY 1 EB OFF RAMP Eastbound				MONTEREY RD Westbound				CALIFORNIA AVE Northbound				CALIFORNIA AVE Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	74	43	0	63	0	47	0	0	29	85	0	0	1	0	342	0
4:15 PM		0	1	40	31	0	60	0	44	0	0	41	85	0	0	0	0	302	0
4:30 PM		0	1	42	22	0	67	0	51	0	0	31	64	0	0	0	0	278	0
4:45 PM		0	1	33	32	0	71	0	59	0	0	20	77	0	1	1	0	295	1,217
5:00 PM		**0**	**0**	**43**	**31**	**0**	**51**	**0**	**47**	**0**	**0**	**26**	**83**	**0**	**0**	**0**	**0**	**281**	1,156
5:15 PM		**0**	**0**	**45**	**42**	**0**	**77**	**0**	**34**	**0**	**0**	**32**	**92**	**0**	**0**	**0**	**0**	**322**	1,176
5:30 PM		**0**	**1**	**63**	**48**	**0**	**68**	**0**	**31**	**0**	**0**	**25**	**83**	**0**	**0**	**0**	**0**	**319**	1,217
5:45 PM		**0**	**1**	**62**	**55**	**0**	**65**	**0**	**52**	**0**	**0**	**30**	**93**	**0**	**0**	**0**	**0**	**358**	**1,280**
Count Total		0	5	402	304	0	522	0	365	0	0	234	662	0	1	2	0	2,497	0
Peak Hour	**All**	**0**	**2**	**213**	**176**	**0**	**261**	**0**	**164**	**0**	**0**	**113**	**351**	**0**	**0**	**0**	**0**	**1,280**	**0**
	HV	**0**	**0**	**2**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**4**	**0**	**0**	**0**	**0**	**10**	**0**
	HV%	**-**	**0%**	**1%**	**1%**	**-**	**1%**	**-**	**0%**	**-**	**-**	**1%**	**1%**	**-**	**-**	**-**	**-**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	2	3	0	*5*	0	0	0	0	*0*	0	2	0	1	*3*
4:15 PM	0	2	2	0	*4*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	3	1	2	0	*6*	0	0	0	0	*0*	0	0	0	2	*2*
4:45 PM	0	2	2	0	*4*	0	0	0	0	*0*	1	0	0	1	*2*
5:00 PM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**3**	*5*
5:15 PM	**0**	**2**	**1**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	*2*
5:30 PM	**2**	**0**	**2**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	*1*
5:45 PM	**1**	**0**	**1**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***
Count Total	6	9	14	0	*29*	0	0	0	0	*0*	1	3	1	11	*16*
Peak Hour	**3**	**2**	**5**	**0**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**7**	***9***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	HWY 1 EB OFF RAMP				MONTEREY RD				CALIFORNIA AVE				CALIFORNIA AVE				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	2	0	0	0	0	1	2	0	0	0	0	5	0
4:15 PM	0	0	0	0	0	2	0	0	0	0	1	1	0	0	0	0	4	0
4:30 PM	0	0	2	1	0	1	0	0	0	0	1	1	0	0	0	0	6	0
4:45 PM	0	0	0	0	0	1	0	1	0	0	0	2	0	0	0	0	4	19
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	15
5:15 PM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	14
5:30 PM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**4**	12
5:45 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**10**
Count Total	0	0	4	2	0	8	0	1	0	0	4	10	0	0	0	0	29	0
Peak Hour	**0**	**0**	**2**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**4**	**0**	**0**	**0**	**0**	**10**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	HWY 1 EB OFF RAMP			MONTEREY RD			CALIFORNIA AVE			CALIFORNIA AVE			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

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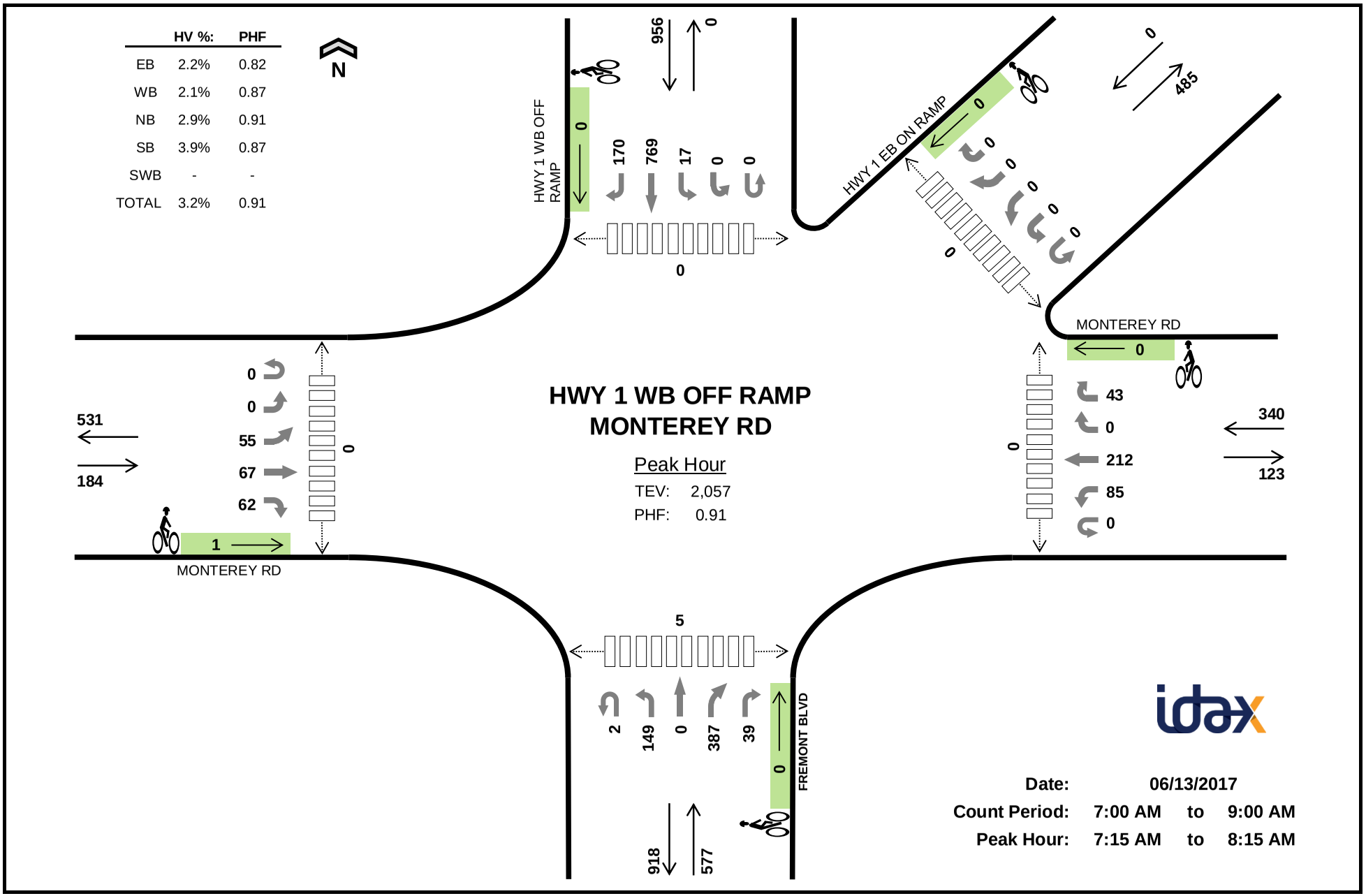

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Two-Hour Count Summaries

Interval Start	MONTEREY RD Eastbound					MONTEREY RD Westbound					FREMONT BLVD Northbound					HWY 1 WB OFF RAMP Southbound					HWY 1 EB ON RAMP Southwestbound					15-min Total	Rolling One Hour
	UT	LT	BL	TH	RT	UT	LT	TH	RT	HR	UT	LT	TH	BR	RT	UT	HL	LT	TH	RT	UT	HL	BL	BR	HR		
7:00 AM	0	0	9	10	6	0	12	61	0	3	0	22	0	55	13	0	0	5	162	50	0	0	0	0	0	408	0
7:15 AM	**0**	**0**	**17**	**18**	**8**	**0**	**20**	**48**	**0**	**12**	**0**	**28**	**0**	**87**	**6**	**0**	**0**	**3**	**222**	**50**	**0**	**0**	**0**	**0**	**0**	**519**	0
7:30 AM	**0**	**0**	**11**	**10**	**15**	**0**	**22**	**67**	**0**	**9**	**0**	**46**	**0**	**102**	**11**	**0**	**0**	**2**	**217**	**52**	**0**	**0**	**0**	**0**	**0**	**564**	0
7:45 AM	**0**	**0**	**7**	**21**	**21**	**0**	**24**	**47**	**0**	**11**	**0**	**37**	**0**	**106**	**15**	**0**	**0**	**4**	**172**	**37**	**0**	**0**	**0**	**0**	**0**	**502**	1,993
8:00 AM	**0**	**0**	**20**	**18**	**18**	**0**	**19**	**50**	**0**	**11**	**2**	**38**	**0**	**92**	**7**	**0**	**0**	**8**	**158**	**31**	**0**	**0**	**0**	**0**	**0**	**472**	**2,057**
8:15 AM	0	0	17	17	18	0	21	49	0	9	1	39	0	110	8	0	0	18	151	24	0	0	0	0	0	482	2,020
8:30 AM	0	0	21	20	8	0	17	45	0	12	0	36	0	123	11	0	0	10	129	30	0	0	0	0	0	462	1,918
8:45 AM	0	0	22	19	16	0	14	56	0	6	0	48	0	91	13	0	0	9	131	35	0	0	0	0	0	460	1,876
Count Total	0	0	124	133	110	0	149	423	0	73	3	294	0	766	84	0	0	59	1,342	309	0	0	0	0	0	3,869	0
Peak Hour All	**0**	**0**	**55**	**67**	**62**	**0**	**85**	**212**	**0**	**43**	**2**	**149**	**0**	**387**	**39**	**0**	**0**	**17**	**769**	**170**	**0**	**0**	**0**	**0**	**0**	**2,057**	**0**
Peak Hour HV	**0**	**0**	**3**	**1**	**0**	**0**	**4**	**3**	**0**	**0**	**0**	**3**	**0**	**13**	**1**	**0**	**0**	**0**	**30**	**7**	**0**	**0**	**0**	**0**	**0**	**65**	**0**
Peak Hour HV%	**-**	**-**	**5%**	**1%**	**0%**	**-**	**5%**	**1%**	**-**	**0%**	**0%**	**2%**	**-**	**3%**	**3%**	**-**	**-**	**0%**	**4%**	**4%**	**-**	**-**	**-**	**-**	**-**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals						Bicycles						Pedestrians (Crossing Leg)					
	EB	WB	NB	SB	SWB	Total	EB	WB	NB	SB	SWB	Total	East	West	North	South	Northeast	Total
7:00 AM	1	1	7	11	0	*20*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
7:15 AM	**1**	**2**	**2**	**7**	**0**	***12***	**1**	**0**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	**0**	***0***
7:30 AM	**0**	**1**	**5**	**8**	**0**	***14***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	**0**	***2***
7:45 AM	**1**	**1**	**6**	**5**	**0**	***13***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	**0**	***1***
8:00 AM	**2**	**3**	**4**	**17**	**0**	***26***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	**0**	***2***
8:15 AM	0	2	9	18	0	*29*	0	0	1	1	0	*2*	0	0	0	0	0	*0*
8:30 AM	3	2	3	8	0	*16*	0	0	0	0	0	*0*	0	0	0	3	0	*3*
8:45 AM	4	0	10	4	0	*18*	0	0	0	0	0	*0*	0	0	0	2	0	*2*
Count Total	12	12	46	78	0	*148*	1	0	1	1	0	*3*	0	0	0	10	0	*10*
Peak Hr	**4**	**7**	**17**	**37**	**0**	***65***	**1**	**0**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**5**	**0**	*5*

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	MONTEREY RD Eastbound					MONTEREY RD Westbound					FREMONT BLVD Northbound					HWY 1 WB OFF RAMP Southbound					HWY 1 EB ON RAMP Southwestbound					15-min Total	Rolling One Hour
	UT	LT	BL	TH	RT	UT	LT	TH	RT	HR	UT	LT	TH	BR	RT	UT	HL	LT	TH	RT	UT	HL	BL	BR	HR		
7:00 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	6	1	0	0	0	6	5	0	0	0	0	0	20	0
7:15 AM	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**5**	**2**	**0**	**0**	**0**	**0**	**0**	**12**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	**0**	**0**	**0**	**0**	**6**	**2**	**0**	**0**	**0**	**0**	**0**	**14**	0
7:45 AM	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**5**	**0**	**0**	**0**	**0**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**13**	59
8:00 AM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**2**	**1**	**0**	**0**	**0**	**15**	**2**	**0**	**0**	**0**	**0**	**0**	**26**	**65**
8:15 AM	0	0	0	0	0	0	2	0	0	0	0	1	0	7	1	0	0	2	15	1	0	0	0	0	0	29	82
8:30 AM	0	0	2	0	1	0	0	2	0	0	0	0	0	2	1	0	0	0	6	2	0	0	0	0	0	16	84
8:45 AM	0	0	3	1	0	0	0	0	0	0	0	2	0	8	0	0	0	0	3	1	0	0	0	0	0	18	89
Count Total	0	0	9	2	1	0	6	6	0	0	0	6	0	36	4	0	0	2	60	16	0	0	0	0	0	148	0
Peak Hour	**0**	**0**	**3**	**1**	**0**	**0**	**4**	**3**	**0**	**0**	**0**	**3**	**0**	**13**	**1**	**0**	**0**	**0**	**30**	**7**	**0**	**0**	**0**	**0**	**0**	65	**0**

Two-Hour Count Summaries - Bikes

Interval Start	MONTEREY RD Eastbound					MONTEREY RD Westbound					FREMONT BLVD Northbound					HWY 1 WB OFF RAMP Southbound					HWY 1 EB ON RAMP Southwestbound					15-min Total	Rolling One Hour
	UT	LT	BL	TH	RT	UT	LT	TH	RT	HR	UT	LT	TH	BR	RT	UT	HL	LT	TH	RT	UT	HL	BL	BR	HR		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3	0
Peak Hour	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1	**0**

Deon Fouche: 415 - 757 - 7714

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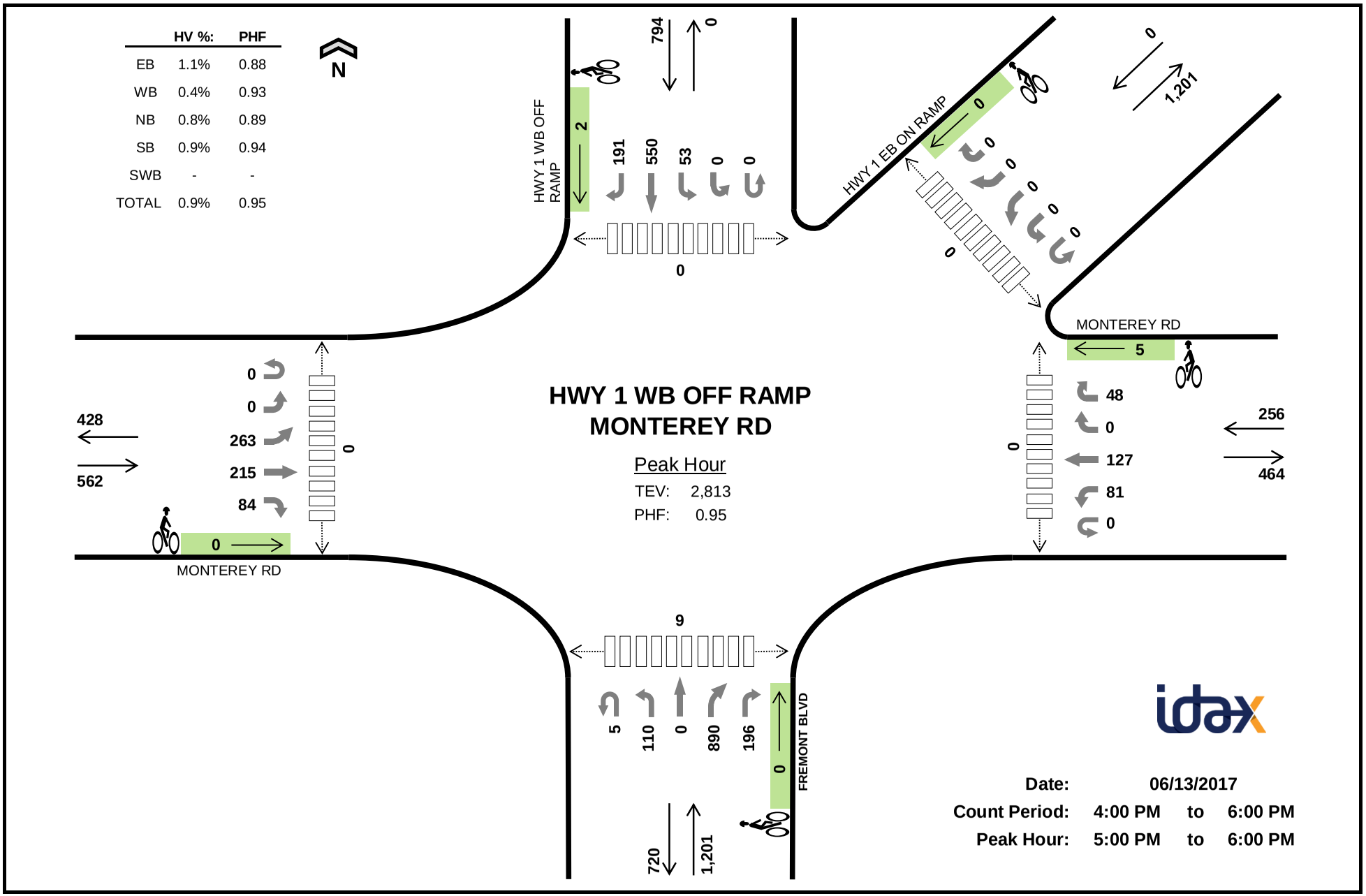

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Two-Hour Count Summaries

Interval Start	MONTEREY RD Eastbound					MONTEREY RD Westbound					FREMONT BLVD Northbound					HWY 1 WB OFF RAMP Southbound					HWY 1 EB ON RAMP Southwestbound					15-min Total	Rolling One Hour
	UT	LT	BL	TH	RT	UT	LT	TH	RT	HR	UT	LT	TH	BR	RT	UT	HL	LT	TH	RT	UT	HL	BL	BR	HR		
4:00 PM	0	0	70	59	30	0	13	29	0	27	1	26	0	187	26	0	0	13	165	47	0	0	0	0	0	693	0
4:15 PM	0	0	56	42	14	0	20	28	0	6	0	36	0	177	41	0	0	9	161	41	0	0	0	0	0	631	0
4:30 PM	0	0	51	53	16	0	17	29	0	9	3	38	0	221	33	0	0	13	155	50	0	0	0	0	0	688	0
4:45 PM	0	0	58	38	13	0	14	45	0	9	0	30	0	192	49	0	0	12	151	48	0	0	0	0	0	659	2,671
5:00 PM	**0**	**0**	**60**	**55**	**16**	**0**	**24**	**34**	**0**	**11**	**1**	**27**	**0**	**214**	**46**	**0**	**0**	**21**	**126**	**40**	**0**	**0**	**0**	**0**	**0**	**675**	2,653
5:15 PM	**0**	**0**	**68**	**49**	**16**	**0**	**20**	**29**	**0**	**12**	**1**	**22**	**0**	**258**	**56**	**0**	**0**	**11**	**145**	**54**	**0**	**0**	**0**	**0**	**0**	**741**	2,763
5:30 PM	**0**	**0**	**68**	**48**	**22**	**0**	**22**	**31**	**0**	**12**	**2**	**19**	**0**	**238**	**43**	**0**	**0**	**14**	**145**	**53**	**0**	**0**	**0**	**0**	**0**	**717**	2,792
5:45 PM	**0**	**0**	**67**	**63**	**30**	**0**	**15**	**33**	**0**	**13**	**1**	**42**	**0**	**180**	**51**	**0**	**0**	**7**	**134**	**44**	**0**	**0**	**0**	**0**	**0**	**680**	**2,813**
Count Total	0	0	498	407	157	0	145	258	0	99	9	240	0	1,667	345	0	0	100	1,182	377	0	0	0	0	0	5,484	0
Peak Hour All	**0**	**0**	**263**	**215**	**84**	**0**	**81**	**127**	**0**	**48**	**5**	**110**	**0**	**890**	**196**	**0**	**0**	**53**	**550**	**191**	**0**	**0**	**0**	**0**	**0**	**2,813**	**0**
Peak Hour HV	**0**	**0**	**3**	**3**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**9**	**0**	**0**	**0**	**0**	**6**	**1**	**0**	**0**	**0**	**0**	**0**	**24**	**0**
Peak Hour HV%	**-**	**-**	**1%**	**1%**	**0%**	**-**	**0%**	**0%**	**-**	**2%**	**0%**	**1%**	**-**	**1%**	**0%**	**-**	**-**	**0%**	**1%**	**1%**	**-**	**-**	**-**	**-**	**-**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals						Bicycles						Pedestrians (Crossing Leg)					
	EB	WB	NB	SB	SWB	Total	EB	WB	NB	SB	SWB	Total	East	West	North	South	Northeast	Total
4:00 PM	2	1	5	5	0	*13*	0	0	0	0	0	*0*	0	0	0	2	0	*2*
4:15 PM	1	0	4	7	0	*12*	0	0	0	0	0	*0*	0	0	0	2	0	*2*
4:30 PM	3	0	3	5	0	*11*	0	0	0	0	0	*0*	0	0	0	2	0	*2*
4:45 PM	2	1	3	2	0	*8*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
5:00 PM	**0**	**0**	**4**	**3**	**0**	***7***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**3**	**0**	***3***
5:15 PM	**1**	**0**	**2**	**4**	**0**	***7***	**0**	**5**	**0**	**2**	**0**	***7***	**0**	**0**	**0**	**5**	**0**	***5***
5:30 PM	**4**	**0**	**3**	**0**	**0**	***7***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	**0**	***1***
5:45 PM	**1**	**1**	**1**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**	***0***
Count Total	14	3	25	26	0	*68*	0	5	0	2	0	*7*	0	0	0	15	0	*15*
Peak Hr	**6**	**1**	**10**	**7**	**0**	***24***	**0**	**5**	**0**	**2**	**0**	***7***	**0**	**0**	**0**	**9**	**0**	*9*

Deon Fouche: 415 - 757 - 7714

deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	MONTEREY RD Eastbound					MONTEREY RD Westbound					FREMONT BLVD Northbound					HWY 1 WB OFF RAMP Southbound					HWY 1 EB ON RAMP Southwestbound					15-min Total	Rolling One Hour
	UT	LT	BL	TH	RT	UT	LT	TH	RT	HR	UT	LT	TH	BR	RT	UT	HL	LT	TH	RT	UT	HL	BL	BR	HR		
4:00 PM	0	0	2	0	0	0	0	1	0	0	0	0	0	5	0	0	0	1	2	2	0	0	0	0	0	13	0
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	6	1	0	0	0	0	0	12	0
4:30 PM	0	0	1	1	1	0	0	0	0	0	0	0	0	3	0	0	0	0	4	1	0	0	0	0	0	11	0
4:45 PM	0	0	2	0	0	0	0	1	0	0	0	0	0	3	0	0	0	0	1	1	0	0	0	0	0	8	44
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	38
5:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**7**	33
5:30 PM	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	29
5:45 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**24**
Count Total	0	0	9	4	1	0	0	2	0	1	0	1	0	24	0	0	0	1	19	6	0	0	0	0	0	68	0
Peak Hour	**0**	**0**	**3**	**3**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**9**	**0**	**0**	**0**	**0**	**6**	**1**	**0**	**0**	**0**	**0**	**0**	24	**0**

Two-Hour Count Summaries - Bikes

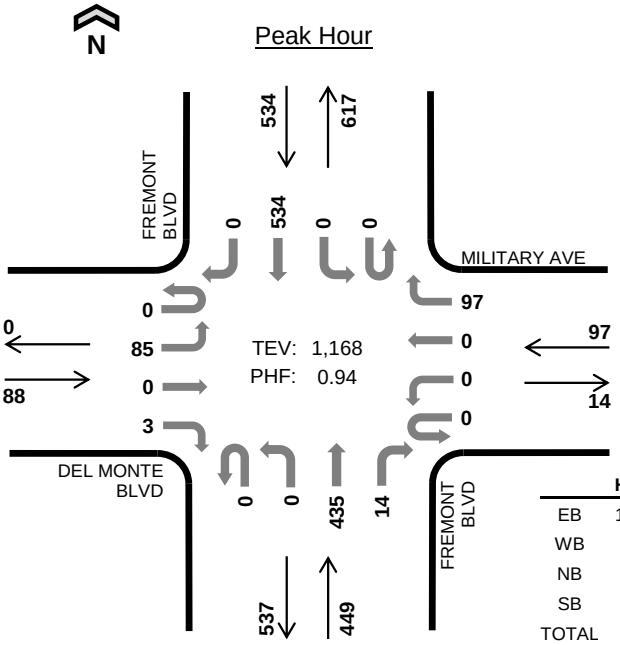
Interval Start	MONTEREY RD Eastbound					MONTEREY RD Westbound					FREMONT BLVD Northbound					HWY 1 WB OFF RAMP Southbound					HWY 1 EB ON RAMP Southwestbound					15-min Total	Rolling One Hour
	UT	LT	BL	TH	RT	UT	LT	TH	RT	HR	UT	LT	TH	BR	RT	UT	HL	LT	TH	RT	UT	HL	BL	BR	HR		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	7
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	7
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**
Count Total	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	7	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	7	**0**

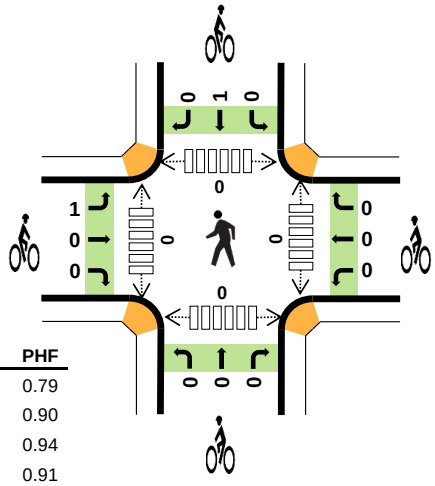
Deon Fouche: 415 - 757 - 7714

deon.fouche@idaxdata.com

FREMONT BLVD
DEL MONTE BLVD

Date: 06/13/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM





	HV %:	PHF
EB	13.6%	0.79
WB	2.1%	0.90
NB	3.3%	0.94
SB	3.2%	0.91
TOTAL	3.9%	0.94

Two-Hour Count Summaries

Interval Start	DEL MONTE BLVD Eastbound				MILITARY AVE Westbound				FREMONT BLVD Northbound				FREMONT BLVD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	16	0	0	0	0	0	22	0	0	57	1	0	0	96	0	192	0
7:15 AM	0	10	0	0	0	0	0	22	0	0	90	0	0	0	154	0	276	0
7:30 AM	**0**	**14**	**0**	**0**	**0**	**0**	**0**	**24**	**0**	**0**	**105**	**2**	**0**	**0**	**147**	**0**	**292**	0
7:45 AM	**0**	**23**	**0**	**2**	**0**	**0**	**0**	**27**	**0**	**0**	**117**	**3**	**0**	**0**	**138**	**0**	**310**	1,070
8:00 AM	**0**	**21**	**0**	**0**	**0**	**0**	**0**	**24**	**0**	**0**	**101**	**4**	**0**	**0**	**130**	**0**	**280**	1,158
8:15 AM	**0**	**27**	**0**	**1**	**0**	**0**	**0**	**22**	**0**	**0**	**112**	**5**	**0**	**0**	**119**	**0**	**286**	**1,168**
8:30 AM	0	21	0	0	0	0	0	32	0	0	117	1	0	0	110	0	281	1,157
8:45 AM	0	32	0	0	0	0	0	27	0	0	84	1	0	0	94	0	238	1,085
Count Total	0	164	0	3	0	0	0	200	0	0	783	17	0	0	988	0	2,155	0
Peak Hour All	**0**	**85**	**0**	**3**	**0**	**0**	**0**	**97**	**0**	**0**	**435**	**14**	**0**	**0**	**534**	**0**	**1,168**	**0**
Peak Hour HV	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**15**	**0**	**0**	**0**	**17**	**0**	**46**	**0**
Peak Hour HV%	**-**	**14%**	**-**	**0%**	**-**	**-**	**-**	**2%**	**-**	**-**	**3%**	**0%**	**-**	**-**	**3%**	**-**	**4%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	0	3	5	*9*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	1	5	*6*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**4**	**0**	**2**	**3**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**1**	**0**	**4**	**2**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**2**	**2**	**3**	**9**	***16***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**5**	**0**	**6**	**3**	***14***	**1**	**0**	**0**	**1**	***2***	**0**	**0**	**0**	**0**	***0***
8:30 AM	3	0	6	3	*12*	0	0	0	0	*0*	0	1	1	0	*2*
8:45 AM	8	2	6	2	*18*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	24	4	31	32	*91*	1	0	0	1	*2*	0	1	1	0	*2*
Peak Hour	**12**	**2**	**15**	**17**	***46***	**1**	**0**	**0**	**1**	***2***	**0**	**0**	**0**	**0**	***0***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	DEL MONTE BLVD Eastbound				MILITARY AVE Westbound				FREMONT BLVD Northbound				FREMONT BLVD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	0	0	0	0	0	0	0	0	3	0	0	0	5	0	9	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	6	0
7:30 AM	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**3**	**0**	**9**	0
7:45 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**2**	**0**	**7**	31
8:00 AM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**3**	**0**	**0**	**0**	**9**	**0**	**16**	38
8:15 AM	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**3**	**0**	**14**	**46**
8:30 AM	0	3	0	0	0	0	0	0	0	0	6	0	0	0	3	0	12	49
8:45 AM	0	8	0	0	0	0	0	2	0	0	6	0	0	0	2	0	18	60
Count Total	0	24	0	0	0	0	0	4	0	0	31	0	0	0	32	0	91	0
Peak Hour	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**15**	**0**	**0**	**0**	**17**	**0**	**46**	**0**

Two-Hour Count Summaries - Bikes

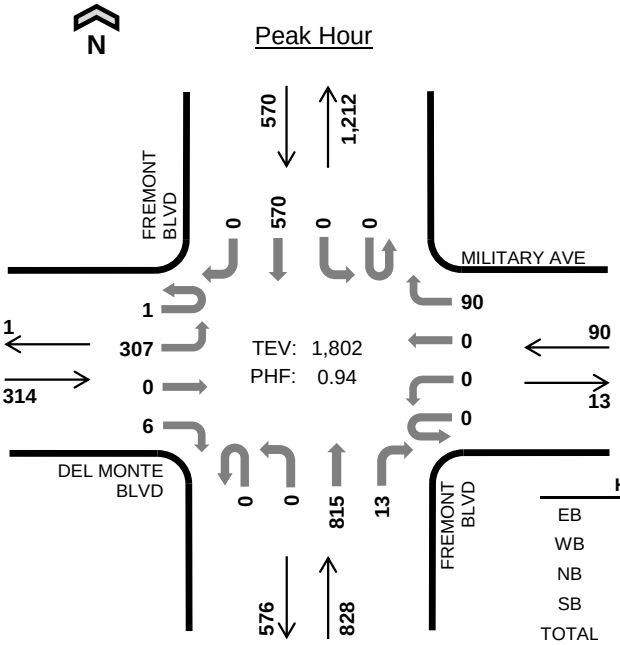
Interval Start	DEL MONTE BLVD Eastbound			MILITARY AVE Westbound			FREMONT BLVD Northbound			FREMONT BLVD Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**2**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	1	0	0	0	0	0	0	0	0	0	1	0	2	0
Peak Hour	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

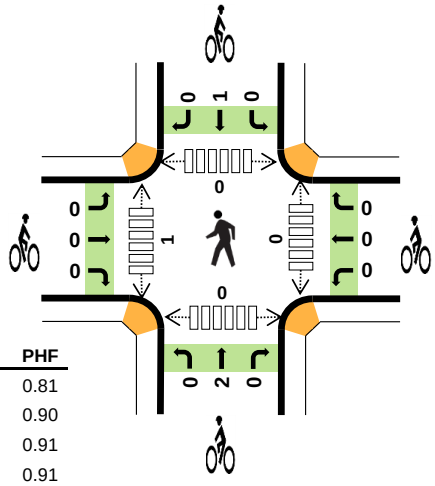
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

FREMONT BLVD
DEL MONTE BLVD

Date: 06/13/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.0%	0.81
WB	0.0%	0.90
NB	1.7%	0.91
SB	0.9%	0.91
TOTAL	1.1%	0.94



Two-Hour Count Summaries

Interval Start	DEL MONTE BLVD Eastbound				MILITARY AVE Westbound				FREMONT BLVD Northbound				FREMONT BLVD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	63	0	2	0	0	0	20	0	0	168	6	0	0	156	0	415	0
4:15 PM	0	69	0	3	0	0	0	12	0	0	167	3	0	0	159	0	413	0
4:30 PM	0	97	0	4	0	0	0	25	0	0	182	7	0	0	142	0	457	0
4:45 PM	0	83	0	1	0	0	0	20	0	0	172	4	0	0	145	0	425	1,710
5:00 PM	**0**	**95**	**0**	**2**	**0**	**0**	**0**	**25**	**0**	**0**	**224**	**4**	**0**	**0**	**130**	**0**	**480**	1,775
5:15 PM	**0**	**82**	**0**	**1**	**0**	**0**	**0**	**22**	**0**	**0**	**185**	**4**	**0**	**0**	**139**	**0**	**433**	1,795
5:30 PM	**0**	**64**	**0**	**2**	**0**	**0**	**0**	**22**	**0**	**0**	**207**	**4**	**0**	**0**	**156**	**0**	**455**	1,793
5:45 PM	**1**	**66**	**0**	**1**	**0**	**0**	**0**	**21**	**0**	**0**	**199**	**1**	**0**	**0**	**145**	**0**	**434**	**1,802**
Count Total	1	619	0	16	0	0	0	167	0	0	1,504	33	0	0	1,172	0	3,512	0
Peak Hour All	**1**	**307**	**0**	**6**	**0**	**0**	**0**	**90**	**0**	**0**	**815**	**13**	**0**	**0**	**570**	**0**	**1,802**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**0**	**0**	**5**	**0**	**19**	**0**
Peak Hour HV%	**0%**	**0%**	**-**	**0%**	**-**	**-**	**-**	**0%**	**-**	**-**	**2%**	**0%**	**-**	**-**	**1%**	**-**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	1	6	0	*7*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	2	1	2	6	*11*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	2	1	3	1	*7*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	3	0	1	0	*4*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	**0**	**0**	**5**	**2**	***7***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**1**	***1***	**0**	**1**	**0**	**0**	*1*
5:30 PM	**0**	**0**	**5**	**2**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:45 PM	**0**	**0**	**3**	**0**	***3***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***
Count Total	7	3	26	12	*48*	0	0	2	1	*3*	0	1	0	0	*1*
Peak Hour	**0**	**0**	**14**	**5**	***19***	**0**	**0**	**2**	**1**	***3***	**0**	**1**	**0**	**0**	***1***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	DEL MONTE BLVD Eastbound				MILITARY AVE Westbound				FREMONT BLVD Northbound				FREMONT BLVD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	1	0	0	6	0	0	0	0	0	7	0
4:15 PM	0	2	0	0	0	0	0	1	0	0	2	0	0	0	6	0	11	0
4:30 PM	0	1	0	1	0	0	0	1	0	0	2	1	0	0	1	0	7	0
4:45 PM	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4	29
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**2**	**0**	**7**	29
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	20
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**2**	**0**	**7**	20
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**3**	**19**
Count Total	0	6	0	1	0	0	0	3	0	0	25	1	0	0	12	0	48	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**0**	**0**	**5**	**0**	**19**	**0**

Two-Hour Count Summaries - Bikes

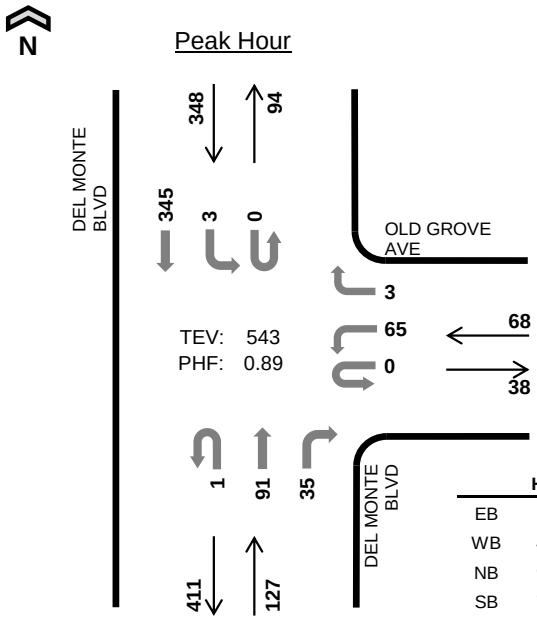
Interval Start	DEL MONTE BLVD Eastbound			MILITARY AVE Westbound			FREMONT BLVD Northbound			FREMONT BLVD Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	1
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	2
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**3**
Count Total	0	0	0	0	0	0	0	2	0	0	1	0	3	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**3**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

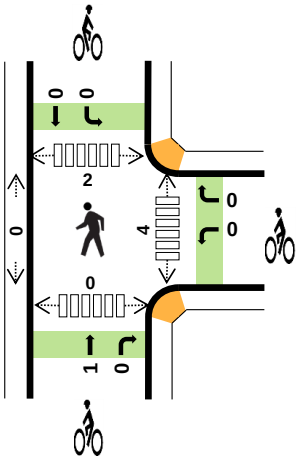
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

DEL MONTE BLVD
OLD GROVE AVE

Date: 06/13/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	-	-
WB	4.4%	0.68
NB	9.4%	0.79
SB	7.2%	0.78
TOTAL	7.4%	0.89



Two-Hour Count Summaries

Interval Start		0 Eastbound				OLD GROVE AVE Westbound				DEL MONTE BLVD Northbound				DEL MONTE BLVD Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	0	0	0	13	0	0	0	0	14	2	0	0	86	0	115	0
7:15 AM		0	0	0	0	0	11	0	0	0	0	9	1	0	0	85	0	106	0
7:30 AM		**0**	**0**	**0**	**0**	**0**	**15**	**0**	**0**	**1**	**0**	**16**	**8**	**0**	**0**	**112**	**0**	**152**	0
7:45 AM		**0**	**0**	**0**	**0**	**0**	**23**	**0**	**2**	**0**	**0**	**23**	**7**	**0**	**0**	**86**	**0**	**141**	514
8:00 AM		**0**	**0**	**0**	**0**	**0**	**17**	**0**	**1**	**0**	**0**	**22**	**10**	**0**	**3**	**69**	**0**	**122**	521
8:15 AM		**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**30**	**10**	**0**	**0**	**78**	**0**	**128**	**543**
8:30 AM		0	0	0	0	0	14	0	1	0	0	28	5	0	1	44	0	93	484
8:45 AM		0	0	0	0	0	13	0	3	0	0	34	7	0	1	74	0	132	475
Count Total		0	0	0	0	0	116	0	7	1	0	176	50	0	5	634	0	989	0
Peak Hour	**All**	**0**	**0**	**0**	**0**	**0**	**65**	**0**	**3**	**1**	**0**	**91**	**35**	**0**	**3**	**345**	**0**	**543**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**10**	**2**	**0**	**0**	**25**	**0**	**40**	**0**
	HV%	**-**	**-**	**-**	**-**	**-**	**3%**	**-**	**33%**	**0%**	**-**	**11%**	**6%**	**-**	**0%**	**7%**	**-**	**7%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	1	1	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	1	2	*3*	0	1	0	0	*1*	0	0	0	0	*0*
7:30 AM	**0**	**0**	**4**	**4**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**0**	**2**	**0**	**2**	***4***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**1**	**0**	*2*
8:00 AM	**0**	**1**	**4**	**6**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
8:15 AM	**0**	**0**	**4**	**13**	***17***	**0**	**0**	**1**	**0**	***1***	**3**	**0**	**0**	**0**	***3***
8:30 AM	0	3	5	2	*10*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	0	4	2	*6*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	7	23	32	*62*	0	1	1	0	*2*	4	0	2	0	*6*
Peak Hr	**0**	**3**	**12**	**25**	***40***	**0**	**0**	**1**	**0**	***1***	**4**	**0**	**2**	**0**	***6***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	0				OLD GROVE AVE				DEL MONTE BLVD				DEL MONTE BLVD				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	3	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	3	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**4**	**0**	**8**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**4**	18
8:00 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**6**	**0**	**11**	26
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**13**	**0**	**17**	**40**
8:30 AM	0	0	0	0	0	3	0	0	0	0	5	0	0	0	2	0	10	42
8:45 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	1	1	0	6	44
Count Total	0	0	0	0	0	6	0	1	0	0	20	3	0	1	31	0	62	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**10**	**2**	**0**	**0**	**25**	**0**	**40**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	0			OLD GROVE AVE			DEL MONTE BLVD			DEL MONTE BLVD			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	1	0	0	0	1	0	0	0	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

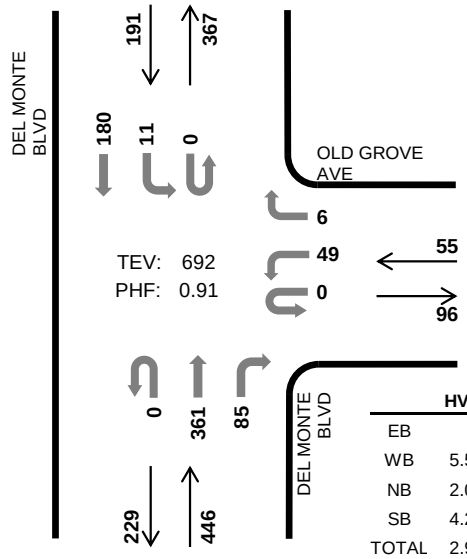
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

DEL MONTE BLVD
OLD GROVE AVE

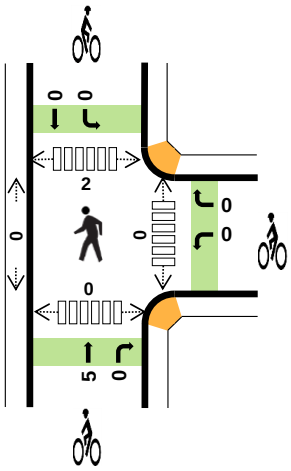
Date: 06/13/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM

N

Peak Hour



	HV %:	PHF
EB	-	-
WB	5.5%	0.69
NB	2.0%	0.90
SB	4.2%	0.87
TOTAL	2.9%	0.91



Two-Hour Count Summaries

Interval Start	0 Eastbound				OLD GROVE AVE Westbound				DEL MONTE BLVD Northbound				DEL MONTE BLVD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	13	0	1	0	0	77	16	0	1	53	0	161	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**17**	**0**	**3**	**0**	**0**	**77**	**17**	**0**	**3**	**52**	**0**	**169**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**1**	**0**	**0**	**109**	**15**	**0**	**0**	**52**	**0**	**190**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**2**	**0**	**0**	**82**	**23**	**0**	**5**	**35**	**0**	**154**	674
5:00 PM	**0**	**0**	**0**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**93**	**30**	**0**	**3**	**41**	**0**	**179**	**692**
5:15 PM	0	0	0	0	0	17	0	2	0	0	83	7	0	2	34	0	145	668
5:30 PM	0	0	0	0	0	9	0	1	0	0	65	14	0	2	44	0	135	613
5:45 PM	0	0	0	0	0	7	0	2	0	0	65	18	0	3	31	0	126	585
Count Total	0	0	0	0	0	95	0	12	0	0	651	140	0	19	342	0	1,259	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**49**	**0**	**6**	**0**	**0**	**361**	**85**	**0**	**11**	**180**	**0**	**692**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**8**	**1**	**0**	**1**	**7**	**0**	**20**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**6%**	**-**	**0%**	**-**	**-**	**2%**	**1%**	**-**	**9%**	**4%**	**-**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	2	3	*5*	0	0	0	0	*0*	0	0	0	1	*1*
4:15 PM	**0**	**1**	**2**	**2**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
4:30 PM	**0**	**2**	**2**	**3**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**0**	**0**	**2**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
5:00 PM	**0**	**0**	**3**	**2**	***5***	**0**	**0**	**5**	**0**	***5***	**0**	**0**	**0**	**0**	***0***
5:15 PM	0	0	0	1	*1*	0	2	2	0	*4*	0	0	0	0	*0*
5:30 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	3	12	13	*28*	0	2	7	0	*9*	0	0	2	1	*3*
Peak Hr	**0**	**3**	**9**	**8**	***20***	**0**	**0**	**5**	**0**	***5***	**0**	**0**	**2**	**0**	***2***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	0				OLD GROVE AVE				DEL MONTE BLVD				DEL MONTE BLVD				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	3	0	5	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**5**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**3**	**0**	**7**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**3**	20
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**1**	**1**	**0**	**5**	**20**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	16
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	10
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	8
Count Total	0	0	0	0	0	3	0	0	0	0	10	2	0	1	12	0	28	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**8**	**1**	**0**	**1**	**7**	**0**	**20**	**0**

Two-Hour Count Summaries - Bikes

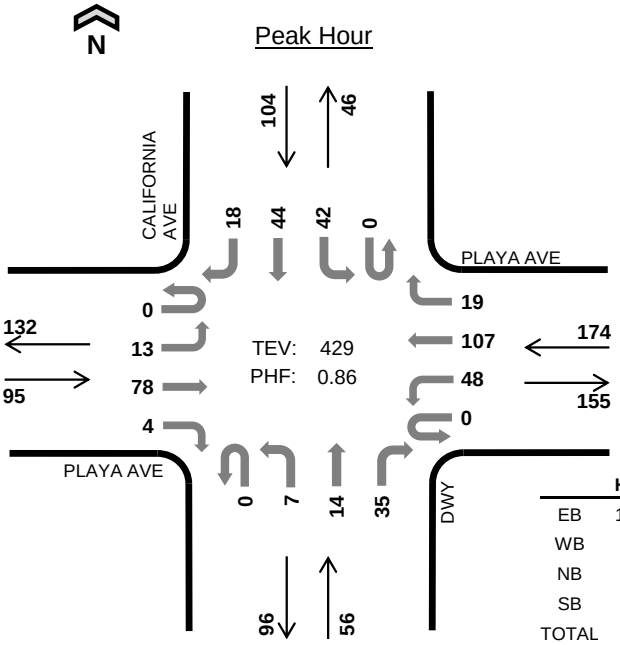
Interval Start	0			OLD GROVE AVE			DEL MONTE BLVD			DEL MONTE BLVD			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**5**	**5**
5:15 PM	0	0	0	2	0	0	0	1	1	0	0	0	4	9
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	9
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Count Total	0	0	0	2	0	0	0	6	1	0	0	0	9	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**5**	**0**

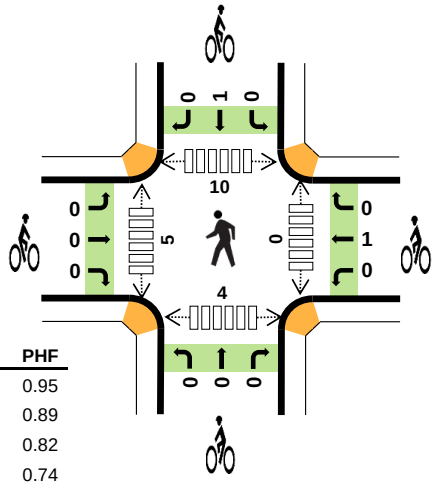
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

CALIFORNIA AVE
PLAYA AVE

Date: 06/13/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM





	HV %:	PHF
EB	16.8%	0.95
WB	7.5%	0.89
NB	7.1%	0.82
SB	6.7%	0.74
TOTAL	9.3%	0.86

Two-Hour Count Summaries

Interval Start	PLAYA AVE Eastbound				PLAYA AVE Westbound				DWY Northbound				CALIFORNIA AVE Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	2	16	4	0	15	10	2	0	0	2	8	0	10	22	6	97	0
7:15 AM	0	4	11	2	0	12	15	3	0	0	7	9	0	9	14	3	89	0
7:30 AM	0	1	17	1	0	6	14	4	0	1	2	6	0	12	22	7	93	0
7:45 AM	0	0	18	7	0	12	23	5	0	0	4	14	0	17	10	7	117	396
8:00 AM	**0**	**2**	**18**	**1**	**0**	**10**	**29**	**2**	**0**	**0**	**5**	**7**	**0**	**10**	**13**	**5**	**102**	401
8:15 AM	**0**	**2**	**22**	**1**	**0**	**10**	**22**	**8**	**0**	**3**	**2**	**7**	**0**	**14**	**7**	**2**	**100**	412
8:30 AM	**0**	**3**	**20**	**2**	**0**	**17**	**24**	**3**	**0**	**3**	**4**	**8**	**0**	**7**	**7**	**4**	**102**	421
8:45 AM	**0**	**6**	**18**	**0**	**0**	**11**	**32**	**6**	**0**	**1**	**3**	**13**	**0**	**11**	**17**	**7**	**125**	**429**
Count Total	0	20	140	18	0	93	169	33	0	8	29	72	0	90	112	41	825	0
Peak Hour All	**0**	**13**	**78**	**4**	**0**	**48**	**107**	**19**	**0**	**7**	**14**	**35**	**0**	**42**	**44**	**18**	**429**	**0**
Peak Hour HV	**0**	**2**	**14**	**0**	**0**	**0**	**11**	**2**	**0**	**0**	**2**	**2**	**0**	**1**	**0**	**6**	**40**	**0**
Peak Hour HV%	**-**	**15%**	**18%**	**0%**	**-**	**0%**	**10%**	**11%**	**-**	**0%**	**14%**	**6%**	**-**	**2%**	**0%**	**33%**	**9%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	7	3	1	5	*16*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	3	3	1	3	*10*	0	0	0	0	*0*	0	1	3	1	*5*
7:30 AM	4	2	0	1	*7*	0	0	0	0	*0*	0	1	2	0	*3*
7:45 AM	2	2	0	4	*8*	0	1	0	1	*2*	0	1	2	0	*3*
8:00 AM	**5**	**4**	**1**	**2**	***12***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**4**	**4**	**1**	**3**	***12***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**4**	**3**	*8*
8:30 AM	**5**	**4**	**2**	**1**	***12***	**0**	**1**	**0**	**0**	***1***	**0**	**2**	**3**	**1**	*6*
8:45 AM	**2**	**1**	**0**	**1**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**3**	**0**	***5***
Count Total	32	23	6	20	*81*	0	2	0	2	*4*	0	8	17	5	*30*
Peak Hour	**16**	**13**	**4**	**7**	***40***	**0**	**1**	**0**	**1**	***2***	**0**	**5**	**10**	**4**	***19***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	PLAYA AVE Eastbound				PLAYA AVE Westbound				DWY Northbound				CALIFORNIA AVE Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	6	0	0	0	3	0	0	0	0	1	0	1	0	4	16	0
7:15 AM	0	1	2	0	0	0	3	0	0	0	1	0	0	2	0	1	10	0
7:30 AM	0	0	4	0	0	0	2	0	0	0	0	0	0	0	0	1	7	0
7:45 AM	0	0	2	0	0	0	2	0	0	0	0	0	0	2	0	2	8	41
8:00 AM	**0**	**1**	**4**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**12**	37
8:15 AM	**0**	**0**	**4**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**2**	**12**	39
8:30 AM	**0**	**1**	**4**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**12**	44
8:45 AM	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**4**	**40**
Count Total	0	4	28	0	0	0	21	2	0	0	3	3	0	6	0	14	81	0
Peak Hour	**0**	**2**	**14**	**0**	**0**	**0**	**11**	**2**	**0**	**0**	**2**	**2**	**0**	**1**	**0**	**6**	**40**	**0**

Two-Hour Count Summaries - Bikes

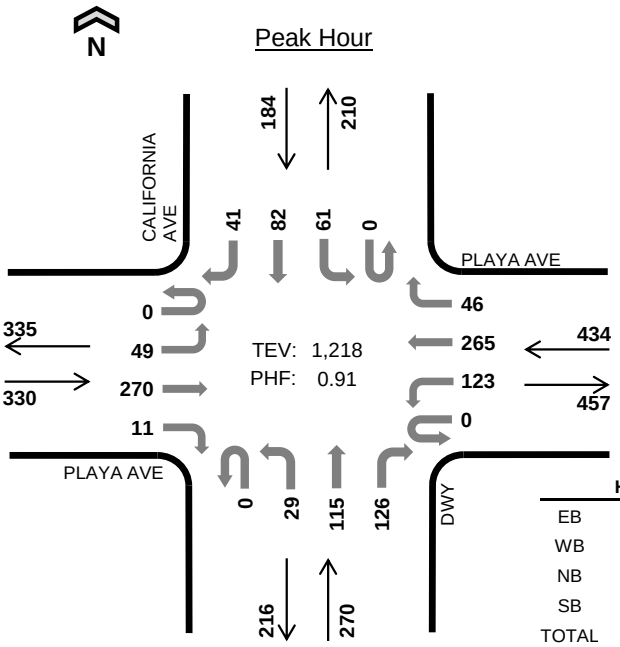
Interval Start	PLAYA AVE Eastbound			PLAYA AVE Westbound			DWY Northbound			CALIFORNIA AVE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	1	0	0	0	0	0	1	0	0	2	2
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	3
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
8:30 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	4
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
Count Total	0	0	0	1	1	0	0	0	0	1	1	0	4	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

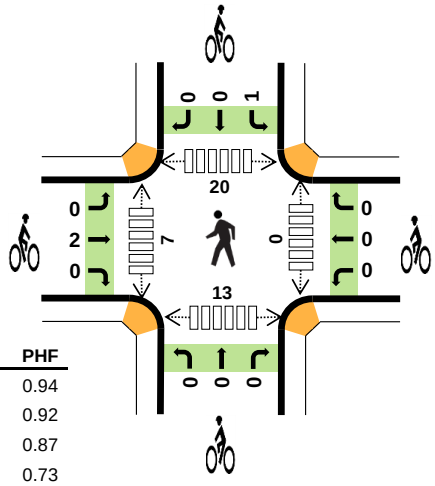
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

CALIFORNIA AVE
PLAYA AVE

Date: 06/13/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	4.2%	0.94
WB	2.8%	0.92
NB	0.0%	0.87
SB	1.1%	0.73
TOTAL	2.3%	0.91



Two-Hour Count Summaries

Interval Start	PLAYA AVE Eastbound				PLAYA AVE Westbound				DWY Northbound				CALIFORNIA AVE Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	16	62	3	0	30	51	8	0	5	29	31	0	23	13	10	281	0
4:15 PM	0	14	67	2	0	27	64	9	0	5	33	41	0	11	22	13	308	0
4:30 PM	0	15	53	7	0	32	71	7	0	6	23	28	0	19	20	10	291	0
4:45 PM	0	13	71	5	0	21	63	12	0	4	27	35	0	14	21	13	299	1,179
5:00 PM	**0**	**12**	**66**	**1**	**0**	**24**	**69**	**8**	**0**	**7**	**35**	**36**	**0**	**9**	**11**	**6**	**284**	1,182
5:15 PM	**0**	**14**	**68**	**2**	**0**	**36**	**69**	**13**	**0**	**6**	**31**	**34**	**0**	**25**	**24**	**14**	**336**	1,210
5:30 PM	**0**	**10**	**74**	**4**	**0**	**36**	**61**	**11**	**0**	**8**	**25**	**23**	**0**	**13**	**24**	**7**	**296**	1,215
5:45 PM	**0**	**13**	**62**	**4**	**0**	**27**	**66**	**14**	**0**	**8**	**24**	**33**	**0**	**14**	**23**	**14**	**302**	**1,218**
Count Total	0	107	523	28	0	233	514	82	0	49	227	261	0	128	158	87	2,397	0
Peak Hour All	**0**	**49**	**270**	**11**	**0**	**123**	**265**	**46**	**0**	**29**	**115**	**126**	**0**	**61**	**82**	**41**	**1,218**	**0**
Peak Hour HV	**0**	**5**	**9**	**0**	**0**	**1**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**28**	**0**
Peak Hour HV%	**-**	**10%**	**3%**	**0%**	**-**	**1%**	**4%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**5%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	5	3	0	2	*10*	0	0	0	0	*0*	3	0	11	6	*20*
4:15 PM	4	5	0	2	*11*	0	0	1	0	*1*	1	4	11	1	*17*
4:30 PM	5	2	0	3	*10*	0	0	0	0	*0*	0	1	3	0	*4*
4:45 PM	3	3	1	1	*8*	0	0	0	0	*0*	0	0	2	2	*4*
5:00 PM	**3**	**4**	**0**	**0**	***7***	**1**	**0**	**0**	**1**	***2***	**0**	**3**	**7**	**3**	*13*
5:15 PM	**3**	**3**	**0**	**1**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**3**	**6**	**2**	*11*
5:30 PM	**6**	**5**	**0**	**0**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**4**	**6**	*11*
5:45 PM	**2**	**0**	**0**	**1**	***3***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**3**	**2**	***5***
Count Total	31	25	1	10	*67*	2	0	1	1	*4*	4	12	47	22	*85*
Peak Hour	**14**	**12**	**0**	**2**	***28***	**2**	**0**	**0**	**1**	***3***	**0**	**7**	**20**	**13**	***40***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	PLAYA AVE Eastbound				PLAYA AVE Westbound				DWY Northbound				CALIFORNIA AVE Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	3	2	0	0	0	3	0	0	0	0	0	0	0	0	2	10	0
4:15 PM	0	1	3	0	0	0	5	0	0	0	0	0	0	0	0	2	11	0
4:30 PM	0	2	3	0	0	0	2	0	0	0	0	0	0	1	1	1	10	0
4:45 PM	0	1	2	0	0	0	3	0	0	0	1	0	0	0	0	1	8	39
5:00 PM	**0**	**1**	**2**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	36
5:15 PM	**0**	**1**	**2**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**7**	32
5:30 PM	**0**	**2**	**4**	**0**	**0**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	33
5:45 PM	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**28**
Count Total	0	12	19	0	0	1	24	0	0	0	1	0	0	1	1	8	67	0
Peak Hour	**0**	**5**	**9**	**0**	**0**	**1**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**28**	**0**

Two-Hour Count Summaries - Bikes

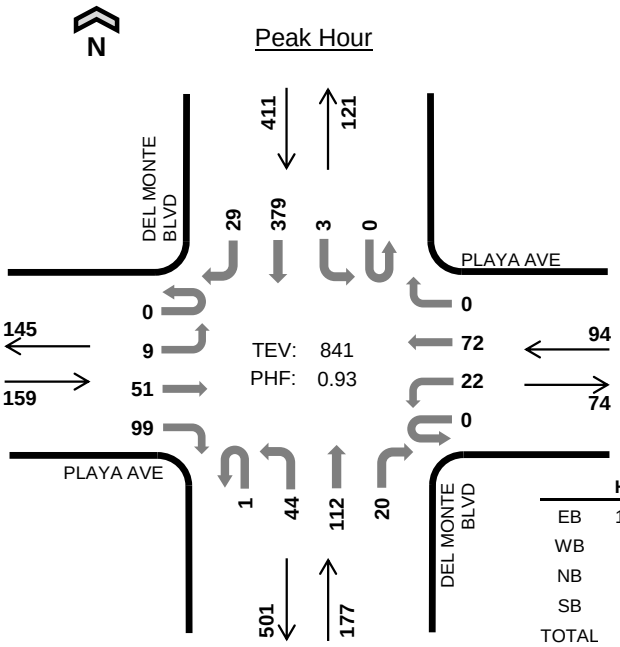
Interval Start	PLAYA AVE Eastbound			PLAYA AVE Westbound			DWY Northbound			CALIFORNIA AVE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	3
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:45 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**
Count Total	0	2	0	0	0	0	0	0	1	1	0	0	4	0
Peak Hour	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

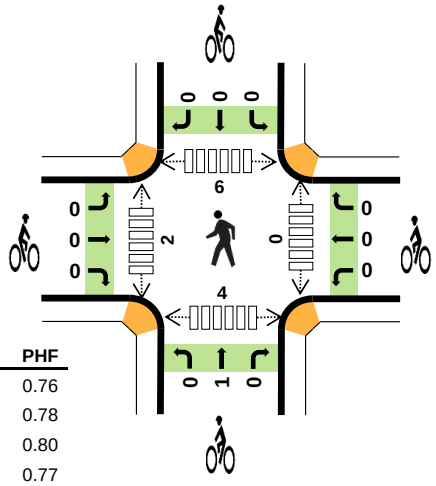
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

DEL MONTE BLVD
PLAYA AVE

Date: 06/13/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	11.3%	0.76
WB	6.4%	0.78
NB	8.5%	0.80
SB	5.8%	0.77
TOTAL	7.5%	0.93



Two-Hour Count Summaries

Interval Start	PLAYA AVE Eastbound				PLAYA AVE Westbound				DEL MONTE BLVD Northbound				DEL MONTE BLVD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	2	10	19	0	1	14	0	0	8	14	2	0	0	79	8	157	0
7:15 AM	0	0	12	19	0	2	12	0	0	10	11	0	0	2	79	7	154	0
7:30 AM	**0**	**2**	**10**	**20**	**0**	**5**	**17**	**0**	**0**	**8**	**19**	**5**	**0**	**1**	**132**	**0**	**219**	0
7:45 AM	**0**	**2**	**11**	**39**	**0**	**6**	**14**	**0**	**1**	**10**	**21**	**7**	**0**	**0**	**102**	**13**	**226**	756
8:00 AM	**0**	**2**	**12**	**16**	**0**	**3**	**19**	**0**	**0**	**17**	**33**	**5**	**0**	**1**	**67**	**6**	**181**	780
8:15 AM	**0**	**3**	**18**	**24**	**0**	**8**	**22**	**0**	**0**	**9**	**39**	**3**	**0**	**1**	**78**	**10**	**215**	**841**
8:30 AM	0	4	12	20	0	10	19	3	0	16	31	5	0	1	62	6	189	811
8:45 AM	0	4	14	22	0	4	19	0	0	16	37	7	0	0	72	9	204	789
Count Total	0	19	99	179	0	39	136	3	1	94	205	34	0	6	671	59	1,545	0
Peak Hour All	**0**	**9**	**51**	**99**	**0**	**22**	**72**	**0**	**1**	**44**	**112**	**20**	**0**	**3**	**379**	**29**	**841**	**0**
Peak Hour HV	**0**	**0**	**8**	**10**	**0**	**0**	**6**	**0**	**0**	**4**	**9**	**2**	**0**	**0**	**23**	**1**	**63**	**0**
Peak Hour HV%	**-**	**0%**	**16%**	**10%**	**-**	**0%**	**8%**	**-**	**0%**	**9%**	**8%**	**10%**	**-**	**0%**	**6%**	**3%**	**7%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	5	0	5	1	*11*	1	0	0	0	*1*	1	0	0	0	*1*
7:15 AM	6	0	2	3	*11*	0	0	0	0	*0*	0	0	2	1	*3*
7:30 AM	**4**	**2**	**3**	**4**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**1**	*2*
7:45 AM	**4**	**0**	**2**	**3**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	*2*
8:00 AM	**4**	**1**	**6**	**5**	***16***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**6**	**3**	**4**	**12**	***25***	**0**	**0**	**1**	**0**	***1***	**0**	**1**	**4**	**3**	***8***
8:30 AM	5	0	5	7	*17*	0	0	0	0	*0*	0	0	4	3	*7*
8:45 AM	2	1	5	2	*10*	0	0	0	0	*0*	0	1	2	1	*4*
Count Total	36	7	32	37	*112*	1	0	1	0	*2*	1	3	14	9	*27*
Peak Hour	**18**	**6**	**15**	**24**	***63***	**0**	**0**	**1**	**0**	***1***	**0**	**2**	**6**	**4**	***12***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	PLAYA AVE Eastbound				PLAYA AVE Westbound				DEL MONTE BLVD Northbound				DEL MONTE BLVD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	4	1	0	0	0	0	0	4	1	0	0	0	1	0	11	0
7:15 AM	0	0	0	6	0	0	0	0	0	2	0	0	0	0	3	0	11	0
7:30 AM	**0**	**0**	**2**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**4**	**0**	**13**	0
7:45 AM	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**3**	**0**	**9**	44
8:00 AM	**0**	**0**	**3**	**1**	**0**	**0**	**1**	**0**	**0**	**2**	**4**	**0**	**0**	**0**	**5**	**0**	**16**	49
8:15 AM	**0**	**0**	**2**	**4**	**0**	**0**	**3**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**11**	**1**	**25**	**63**
8:30 AM	0	1	1	3	0	0	0	0	0	3	2	0	0	0	6	1	17	67
8:45 AM	0	0	1	1	0	0	1	0	0	0	5	0	0	0	2	0	10	68
Count Total	0	1	14	21	0	0	7	0	0	13	17	2	0	0	35	2	112	0
Peak Hour	**0**	**0**	**8**	**10**	**0**	**0**	**6**	**0**	**0**	**4**	**9**	**2**	**0**	**0**	**23**	**1**	**63**	**0**

Two-Hour Count Summaries - Bikes

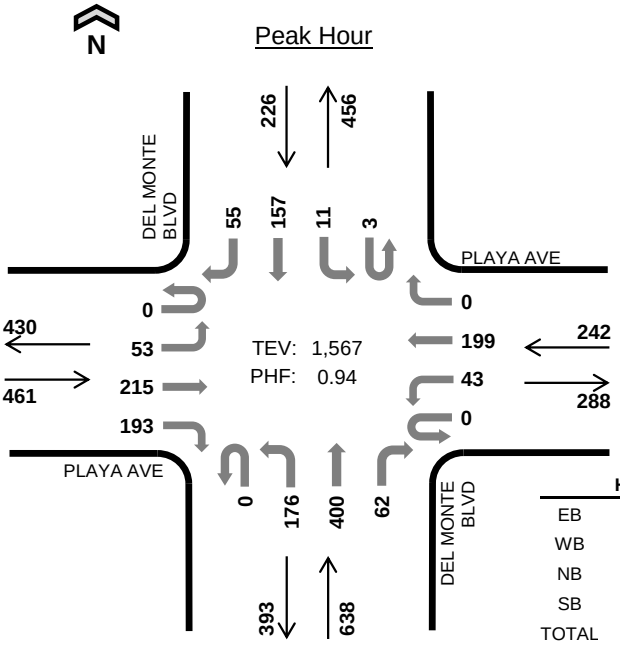
Interval Start	PLAYA AVE Eastbound			PLAYA AVE Westbound			DEL MONTE BLVD Northbound			DEL MONTE BLVD Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	1	0	0	0	0	0	1	0	0	0	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

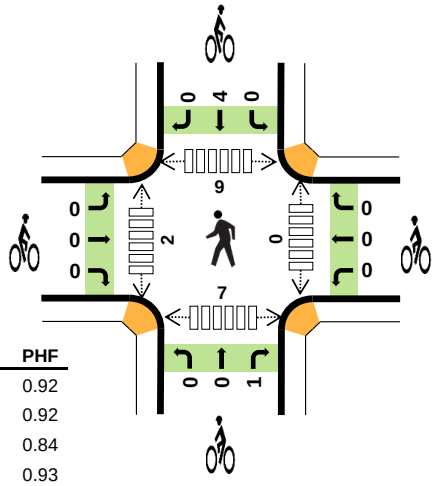
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

DEL MONTE BLVD
PLAYA AVE

Date: 06/13/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	2.2%	0.92
WB	2.1%	0.92
NB	2.2%	0.84
SB	3.1%	0.93
TOTAL	2.3%	0.94



Two-Hour Count Summaries

Interval Start	PLAYA AVE Eastbound				PLAYA AVE Westbound				DEL MONTE BLVD Northbound				DEL MONTE BLVD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	13	64	43	0	4	37	0	1	34	76	13	0	6	47	12	350	0
4:15 PM	0	13	54	48	0	6	44	0	0	43	72	26	0	2	58	15	381	0
4:30 PM	**0**	**14**	**53**	**42**	**0**	**10**	**50**	**0**	**0**	**40**	**114**	**18**	**0**	**1**	**45**	**15**	**402**	0
4:45 PM	**0**	**10**	**58**	**48**	**0**	**11**	**45**	**0**	**0**	**41**	**90**	**9**	**0**	**4**	**37**	**13**	**366**	1,499
5:00 PM	**0**	**18**	**48**	**45**	**0**	**14**	**46**	**0**	**0**	**47**	**121**	**22**	**3**	**2**	**38**	**11**	**415**	1,564
5:15 PM	**0**	**11**	**56**	**58**	**0**	**8**	**58**	**0**	**0**	**48**	**75**	**13**	**0**	**4**	**37**	**16**	**384**	**1,567**
5:30 PM	0	12	54	37	0	4	56	0	0	27	69	17	0	2	33	22	333	1,498
5:45 PM	0	10	72	39	0	2	54	0	0	39	66	19	1	4	21	15	342	1,474
Count Total	0	101	459	360	0	59	390	0	1	319	683	137	4	25	316	119	2,973	0
Peak Hour All	**0**	**53**	**215**	**193**	**0**	**43**	**199**	**0**	**0**	**176**	**400**	**62**	**3**	**11**	**157**	**55**	**1,567**	**0**
Peak Hour HV	**0**	**0**	**5**	**5**	**0**	**0**	**5**	**0**	**0**	**7**	**7**	**0**	**0**	**0**	**7**	**0**	**36**	**0**
Peak Hour HV%	**-**	**0%**	**2%**	**3%**	**-**	**0%**	**3%**	**-**	**-**	**4%**	**2%**	**0%**	**0%**	**0%**	**4%**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	0	2	2	*6*	0	0	0	0	*0*	2	0	10	3	*15*
4:15 PM	2	3	5	3	*13*	1	0	0	0	*1*	0	0	5	1	*6*
4:30 PM	**3**	**1**	**4**	**5**	***13***	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**3**	**2**	*5*
4:45 PM	**3**	**1**	**4**	**1**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**2**	**2**	**3**	**0**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**3**	**3**	*7*
5:15 PM	**2**	**1**	**3**	**1**	***7***	**0**	**0**	**1**	**2**	***3***	**0**	**1**	**3**	**2**	***6***
5:30 PM	4	2	2	0	*8*	0	0	0	0	*0*	1	1	4	2	*8*
5:45 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	1	0	3	*4*
Count Total	19	10	23	12	*64*	1	0	1	4	*6*	3	4	28	16	*51*
Peak Hour	**10**	**5**	**14**	**7**	***36***	**0**	**0**	**1**	**4**	***5***	**0**	**2**	**9**	**7**	***18***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	PLAYA AVE Eastbound				PLAYA AVE Westbound				DEL MONTE BLVD Northbound				DEL MONTE BLVD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	1	0	0	0	0	0	2	0	0	0	1	1	0	6	0
4:15 PM	0	0	1	1	0	0	3	0	0	3	2	0	0	0	3	0	13	0
4:30 PM	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**5**	**0**	**13**	0
4:45 PM	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**1**	**0**	**9**	41
5:00 PM	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**7**	42
5:15 PM	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**1**	**0**	**7**	**36**
5:30 PM	0	0	0	4	0	0	2	0	0	2	0	0	0	0	0	0	8	31
5:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	23
Count Total	0	0	7	12	0	0	10	0	0	14	9	0	0	1	11	0	64	0
Peak Hour	**0**	**0**	**5**	**5**	**0**	**0**	**5**	**0**	**0**	**7**	**7**	**0**	**0**	**0**	**7**	**0**	**36**	**0**

Two-Hour Count Summaries - Bikes

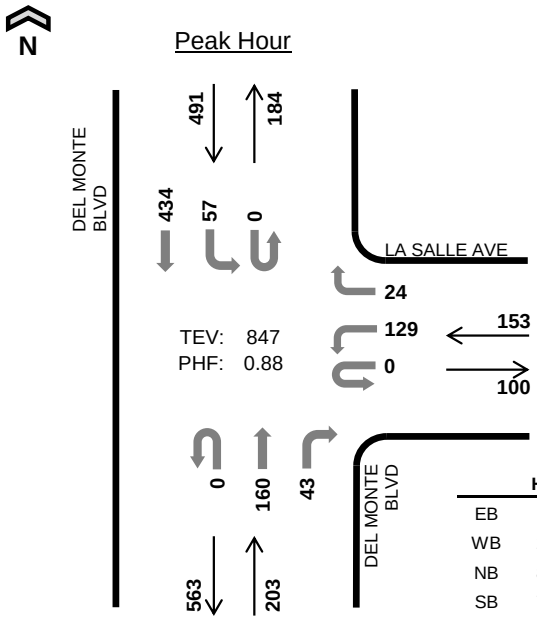
Interval Start	PLAYA AVE Eastbound			PLAYA AVE Westbound			DEL MONTE BLVD Northbound			DEL MONTE BLVD Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**3**	**5**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	0	0	1	0	0	0	0	0	1	0	4	0	6	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	**0**	**5**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

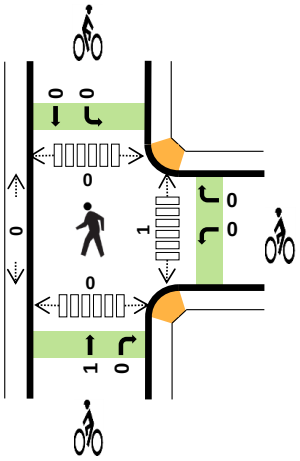
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

DEL MONTE BLVD
LA SALLE AVE

Date: 06/13/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	-	-
WB	2.6%	0.74
NB	8.9%	0.82
SB	7.1%	0.79
TOTAL	6.7%	0.88



Two-Hour Count Summaries

Interval Start	0 Eastbound				LA SALLE AVE Westbound				DEL MONTE BLVD Northbound				DEL MONTE BLVD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	20	0	3	0	0	18	11	0	5	103	0	160	0
7:15 AM	0	0	0	0	0	26	0	6	0	0	17	6	0	11	88	0	154	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**47**	**0**	**5**	**0**	**0**	**27**	**8**	**0**	**14**	**141**	**0**	**242**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**33**	**0**	**9**	**0**	**0**	**38**	**11**	**0**	**13**	**126**	**0**	**230**	786
8:00 AM	**0**	**0**	**0**	**0**	**0**	**28**	**0**	**7**	**0**	**0**	**45**	**12**	**0**	**11**	**77**	**0**	**180**	806
8:15 AM	**0**	**0**	**0**	**0**	**0**	**21**	**0**	**3**	**0**	**0**	**50**	**12**	**0**	**19**	**90**	**0**	**195**	**847**
8:30 AM	0	0	0	0	0	20	0	4	0	0	53	16	0	6	75	0	174	779
8:45 AM	0	0	0	0	0	24	0	7	0	0	54	10	0	11	75	0	181	730
Count Total	0	0	0	0	0	219	0	44	0	0	302	86	0	90	775	0	1,516	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**129**	**0**	**24**	**0**	**0**	**160**	**43**	**0**	**57**	**434**	**0**	**847**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	**0**	**0**	**16**	**2**	**0**	**4**	**31**	**0**	**57**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**2%**	**-**	**8%**	**-**	**-**	**10%**	**5%**	**-**	**7%**	**7%**	**-**	**7%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	1	5	5	*11*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	1	2	7	*10*	0	0	0	1	*1*	0	0	0	0	*0*
7:30 AM	**0**	**1**	**4**	**3**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**0**	**2**	**2**	**6**	***10***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
8:00 AM	**0**	**1**	**7**	**11**	***19***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**0**	**0**	**5**	**15**	***20***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***
8:30 AM	0	2	7	8	*17*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	0	7	3	*10*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	8	39	58	*105*	0	0	1	1	*2*	1	0	0	0	*1*
Peak Hr	**0**	**4**	**18**	**35**	***57***	**0**	**0**	**1**	**0**	***1***	**1**	**0**	**0**	**0**	***1***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	0				LA SALLE AVE				DEL MONTE BLVD				DEL MONTE BLVD				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	1	0	0	3	2	0	1	4	0	11	0
7:15 AM	0	0	0	0	0	1	0	0	0	0	2	0	0	2	5	0	10	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**3**	**0**	**8**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**1**	**5**	**0**	**10**	39
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**7**	**0**	**0**	**1**	**10**	**0**	**19**	47
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**2**	**13**	**0**	**20**	**57**
8:30 AM	0	0	0	0	0	1	0	1	0	0	7	0	0	1	7	0	17	66
8:45 AM	0	0	0	0	0	0	0	0	0	0	6	1	0	0	3	0	10	66
Count Total	0	0	0	0	0	4	0	4	0	0	34	5	0	8	50	0	105	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	**0**	**0**	**16**	**2**	**0**	**4**	**31**	**0**	**57**	**0**

Two-Hour Count Summaries - Bikes

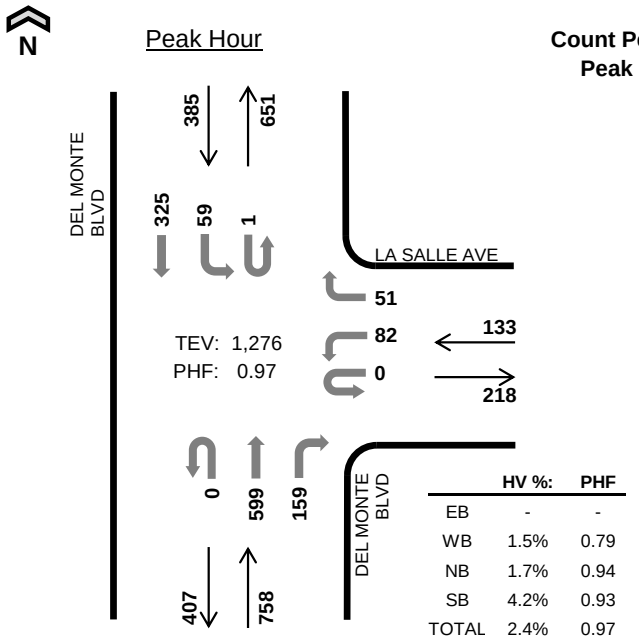
Interval Start	0			LA SALLE AVE			DEL MONTE BLVD			DEL MONTE BLVD			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	0	0	0	1	0	0	1	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

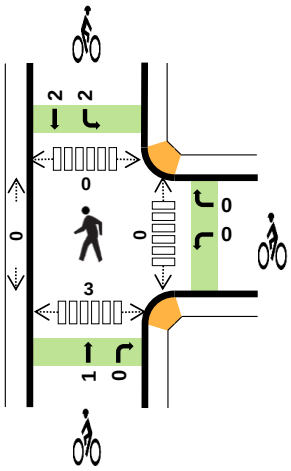
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

DEL MONTE BLVD
LA SALLE AVE

Date: 06/13/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV %:	PHF
EB	-	-
WB	1.5%	0.79
NB	1.7%	0.94
SB	4.2%	0.93
TOTAL	2.4%	0.97



Two-Hour Count Summaries

Interval Start	0 Eastbound				LA SALLE AVE Westbound				DEL MONTE BLVD Northbound				DEL MONTE BLVD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	17	0	13	0	0	113	39	0	11	79	0	272	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**19**	**0**	**9**	**0**	**0**	**137**	**48**	**0**	**15**	**89**	**0**	**317**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**23**	**0**	**19**	**0**	**0**	**159**	**27**	**1**	**10**	**89**	**0**	**328**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**17**	**0**	**10**	**0**	**0**	**141**	**44**	**0**	**16**	**75**	**0**	**303**	1,220
5:00 PM	**0**	**0**	**0**	**0**	**0**	**23**	**0**	**13**	**0**	**0**	**162**	**40**	**0**	**18**	**72**	**0**	**328**	**1,276**
5:15 PM	0	0	0	0	0	16	0	11	0	0	119	41	0	21	82	0	290	1,249
5:30 PM	0	0	0	0	0	12	0	10	0	0	116	34	0	15	59	0	246	1,167
5:45 PM	0	0	0	0	0	22	0	12	0	0	108	31	0	10	45	0	228	1,092
Count Total	0	0	0	0	0	149	0	97	0	0	1,055	304	1	116	590	0	2,312	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**82**	**0**	**51**	**0**	**0**	**599**	**159**	**1**	**59**	**325**	**0**	**1,276**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**13**	**0**	**0**	**3**	**13**	**0**	**31**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**1%**	**-**	**2%**	**-**	**-**	**2%**	**0%**	**0%**	**5%**	**4%**	**-**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	6	3	2	*11*	0	2	0	0	*2*	0	0	0	0	*0*
4:15 PM	**0**	**0**	**4**	**3**	***7***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**0**	**0**	**4**	**9**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**0**	**2**	**2**	**1**	***5***	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**0**	**3**	*3*
5:00 PM	**0**	**0**	**3**	**3**	***6***	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***
5:15 PM	0	1	3	2	*6*	0	1	0	2	*3*	0	0	0	0	*0*
5:30 PM	0	3	1	3	*7*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	0	1	*1*	0	0	1	1	*2*	0	0	0	0	*0*
Count Total	0	12	20	24	*56*	0	3	2	7	*12*	0	0	0	3	*3*
Peak Hr	**0**	**2**	**13**	**16**	***31***	**0**	**0**	**1**	**4**	***5***	**0**	**0**	**0**	**3**	***3***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	0				LA SALLE AVE				DEL MONTE BLVD				DEL MONTE BLVD				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	3	0	3	0	0	3	0	0	1	1	0	11	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**1**	**2**	**0**	**7**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**1**	**8**	**0**	**13**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**5**	36
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**2**	**0**	**6**	**31**
5:15 PM	0	0	0	0	0	0	0	1	0	0	3	0	0	0	2	0	6	30
5:30 PM	0	0	0	0	0	0	0	3	0	0	1	0	0	2	1	0	7	24
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	20
Count Total	0	0	0	0	0	4	0	8	0	0	20	0	0	6	18	0	56	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**13**	**0**	**0**	**3**	**13**	**0**	**31**	**0**

Two-Hour Count Summaries - Bikes

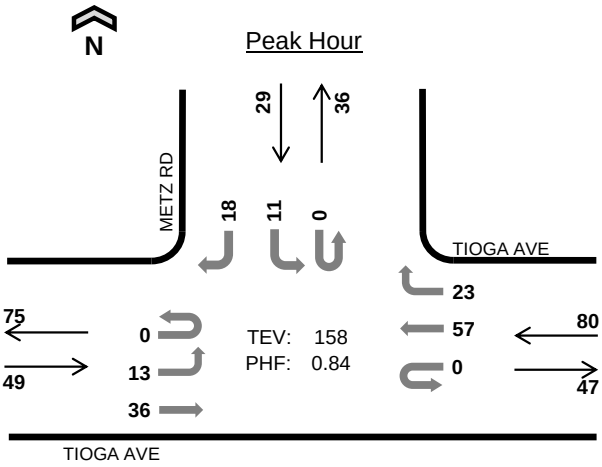
Interval Start	0			LA SALLE AVE			DEL MONTE BLVD			DEL MONTE BLVD			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	2	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	5
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**2**	**5**
5:15 PM	0	0	0	1	0	0	0	0	0	0	2	0	3	7
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	7
5:45 PM	0	0	0	0	0	0	0	0	1	0	1	0	2	7
Count Total	0	0	0	1	0	2	0	1	1	2	5	0	12	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**2**	**0**	**5**	**0**

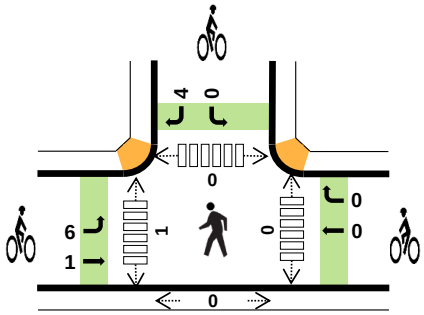
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

METZ RD
TIOGA AVE

Date: 06/13/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM





	HV %:	PHF
EB	0.0%	0.82
WB	10.0%	0.77
NB	-	-
SB	6.9%	0.81
TOTAL	6.3%	0.84

Two-Hour Count Summaries

Interval Start		TIOGA AVE Eastbound				TIOGA AVE Westbound				0 Northbound				METZ RD Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		1	0	5	0	0	0	11	2	0	0	0	0	0	2	0	2	23	0
7:15 AM		0	3	5	0	1	0	12	1	0	0	0	0	0	0	0	5	27	0
7:30 AM		0	2	8	0	0	0	24	8	0	0	0	0	0	2	0	4	48	0
7:45 AM		0	4	8	0	1	0	12	5	0	0	0	0	0	6	0	4	40	138
8:00 AM		**0**	**2**	**6**	**0**	**0**	**0**	**7**	**6**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**5**	**30**	145
8:15 AM		**0**	**3**	**9**	**0**	**0**	**0**	**18**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**5**	**39**	157
8:30 AM		**0**	**3**	**11**	**0**	**0**	**0**	**18**	**8**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**3**	**47**	156
8:45 AM		**0**	**5**	**10**	**0**	**0**	**0**	**14**	**7**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**5**	**42**	**158**
Count Total		1	22	62	0	2	0	116	39	0	0	0	0	0	21	0	33	296	0
Peak Hour	**All**	**0**	**13**	**36**	**0**	**0**	**0**	**57**	**23**	**0**	**0**	**0**	**0**	**0**	**11**	**0**	**18**	**158**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**3**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**10**	**0**
	HV%	**-**	**0%**	**0%**	**-**	**-**	**-**	**9%**	**13%**	**-**	**-**	**-**	**-**	**-**	**18%**	**-**	**0%**	**6%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	1	0	0	0	*1*	0	1	0	0	*1*	0	3	0	0	*3*
7:15 AM	0	0	0	0	*0*	3	0	0	0	*3*	0	0	0	0	*0*
7:30 AM	0	1	0	0	*1*	1	0	0	4	*5*	3	8	0	0	*11*
7:45 AM	0	0	0	0	*0*	1	0	0	1	*2*	1	1	0	0	*2*
8:00 AM	**0**	**2**	**0**	**0**	***2***	**3**	**0**	**0**	**1**	***4***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**0**	**1**	**0**	**0**	***1***	**1**	**0**	**0**	**1**	***2***	**0**	**0**	**0**	**0**	*0*
8:30 AM	**0**	**3**	**0**	**1**	***4***	**2**	**0**	**0**	**2**	***4***	**0**	**1**	**0**	**0**	*1*
8:45 AM	**0**	**2**	**0**	**1**	***3***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***
Count Total	1	9	0	2	*12*	12	1	0	9	*22*	4	13	0	0	*17*
Peak Hr	**0**	**8**	**0**	**2**	***10***	**7**	**0**	**0**	**4**	***11***	**0**	**1**	**0**	**0**	***1***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	TIOGA AVE				TIOGA AVE				0				METZ RD				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	3
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	4
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**	7
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	**10**
Count Total	0	0	1	0	0	0	5	4	0	0	0	0	0	2	0	0	12	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**3**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**10**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	TIOGA AVE			TIOGA AVE			0			METZ RD			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
7:15 AM	3	0	0	0	0	0	0	0	0	0	0	0	3	0
7:30 AM	1	0	0	0	0	0	0	0	0	0	0	4	5	0
7:45 AM	1	0	0	0	0	0	0	0	0	0	0	1	2	11
8:00 AM	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**4**	14
8:15 AM	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	13
8:30 AM	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**4**	12
8:45 AM	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**11**
Count Total	11	1	0	0	1	0	0	0	0	0	0	9	22	0
Peak Hour	**6**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**11**	**0**

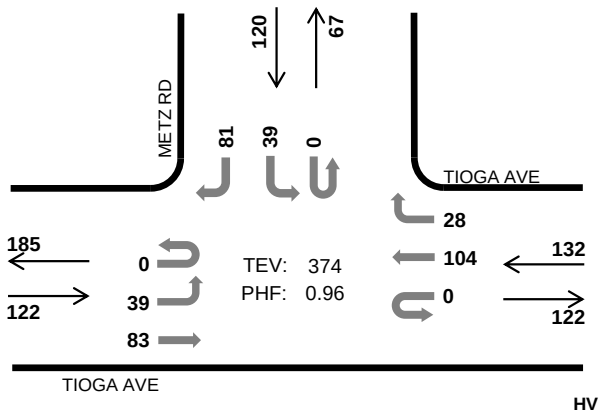
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

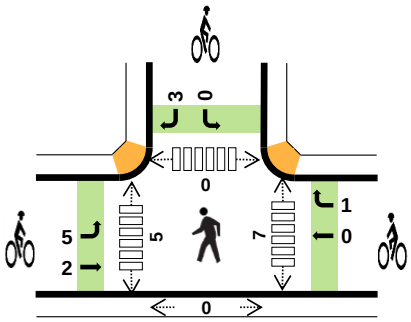
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

METZ RD
TIOGA AVE

Date: 06/13/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM

Peak Hour





	HV %:	PHF
EB	1.6%	0.85
WB	0.0%	0.87
NB	-	-
SB	0.0%	0.91
TOTAL	0.5%	0.96

Two-Hour Count Summaries

Interval Start		TIOGA AVE Eastbound				TIOGA AVE Westbound				0 Northbound				METZ RD Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	6	23	0	0	0	25	6	0	0	0	0	0	10	0	21	91	0
4:15 PM		**0**	**8**	**16**	**0**	**0**	**0**	**27**	**8**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**21**	**90**	0
4:30 PM		**0**	**14**	**22**	**0**	**0**	**0**	**25**	**5**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**21**	**97**	0
4:45 PM		**0**	**8**	**21**	**0**	**0**	**0**	**23**	**6**	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**20**	**91**	369
5:00 PM		**0**	**9**	**24**	**0**	**0**	**0**	**29**	**9**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**19**	**96**	**374**
5:15 PM		0	6	18	0	0	0	17	4	0	0	0	0	0	7	0	15	67	351
5:30 PM		0	16	25	0	0	0	31	5	0	0	0	0	0	8	0	14	99	353
5:45 PM		0	9	20	0	0	0	16	3	0	0	0	0	0	6	0	14	68	330
Count Total		0	76	169	0	0	0	193	46	0	0	0	0	0	70	0	145	699	0
Peak Hour	**All**	**0**	**39**	**83**	**0**	**0**	**0**	**104**	**28**	**0**	**0**	**0**	**0**	**0**	**39**	**0**	**81**	**374**	**0**
	HV	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**
	HV%	**-**	**0%**	**2%**	**-**	**-**	**-**	**0%**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	0	0	0	*2*	0	1	0	1	*2*	1	0	0	0	*1*
4:15 PM	**2**	**0**	**0**	**0**	***2***	**1**	**1**	**0**	**1**	***3***	**4**	**2**	**0**	**0**	*6*
4:30 PM	**0**	**0**	**0**	**0**	***0***	**4**	**0**	**0**	**2**	***6***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**0**	*2*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**0**	***2***	**1**	**3**	**0**	**0**	***4***
5:15 PM	0	0	0	0	*0*	1	0	0	1	*2*	2	0	0	0	*2*
5:30 PM	0	0	0	0	*0*	4	1	0	3	*8*	1	1	0	0	*2*
5:45 PM	0	0	0	0	*0*	4	0	0	4	*8*	0	0	0	0	*0*
Count Total	4	0	0	0	*4*	16	3	0	12	*31*	11	6	0	0	*17*
Peak Hr	**2**	**0**	**0**	**0**	***2***	**7**	**1**	**0**	**3**	***11***	**7**	**5**	**0**	**0**	***12***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	TIOGA AVE Eastbound				TIOGA AVE Westbound				0 Northbound				METZ RD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
4:15 PM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
Peak Hour	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	TIOGA AVE Eastbound			TIOGA AVE Westbound			0 Northbound			METZ RD Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	1	2	0
4:15 PM	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	0
4:30 PM	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**6**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	11
5:00 PM	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**11**
5:15 PM	1	0	0	0	0	0	0	0	0	0	0	1	2	10
5:30 PM	4	0	0	0	1	0	0	0	0	0	0	3	8	12
5:45 PM	3	1	0	0	0	0	0	0	0	0	0	4	8	20
Count Total	13	3	0	0	1	2	0	0	0	0	0	12	31	0
Peak Hour	**5**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**11**	**0**

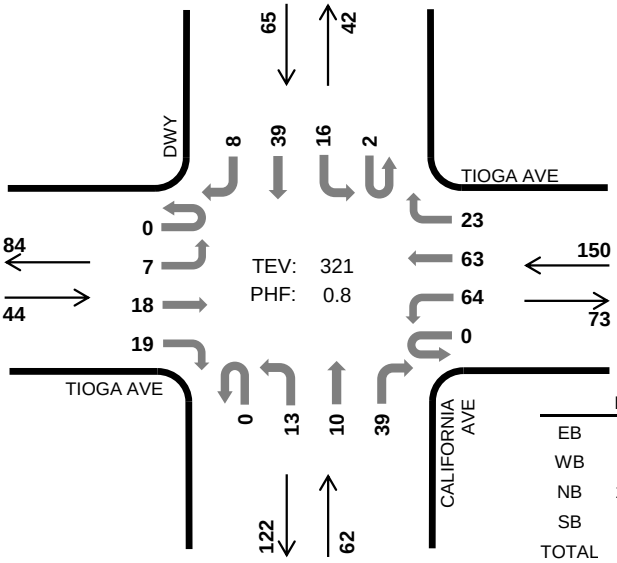
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

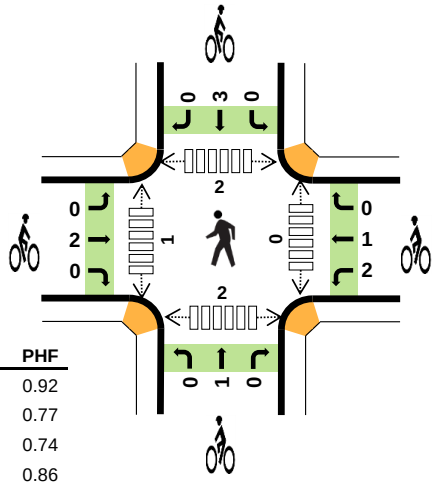
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

CALIFORNIA AVE
TIOGA AVE

Peak Hour

Date: 06/13/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM





	HV %:	PHF
EB	6.8%	0.92
WB	6.7%	0.77
NB	14.5%	0.74
SB	1.5%	0.86
TOTAL	7.2%	0.80

Two-Hour Count Summaries

Interval Start		TIOGA AVE Eastbound				TIOGA AVE Westbound				CALIFORNIA AVE Northbound				DWY Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	4	4	0	18	10	3	0	1	1	10	0	3	17	2	73	0
7:15 AM		0	0	5	1	0	16	11	2	0	2	7	0	0	5	11	4	64	0
7:30 AM		**0**	**2**	**3**	**6**	**0**	**16**	**26**	**7**	**0**	**4**	**3**	**14**	**0**	**5**	**13**	**1**	**100**	0
7:45 AM		**0**	**1**	**5**	**6**	**0**	**18**	**14**	**6**	**0**	**3**	**4**	**5**	**0**	**4**	**11**	**3**	**80**	317
8:00 AM		**0**	**2**	**6**	**3**	**0**	**14**	**10**	**3**	**0**	**2**	**1**	**5**	**1**	**3**	**8**	**0**	**58**	302
8:15 AM		**0**	**2**	**4**	**4**	**0**	**16**	**13**	**7**	**0**	**4**	**2**	**15**	**1**	**4**	**7**	**4**	**83**	**321**
8:30 AM		0	3	8	6	0	9	16	5	0	6	2	7	0	8	5	2	77	298
8:45 AM		0	1	5	3	0	13	14	8	0	4	3	9	0	7	5	2	74	292
Count Total		0	11	40	33	0	120	114	41	0	26	23	65	2	39	77	18	609	0
Peak Hour	**All**	**0**	**7**	**18**	**19**	**0**	**64**	**63**	**23**	**0**	**13**	**10**	**39**	**2**	**16**	**39**	**8**	**321**	**0**
	HV	**0**	**2**	**0**	**1**	**0**	**7**	**3**	**0**	**0**	**2**	**0**	**7**	**0**	**1**	**0**	**0**	**23**	**0**
	HV%	**-**	**29%**	**0%**	**5%**	**-**	**11%**	**5%**	**0%**	**-**	**15%**	**0%**	**18%**	**0%**	**6%**	**0%**	**0%**	**7%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	1	3	1	*5*	0	1	0	0	*1*	0	0	0	2	*2*
7:15 AM	0	0	0	0	*0*	1	0	0	0	*1*	0	0	0	0	*0*
7:30 AM	**0**	**1**	**2**	**0**	***3***	**1**	**2**	**0**	**1**	***4***	**0**	**0**	**0**	**1**	*1*
7:45 AM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**1**	**3**	**2**	**0**	***6***	**1**	**1**	**0**	**1**	***3***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**2**	**6**	**4**	**1**	***13***	**0**	**0**	**1**	**0**	***1***	**0**	**1**	**2**	**1**	***4***
8:30 AM	0	2	4	0	*6*	0	0	0	1	*1*	1	2	1	1	*5*
8:45 AM	2	2	4	0	*8*	0	1	0	0	*1*	0	0	0	0	*0*
Count Total	5	15	20	2	*42*	3	5	1	4	*13*	1	3	3	5	*12*
Peak Hour	**3**	**10**	**9**	**1**	***23***	**2**	**3**	**1**	**3**	***9***	**0**	**1**	**2**	**2**	***5***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	TIOGA AVE Eastbound				TIOGA AVE Westbound				CALIFORNIA AVE Northbound				DWY Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	1	0	0	0	1	2	0	0	1	0	5	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**3**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	9
8:00 AM	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**6**	10
8:15 AM	**0**	**1**	**0**	**1**	**0**	**4**	**2**	**0**	**0**	**1**	**0**	**3**	**0**	**1**	**0**	**0**	**13**	**23**
8:30 AM	0	0	0	0	0	2	0	0	0	2	1	1	0	0	0	0	6	26
8:45 AM	0	1	0	1	0	1	0	1	0	2	0	2	0	0	0	0	8	33
Count Total	0	3	0	2	0	10	4	1	0	6	2	12	0	1	1	0	42	0
Peak Hour	**0**	**2**	**0**	**1**	**0**	**7**	**3**	**0**	**0**	**2**	**0**	**7**	**0**	**1**	**0**	**0**	**23**	**0**

Two-Hour Count Summaries - Bikes

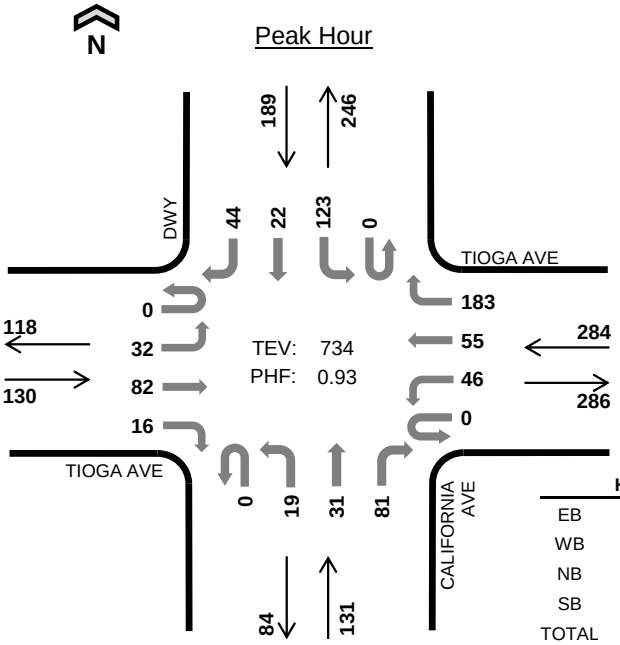
Interval Start	TIOGA AVE Eastbound			TIOGA AVE Westbound			CALIFORNIA AVE Northbound			DWY Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	7
8:00 AM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	9
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**9**
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	6
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	6
Count Total	0	3	0	2	2	1	0	1	0	1	3	0	13	0
Peak Hour	**0**	**2**	**0**	**2**	**1**	**0**	**0**	**1**	**0**	**0**	**3**	**0**	**9**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

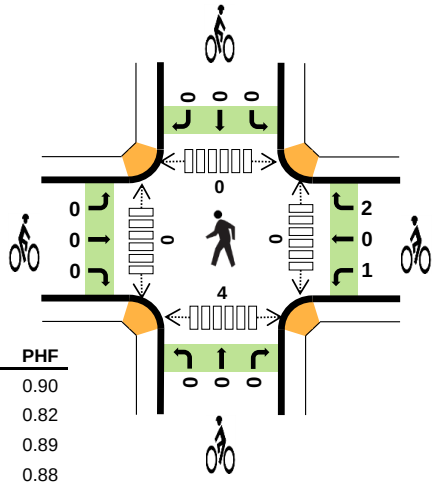
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

CALIFORNIA AVE
TIOGA AVE

Date: 06/13/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM



	HV %:	PHF
EB	6.2%	0.90
WB	3.2%	0.82
NB	5.3%	0.89
SB	2.1%	0.88
TOTAL	3.8%	0.93



Two-Hour Count Summaries

Interval Start		TIOGA AVE Eastbound				TIOGA AVE Westbound				CALIFORNIA AVE Northbound				DWY Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		**0**	**10**	**18**	**7**	**0**	**9**	**14**	**38**	**0**	**4**	**10**	**23**	**0**	**29**	**11**	**13**	**186**	0
4:15 PM		**0**	**7**	**14**	**4**	**0**	**14**	**12**	**39**	**0**	**7**	**7**	**20**	**0**	**23**	**3**	**12**	**162**	0
4:30 PM		**0**	**4**	**30**	**2**	**0**	**10**	**15**	**46**	**0**	**3**	**8**	**25**	**0**	**37**	**4**	**13**	**197**	0
4:45 PM		**0**	**11**	**20**	**3**	**0**	**13**	**14**	**60**	**0**	**5**	**6**	**13**	**0**	**34**	**4**	**6**	**189**	**734**
5:00 PM		0	2	27	0	0	9	14	45	0	7	5	17	0	35	1	16	178	726
5:15 PM		0	9	15	2	0	13	8	39	0	4	8	14	0	32	5	9	158	722
5:30 PM		0	9	17	5	0	7	15	37	0	3	5	20	0	33	0	18	169	694
5:45 PM		0	9	20	0	0	8	8	31	0	2	5	9	0	39	2	9	142	647
Count Total		0	61	161	23	0	83	100	335	0	35	54	141	0	262	30	96	1,381	0
Peak Hour	**All**	**0**	**32**	**82**	**16**	**0**	**46**	**55**	**183**	**0**	**19**	**31**	**81**	**0**	**123**	**22**	**44**	**734**	**0**
	HV	**0**	**0**	**6**	**2**	**0**	**7**	**1**	**1**	**0**	**2**	**1**	**4**	**0**	**0**	**4**	**0**	**28**	**0**
	HV%	**-**	**0%**	**7%**	**13%**	**-**	**15%**	**2%**	**1%**	**-**	**11%**	**3%**	**5%**	**-**	**0%**	**18%**	**0%**	**4%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	**3**	**5**	**4**	**1**	***13***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**2**	*2*
4:15 PM	**1**	**1**	**1**	**0**	***3***	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**4**	**3**	**2**	**3**	***12***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	*2*
4:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	1	0	*1*
5:30 PM	0	1	0	0	*1*	0	1	0	0	*1*	0	1	0	0	*1*
5:45 PM	0	0	0	0	*0*	1	0	0	0	*1*	0	1	0	0	*1*
Count Total	8	11	7	4	*30*	1	4	0	0	*5*	0	2	1	4	*7*
Peak Hour	**8**	**9**	**7**	**4**	***28***	**0**	**3**	**0**	**0**	***3***	**0**	**0**	**0**	**4**	***4***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	TIOGA AVE Eastbound				TIOGA AVE Westbound				CALIFORNIA AVE Northbound				DWY Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**1**	**2**	**0**	**3**	**1**	**1**	**0**	**1**	**1**	**2**	**0**	**0**	**1**	**0**	**13**	0
4:15 PM	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	0
4:30 PM	**0**	**0**	**4**	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**3**	**0**	**12**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**28**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
5:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	13
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	6	2	0	8	1	2	0	2	1	4	0	0	4	0	30	0
Peak Hour	**0**	**0**	**6**	**2**	**0**	**7**	**1**	**1**	**0**	**2**	**1**	**4**	**0**	**0**	**4**	**0**	**28**	**0**

Two-Hour Count Summaries - Bikes

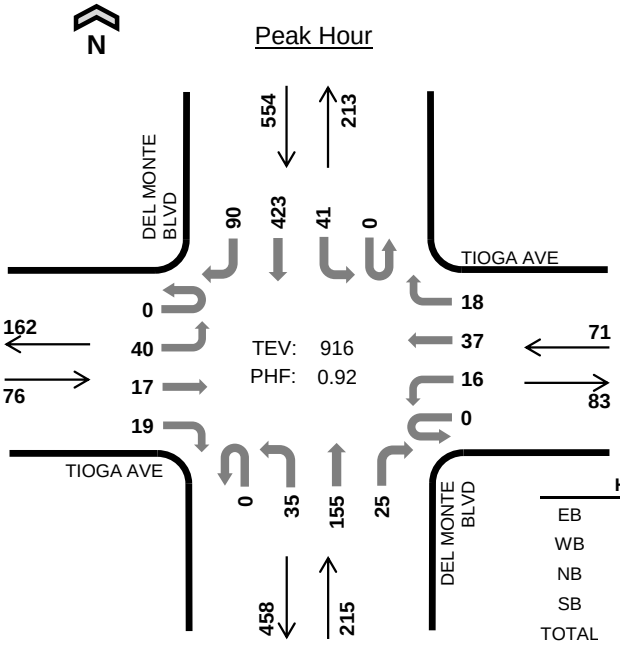
Interval Start	TIOGA AVE Eastbound			TIOGA AVE Westbound			CALIFORNIA AVE Northbound			DWY Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	1
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	2
Count Total	0	1	0	1	1	2	0	0	0	0	0	0	5	0
Peak Hour	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**

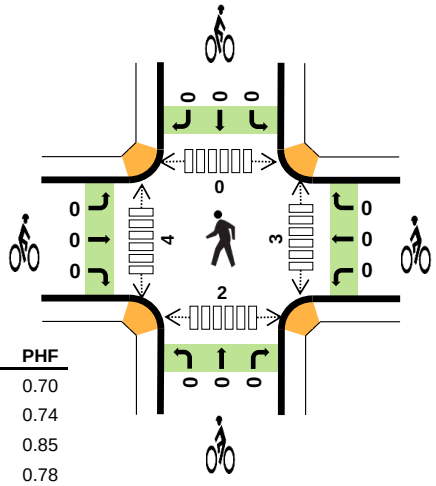
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

DEL MONTE BLVD
TIOGA AVE

Date: 06/13/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM





	HV %:	PHF
EB	9.2%	0.70
WB	2.8%	0.74
NB	7.9%	0.85
SB	6.0%	0.78
TOTAL	6.4%	0.92

Two-Hour Count Summaries

Interval Start		TIOGA AVE Eastbound				TIOGA AVE Westbound				DEL MONTE BLVD Northbound				DEL MONTE BLVD Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	9	1	7	1	6	6	4	0	4	17	2	0	7	97	22	183	0
7:15 AM		0	1	4	7	0	2	6	1	0	8	19	4	0	15	89	17	173	0
7:30 AM		**0**	**13**	**6**	**4**	**0**	**5**	**9**	**1**	**0**	**8**	**20**	**4**	**0**	**8**	**135**	**34**	**247**	0
7:45 AM		**0**	**3**	**3**	**7**	**0**	**4**	**12**	**8**	**0**	**9**	**41**	**8**	**0**	**17**	**120**	**18**	**250**	853
8:00 AM		**0**	**6**	**4**	**3**	**0**	**3**	**7**	**5**	**0**	**7**	**48**	**8**	**0**	**6**	**88**	**16**	**201**	871
8:15 AM		**0**	**18**	**4**	**5**	**0**	**4**	**9**	**4**	**0**	**11**	**46**	**5**	**0**	**10**	**80**	**22**	**218**	**916**
8:30 AM		0	7	6	11	0	2	10	9	0	7	54	11	0	3	78	15	213	882
8:45 AM		0	13	6	3	0	2	11	4	0	8	46	4	0	8	86	21	212	844
Count Total		0	70	34	47	1	28	70	36	0	62	291	46	0	74	773	165	1,697	0
Peak Hour	**All**	**0**	**40**	**17**	**19**	**0**	**16**	**37**	**18**	**0**	**35**	**155**	**25**	**0**	**41**	**423**	**90**	**916**	**0**
	HV	**0**	**5**	**2**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**16**	**1**	**0**	**2**	**19**	**12**	**59**	**0**
	HV%	**-**	**13%**	**12%**	**0%**	**-**	**0%**	**3%**	**6%**	**-**	**0%**	**10%**	**4%**	**-**	**5%**	**4%**	**13%**	**6%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	2	0	4	2	*8*	0	0	0	1	*1*	1	0	0	0	*1*
7:15 AM	1	0	0	4	*5*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**1**	**0**	**5**	**6**	***12***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**0**	**0**	**3**	**5**	***8***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**0**	*2*
8:00 AM	**1**	**2**	**8**	**8**	***19***	**0**	**0**	**0**	**0**	***0***	**1**	**2**	**0**	**2**	*5*
8:15 AM	**5**	**0**	**1**	**14**	***20***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**0**	***2***
8:30 AM	4	0	3	6	*13*	0	0	0	0	*0*	0	2	0	4	*6*
8:45 AM	3	1	5	2	*11*	0	0	0	0	*0*	0	1	0	1	*2*
Count Total	17	3	29	47	*96*	0	0	0	1	*1*	4	7	0	7	*18*
Peak Hour	**7**	**2**	**17**	**33**	***59***	**0**	**0**	**0**	**0**	***0***	**3**	**4**	**0**	**2**	***9***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	TIOGA AVE Eastbound				TIOGA AVE Westbound				DEL MONTE BLVD Northbound				DEL MONTE BLVD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	2	0	0	0	0	0	0	0	0	4	0	0	0	1	1	8	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	1	5	0
7:30 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**3**	**3**	**12**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**5**	**0**	**8**	33
8:00 AM	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**8**	**0**	**0**	**1**	**4**	**3**	**19**	44
8:15 AM	**0**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**7**	**6**	**20**	**59**
8:30 AM	0	1	1	2	0	0	0	0	0	0	3	0	0	0	4	2	13	60
8:45 AM	0	2	1	0	0	0	1	0	0	0	5	0	0	0	1	1	11	63
Count Total	0	11	4	2	0	0	2	1	0	0	28	1	0	2	28	17	96	0
Peak Hour	**0**	**5**	**2**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**16**	**1**	**0**	**2**	**19**	**12**	**59**	**0**

Two-Hour Count Summaries - Bikes

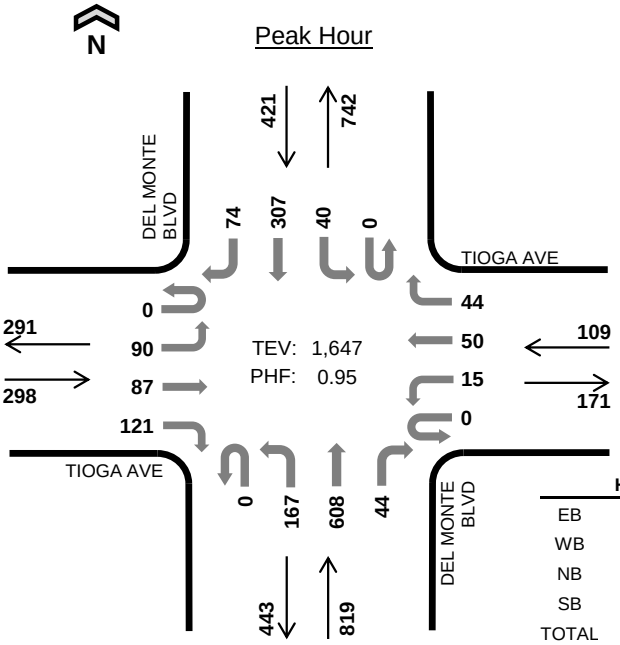
Interval Start	TIOGA AVE Eastbound			TIOGA AVE Westbound			DEL MONTE BLVD Northbound			DEL MONTE BLVD Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	1	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

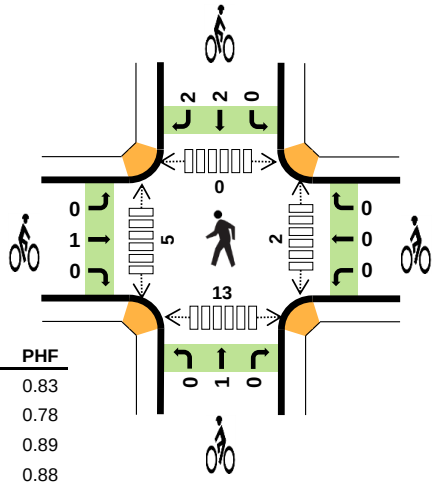
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

DEL MONTE BLVD
TIOGA AVE

Date: 06/13/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV %:	PHF
EB	1.0%	0.83
WB	0.0%	0.78
NB	1.5%	0.89
SB	2.9%	0.88
TOTAL	1.6%	0.95



Two-Hour Count Summaries

Interval Start	TIOGA AVE Eastbound				TIOGA AVE Westbound				DEL MONTE BLVD Northbound				DEL MONTE BLVD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	27	19	26	0	4	14	18	0	34	114	7	0	12	74	15	364	0
4:15 PM	**0**	**23**	**10**	**27**	**0**	**3**	**9**	**7**	**0**	**41**	**149**	**8**	**0**	**7**	**80**	**17**	**381**	0
4:30 PM	**0**	**25**	**29**	**36**	**0**	**6**	**13**	**8**	**0**	**35**	**150**	**9**	**0**	**13**	**83**	**23**	**430**	0
4:45 PM	**0**	**18**	**22**	**29**	**0**	**5**	**15**	**15**	**0**	**54**	**157**	**20**	**0**	**9**	**70**	**18**	**432**	1,607
5:00 PM	**0**	**24**	**26**	**29**	**0**	**1**	**13**	**14**	**0**	**37**	**152**	**7**	**0**	**11**	**74**	**16**	**404**	**1,647**
5:15 PM	0	22	20	20	1	4	12	17	0	36	126	7	0	6	72	19	362	1,628
5:30 PM	0	29	21	25	0	1	13	14	0	34	114	6	0	6	60	11	334	1,532
5:45 PM	0	22	22	27	0	6	11	9	0	27	97	8	0	5	49	9	292	1,392
Count Total	0	190	169	219	1	30	100	102	0	298	1,059	72	0	69	562	128	2,999	0
Peak Hour All	**0**	**90**	**87**	**121**	**0**	**15**	**50**	**44**	**0**	**167**	**608**	**44**	**0**	**40**	**307**	**74**	**1,647**	**0**
Peak Hour HV	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**1**	**0**	**1**	**8**	**3**	**27**	**0**
Peak Hour HV%	**-**	**2%**	**1%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**2%**	**2%**	**-**	**3%**	**3%**	**4%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	1	4	3	*9*	0	0	0	0	*0*	0	0	0	3	*3*
4:15 PM	**2**	**0**	**4**	**4**	***10***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**4**	*4*
4:30 PM	**1**	**0**	**3**	**4**	***8***	**0**	**0**	**0**	**3**	***3***	**0**	**0**	**0**	**6**	*6*
4:45 PM	**0**	**0**	**3**	**2**	***5***	**0**	**0**	**0**	**1**	***1***	**0**	**3**	**0**	**0**	*3*
5:00 PM	**0**	**0**	**2**	**2**	***4***	**1**	**0**	**0**	**0**	***1***	**2**	**2**	**0**	**3**	***7***
5:15 PM	0	0	3	2	*5*	0	0	0	3	*3*	1	0	0	0	*1*
5:30 PM	0	0	1	2	*3*	0	1	1	1	*3*	0	0	1	1	*2*
5:45 PM	0	1	2	1	*4*	0	0	1	1	*2*	0	0	0	1	*1*
Count Total	4	2	22	20	*48*	1	1	3	9	*14*	3	5	1	18	*27*
Peak Hour	**3**	**0**	**12**	**12**	***27***	**1**	**0**	**1**	**4**	***6***	**2**	**5**	**0**	**13**	***20***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	TIOGA AVE Eastbound				TIOGA AVE Westbound				DEL MONTE BLVD Northbound				DEL MONTE BLVD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	1	0	0	1	0	0	1	3	0	0	0	1	2	9	0
4:15 PM	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**3**	**1**	**10**	0
4:30 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**2**	**8**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**1**	**0**	**5**	32
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**4**	**27**
5:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	1	5	22
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	17
5:45 PM	0	0	0	0	0	1	0	0	0	0	1	1	0	0	1	0	4	16
Count Total	0	2	1	1	0	1	1	0	0	1	19	2	0	1	13	6	48	0
Peak Hour	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**1**	**0**	**1**	**8**	**3**	**27**	**0**

Two-Hour Count Summaries - Bikes

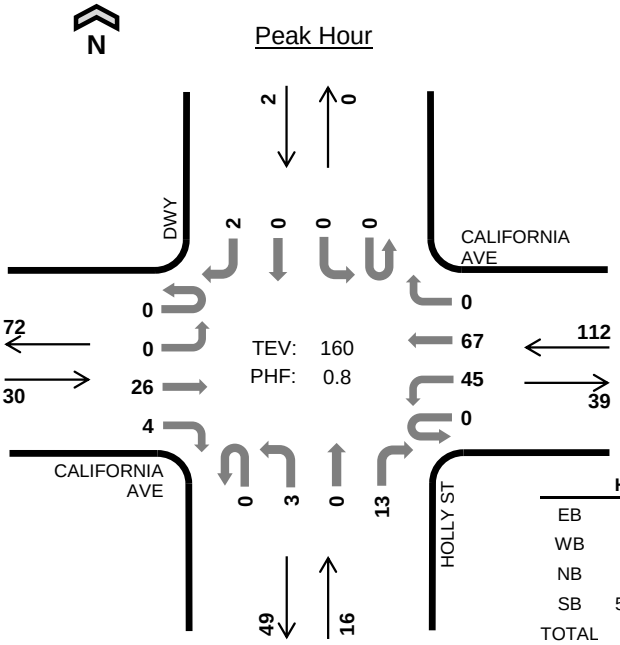
Interval Start	TIOGA AVE Eastbound			TIOGA AVE Westbound			DEL MONTE BLVD Northbound			DEL MONTE BLVD Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**3**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	5
5:00 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**6**
5:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	3	8
5:30 PM	0	0	0	0	1	0	0	1	0	0	1	0	3	8
5:45 PM	0	0	0	0	0	0	0	1	0	1	0	0	2	9
Count Total	0	1	0	0	1	0	0	3	0	1	6	2	14	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**2**	**6**	**0**

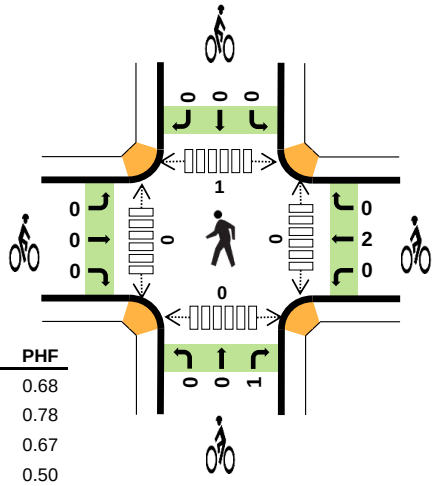
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

HOLLY ST
CALIFORNIA AVE

Date: 06/13/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM





	HV %:	PHF
EB	6.7%	0.68
WB	1.8%	0.78
NB	0.0%	0.67
SB	50.0%	0.50
TOTAL	3.1%	0.80

Two-Hour Count Summaries

Interval Start	CALIFORNIA AVE Eastbound				CALIFORNIA AVE Westbound				HOLLY ST Northbound				DWY Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	**0**	**0**	**4**	**0**	**0**	**13**	**15**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**34**	0
7:15 AM	**0**	**0**	**6**	**1**	**0**	**13**	**12**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**36**	0
7:30 AM	**0**	**0**	**6**	**2**	**0**	**14**	**22**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**50**	0
7:45 AM	**0**	**0**	**10**	**1**	**0**	**5**	**18**	**0**	**0**	**2**	**0**	**3**	**0**	**0**	**0**	**1**	**40**	**160**
8:00 AM	0	0	4	1	0	4	11	0	0	0	0	2	0	0	0	0	22	148
8:15 AM	0	0	4	0	0	10	11	0	0	1	1	6	0	0	0	0	33	145
8:30 AM	0	0	3	0	0	6	7	0	0	1	0	6	0	0	0	0	23	118
8:45 AM	0	0	10	3	0	8	7	0	0	0	0	4	0	0	0	0	32	110
Count Total	0	0	47	8	0	73	103	0	0	5	1	31	0	0	0	2	270	0
Peak Hour All	**0**	**0**	**26**	**4**	**0**	**45**	**67**	**0**	**0**	**3**	**0**	**13**	**0**	**0**	**0**	**2**	**160**	**0**
Peak Hour HV	**0**	**0**	**2**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**0**
Peak Hour HV%	**-**	**-**	**8%**	**0%**	**-**	**2%**	**1%**	**-**	**-**	**0%**	**-**	**0%**	**-**	**-**	**-**	**50%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	**1**	**0**	**0**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:15 AM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:30 AM	**0**	**1**	**0**	**0**	***1***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**1**	**0**	**0**	**0**	***1***	**0**	**1**	**1**	**0**	***2***	**0**	**0**	**1**	**0**	***1***
8:00 AM	0	2	0	0	*2*	2	0	1	0	*3*	0	0	0	0	*0*
8:15 AM	0	1	0	0	*1*	0	0	1	0	*1*	1	1	1	0	*3*
8:30 AM	0	2	0	0	*2*	0	0	0	0	*0*	1	0	1	0	*2*
8:45 AM	0	1	2	0	*3*	0	0	0	0	*0*	1	1	0	0	*2*
Count Total	2	8	2	1	*13*	2	2	3	0	*7*	3	2	3	0	*8*
Peak Hour	**2**	**2**	**0**	**1**	***5***	**0**	**2**	**1**	**0**	***3***	**0**	**0**	**1**	**0**	***1***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	CALIFORNIA AVE Eastbound				CALIFORNIA AVE Westbound				HOLLY ST Northbound				DWY Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
7:45 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
8:00 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	5
8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	5
8:30 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	6
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	3	8
Count Total	0	0	2	0	0	6	2	0	0	0	0	2	0	0	0	1	13	0
Peak Hour	**0**	**0**	**2**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**0**

Two-Hour Count Summaries - Bikes

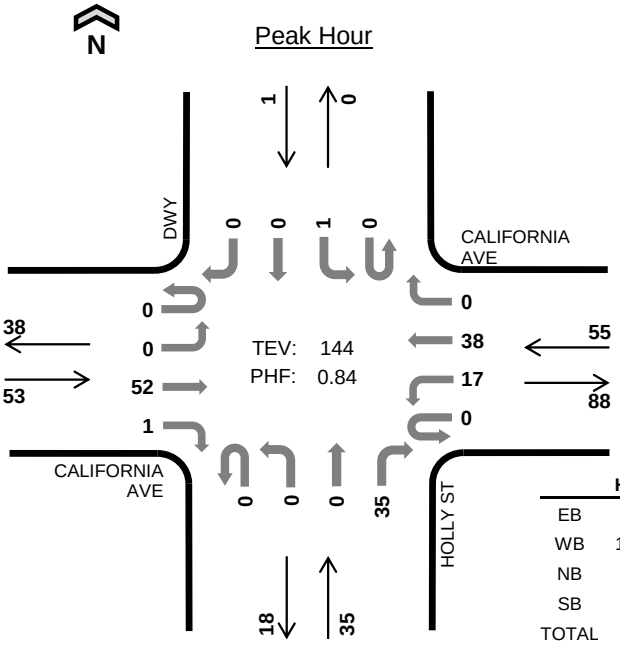
Interval Start	CALIFORNIA AVE Eastbound			CALIFORNIA AVE Westbound			HOLLY ST Northbound			DWY Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:30 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
7:45 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**3**
8:00 AM	0	2	0	0	0	0	0	0	1	0	0	0	3	6
8:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	1	7
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	6
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Count Total	0	2	0	0	2	0	0	0	3	0	0	0	7	0
Peak Hour	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**

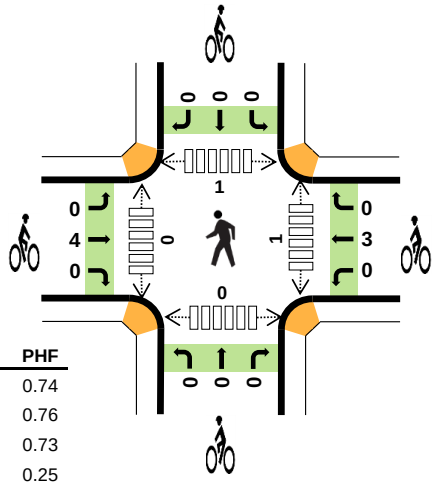
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

HOLLY ST
CALIFORNIA AVE

Date: 06/13/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM





	HV %:	PHF
EB	0.0%	0.74
WB	10.9%	0.76
NB	2.9%	0.73
SB	0.0%	0.25
TOTAL	4.9%	0.84

Two-Hour Count Summaries

Interval Start	CALIFORNIA AVE Eastbound				CALIFORNIA AVE Westbound				HOLLY ST Northbound				DWY Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**11**	**1**	**0**	**3**	**15**	**0**	**0**	**0**	**0**	**12**	**0**	**1**	**0**	**0**	**43**	0
4:15 PM	**0**	**0**	**18**	**0**	**0**	**6**	**8**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**39**	0
4:30 PM	**0**	**0**	**15**	**0**	**0**	**3**	**11**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**37**	0
4:45 PM	**0**	**0**	**8**	**0**	**0**	**5**	**4**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**25**	**144**
5:00 PM	1	0	16	1	0	2	4	0	0	0	0	8	0	0	0	0	32	133
5:15 PM	0	0	13	1	0	5	11	0	0	0	0	10	0	0	0	0	40	134
5:30 PM	0	0	13	1	0	1	9	0	0	1	0	3	0	0	0	0	28	125
5:45 PM	0	0	8	0	0	6	5	0	0	0	0	4	0	0	0	0	23	123
Count Total	1	0	102	4	0	31	67	0	0	1	0	60	0	1	0	0	267	0
Peak Hour All	**0**	**0**	**52**	**1**	**0**	**17**	**38**	**0**	**0**	**0**	**0**	**35**	**0**	**1**	**0**	**0**	**144**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**2**	**4**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**7**	**0**
Peak Hour HV%	**-**	**-**	**0%**	**0%**	**-**	**12%**	**11%**	**-**	**-**	**-**	**-**	**3%**	**-**	**0%**	**-**	**-**	**5%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	**0**	**3**	**0**	**0**	***3***	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**1**	**0**	*1*
4:15 PM	**0**	**2**	**0**	**0**	***2***	**3**	**0**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**0**	**1**	**1**	**0**	***2***	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***
5:00 PM	1	0	0	0	*1*	0	1	1	0	*2*	0	0	1	0	*1*
5:15 PM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	1	0	*1*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	1	0	*1*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	1	0	*1*
Count Total	1	7	1	0	*9*	4	4	1	0	*9*	1	0	5	0	*6*
Peak Hour	**0**	**6**	**1**	**0**	***7***	**4**	**3**	**0**	**0**	***7***	**1**	**0**	**1**	**0**	***2***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	CALIFORNIA AVE Eastbound				CALIFORNIA AVE Westbound				HOLLY ST Northbound				DWY Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**
5:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	5
5:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	4
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	0	1	0	2	5	0	0	0	0	1	0	0	0	0	9	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**2**	**4**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**7**	**0**

Two-Hour Count Summaries - Bikes

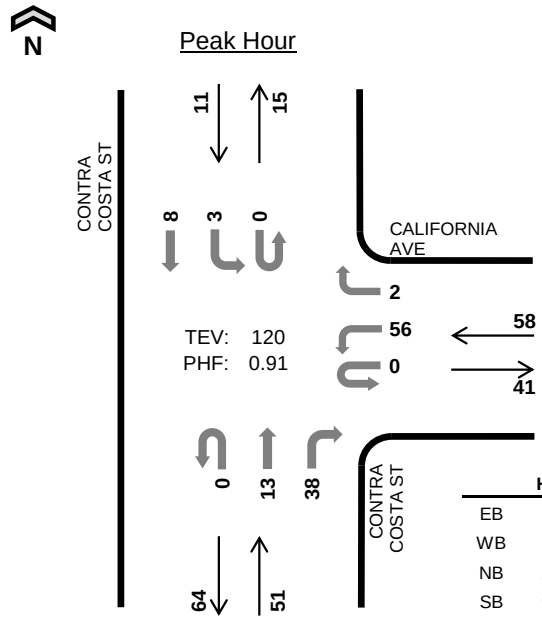
Interval Start	CALIFORNIA AVE Eastbound			CALIFORNIA AVE Westbound			HOLLY ST Northbound			DWY Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
4:15 PM	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	0
4:30 PM	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**
5:00 PM	0	0	0	1	0	0	0	0	1	0	0	0	2	7
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	4	0	1	3	0	0	0	1	0	0	0	9	0
Peak Hour	**0**	**4**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

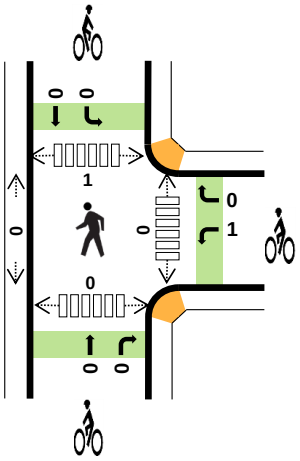
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

CONTRA COSTA ST
CALIFORNIA AVE

Date: 06/13/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	-	-
WB	1.7%	0.69
NB	2.0%	0.67
SB	9.1%	0.46
TOTAL	2.5%	0.91



Two-Hour Count Summaries

Interval Start	0 Eastbound				CALIFORNIA AVE Westbound				CONTRA COSTA ST Northbound				CONTRA COSTA ST Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	8	0	2	0	0	3	6	0	1	1	0	21	0
7:15 AM	0	0	0	0	0	10	0	0	0	0	2	6	0	0	0	0	18	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**20**	**0**	**1**	**0**	**0**	**0**	**8**	**0**	**0**	**4**	**0**	**33**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**3**	**16**	**0**	**1**	**0**	**0**	**32**	104
8:00 AM	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**1**	**0**	**0**	**1**	**11**	**0**	**0**	**0**	**0**	**23**	106
8:15 AM	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**0**	**0**	**0**	**9**	**3**	**0**	**2**	**4**	**0**	**32**	**120**
8:30 AM	0	0	0	0	0	10	0	0	0	0	1	4	0	0	4	0	19	106
8:45 AM	0	0	0	0	0	7	0	1	0	0	2	14	0	0	1	0	25	99
Count Total	0	0	0	0	0	91	0	5	0	0	21	68	0	4	14	0	203	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**56**	**0**	**2**	**0**	**0**	**13**	**38**	**0**	**3**	**8**	**0**	**120**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**3**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**50%**	**-**	**-**	**0%**	**3%**	**-**	**0%**	**13%**	**-**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	2	2	2	*6*	0	0	0	0	*0*	0	0	0	2	*2*
7:15 AM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**0**	**1**	**0**	**1**	***2***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
8:00 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	5	3	3	*11*	0	1	0	0	*1*	0	0	1	2	*3*
Peak Hr	**0**	**1**	**1**	**1**	***3***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**1**	**0**	***1***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	0				CALIFORNIA AVE				CONTRA COSTA ST				CONTRA COSTA ST				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	1	0	1	0	0	1	1	0	1	1	0	6	0
7:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	10
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
Count Total	0	0	0	0	0	3	0	2	0	0	1	2	0	1	2	0	11	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**3**	**0**

Two-Hour Count Summaries - Bikes

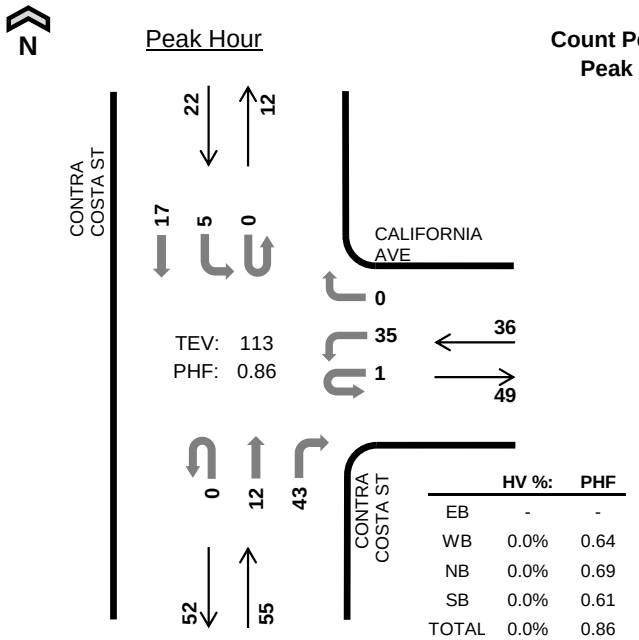
Interval Start	0			CALIFORNIA AVE			CONTRA COSTA ST			CONTRA COSTA ST			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	1	0	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

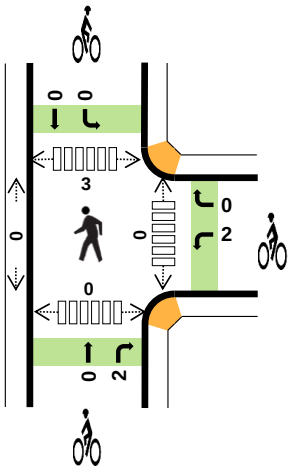
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

CONTRA COSTA ST
CALIFORNIA AVE

Date: 06/13/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV %:	PHF
EB	-	-
WB	0.0%	0.64
NB	0.0%	0.69
SB	0.0%	0.61
TOTAL	0.0%	0.86



Two-Hour Count Summaries

Interval Start	0 Eastbound				CALIFORNIA AVE Westbound				CONTRA COSTA ST Northbound				CONTRA COSTA ST Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	14	0	1	0	0	1	11	0	0	2	0	29	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**3**	**17**	**0**	**0**	**3**	**0**	**33**	0
4:30 PM	**0**	**0**	**0**	**0**	**1**	**13**	**0**	**0**	**0**	**0**	**4**	**7**	**0**	**1**	**2**	**0**	**28**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**1**	**6**	**0**	**1**	**8**	**0**	**22**	112
5:00 PM	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**4**	**13**	**0**	**3**	**4**	**0**	**30**	**113**
5:15 PM	0	0	0	0	0	5	0	1	0	0	3	11	0	0	2	0	22	102
5:30 PM	0	0	0	0	0	11	0	0	0	0	2	8	0	0	0	0	21	95
5:45 PM	0	0	0	0	0	6	0	0	0	0	0	7	0	0	3	0	16	89
Count Total	0	0	0	0	1	71	0	2	0	0	18	80	0	5	24	0	201	0
Peak Hour All	**0**	**0**	**0**	**0**	**1**	**35**	**0**	**0**	**0**	**0**	**12**	**43**	**0**	**5**	**17**	**0**	**113**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**0%**	**0%**	**-**	**-**	**-**	**-**	**0%**	**0%**	**-**	**0%**	**0%**	**-**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	3	0	0	*3*	0	0	0	1	*1*	0	0	0	0	*0*
4:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**2**	**0**	*2*
4:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***
5:15 PM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	5	1	*6*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	0	0	*0*	0	1	0	0	*1*	0	0	0	0	*0*
Count Total	0	4	0	0	*4*	0	3	2	1	*6*	0	0	8	1	*9*
Peak Hr	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**2**	**0**	***4***	**0**	**0**	**3**	**0**	***3***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	0				CALIFORNIA AVE				CONTRA COSTA ST				CONTRA COSTA ST				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Two-Hour Count Summaries - Bikes

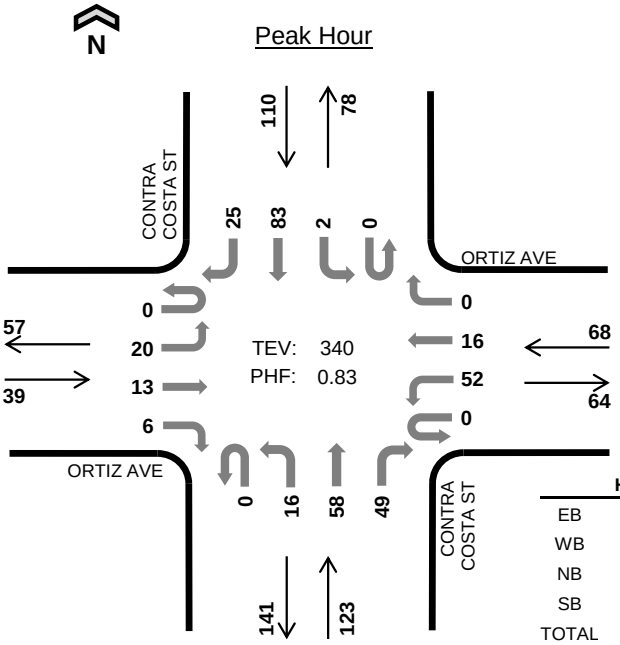
Interval Start	0			CALIFORNIA AVE			CONTRA COSTA ST			CONTRA COSTA ST			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	0
4:30 PM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	5
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	1	1
Count Total	0	0	0	3	0	0	0	0	2	1	0	0	6	0
Peak Hour	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**4**	**0**

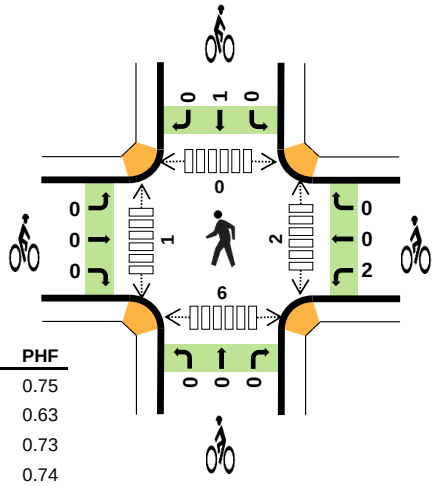
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

CONTRA COSTA ST
ORTIZ AVE

Date: 06/13/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM





	HV %:	PHF
EB	2.6%	0.75
WB	5.9%	0.63
NB	3.3%	0.73
SB	9.1%	0.74
TOTAL	5.6%	0.83

Two-Hour Count Summaries

Interval Start		ORTIZ AVE Eastbound				ORTIZ AVE Westbound				CONTRA COSTA ST Northbound				CONTRA COSTA ST Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		**0**	**5**	**2**	**1**	**0**	**11**	**3**	**0**	**0**	**6**	**15**	**8**	**0**	**2**	**13**	**4**	**70**	0
7:15 AM		**0**	**7**	**5**	**1**	**0**	**11**	**4**	**0**	**0**	**3**	**7**	**12**	**0**	**0**	**19**	**6**	**75**	0
7:30 AM		**0**	**2**	**4**	**2**	**0**	**23**	**4**	**0**	**0**	**2**	**11**	**17**	**0**	**0**	**27**	**10**	**102**	0
7:45 AM		**0**	**6**	**2**	**2**	**0**	**7**	**5**	**0**	**0**	**5**	**25**	**12**	**0**	**0**	**24**	**5**	**93**	**340**
8:00 AM		0	3	0	0	0	9	2	0	0	2	14	6	0	3	15	5	59	329
8:15 AM		0	4	0	1	0	14	5	0	0	2	12	9	0	0	23	4	74	328
8:30 AM		0	6	3	1	0	6	1	0	0	1	9	7	0	1	18	6	59	285
8:45 AM		0	3	2	1	0	18	0	1	0	3	22	4	0	0	12	4	70	262
Count Total		0	36	18	9	0	99	24	1	0	24	115	75	0	6	151	44	602	0
Peak Hour	**All**	**0**	**20**	**13**	**6**	**0**	**52**	**16**	**0**	**0**	**16**	**58**	**49**	**0**	**2**	**83**	**25**	**340**	**0**
	HV	**0**	**0**	**1**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**2**	**2**	**0**	**1**	**8**	**1**	**19**	**0**
	HV%	**-**	**0%**	**8%**	**0%**	**-**	**6%**	**6%**	**-**	**-**	**0%**	**3%**	**4%**	**-**	**50%**	**10%**	**4%**	**6%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	**0**	**0**	**2**	**3**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:15 AM	**1**	**2**	**0**	**3**	***6***	**0**	**1**	**0**	**0**	***1***	**0**	**1**	**0**	**1**	*2*
7:30 AM	**0**	**2**	**1**	**4**	***7***	**0**	**1**	**0**	**1**	***2***	**0**	**0**	**0**	**5**	*5*
7:45 AM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**0**	***2***
8:00 AM	0	1	0	5	*6*	0	0	1	0	*1*	0	2	2	2	*6*
8:15 AM	0	4	0	0	*4*	0	0	0	0	*0*	0	0	0	1	*1*
8:30 AM	0	2	2	6	*10*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	4	0	3	*7*	0	0	0	0	*0*	1	0	0	1	*2*
Count Total	1	15	6	24	*46*	0	2	1	1	*4*	3	3	2	10	*18*
Peak Hour	**1**	**4**	**4**	**10**	***19***	**0**	**2**	**0**	**1**	***3***	**2**	**1**	**0**	**6**	***9***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	ORTIZ AVE Eastbound				ORTIZ AVE Westbound				CONTRA COSTA ST Northbound				CONTRA COSTA ST Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**1**	**1**	**1**	**5**	0
7:15 AM	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**6**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**	**0**	**7**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**19**
8:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	3	2	0	6	20
8:15 AM	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	4	18
8:30 AM	0	0	0	0	0	2	0	0	0	0	2	0	0	0	6	0	10	21
8:45 AM	0	0	0	0	0	4	0	0	0	0	0	0	0	0	3	0	7	27
Count Total	0	0	1	0	0	13	2	0	0	0	4	2	0	4	19	1	46	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**2**	**2**	**0**	**1**	**8**	**1**	**19**	**0**

Two-Hour Count Summaries - Bikes

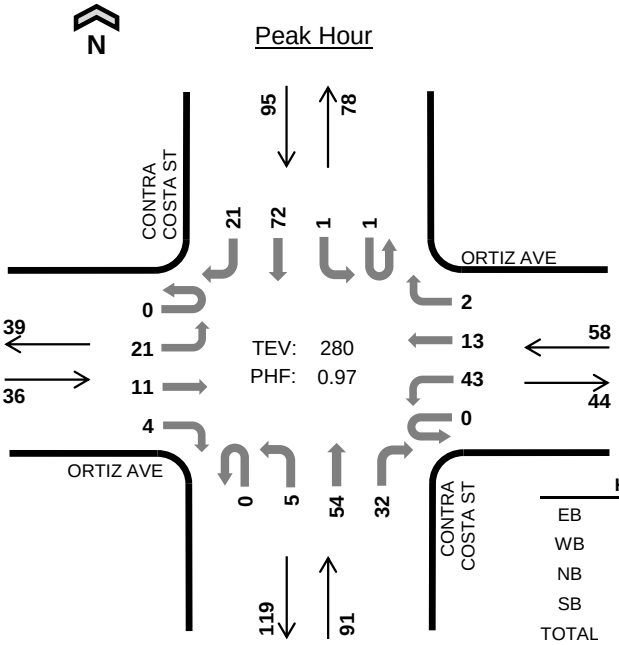
Interval Start	ORTIZ AVE Eastbound			ORTIZ AVE Westbound			CONTRA COSTA ST Northbound			CONTRA COSTA ST Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:15 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
7:30 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	4
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	2	0	0	0	1	0	0	1	0	4	0
Peak Hour	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

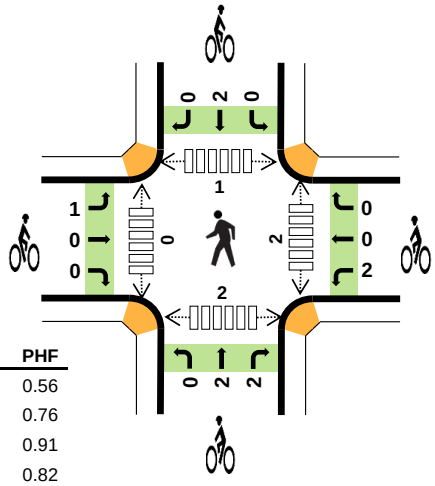
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

CONTRA COSTA ST
ORTIZ AVE

Date: 06/13/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV %:	PHF
EB	2.8%	0.56
WB	5.2%	0.76
NB	6.6%	0.91
SB	1.1%	0.82
TOTAL	3.9%	0.97



Two-Hour Count Summaries

Interval Start	ORTIZ AVE Eastbound				ORTIZ AVE Westbound				CONTRA COSTA ST Northbound				CONTRA COSTA ST Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	12	1	5	0	5	1	0	0	1	7	8	0	0	11	6	57	0
4:15 PM	**0**	**7**	**6**	**3**	**0**	**9**	**2**	**0**	**0**	**0**	**18**	**5**	**1**	**0**	**16**	**5**	**72**	0
4:30 PM	**0**	**8**	**4**	**0**	**0**	**14**	**5**	**0**	**0**	**2**	**9**	**10**	**0**	**0**	**16**	**3**	**71**	0
4:45 PM	**0**	**1**	**0**	**1**	**0**	**12**	**3**	**1**	**0**	**2**	**13**	**10**	**0**	**1**	**20**	**8**	**72**	272
5:00 PM	**0**	**5**	**1**	**0**	**0**	**8**	**3**	**1**	**0**	**1**	**14**	**7**	**0**	**0**	**20**	**5**	**65**	**280**
5:15 PM	0	4	2	1	0	6	2	0	0	0	12	13	0	1	7	2	50	258
5:30 PM	0	5	2	0	0	3	1	0	0	0	10	17	0	0	10	3	51	238
5:45 PM	0	6	3	0	0	9	0	0	0	1	7	7	0	0	11	5	49	215
Count Total	0	48	19	10	0	66	17	2	0	7	90	77	1	2	111	37	487	0
Peak Hour All	**0**	**21**	**11**	**4**	**0**	**43**	**13**	**2**	**0**	**5**	**54**	**32**	**1**	**1**	**72**	**21**	**280**	**0**
Peak Hour HV	**0**	**0**	**1**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**3**	**3**	**0**	**0**	**1**	**0**	**11**	**0**
Peak Hour HV%	**-**	**0%**	**9%**	**0%**	**-**	**5%**	**8%**	**0%**	**-**	**0%**	**6%**	**9%**	**0%**	**0%**	**1%**	**0%**	**4%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	1	2	*3*	0	0	1	0	*1*	0	0	0	1	*1*
4:15 PM	**0**	**1**	**2**	**1**	***4***	**1**	**0**	**4**	**0**	***5***	**0**	**0**	**0**	**1**	*1*
4:30 PM	**1**	**1**	**2**	**0**	***4***	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**0**	**0**	**2**	**0**	***2***	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**1**	**1**	***4***
5:15 PM	0	0	2	0	*2*	1	0	0	0	*1*	0	2	0	1	*3*
5:30 PM	0	0	4	0	*4*	0	0	0	0	*0*	0	1	0	0	*1*
5:45 PM	1	1	0	0	*2*	0	1	0	1	*2*	1	0	0	0	*1*
Count Total	2	4	13	3	*22*	2	3	5	3	*13*	3	3	1	4	*11*
Peak Hour	**1**	**3**	**6**	**1**	***11***	**1**	**2**	**4**	**2**	***9***	**2**	**0**	**1**	**2**	***5***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	ORTIZ AVE Eastbound				ORTIZ AVE Westbound				CONTRA COSTA ST Northbound				CONTRA COSTA ST Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	3	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**0**	**4**	0
4:30 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**4**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**2**	13
5:00 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**11**
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	9
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	4	9
5:45 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	9
Count Total	0	1	1	0	0	3	1	0	0	0	5	8	0	0	2	1	22	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**3**	**3**	**0**	**0**	**1**	**0**	**11**	**0**

Two-Hour Count Summaries - Bikes

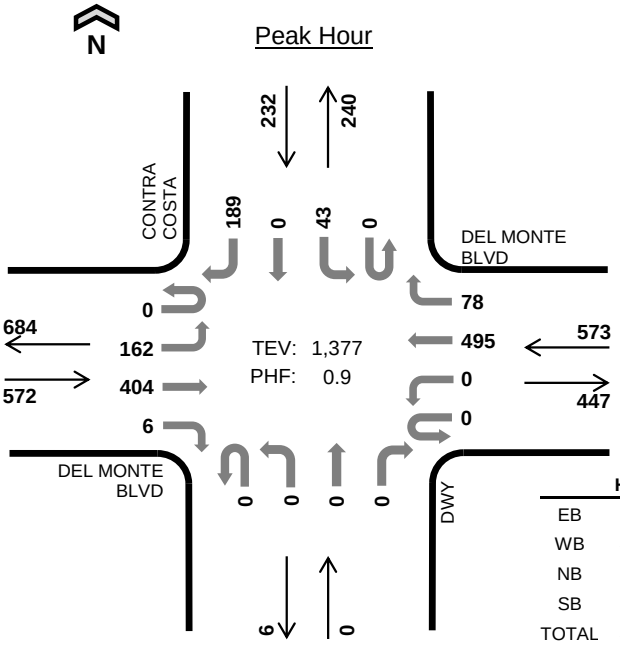
Interval Start	ORTIZ AVE Eastbound			ORTIZ AVE Westbound			CONTRA COSTA ST Northbound			CONTRA COSTA ST Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	1	0
4:15 PM	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**5**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	0
4:45 PM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	10
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	5
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	1	0	0	0	0	0	1	0	2	3
Count Total	1	1	0	2	1	0	0	2	3	0	3	0	13	0
Peak Hour	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**2**	**0**	**2**	**0**	**9**	**0**

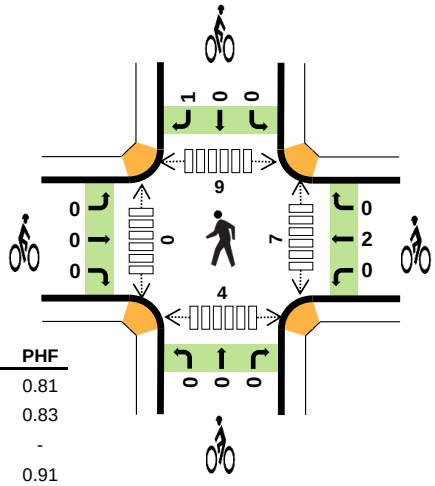
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

CONTRA COSTA
DEL MONTE BLVD

Date: 06/13/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM





	HV %:	PHF
EB	3.5%	0.81
WB	4.7%	0.83
NB	-	-
SB	6.5%	0.91
TOTAL	4.5%	0.90

Two-Hour Count Summaries

Interval Start		DEL MONTE BLVD Eastbound				DEL MONTE BLVD Westbound				DWY Northbound				CONTRA COSTA Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	31	54	0	0	0	73	21	0	0	0	0	0	5	0	32	216	0
7:15 AM		0	24	67	0	0	0	113	13	0	0	0	0	0	6	0	38	261	0
7:30 AM		**0**	**41**	**78**	**0**	**0**	**0**	**154**	**18**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**56**	**355**	0
7:45 AM		**0**	**56**	**118**	**2**	**0**	**0**	**129**	**23**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**46**	**384**	1,216
8:00 AM		**0**	**36**	**98**	**4**	**0**	**0**	**114**	**22**	**0**	**0**	**0**	**0**	**0**	**11**	**0**	**39**	**324**	1,324
8:15 AM		**0**	**29**	**110**	**0**	**0**	**0**	**98**	**15**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**48**	**314**	**1,377**
8:30 AM		0	23	106	1	0	0	120	15	0	0	0	0	1	10	0	32	308	1,330
8:45 AM		0	45	108	0	0	0	106	12	0	0	0	0	0	7	0	44	322	1,268
Count Total		0	285	739	7	0	0	907	139	0	0	0	0	1	71	0	335	2,484	0
Peak Hour	**All**	**0**	**162**	**404**	**6**	**0**	**0**	**495**	**78**	**0**	**0**	**0**	**0**	**0**	**43**	**0**	**189**	**1,377**	**0**
	HV	**0**	**4**	**16**	**0**	**0**	**0**	**24**	**3**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**10**	**62**	**0**
	HV%	**-**	**2%**	**4%**	**0%**	**-**	**-**	**5%**	**4%**	**-**	**-**	**-**	**-**	**-**	**12%**	**-**	**5%**	**5%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	6	3	0	1	*10*	0	1	0	0	*1*	0	0	1	0	*1*
7:15 AM	0	5	0	4	*9*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**4**	**7**	**0**	**6**	***17***	**0**	**1**	**0**	**1**	***2***	**2**	**0**	**0**	**1**	*3*
7:45 AM	**7**	**9**	**0**	**3**	***19***	**0**	**1**	**0**	**0**	***1***	**4**	**0**	**1**	**2**	*7*
8:00 AM	**7**	**3**	**0**	**3**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**5**	**0**	*5*
8:15 AM	**2**	**8**	**0**	**3**	***13***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**3**	**1**	***5***
8:30 AM	6	9	0	8	*23*	0	0	0	0	*0*	3	0	2	5	*10*
8:45 AM	11	2	0	9	*22*	0	1	0	1	*2*	0	0	1	2	*3*
Count Total	43	46	0	37	*126*	0	4	0	2	*6*	10	0	13	11	*34*
Peak Hour	**20**	**27**	**0**	**15**	***62***	**0**	**2**	**0**	**1**	***3***	**7**	**0**	**9**	**4**	***20***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	DEL MONTE BLVD Eastbound				DEL MONTE BLVD Westbound				DWY Northbound				CONTRA COSTA Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	5	0	0	0	3	0	0	0	0	0	0	0	0	1	10	0
7:15 AM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	4	9	0
7:30 AM	**0**	**1**	**3**	**0**	**0**	**0**	**6**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**4**	**17**	0
7:45 AM	**0**	**2**	**5**	**0**	**0**	**0**	**8**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**19**	55
8:00 AM	**0**	**1**	**6**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**13**	58
8:15 AM	**0**	**0**	**2**	**0**	**0**	**0**	**7**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**13**	**62**
8:30 AM	0	1	5	0	0	0	8	1	0	0	0	0	0	3	0	5	23	68
8:45 AM	0	2	9	0	0	0	2	0	0	0	0	0	0	2	0	7	22	71
Count Total	0	8	35	0	0	0	42	4	0	0	0	0	0	10	0	27	126	0
Peak Hour	**0**	**4**	**16**	**0**	**0**	**0**	**24**	**3**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**10**	**62**	**0**

Two-Hour Count Summaries - Bikes

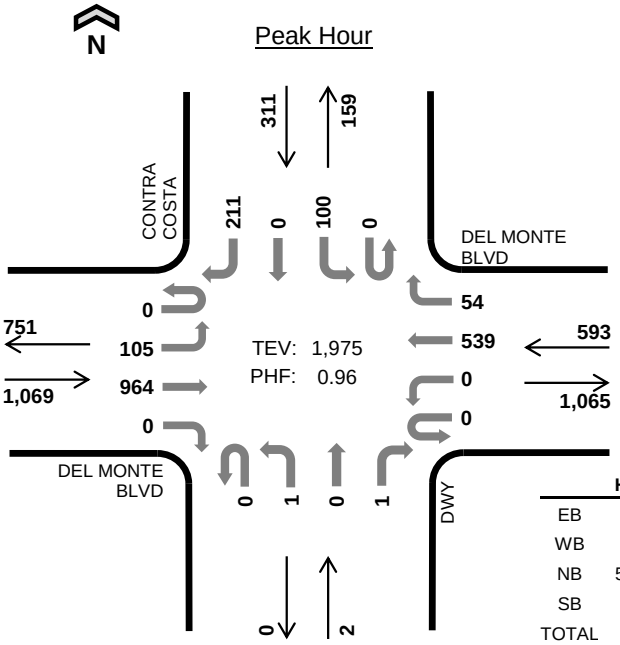
Interval Start	DEL MONTE BLVD Eastbound			DEL MONTE BLVD Westbound			DWY Northbound			CONTRA COSTA Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	0
7:45 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	4
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	1	0	0	0	0	1	0	0	2	2
Count Total	0	0	0	0	4	0	0	0	0	1	0	1	6	0
Peak Hour	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**0**

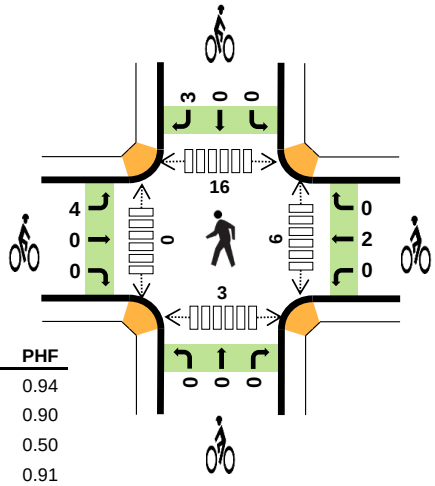
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

CONTRA COSTA
DEL MONTE BLVD

Date: 06/13/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM





	HV %:	PHF
EB	1.3%	0.94
WB	2.2%	0.90
NB	50.0%	0.50
SB	1.9%	0.91
TOTAL	1.7%	0.96

Two-Hour Count Summaries

Interval Start	DEL MONTE BLVD Eastbound				DEL MONTE BLVD Westbound				DWY Northbound				CONTRA COSTA Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	31	202	0	0	0	126	7	0	2	0	0	0	18	0	35	421	0
4:15 PM	**0**	**25**	**246**	**0**	**0**	**0**	**144**	**20**	**0**	**0**	**0**	**1**	**0**	**31**	**0**	**43**	**510**	0
4:30 PM	**0**	**33**	**223**	**0**	**0**	**0**	**136**	**18**	**0**	**0**	**0**	**0**	**0**	**18**	**0**	**59**	**487**	0
4:45 PM	**0**	**27**	**257**	**0**	**0**	**0**	**136**	**11**	**0**	**1**	**0**	**0**	**0**	**27**	**0**	**58**	**517**	1,935
5:00 PM	**0**	**20**	**238**	**0**	**0**	**0**	**123**	**5**	**0**	**0**	**0**	**0**	**0**	**24**	**0**	**51**	**461**	**1,975**
5:15 PM	0	26	203	0	0	0	120	7	0	0	0	0	0	16	0	29	401	1,866
5:30 PM	0	29	189	0	0	0	125	7	0	0	0	0	0	14	0	24	388	1,767
5:45 PM	1	16	177	0	0	0	129	5	0	0	0	0	0	12	0	29	369	1,619
Count Total	1	207	1,735	0	0	0	1,039	80	0	3	0	1	0	160	0	328	3,554	0
Peak Hour All	**0**	**105**	**964**	**0**	**0**	**0**	**539**	**54**	**0**	**1**	**0**	**1**	**0**	**100**	**0**	**211**	**1,975**	**0**
Peak Hour HV	**0**	**4**	**10**	**0**	**0**	**0**	**11**	**2**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**4**	**34**	**0**
Peak Hour HV%	**-**	**4%**	**1%**	**-**	**-**	**-**	**2%**	**4%**	**-**	**100%**	**-**	**0%**	**-**	**2%**	**-**	**2%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	8	2	0	1	*11*	0	0	0	0	*0*	1	0	1	1	*3*
4:15 PM	**6**	**6**	**0**	**3**	***15***	**4**	**0**	**0**	**0**	***4***	**0**	**0**	**2**	**0**	*2*
4:30 PM	**2**	**5**	**0**	**1**	***8***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**3**	**1**	*6*
4:45 PM	**3**	**1**	**1**	**1**	***6***	**0**	**2**	**0**	**1**	***3***	**0**	**0**	**5**	**0**	*5*
5:00 PM	**3**	**1**	**0**	**1**	***5***	**0**	**0**	**0**	**2**	***2***	**4**	**0**	**6**	**2**	***12***
5:15 PM	4	0	0	0	*4*	0	2	0	0	*2*	3	0	0	3	*6*
5:30 PM	2	2	0	0	*4*	2	2	0	0	*4*	0	0	0	3	*3*
5:45 PM	3	1	0	0	*4*	0	1	0	0	*1*	0	0	0	0	*0*
Count Total	31	18	1	7	*57*	6	7	0	3	*16*	10	0	17	10	*37*
Peak Hour	**14**	**13**	**1**	**6**	***34***	**4**	**2**	**0**	**3**	***9***	**6**	**0**	**16**	**3**	***25***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	DEL MONTE BLVD Eastbound				DEL MONTE BLVD Westbound				DWY Northbound				CONTRA COSTA Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	2	6	0	0	0	2	0	0	0	0	0	0	0	0	1	11	0
4:15 PM	**0**	**2**	**4**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**15**	0
4:30 PM	**0**	**1**	**1**	**0**	**0**	**0**	**3**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**8**	0
4:45 PM	**0**	**1**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**6**	40
5:00 PM	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**34**
5:15 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	23
5:30 PM	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	4	19
5:45 PM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4	17
Count Total	0	7	24	0	0	0	16	2	0	1	0	0	0	2	0	5	57	0
Peak Hour	**0**	**4**	**10**	**0**	**0**	**0**	**11**	**2**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**4**	**34**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	DEL MONTE BLVD Eastbound			DEL MONTE BLVD Westbound			DWY Northbound			CONTRA COSTA Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	7
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**2**	**9**
5:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	2	7
5:30 PM	0	2	0	0	2	0	0	0	0	0	0	0	4	11
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	9
Count Total	4	2	0	0	7	0	0	0	0	0	0	3	16	0
Peak Hour	**4**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**9**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

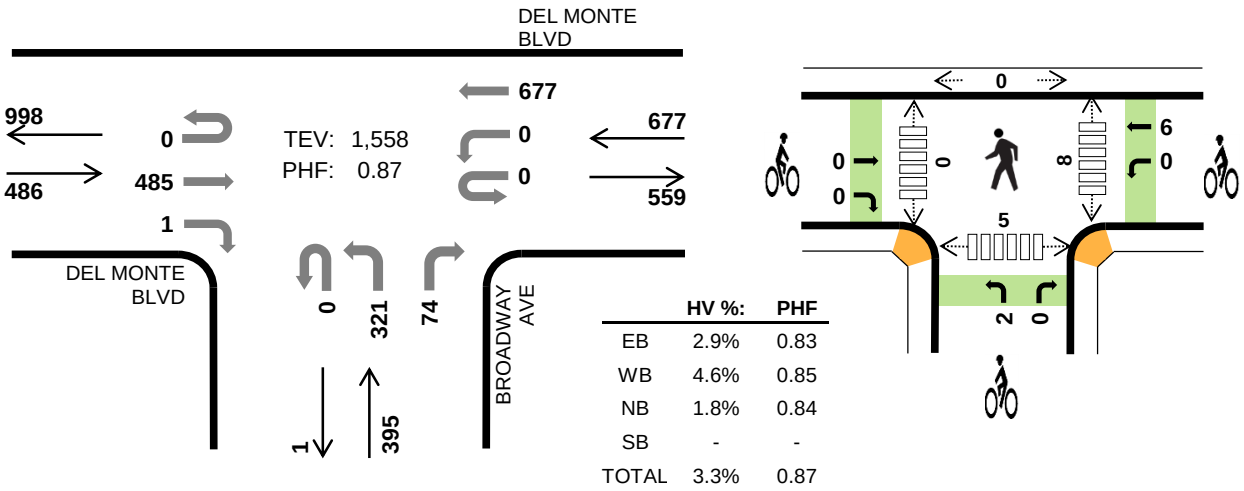
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

BROADWAY AVE
DEL MONTE BLVD

N

Peak Hour

Date: 06/13/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	2.9%	0.83
WB	4.6%	0.85
NB	1.8%	0.84
SB	-	-
TOTAL	3.3%	0.87

Two-Hour Count Summaries

Interval Start	DEL MONTE BLVD Eastbound				DEL MONTE BLVD Westbound				BROADWAY AVE Northbound				0 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	66	2	0	0	103	0	0	54	0	10	0	0	0	0	235	0
7:15 AM	0	0	76	0	0	0	145	0	0	85	0	14	0	0	0	0	320	0
7:30 AM	**0**	**0**	**96**	**0**	**0**	**0**	**199**	**0**	**0**	**91**	**0**	**18**	**0**	**0**	**0**	**0**	**404**	0
7:45 AM	**0**	**0**	**146**	**0**	**0**	**0**	**184**	**0**	**0**	**92**	**0**	**25**	**0**	**0**	**0**	**0**	**447**	1,406
8:00 AM	**0**	**0**	**127**	**0**	**0**	**0**	**144**	**0**	**0**	**65**	**0**	**18**	**0**	**0**	**0**	**0**	**354**	1,525
8:15 AM	**0**	**0**	**116**	**1**	**0**	**0**	**150**	**0**	**0**	**73**	**0**	**13**	**0**	**0**	**0**	**0**	**353**	**1,558**
8:30 AM	0	0	126	0	0	0	150	0	0	76	0	12	0	0	0	0	364	1,518
8:45 AM	0	0	137	0	0	0	149	0	0	65	0	10	0	0	0	0	361	1,432
Count Total	0	0	890	3	0	0	1,224	0	0	601	0	120	0	0	0	0	2,838	0
Peak Hour All	**0**	**0**	**485**	**1**	**0**	**0**	**677**	**0**	**0**	**321**	**0**	**74**	**0**	**0**	**0**	**0**	**1,558**	**0**
Peak Hour HV	**0**	**0**	**14**	**0**	**0**	**0**	**31**	**0**	**0**	**6**	**0**	**1**	**0**	**0**	**0**	**0**	**52**	**0**
Peak Hour HV%	**-**	**-**	**3%**	**0%**	**-**	**-**	**5%**	**-**	**-**	**2%**	**-**	**1%**	**-**	**-**	**-**	**-**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	8	3	4	0	*15*	0	2	1	0	*3*	0	0	0	0	*0*
7:15 AM	0	7	5	0	*12*	0	0	2	0	*2*	1	0	0	0	*1*
7:30 AM	**2**	**9**	**4**	**0**	***15***	**0**	**3**	**1**	**0**	***4***	**2**	**0**	**0**	**0**	*2*
7:45 AM	**4**	**8**	**1**	**0**	***13***	**0**	**1**	**1**	**0**	***2***	**3**	**0**	**0**	**1**	*4*
8:00 AM	**6**	**4**	**1**	**0**	***11***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**1**	*1*
8:15 AM	**2**	**10**	**1**	**0**	***13***	**0**	**1**	**0**	**0**	***1***	**3**	**0**	**0**	**3**	***6***
8:30 AM	4	11	6	0	*21*	0	0	0	0	*0*	1	0	0	3	*4*
8:45 AM	11	16	2	0	*29*	1	1	1	0	*3*	4	0	0	0	*4*
Count Total	37	68	24	0	*129*	1	9	6	0	*16*	14	0	0	8	*22*
Peak Hr	**14**	**31**	**7**	**0**	***52***	**0**	**6**	**2**	**0**	***8***	**8**	**0**	**0**	**5**	***13***

Deon Fouche: 415 - 757 - 7714

deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	DEL MONTE BLVD				DEL MONTE BLVD				BROADWAY AVE				0				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	8	0	0	0	3	0	0	2	0	2	0	0	0	0	15	0
7:15 AM	0	0	0	0	0	0	7	0	0	5	0	0	0	0	0	0	12	0
7:30 AM	**0**	**0**	**2**	**0**	**0**	**0**	**9**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	0
7:45 AM	**0**	**0**	**4**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**13**	55
8:00 AM	**0**	**0**	**6**	**0**	**0**	**0**	**4**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	51
8:15 AM	**0**	**0**	**2**	**0**	**0**	**0**	**10**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	**52**
8:30 AM	0	0	4	0	0	0	11	0	0	5	0	1	0	0	0	0	21	58
8:45 AM	0	0	11	0	0	0	16	0	0	1	0	1	0	0	0	0	29	74
Count Total	0	0	37	0	0	0	68	0	0	19	0	5	0	0	0	0	129	0
Peak Hour	**0**	**0**	**14**	**0**	**0**	**0**	**31**	**0**	**0**	**6**	**0**	**1**	**0**	**0**	**0**	**0**	**52**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	DEL MONTE BLVD			DEL MONTE BLVD			BROADWAY AVE			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	2	0	1	0	0	0	0	0	3	0
7:15 AM	0	0	0	0	0	0	2	0	0	0	0	0	2	0
7:30 AM	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**4**	0
7:45 AM	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	11
8:00 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	9
8:15 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**8**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:45 AM	0	0	1	0	1	0	1	0	0	0	0	0	3	5
Count Total	0	0	1	0	9	0	6	0	0	0	0	0	16	0
Peak Hour	**0**	**0**	**0**	**0**	**6**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**8**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

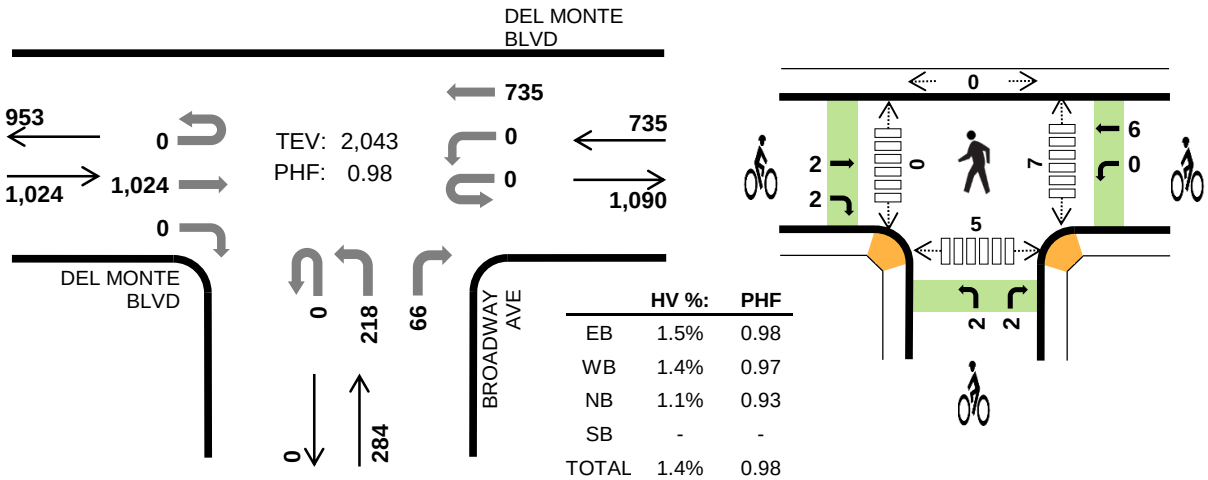
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

BROADWAY AVE
DEL MONTE BLVD

N

Peak Hour

Date: 06/13/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV %:	PHF
EB	1.5%	0.98
WB	1.4%	0.97
NB	1.1%	0.93
SB	-	-
TOTAL	1.4%	0.98

Two-Hour Count Summaries

Interval Start	DEL MONTE BLVD Eastbound				DEL MONTE BLVD Westbound				BROADWAY AVE Northbound				0 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	242	0	0	0	152	0	0	55	0	13	0	0	0	0	462	0
4:15 PM	**0**	**0**	**260**	**0**	**0**	**0**	**177**	**0**	**0**	**51**	**0**	**15**	**0**	**0**	**0**	**0**	**503**	0
4:30 PM	**0**	**0**	**254**	**0**	**0**	**0**	**189**	**0**	**0**	**59**	**0**	**10**	**0**	**0**	**0**	**0**	**512**	0
4:45 PM	**0**	**0**	**261**	**0**	**0**	**0**	**184**	**0**	**0**	**53**	**0**	**23**	**0**	**0**	**0**	**0**	**521**	1,998
5:00 PM	**0**	**0**	**249**	**0**	**0**	**0**	**185**	**0**	**0**	**55**	**0**	**18**	**0**	**0**	**0**	**0**	**507**	**2,043**
5:15 PM	0	0	222	0	0	0	143	0	0	38	0	11	0	0	0	0	414	1,954
5:30 PM	0	0	215	0	0	0	149	0	0	38	0	16	0	0	0	0	418	1,860
5:45 PM	0	0	186	0	0	0	156	0	0	49	0	16	0	0	0	0	407	1,746
Count Total	0	0	1,889	0	0	0	1,335	0	0	398	0	122	0	0	0	0	3,744	0
Peak Hour All	**0**	**0**	**1,024**	**0**	**0**	**0**	**735**	**0**	**0**	**218**	**0**	**66**	**0**	**0**	**0**	**0**	**2,043**	**0**
Peak Hour HV	**0**	**0**	**15**	**0**	**0**	**0**	**10**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**28**	**0**
Peak Hour HV%	**-**	**-**	**1%**	**-**	**-**	**-**	**1%**	**-**	**-**	**0%**	**-**	**3%**	**-**	**-**	**-**	**-**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	7	2	0	0	*9*	0	0	0	0	*0*	4	0	0	0	*4*
4:15 PM	**6**	**4**	**2**	**0**	***12***	**4**	**0**	**3**	**0**	***7***	**2**	**0**	**0**	**0**	*2*
4:30 PM	**3**	**3**	**1**	**0**	***7***	**0**	**0**	**1**	**0**	***1***	**2**	**0**	**0**	**2**	*4*
4:45 PM	**3**	**2**	**0**	**0**	***5***	**0**	**4**	**0**	**0**	***4***	**3**	**0**	**0**	**1**	*4*
5:00 PM	**3**	**1**	**0**	**0**	***4***	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**0**	**2**	***2***
5:15 PM	5	0	0	0	*5*	0	0	0	0	*0*	1	0	0	1	*2*
5:30 PM	2	2	0	0	*4*	0	3	3	0	*6*	0	0	0	1	*1*
5:45 PM	2	1	0	0	*3*	1	0	0	0	*1*	1	0	0	0	*1*
Count Total	31	15	3	0	*49*	5	9	7	0	*21*	13	0	0	7	*20*
Peak Hr	**15**	**10**	**3**	**0**	***28***	**4**	**6**	**4**	**0**	***14***	**7**	**0**	**0**	**5**	***12***

Deon Fouche: 415 - 757 - 7714

deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	DEL MONTE BLVD				DEL MONTE BLVD				BROADWAY AVE				0				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	7	0	0	0	2	0	0	0	0	0	0	0	0	0	9	0
4:15 PM	**0**	**0**	**6**	**0**	**0**	**0**	**4**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**12**	0
4:30 PM	**0**	**0**	**3**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**7**	0
4:45 PM	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	33
5:00 PM	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**28**
5:15 PM	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5	21
5:30 PM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	18
5:45 PM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	16
Count Total	0	0	31	0	0	0	15	0	0	1	0	2	0	0	0	0	49	0
Peak Hour	**0**	**0**	**15**	**0**	**0**	**0**	**10**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**28**	**0**

Two-Hour Count Summaries - Bikes

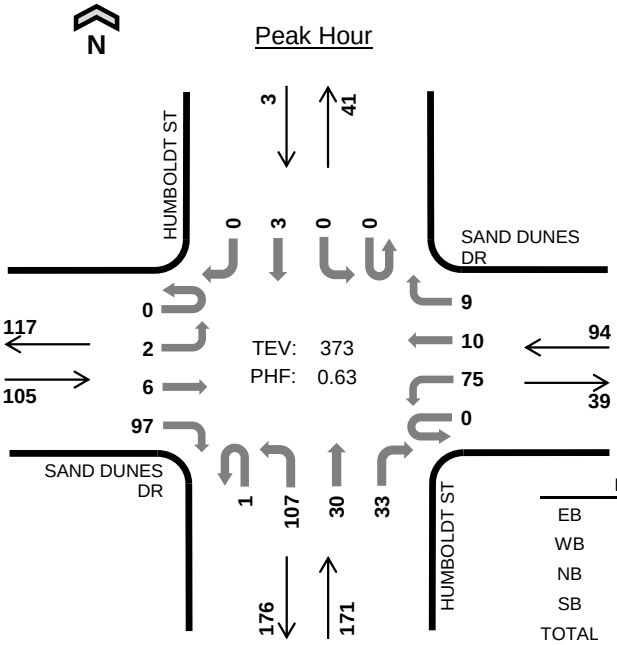
Interval Start	DEL MONTE BLVD			DEL MONTE BLVD			BROADWAY AVE			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**2**	**2**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**7**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:45 PM	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	12
5:00 PM	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**14**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	7
5:30 PM	0	0	0	1	2	0	3	0	0	0	0	0	6	12
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	9
Count Total	0	3	2	1	8	0	5	0	2	0	0	0	21	0
Peak Hour	**0**	**2**	**2**	**0**	**6**	**0**	**2**	**0**	**2**	**0**	**0**	**0**	**14**	**0**

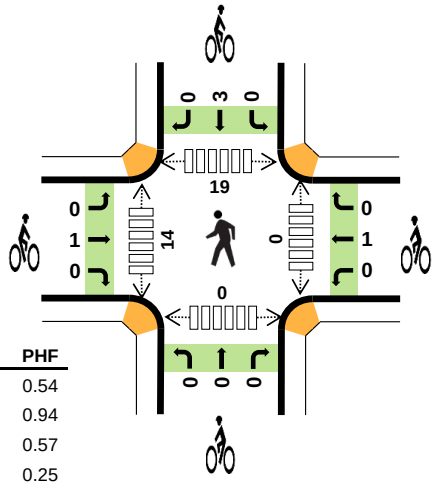
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

HUMBOLDT ST
SAND DUNES DR

Date: 06/13/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM





	HV %:	PHF
EB	0.0%	0.54
WB	6.4%	0.94
NB	0.6%	0.57
SB	0.0%	0.25
TOTAL	1.9%	0.63

Two-Hour Count Summaries

Interval Start		SAND DUNES DR Eastbound				SAND DUNES DR Westbound				HUMBOLDT ST Northbound				HUMBOLDT ST Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	0	6	0	13	0	0	0	4	3	5	0	0	1	0	32	0
7:15 AM		0	0	0	3	0	15	1	1	0	2	6	3	0	0	0	0	31	0
7:30 AM		0	0	0	6	0	27	0	1	0	9	2	3	0	0	1	0	49	0
7:45 AM		0	0	0	3	0	22	4	1	0	6	9	6	0	0	1	0	52	164
8:00 AM		**0**	**0**	**2**	**9**	**0**	**18**	**0**	**2**	**0**	**9**	**8**	**5**	**0**	**0**	**0**	**0**	**53**	185
8:15 AM		**0**	**1**	**1**	**17**	**0**	**19**	**2**	**4**	**0**	**21**	**4**	**8**	**0**	**0**	**3**	**0**	**80**	234
8:30 AM		**0**	**1**	**2**	**23**	**0**	**17**	**4**	**3**	**1**	**21**	**10**	**9**	**0**	**0**	**0**	**0**	**91**	276
8:45 AM		**0**	**0**	**1**	**48**	**0**	**21**	**4**	**0**	**0**	**56**	**8**	**11**	**0**	**0**	**0**	**0**	**149**	**373**
Count Total		0	2	6	115	0	152	15	12	1	128	50	50	0	0	6	0	537	0
Peak Hour	**All**	**0**	**2**	**6**	**97**	**0**	**75**	**10**	**9**	**1**	**107**	**30**	**33**	**0**	**0**	**3**	**0**	**373**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**7**	**0**
	HV%	**-**	**0%**	**0%**	**0%**	**-**	**8%**	**0%**	**0%**	**0%**	**0%**	**3%**	**0%**	**-**	**-**	**0%**	**-**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	4	3	0	*7*
7:15 AM	0	0	1	0	*1*	0	0	0	0	*0*	0	5	5	0	*10*
7:30 AM	1	2	0	0	*3*	0	0	0	0	*0*	0	6	7	0	*13*
7:45 AM	0	0	1	0	*1*	0	0	0	0	*0*	0	6	6	0	*12*
8:00 AM	**0**	**2**	**1**	**0**	***3***	**1**	**1**	**0**	**1**	***3***	**0**	**4**	**4**	**0**	*8*
8:15 AM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**1**	***1***	**0**	**1**	**3**	**0**	*4*
8:30 AM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**4**	**5**	**0**	*9*
8:45 AM	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**0**	**1**	***1***	**0**	**5**	**7**	**0**	***12***
Count Total	1	8	3	0	*12*	1	1	0	3	*5*	0	35	40	0	*75*
Peak Hour	**0**	**6**	**1**	**0**	***7***	**1**	**1**	**0**	**3**	***5***	**0**	**14**	**19**	**0**	***33***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	SAND DUNES DR				SAND DUNES DR				HUMBOLDT ST				HUMBOLDT ST				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	3	0
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	5
8:00 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	8
8:15 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	8
8:30 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	6
8:45 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**7**
Count Total	0	0	0	1	0	8	0	0	0	2	1	0	0	0	0	0	12	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**7**	**0**

Two-Hour Count Summaries - Bikes

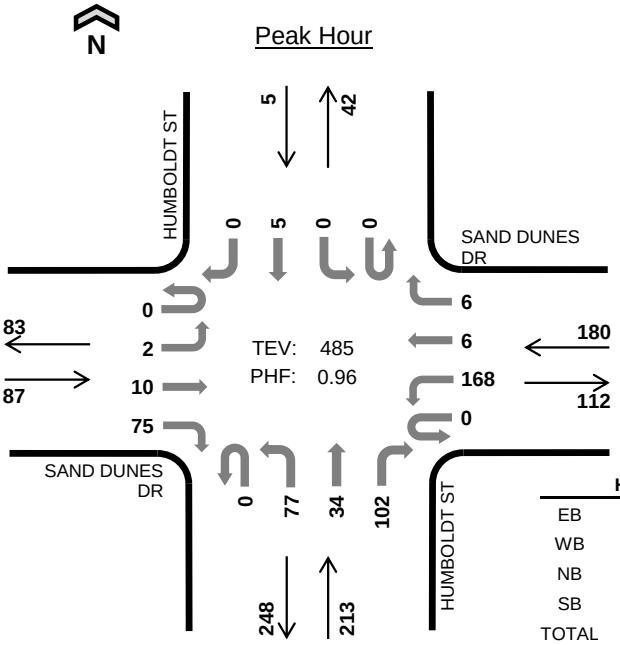
Interval Start	SAND DUNES DR			SAND DUNES DR			HUMBOLDT ST			HUMBOLDT ST			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	3
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	4
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**5**
Count Total	0	1	0	0	1	0	0	0	0	0	3	0	5	0
Peak Hour	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**5**	**0**

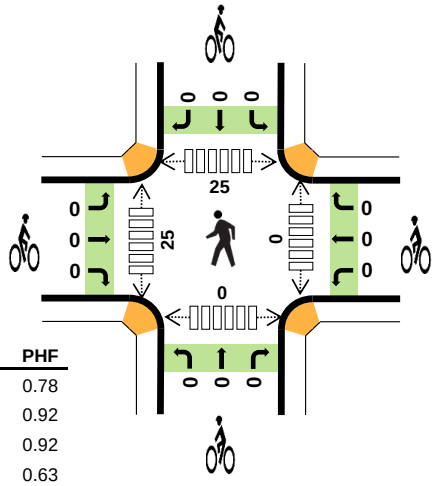
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

HUMBOLDT ST
SAND DUNES DR

Date: 06/13/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM





	HV %:	PHF
EB	2.3%	0.78
WB	0.0%	0.92
NB	0.9%	0.92
SB	0.0%	0.63
TOTAL	0.8%	0.96

Two-Hour Count Summaries

Interval Start		SAND DUNES DR Eastbound				SAND DUNES DR Westbound				HUMBOLDT ST Northbound				HUMBOLDT ST Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	2	12	0	47	3	1	0	14	5	28	0	0	2	0	114	0
4:15 PM		0	0	4	10	0	47	4	0	0	16	9	22	0	0	0	0	112	0
4:30 PM		0	0	4	12	0	50	4	1	1	15	8	28	0	0	0	1	124	0
4:45 PM		**0**	**0**	**2**	**10**	**0**	**45**	**3**	**1**	**0**	**25**	**11**	**22**	**0**	**0**	**0**	**0**	**119**	469
5:00 PM		**0**	**1**	**3**	**24**	**0**	**45**	**0**	**3**	**0**	**14**	**11**	**22**	**0**	**0**	**1**	**0**	**124**	479
5:15 PM		**0**	**1**	**2**	**19**	**0**	**36**	**2**	**1**	**0**	**23**	**6**	**24**	**0**	**0**	**2**	**0**	**116**	483
5:30 PM		**0**	**0**	**3**	**22**	**0**	**42**	**1**	**1**	**0**	**15**	**6**	**34**	**0**	**0**	**2**	**0**	**126**	**485**
5:45 PM		0	1	2	17	0	29	3	1	2	11	9	22	0	0	3	0	100	466
Count Total		0	3	22	126	0	341	20	9	3	133	65	202	0	0	10	1	935	0
Peak Hour	**All**	**0**	**2**	**10**	**75**	**0**	**168**	**6**	**6**	**0**	**77**	**34**	**102**	**0**	**0**	**5**	**0**	**485**	**0**
	HV	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**
	HV%	**-**	**0%**	**0%**	**3%**	**-**	**0%**	**0%**	**0%**	**-**	**3%**	**0%**	**0%**	**-**	**-**	**0%**	**-**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	2	0	*2*	0	0	0	0	*0*	0	5	5	0	*10*
4:15 PM	0	1	1	0	*2*	0	0	1	0	*1*	0	5	5	0	*10*
4:30 PM	0	2	0	0	*2*	0	0	0	0	*0*	0	10	7	0	*17*
4:45 PM	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**5**	**4**	**0**	*9*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**4**	**4**	**0**	*8*
5:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**9**	**9**	**0**	*18*
5:30 PM	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**7**	**8**	**0**	***15***
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	12	7	0	*19*
Count Total	2	3	5	0	*10*	0	0	1	0	*1*	0	57	49	0	*106*
Peak Hour	**2**	**0**	**2**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**25**	**25**	**0**	***50***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	SAND DUNES DR				SAND DUNES DR				HUMBOLDT ST				HUMBOLDT ST				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0
4:15 PM	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	2	0
4:30 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	8
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	6
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
5:30 PM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**4**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	0	2	0	3	0	0	0	2	0	3	0	0	0	0	10	0
Peak Hour	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**

Two-Hour Count Summaries - Bikes

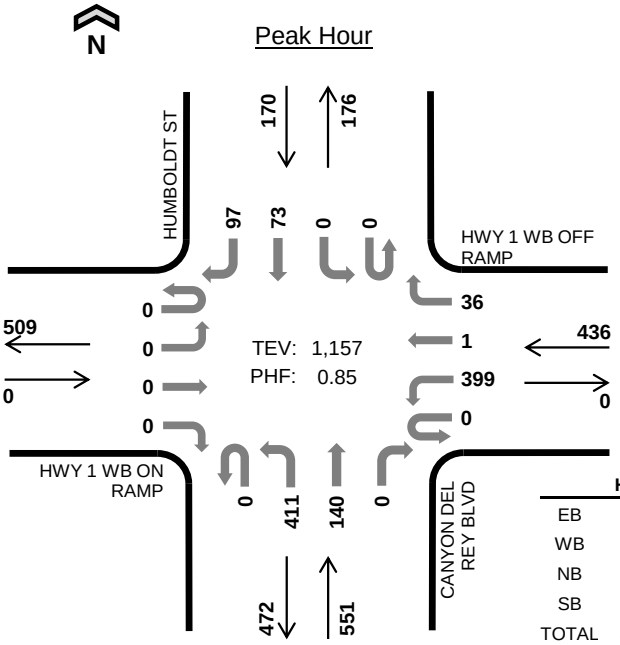
Interval Start	SAND DUNES DR			SAND DUNES DR			HUMBOLDT ST			HUMBOLDT ST			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

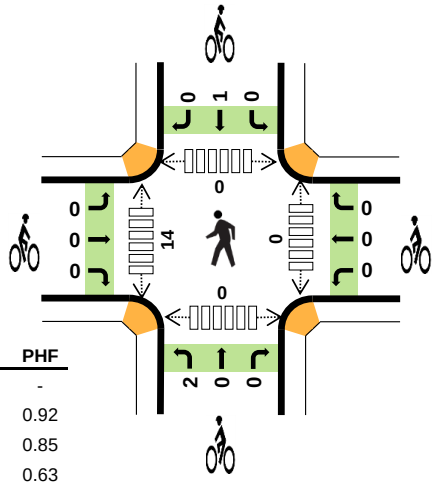
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

CANYON DEL REY BLVD
HWY 1 WB ON RAMP

Date: 06/13/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	-	-
WB	6.2%	0.92
NB	2.5%	0.85
SB	3.5%	0.63
TOTAL	4.1%	0.85



Two-Hour Count Summaries

Interval Start	HWY 1 WB ON RAMP				HWY 1 WB OFF RAMP				CANYON DEL REY BLVD				HUMBOLDT ST				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	119	0	4	0	75	8	0	0	0	9	9	224	0
7:15 AM	0	0	0	0	0	110	0	4	0	100	7	0	0	0	7	12	240	0
7:30 AM	0	0	0	0	0	94	0	1	0	112	12	0	0	0	11	22	252	0
7:45 AM	0	0	0	0	0	112	1	0	0	123	18	0	0	0	10	19	283	999
8:00 AM	**0**	**0**	**0**	**0**	**0**	**87**	**0**	**1**	**0**	**84**	**21**	**0**	**0**	**0**	**13**	**12**	**218**	993
8:15 AM	**0**	**0**	**0**	**0**	**0**	**111**	**1**	**5**	**0**	**102**	**28**	**0**	**0**	**0**	**19**	**21**	**287**	1,040
8:30 AM	**0**	**0**	**0**	**0**	**0**	**109**	**0**	**9**	**0**	**120**	**34**	**0**	**0**	**0**	**13**	**25**	**310**	1,098
8:45 AM	**0**	**0**	**0**	**0**	**0**	**92**	**0**	**21**	**0**	**105**	**57**	**0**	**0**	**0**	**28**	**39**	**342**	**1,157**
Count Total	0	0	0	0	0	834	2	45	0	821	185	0	0	0	110	159	2,156	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**399**	**1**	**36**	**0**	**411**	**140**	**0**	**0**	**0**	**73**	**97**	**1,157**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**27**	**0**	**0**	**0**	**12**	**2**	**0**	**0**	**0**	**1**	**5**	**47**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**7%**	**0%**	**0%**	**-**	**3%**	**1%**	**-**	**-**	**-**	**1%**	**5%**	**4%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	5	3	0	*8*	0	0	0	0	*0*	0	5	0	0	*5*
7:15 AM	0	5	3	0	*8*	0	0	0	0	*0*	0	5	0	0	*5*
7:30 AM	0	4	2	3	*9*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	0	4	1	0	*5*	0	0	0	0	*0*	0	1	0	0	*1*
8:00 AM	**0**	**10**	**2**	**2**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**4**	**0**	**0**	*4*
8:15 AM	**0**	**3**	**5**	**1**	***9***	**0**	**0**	**1**	**1**	***2***	**0**	**4**	**0**	**0**	*4*
8:30 AM	**0**	**7**	**3**	**1**	***11***	**0**	**0**	**1**	**0**	***1***	**0**	**1**	**0**	**0**	*1*
8:45 AM	**0**	**7**	**4**	**2**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**5**	**0**	**0**	***5***
Count Total	0	45	23	9	*77*	0	0	2	1	*3*	0	25	0	0	*25*
Peak Hour	**0**	**27**	**14**	**6**	***47***	**0**	**0**	**2**	**1**	***3***	**0**	**14**	**0**	**0**	***14***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	HWY 1 WB ON RAMP				HWY 1 WB OFF RAMP				CANYON DEL REY BLVD				HUMBOLDT ST				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	5	0	0	0	3	0	0	0	0	0	0	8	0
7:15 AM	0	0	0	0	0	4	0	1	0	3	0	0	0	0	0	0	8	0
7:30 AM	0	0	0	0	0	4	0	0	0	2	0	0	0	0	0	3	9	0
7:45 AM	0	0	0	0	0	4	0	0	0	0	1	0	0	0	0	0	5	30
8:00 AM	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**1**	**14**	36
8:15 AM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**1**	**9**	37
8:30 AM	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**1**	**11**	39
8:45 AM	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**2**	**13**	**47**
Count Total	0	0	0	0	0	44	0	1	0	20	3	0	0	0	1	8	77	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**27**	**0**	**0**	**0**	**12**	**2**	**0**	**0**	**0**	**1**	**5**	**47**	**0**

Two-Hour Count Summaries - Bikes

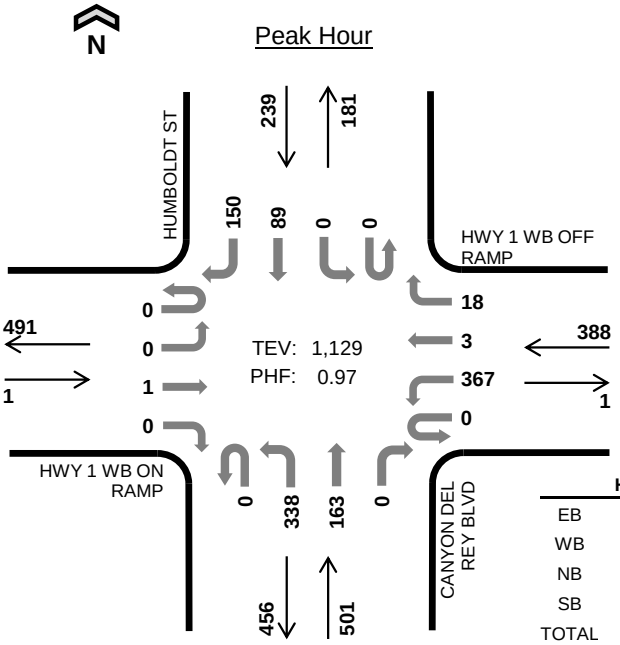
Interval Start	HWY 1 WB ON RAMP			HWY 1 WB OFF RAMP			CANYON DEL REY BLVD			HUMBOLDT ST			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	2
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	3
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
Count Total	0	0	0	0	0	0	2	0	0	0	1	0	3	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**3**	**0**

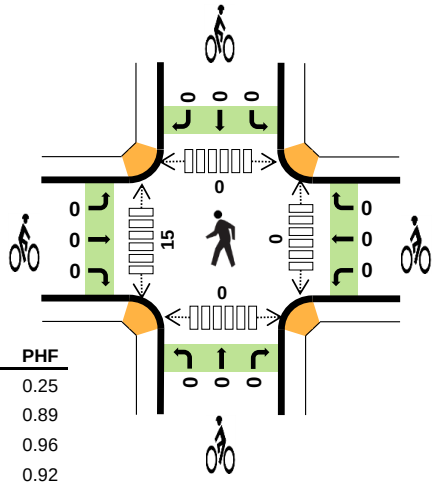
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

CANYON DEL REY BLVD
HWY 1 WB ON RAMP

Date: 06/13/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM





	HV %:	PHF
EB	0.0%	0.25
WB	1.3%	0.89
NB	1.4%	0.96
SB	1.3%	0.92
TOTAL	1.3%	0.97

Two-Hour Count Summaries

Interval Start	HWY 1 WB ON RAMP (Eastbound)				HWY 1 WB OFF RAMP (Westbound)				CANYON DEL REY BLVD (Northbound)				HUMBOLDT ST (Southbound)				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**1**	**0**	**0**	**92**	**0**	**4**	**0**	**87**	**43**	**0**	**0**	**0**	**24**	**41**	**292**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**88**	**1**	**3**	**0**	**93**	**36**	**0**	**0**	**0**	**19**	**37**	**277**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**101**	**2**	**6**	**0**	**75**	**41**	**0**	**0**	**0**	**25**	**38**	**288**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**86**	**0**	**5**	**0**	**83**	**43**	**0**	**0**	**0**	**21**	**34**	**272**	**1,129**
5:00 PM	0	0	0	0	0	102	1	11	0	62	36	0	0	0	25	44	281	1,118
5:15 PM	0	0	0	0	0	86	1	11	0	64	37	0	0	0	29	27	255	1,096
5:30 PM	0	0	0	0	0	90	0	3	0	68	50	0	0	0	30	36	277	1,085
5:45 PM	0	0	0	0	0	80	2	9	0	66	35	0	0	0	23	29	244	1,057
Count Total	0	0	1	0	0	725	7	52	0	598	321	0	0	0	196	286	2,186	0
Peak Hour All	**0**	**0**	**1**	**0**	**0**	**367**	**3**	**18**	**0**	**338**	**163**	**0**	**0**	**0**	**89**	**150**	**1,129**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**2**	**5**	**0**	**0**	**0**	**3**	**0**	**15**	**0**
Peak Hour HV%	**-**	**-**	**0%**	**-**	**-**	**1%**	**0%**	**0%**	**-**	**1%**	**3%**	**-**	**-**	**-**	**3%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	**0**	**3**	**3**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	*1*
4:15 PM	**0**	**1**	**3**	**1**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	*1*
4:30 PM	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**11**	**0**	**0**	*11*
4:45 PM	**0**	**1**	**1**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**0**	***2***
5:00 PM	0	5	1	0	*6*	0	0	0	0	*0*	0	5	1	0	*6*
5:15 PM	0	1	1	0	*2*	0	0	1	0	*1*	0	4	0	0	*4*
5:30 PM	0	0	0	2	*2*	0	0	0	0	*0*	0	2	0	0	*2*
5:45 PM	0	1	0	0	*1*	0	0	0	0	*0*	0	3	0	0	*3*
Count Total	0	12	9	5	*26*	0	0	1	0	*1*	0	29	1	0	*30*
Peak Hour	**0**	**5**	**7**	**3**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**15**	**0**	**0**	***15***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	HWY 1 WB ON RAMP				HWY 1 WB OFF RAMP				CANYON DEL REY BLVD				HUMBOLDT ST				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**6**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**1**	**0**	**5**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**15**
5:00 PM	0	0	0	0	0	5	0	0	0	0	1	0	0	0	0	0	6	15
5:15 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	12
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	12
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	11
Count Total	0	0	0	0	0	12	0	0	0	3	6	0	0	0	4	1	26	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**2**	**5**	**0**	**0**	**0**	**3**	**0**	**15**	**0**

Two-Hour Count Summaries - Bikes

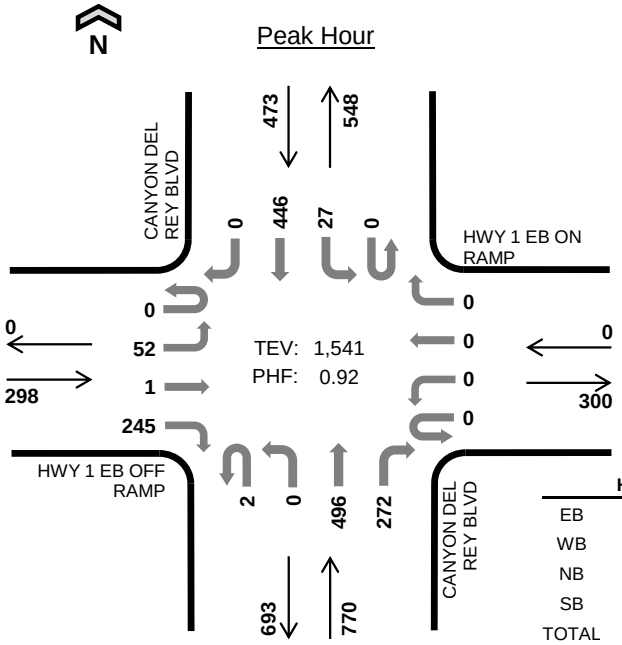
Interval Start	HWY 1 WB ON RAMP			HWY 1 WB OFF RAMP			CANYON DEL REY BLVD			HUMBOLDT ST			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	0	0	1	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

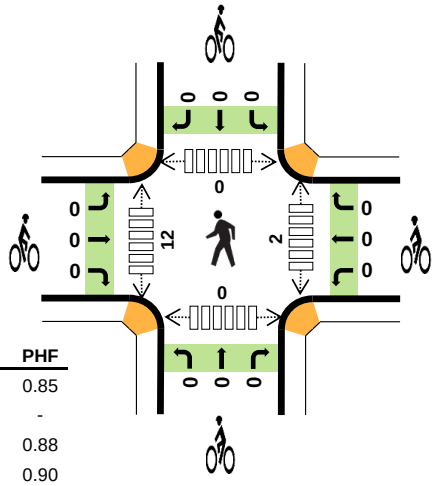
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

CANYON DEL REY BLVD
HWY 1 EB OFF RAMP

Date: 06/13/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	2.7%	0.85
WB	-	-
NB	5.1%	0.88
SB	5.5%	0.90
TOTAL	4.7%	0.92



Two-Hour Count Summaries

Interval Start	HWY 1 EB OFF RAMP Eastbound				HWY 1 EB ON RAMP Westbound				CANYON DEL REY BLVD Northbound				CANYON DEL REY BLVD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	0	27	0	0	0	0	0	0	81	52	0	0	130	0	291	0
7:15 AM	0	1	0	42	0	0	0	0	0	0	105	60	0	1	107	0	316	0
7:30 AM	0	6	0	39	0	0	0	0	0	0	121	76	0	1	109	0	352	0
7:45 AM	0	7	0	61	0	0	0	0	1	0	131	76	0	2	122	0	400	1,359
8:00 AM	**0**	**8**	**1**	**44**	**0**	**0**	**0**	**0**	**0**	**0**	**93**	**54**	**0**	**6**	**99**	**0**	**305**	1,373
8:15 AM	**0**	**7**	**0**	**64**	**0**	**0**	**0**	**0**	**1**	**0**	**124**	**77**	**0**	**5**	**126**	**0**	**404**	1,461
8:30 AM	**0**	**17**	**0**	**69**	**0**	**0**	**0**	**0**	**0**	**0**	**137**	**65**	**0**	**5**	**121**	**0**	**414**	1,523
8:45 AM	**0**	**20**	**0**	**68**	**0**	**0**	**0**	**0**	**1**	**0**	**142**	**76**	**0**	**11**	**100**	**0**	**418**	**1,541**
Count Total	0	67	1	414	0	0	0	0	3	0	934	536	0	31	914	0	2,900	0
Peak Hour All	**0**	**52**	**1**	**245**	**0**	**0**	**0**	**0**	**2**	**0**	**496**	**272**	**0**	**27**	**446**	**0**	**1,541**	**0**
Peak Hour HV	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**16**	**23**	**0**	**0**	**26**	**0**	**73**	**0**
Peak Hour HV%	**-**	**0%**	**0%**	**3%**	**-**	**-**	**-**	**-**	**0%**	**-**	**3%**	**8%**	**-**	**0%**	**6%**	**-**	**5%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	0	6	5	*12*	0	0	0	0	*0*	0	4	0	0	*4*
7:15 AM	1	0	5	3	*9*	0	0	0	0	*0*	1	5	0	0	*6*
7:30 AM	1	0	6	7	*14*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	0	0	3	5	*8*	0	0	0	0	*0*	2	0	0	0	*2*
8:00 AM	**1**	**0**	**4**	**11**	***16***	**0**	**0**	**0**	**0**	***0***	**0**	**3**	**0**	**0**	*3*
8:15 AM	**2**	**0**	**11**	**3**	***16***	**0**	**0**	**0**	**0**	***0***	**1**	**4**	**0**	**0**	*5*
8:30 AM	**1**	**0**	**10**	**7**	***18***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**0**	**0**	*2*
8:45 AM	**4**	**0**	**14**	**5**	***23***	**0**	**0**	**0**	**0**	***0***	**0**	**4**	**0**	**0**	***4***
Count Total	11	0	59	46	*116*	0	0	0	0	*0*	5	21	0	0	*26*
Peak Hour	**8**	**0**	**39**	**26**	***73***	**0**	**0**	**0**	**0**	***0***	**2**	**12**	**0**	**0**	***14***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	HWY 1 EB OFF RAMP				HWY 1 EB ON RAMP				CANYON DEL REY BLVD				CANYON DEL REY BLVD				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	1	0	0	0	0	0	0	3	3	0	0	5	0	12	0
7:15 AM	0	0	0	1	0	0	0	0	0	0	3	2	0	0	3	0	9	0
7:30 AM	0	0	0	1	0	0	0	0	0	0	2	4	0	0	7	0	14	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	5	0	8	43
8:00 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**11**	**0**	**16**	47
8:15 AM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**4**	**0**	**0**	**3**	**0**	**16**	54
8:30 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**6**	**0**	**0**	**7**	**0**	**18**	58
8:45 AM	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**10**	**0**	**0**	**5**	**0**	**23**	**73**
Count Total	0	0	0	11	0	0	0	0	0	0	24	35	0	0	46	0	116	0
Peak Hour	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**16**	**23**	**0**	**0**	**26**	**0**	**73**	**0**

Two-Hour Count Summaries - Bikes

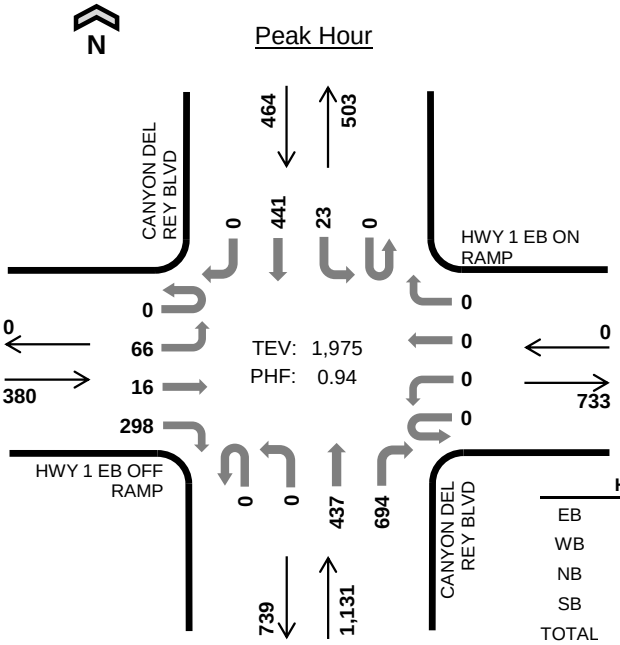
Interval Start	HWY 1 EB OFF RAMP			HWY 1 EB ON RAMP			CANYON DEL REY BLVD			CANYON DEL REY BLVD			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

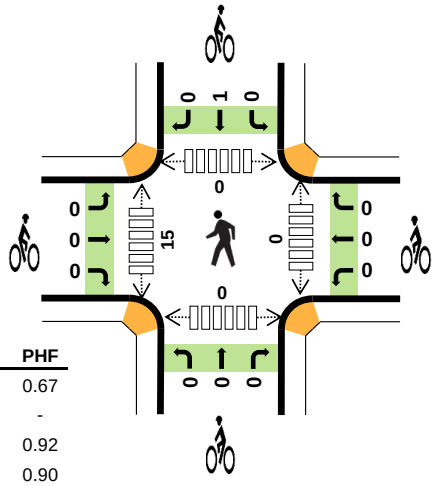
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

CANYON DEL REY BLVD
HWY 1 EB OFF RAMP

Date: 06/13/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM



	HV %:	PHF
EB	2.1%	0.67
WB	-	-
NB	1.4%	0.92
SB	1.5%	0.90
TOTAL	1.6%	0.94



Two-Hour Count Summaries

Interval Start		HWY 1 EB OFF RAMP				HWY 1 EB ON RAMP				CANYON DEL REY BLVD				CANYON DEL REY BLVD				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		**0**	**20**	**2**	**119**	**0**	**0**	**0**	**0**	**0**	**0**	**108**	**155**	**0**	**6**	**117**	**0**	**527**	0
4:15 PM		**0**	**16**	**6**	**69**	**0**	**0**	**0**	**0**	**0**	**0**	**115**	**156**	**0**	**5**	**102**	**0**	**469**	0
4:30 PM		**0**	**16**	**3**	**53**	**0**	**0**	**0**	**0**	**0**	**0**	**98**	**192**	**0**	**10**	**119**	**0**	**491**	0
4:45 PM		**0**	**14**	**5**	**57**	**0**	**0**	**0**	**0**	**0**	**0**	**116**	**191**	**0**	**2**	**103**	**0**	**488**	**1,975**
5:00 PM		0	16	4	61	0	0	0	0	1	0	87	201	0	6	121	0	497	1,945
5:15 PM		0	10	3	61	0	0	0	0	0	0	89	182	0	11	104	0	460	1,936
5:30 PM		0	25	1	89	0	0	0	0	0	0	99	186	0	5	107	0	512	1,957
5:45 PM		0	16	0	98	0	0	0	0	1	0	82	133	0	7	95	0	432	1,901
Count Total		0	133	24	607	0	0	0	0	2	0	794	1,396	0	52	868	0	3,876	0
Peak Hour	**All**	**0**	**66**	**16**	**298**	**0**	**0**	**0**	**0**	**0**	**0**	**437**	**694**	**0**	**23**	**441**	**0**	**1,975**	**0**
	HV	**0**	**3**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**12**	**0**	**1**	**6**	**0**	**31**	**0**
	HV%	**-**	**5%**	**0%**	**2%**	**-**	**-**	**-**	**-**	**-**	**-**	**1%**	**2%**	**-**	**4%**	**1%**	**-**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	**5**	**0**	**4**	**1**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	*1*
4:15 PM	**1**	**0**	**5**	**2**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**0**	*2*
4:30 PM	**2**	**0**	**2**	**3**	***7***	**0**	**0**	**0**	**1**	***1***	**0**	**10**	**0**	**0**	*10*
4:45 PM	**0**	**0**	**5**	**1**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**0**	***2***
5:00 PM	5	0	3	1	*9*	0	0	0	0	*0*	0	2	0	0	*2*
5:15 PM	1	0	1	0	*2*	0	0	2	0	*2*	0	4	0	0	*4*
5:30 PM	2	0	1	1	*4*	0	0	0	1	*1*	0	3	0	0	*3*
5:45 PM	2	0	0	1	*3*	0	0	0	0	*0*	0	3	0	0	*3*
Count Total	18	0	21	10	*49*	0	0	2	2	*4*	0	27	0	0	*27*
Peak Hour	**8**	**0**	**16**	**7**	***31***	**0**	**0**	**0**	**1**	***1***	**0**	**15**	**0**	**0**	***15***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	HWY 1 EB OFF RAMP				HWY 1 EB ON RAMP				CANYON DEL REY BLVD				CANYON DEL REY BLVD				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**2**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**1**	**0**	**10**	0
4:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**3**	**0**	**1**	**1**	**0**	**8**	0
4:30 PM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**3**	**0**	**7**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**4**	**0**	**0**	**1**	**0**	**6**	**31**
5:00 PM	0	3	0	2	0	0	0	0	0	0	0	3	0	0	1	0	9	30
5:15 PM	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	2	24
5:30 PM	0	0	0	2	0	0	0	0	0	0	0	1	0	0	1	0	4	21
5:45 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	3	18
Count Total	0	6	0	12	0	0	0	0	0	0	5	16	0	1	9	0	49	0
Peak Hour	**0**	**3**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**12**	**0**	**1**	**6**	**0**	**31**	**0**

Two-Hour Count Summaries - Bikes

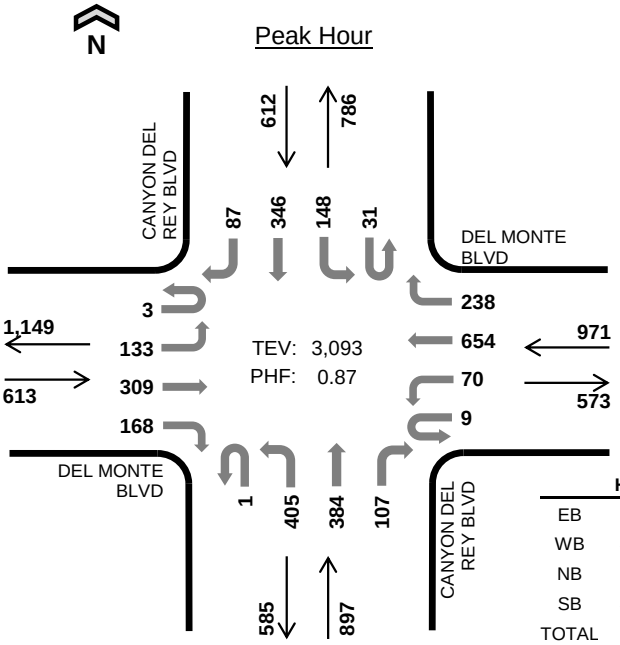
Interval Start	HWY 1 EB OFF RAMP			HWY 1 EB ON RAMP			CANYON DEL REY BLVD			CANYON DEL REY BLVD			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	2	0	0	0	2	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	0	0	0	0	0	0	0	0	2	0	2	0	4	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

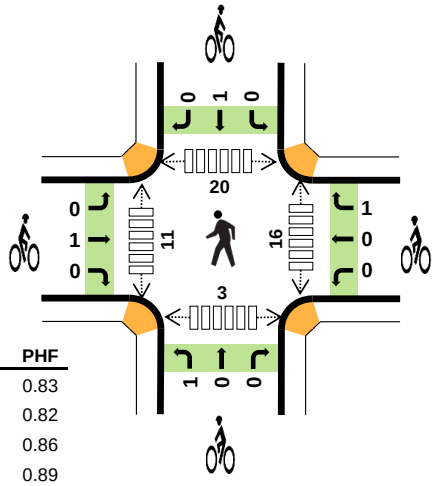
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

CANYON DEL REY BLVD
DEL MONTE BLVD

Date: 06/13/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	3.8%	0.83
WB	4.1%	0.82
NB	2.2%	0.86
SB	4.9%	0.89
TOTAL	3.7%	0.87



Two-Hour Count Summaries

Interval Start	DEL MONTE BLVD Eastbound				DEL MONTE BLVD Westbound				CANYON DEL REY BLVD Northbound				CANYON DEL REY BLVD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	13	40	23	0	3	121	38	1	58	82	17	6	23	74	25	524	0
7:15 AM	0	25	56	26	1	18	182	38	0	79	98	15	5	23	75	21	662	0
7:30 AM	**1**	**24**	**58**	**40**	**1**	**16**	**176**	**63**	**0**	**131**	**107**	**23**	**9**	**25**	**81**	**20**	**775**	0
7:45 AM	**1**	**36**	**92**	**55**	**1**	**16**	**208**	**72**	**0**	**122**	**94**	**32**	**9**	**42**	**95**	**16**	**891**	2,852
8:00 AM	**1**	**31**	**79**	**27**	**6**	**17**	**134**	**49**	**0**	**77**	**72**	**29**	**3**	**32**	**84**	**25**	**666**	2,994
8:15 AM	**0**	**42**	**80**	**46**	**1**	**21**	**136**	**54**	**1**	**75**	**111**	**23**	**10**	**49**	**86**	**26**	**761**	**3,093**
8:30 AM	0	33	81	51	1	21	113	67	0	85	110	17	3	41	96	24	743	3,061
8:45 AM	0	40	100	51	2	16	150	54	0	106	103	19	8	41	98	16	804	2,974
Count Total	3	244	586	319	13	128	1,220	435	2	733	777	175	53	276	689	173	5,826	0
Peak Hour All	**3**	**133**	**309**	**168**	**9**	**70**	**654**	**238**	**1**	**405**	**384**	**107**	**31**	**148**	**346**	**87**	**3,093**	**0**
Peak Hour HV	**0**	**4**	**12**	**7**	**0**	**6**	**24**	**10**	**0**	**6**	**9**	**5**	**0**	**4**	**17**	**9**	**113**	**0**
Peak Hour HV%	**0%**	**3%**	**4%**	**4%**	**0%**	**9%**	**4%**	**4%**	**0%**	**1%**	**2%**	**5%**	**0%**	**3%**	**5%**	**10%**	**4%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	3	6	11	6	*26*	0	1	1	0	*2*	5	3	6	5	*19*
7:15 AM	4	14	8	4	*30*	0	0	1	0	*1*	5	6	5	4	*20*
7:30 AM	**7**	**14**	**4**	**6**	***31***	**0**	**1**	**0**	**0**	***1***	**1**	**4**	**6**	**2**	*13*
7:45 AM	**7**	**6**	**7**	**3**	***23***	**0**	**0**	**0**	**0**	***0***	**5**	**2**	**2**	**0**	*9*
8:00 AM	**7**	**8**	**5**	**14**	***34***	**1**	**0**	**1**	**0**	***2***	**7**	**3**	**8**	**0**	*18*
8:15 AM	**2**	**12**	**4**	**7**	***25***	**0**	**0**	**0**	**1**	***1***	**3**	**2**	**4**	**1**	***10***
8:30 AM	5	11	6	3	*25*	0	0	1	0	*1*	5	0	3	3	*11*
8:45 AM	8	11	13	12	*44*	0	0	3	1	*4*	1	0	6	0	*7*
Count Total	43	82	58	55	*238*	1	2	7	2	*12*	32	20	40	15	*107*
Peak Hour	**23**	**40**	**20**	**30**	***113***	**1**	**1**	**1**	**1**	***4***	**16**	**11**	**20**	**3**	***50***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	DEL MONTE BLVD Eastbound				DEL MONTE BLVD Westbound				CANYON DEL REY BLVD Northbound				CANYON DEL REY BLVD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	2	1	0	0	2	4	0	4	2	5	0	1	4	1	26	0
7:15 AM	0	1	1	2	0	2	11	1	0	5	3	0	0	0	4	0	30	0
7:30 AM	**0**	**1**	**2**	**4**	**0**	**5**	**5**	**4**	**0**	**3**	**0**	**1**	**0**	**0**	**4**	**2**	**31**	0
7:45 AM	**0**	**1**	**4**	**2**	**0**	**1**	**4**	**1**	**0**	**3**	**2**	**2**	**0**	**0**	**2**	**1**	**23**	110
8:00 AM	**0**	**2**	**5**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**3**	**2**	**0**	**2**	**8**	**4**	**34**	118
8:15 AM	**0**	**0**	**1**	**1**	**0**	**0**	**7**	**5**	**0**	**0**	**4**	**0**	**0**	**2**	**3**	**2**	**25**	**113**
8:30 AM	0	2	3	0	0	3	3	5	0	2	3	1	0	0	2	1	25	107
8:45 AM	0	1	5	2	0	0	8	3	0	3	8	2	0	3	7	2	44	128
Count Total	0	8	23	12	0	11	48	23	0	20	25	13	0	8	34	13	238	0
Peak Hour	**0**	**4**	**12**	**7**	**0**	**6**	**24**	**10**	**0**	**6**	**9**	**5**	**0**	**4**	**17**	**9**	**113**	**0**

Two-Hour Count Summaries - Bikes

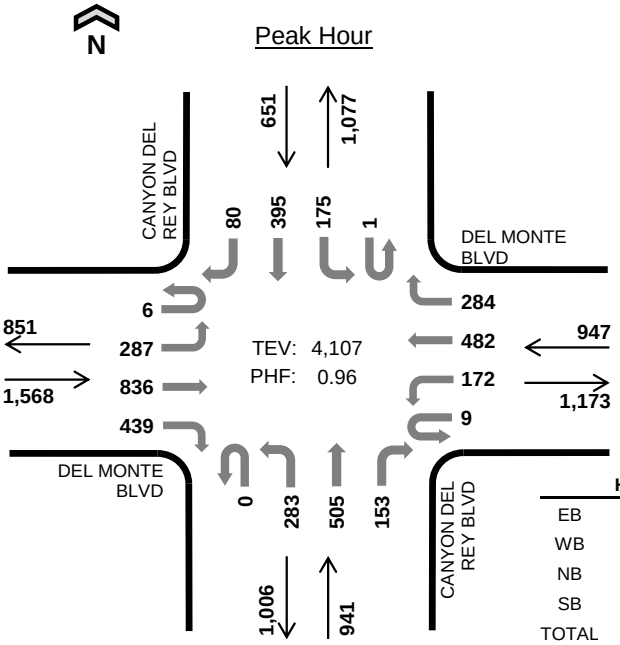
Interval Start	DEL MONTE BLVD Eastbound			DEL MONTE BLVD Westbound			CANYON DEL REY BLVD Northbound			CANYON DEL REY BLVD Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	1	0	1	0	0	0	0	0	2	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
8:00 AM	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	4
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**4**
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	4
8:45 AM	0	0	0	0	0	0	3	0	0	1	0	0	4	8
Count Total	0	1	0	0	1	1	5	2	0	1	1	0	12	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**0**	**4**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

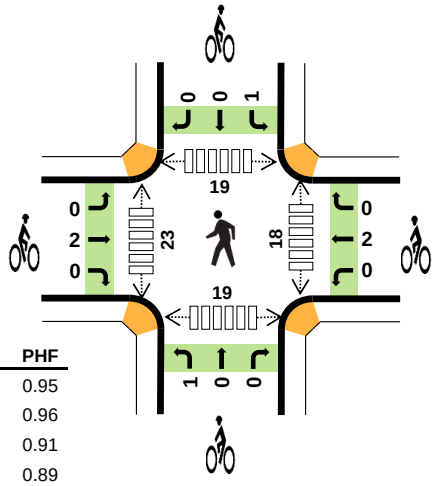
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

CANYON DEL REY BLVD
DEL MONTE BLVD

Date: 06/13/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV %:	PHF
EB	1.1%	0.95
WB	1.7%	0.96
NB	1.7%	0.91
SB	1.4%	0.89
TOTAL	1.4%	0.96



Two-Hour Count Summaries

Interval Start		DEL MONTE BLVD Eastbound				DEL MONTE BLVD Westbound				CANYON DEL REY BLVD Northbound				CANYON DEL REY BLVD Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		3	55	165	105	0	37	95	67	0	53	140	34	1	83	110	27	975	0
4:15 PM		**4**	**77**	**215**	**118**	**3**	**40**	**104**	**68**	**0**	**68**	**110**	**43**	**0**	**42**	**99**	**19**	**1,010**	0
4:30 PM		**2**	**54**	**229**	**110**	**1**	**42**	**129**	**75**	**0**	**84**	**115**	**35**	**1**	**46**	**86**	**20**	**1,029**	0
4:45 PM		**0**	**85**	**184**	**99**	**3**	**45**	**138**	**59**	**0**	**49**	**144**	**34**	**0**	**41**	**96**	**19**	**996**	4,010
5:00 PM		**0**	**71**	**208**	**112**	**2**	**45**	**111**	**82**	**0**	**82**	**136**	**41**	**0**	**46**	**114**	**22**	**1,072**	**4,107**
5:15 PM		2	57	180	92	4	26	91	55	0	62	155	27	1	30	101	25	908	4,005
5:30 PM		3	61	118	78	5	27	96	54	0	55	147	46	1	60	95	21	867	3,843
5:45 PM		0	35	124	52	0	30	125	54	0	64	112	25	0	60	103	22	806	3,653
Count Total		14	495	1,423	766	18	292	889	514	0	517	1,059	285	4	408	804	175	7,663	0
Peak Hour	**All**	**6**	**287**	**836**	**439**	**9**	**172**	**482**	**284**	**0**	**283**	**505**	**153**	**1**	**175**	**395**	**80**	**4,107**	**0**
	HV	**0**	**2**	**12**	**4**	**0**	**3**	**9**	**4**	**0**	**3**	**7**	**6**	**0**	**2**	**6**	**1**	**59**	**0**
	HV%	**0%**	**1%**	**1%**	**1%**	**0%**	**2%**	**2%**	**1%**	**-**	**1%**	**1%**	**4%**	**0%**	**1%**	**2%**	**1%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	6	4	1	5	*16*	1	0	2	1	*4*	8	5	7	5	*25*
4:15 PM	**7**	**6**	**7**	**2**	***22***	**0**	**0**	**0**	**0**	***0***	**2**	**3**	**3**	**2**	*10*
4:30 PM	**1**	**3**	**4**	**1**	***9***	**1**	**0**	**0**	**0**	***1***	**8**	**5**	**4**	**4**	*21*
4:45 PM	**6**	**5**	**2**	**4**	***17***	**0**	**0**	**0**	**0**	***0***	**7**	**11**	**6**	**8**	*32*
5:00 PM	**4**	**2**	**3**	**2**	***11***	**1**	**2**	**1**	**1**	***5***	**1**	**4**	**6**	**5**	***16***
5:15 PM	4	0	3	2	*9*	0	2	0	0	*2*	5	2	3	4	*14*
5:30 PM	1	2	2	1	*6*	0	5	0	0	*5*	7	7	4	9	*27*
5:45 PM	2	1	1	2	*6*	0	1	0	1	*2*	3	3	3	1	*10*
Count Total	31	23	23	19	*96*	3	10	3	3	*19*	41	40	36	38	*155*
Peak Hour	**18**	**16**	**16**	**9**	***59***	**2**	**2**	**1**	**1**	***6***	**18**	**23**	**19**	**19**	***79***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	DEL MONTE BLVD Eastbound				DEL MONTE BLVD Westbound				CANYON DEL REY BLVD Northbound				CANYON DEL REY BLVD Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	5	1	0	1	1	2	0	0	0	1	0	1	3	1	16	0
4:15 PM	**0**	**0**	**6**	**1**	**0**	**1**	**3**	**2**	**0**	**2**	**2**	**3**	**0**	**1**	**1**	**0**	**22**	0
4:30 PM	**0**	**0**	**1**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**3**	**1**	**0**	**1**	**0**	**0**	**9**	0
4:45 PM	**0**	**2**	**3**	**1**	**0**	**1**	**3**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**3**	**1**	**17**	64
5:00 PM	**0**	**0**	**2**	**2**	**0**	**0**	**1**	**1**	**0**	**1**	**0**	**2**	**0**	**0**	**2**	**0**	**11**	**59**
5:15 PM	0	0	4	0	0	0	0	0	0	1	1	1	0	1	1	0	9	46
5:30 PM	0	0	0	1	0	1	1	0	0	0	1	1	0	1	0	0	6	43
5:45 PM	0	1	1	0	0	0	1	0	0	0	0	1	0	2	0	0	6	32
Count Total	0	3	22	6	0	5	12	6	0	4	9	10	0	7	10	2	96	0
Peak Hour	**0**	**2**	**12**	**4**	**0**	**3**	**9**	**4**	**0**	**3**	**7**	**6**	**0**	**2**	**6**	**1**	**59**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	DEL MONTE BLVD Eastbound			DEL MONTE BLVD Westbound			CANYON DEL REY BLVD Northbound			CANYON DEL REY BLVD Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	1	0	0	0	0	0	2	0	1	0	4	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	5
5:00 PM	**0**	**1**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**5**	**6**
5:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	2	8
5:30 PM	0	0	0	0	3	2	0	0	0	0	0	0	5	12
5:45 PM	0	0	0	0	1	0	0	0	0	1	0	0	2	14
Count Total	0	2	1	0	8	2	1	0	2	2	1	0	19	0
Peak Hour	**0**	**2**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**6**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Appendix D

Intersection
Level of Service
Calculations

Existing Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	108	97	208	0	325	0	64	111	0	0	0
Future Volume (veh/h)	1	108	97	208	0	325	0	64	111	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1845	1845	1845	0	1845	0	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	1	123	110	236	0	369	0	73	126	0	0	0
Adj No. of Lanes	0	2	1	1	0	1	0	1	1	0	1	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	0	3	0	6	6	2	2	2
Cap, veh/h	5	600	262	0	0	0	0	442	376	0	459	0
Arrive On Green	0.17	0.17	0.17	0.00	0.00	0.00	0.00	0.25	0.25	0.00	0.00	0.00
Sat Flow, veh/h	28	3568	1555		0		0	1792	1524	0	1863	0
Grp Volume(v), veh/h	66	58	110		0.0		0	73	126	0	0	0
Grp Sat Flow(s),veh/h/ln	1843	1752	1555				0	1792	1524	0	1863	0
Q Serve(g_s), s	0.5	0.5	1.0				0.0	0.5	1.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.5	0.5	1.0				0.0	0.5	1.1	0.0	0.0	0.0
Prop In Lane	0.02		1.00				0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	310	295	262				0	442	376	0	459	0
V/C Ratio(X)	0.21	0.20	0.42				0.00	0.17	0.34	0.00	0.00	0.00
Avail Cap(c_a), veh/h	2919	2775	2463				0	3181	2704	0	3305	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	5.8	5.8	6.0				0.0	4.8	5.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.4				0.0	0.1	0.2	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
%ile BackOfQ(50%),veh/ln	0.3	0.2	0.5				0.0	0.3	0.5	0.0	0.0	0.0
LnGrp Delay(d),s/veh	6.0	5.9	6.4				0.0	4.9	5.2	0.0	0.0	0.0
LnGrp LOS	A	A	A					A	A			
Approach Vol, veh/h		234						199			0	
Approach Delay, s/veh		6.2						5.1			0.0	
Approach LOS		A						A				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		8.2		8.0		8.2		
Change Period (Y+Rc), s		* 4.2		5.3		* 4.2		
Max Green Setting (Gmax), s		* 29		25.7		* 29		
Max Q Clear Time (g_c+I1), s		3.1		3.0		0.0		
Green Ext Time (p_c), s		0.4		0.6		0.0		

Intersection Summary	
HCM 2010 Ctrl Delay	5.7
HCM 2010 LOS	A

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	80	74	85	212	43	151	427	39	17	769	170
Future Volume (veh/h)	65	80	74	85	212	43	151	427	39	17	769	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	1845	1845	1900	1827	1827	1827
Adj Flow Rate, veh/h	71	88	81	93	233	47	166	469	43	19	845	187
Adj No. of Lanes	1	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	220	231	194	103	259	52	197	1388	127	29	1169	523
Arrive On Green	0.12	0.12	0.12	0.23	0.23	0.23	0.11	0.43	0.43	0.02	0.34	0.34
Sat Flow, veh/h	1774	1863	1560	449	1125	227	1757	3248	297	1740	3471	1553
Grp Volume(v), veh/h	71	88	81	373	0	0	166	252	260	19	845	187
Grp Sat Flow(s),veh/h/ln	1774	1863	1560	1800	0	0	1757	1752	1792	1740	1736	1553
Q Serve(g_s), s	3.5	4.1	4.6	19.2	0.0	0.0	8.8	9.2	9.3	1.0	20.4	8.7
Cycle Q Clear(g_c), s	3.5	4.1	4.6	19.2	0.0	0.0	8.8	9.2	9.3	1.0	20.4	8.7
Prop In Lane	1.00		1.00	0.25		0.13	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	220	231	194	414	0	0	197	749	766	29	1169	523
V/C Ratio(X)	0.32	0.38	0.42	0.90	0.00	0.00	0.84	0.34	0.34	0.66	0.72	0.36
Avail Cap(c_a), veh/h	631	663	555	441	0	0	199	782	799	104	1381	618
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.2	38.5	38.6	35.7	0.0	0.0	41.6	18.3	18.3	46.7	27.8	23.9
Incr Delay (d2), s/veh	0.8	1.0	1.4	22.0	0.0	0.0	26.4	0.3	0.3	22.7	1.7	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	2.2	2.0	12.1	0.0	0.0	5.7	4.5	4.6	0.7	10.0	3.8
LnGrp Delay(d),s/veh	39.0	39.5	40.1	57.7	0.0	0.0	68.0	18.6	18.6	69.4	29.5	24.4
LnGrp LOS	D	D	D	E			E	B	B	E	C	C
Approach Vol, veh/h		240			373			678			1051	
Approach Delay, s/veh		39.5			57.7			30.7			29.3	
Approach LOS		D			E			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	6.3	46.1		16.6	14.9	37.5		26.6
Change Period (Y+Rc), s	* 4.7	5.3		* 4.7	* 4.2	5.3		4.6
Max Green Setting (Gmax), s	* 5.7	42.6		* 34	* 11	38.0		23.4
Max Q Clear Time (g_c+I1), s	3.0	11.3		6.6	10.8	22.4		21.2
Green Ext Time (p_c), s	0.0	14.8		0.9	0.0	9.8		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	35.3
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	85	0	3	0	0	97	0	435	14	0	588	348
Future Vol, veh/h	85	0	3	0	0	97	0	435	14	0	588	348
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	0	-	-	0	-	-	-	-	-	75
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, %	14	14	14	2	2	2	3	3	3	3	3	3
Mvmt Flow	90	0	3	0	0	103	0	463	15	0	626	370

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	857	-	313	-	-	241	-	0	0	-	-	0
Stage 1	626	-	-	-	-	-	-	-	-	-	-	-
Stage 2	231	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.78	-	7.18	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	6.78	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.78	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.64	-	3.44	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	232	0	649	0	0	760	0	-	-	0	-	0
Stage 1	411	0	-	0	0	-	0	-	-	0	-	0
Stage 2	718	0	-	0	0	-	0	-	-	0	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	200	-	649	-	-	759	-	-	-	-	-	-
Mov Cap-2 Maneuver	311	-	-	-	-	-	-	-	-	-	-	-
Stage 1	411	-	-	-	-	-	-	-	-	-	-	-
Stage 2	620	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.9	10.5	0	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	WBLn1	SBT
Capacity (veh/h)	-	-	311	649	759	-
HCM Lane V/C Ratio	-	-	0.291	0.005	0.136	-
HCM Control Delay (s)	-	-	21.3	10.6	10.5	-
HCM Lane LOS	-	-	C	B	B	-
HCM 95th %tile Q(veh)	-	-	1.2	0	0.5	-

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	65	3	91	35	3	345
Future Vol, veh/h	65	3	91	35	3	345
Conflicting Peds, #/hr	0	2	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	9	9	7	7	4	4
Mvmt Flow	73	3	102	39	3	388

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	328	78	0	0	147	0
Stage 1	127	-	-	-	-	-
Stage 2	201	-	-	-	-	-
Critical Hdwy	6.98	7.08	-	-	4.18	-
Critical Hdwy Stg 1	5.98	-	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.24	-
Pot Cap-1 Maneuver	622	945	-	-	1418	-
Stage 1	865	-	-	-	-	-
Stage 2	793	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	618	939	-	-	1416	-
Mov Cap-2 Maneuver	618	-	-	-	-	-
Stage 1	861	-	-	-	-	-
Stage 2	791	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.5	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	627	1416	-
HCM Lane V/C Ratio	-	-	0.122	0.002	-
HCM Control Delay (s)	-	-	11.5	7.5	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	13	80	4	0	48	107	19	0	7	14	36
Future Vol, veh/h	0	13	80	4	0	48	107	19	0	7	14	36
Peak Hour Factor	0.92	0.86	0.86	0.86	0.92	0.86	0.86	0.86	0.92	0.86	0.86	0.86
Heavy Vehicles, %	2	17	17	17	2	8	8	8	2	7	7	7
Mvmt Flow	0	15	93	5	0	56	124	22	0	8	16	42
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	9.2	9.2	8.2
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	33%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	67%	0%	0%	95%	0%	85%	0%	71%
Vol Right, %	0%	100%	0%	5%	0%	15%	0%	29%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	21	36	13	84	48	126	43	62
LT Vol	7	0	13	0	48	0	43	0
Through Vol	14	0	0	80	0	107	0	44
RT Vol	0	36	0	4	0	19	0	18
Lane Flow Rate	24	42	15	98	56	147	50	72
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.039	0.057	0.025	0.148	0.089	0.209	0.084	0.106
Departure Headway (Hd)	5.756	4.883	6.001	5.464	5.756	5.147	6.016	5.308
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	621	731	596	655	622	696	595	674
Service Time	3.502	2.629	3.743	3.206	3.494	2.885	3.756	3.048
HCM Lane V/C Ratio	0.039	0.057	0.025	0.15	0.09	0.211	0.084	0.107
HCM Control Delay	8.7	7.9	8.9	9.2	9.1	9.2	9.3	8.7
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1	0.5	0.3	0.8	0.3	0.4

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	43	44	18
Future Vol, veh/h	0	43	44	18
Peak Hour Factor	0.92	0.86	0.86	0.86
Heavy Vehicles, %	2	7	7	7
Mvmt Flow	0	50	51	21
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	8.9
HCM LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	51	99	22	85	0	59	112	20	3	379	30
Future Volume (veh/h)	9	51	99	22	85	0	59	112	20	3	379	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1792	1792	1900	1743	1743	1900	1792	1792	1900
Adj Flow Rate, veh/h	10	55	106	24	91	0	63	120	22	3	408	32
Adj No. of Lanes	1	1	1	1	2	0	2	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	11	11	11	6	6	6	9	9	9	6	6	6
Cap, veh/h	17	295	249	40	631	0	161	1123	201	6	1131	88
Arrive On Green	0.01	0.17	0.17	0.02	0.19	0.00	0.05	0.40	0.40	0.00	0.35	0.35
Sat Flow, veh/h	1630	1712	1445	1707	3495	0	3221	2806	503	1707	3201	250
Grp Volume(v), veh/h	10	55	106	24	91	0	63	70	72	3	216	224
Grp Sat Flow(s),veh/h/ln	1630	1712	1445	1707	1703	0	1610	1656	1654	1707	1703	1748
Q Serve(g_s), s	0.3	1.1	2.7	0.6	0.9	0.0	0.8	1.1	1.1	0.1	3.9	3.9
Cycle Q Clear(g_c), s	0.3	1.1	2.7	0.6	0.9	0.0	0.8	1.1	1.1	0.1	3.9	3.9
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.30	1.00		0.14
Lane Grp Cap(c), veh/h	17	295	249	40	631	0	161	662	661	6	602	618
V/C Ratio(X)	0.58	0.19	0.43	0.60	0.14	0.00	0.39	0.11	0.11	0.54	0.36	0.36
Avail Cap(c_a), veh/h	158	1040	878	207	2152	0	313	986	985	166	1014	1041
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00
Uniform Delay (d), s/veh	20.3	14.6	15.2	19.9	14.0	0.0	18.9	7.7	7.7	20.5	9.9	9.9
Incr Delay (d2), s/veh	27.8	0.4	1.6	13.8	0.1	0.0	1.6	0.3	0.3	62.0	1.7	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.6	1.2	0.4	0.4	0.0	0.4	0.5	0.6	0.1	2.1	2.1
LnGrp Delay(d),s/veh	48.1	15.0	16.8	33.7	14.2	0.0	20.5	8.1	8.1	82.5	11.5	11.5
LnGrp LOS	D	B	B	C	B		C	A	A	F	B	B
Approach Vol, veh/h		171			115			205			443	
Approach Delay, s/veh		18.1			18.2			11.9			12.0	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.1	21.0	5.0	11.1	6.1	19.0	4.4	11.6
Change Period (Y+Rc), s	4.0	4.5	4.0	4.0	4.0	4.5	4.0	4.0
Max Green Setting (Gmax), s	4.0	24.5	5.0	25.0	4.0	24.5	4.0	26.0
Max Q Clear Time (g_c+I1), s	2.1	3.1	2.6	4.7	2.8	5.9	2.3	2.9
Green Ext Time (p_c), s	0.0	9.3	0.0	1.6	0.0	8.5	0.0	1.7

Intersection Summary	
HCM 2010 Ctrl Delay	13.9
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	3.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	129	24	160	43	57	434
Future Vol, veh/h	129	24	160	43	57	434
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	9	9	7	7
Mvmt Flow	147	27	182	49	65	493

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	584	117	0	0	233	0
Stage 1	208	-	-	-	-	-
Stage 2	376	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.24	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.27	-
Pot Cap-1 Maneuver	443	913	-	-	1296	-
Stage 1	807	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	420	911	-	-	1296	-
Mov Cap-2 Maneuver	420	-	-	-	-	-
Stage 1	806	-	-	-	-	-
Stage 2	631	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.7	0	0.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	420	911	1296	-
HCM Lane V/C Ratio	-	-	0.349	0.03	0.05	-
HCM Control Delay (s)	-	-	18.1	9.1	7.9	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	1.5	0.1	0.2	-

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBU	SBL	SBR
Lane Configurations									
Traffic Vol, veh/h	0	13	36	0	57	23	0	11	18
Future Vol, veh/h	0	13	36	0	57	23	0	11	18
Peak Hour Factor	0.92	0.84	0.84	0.92	0.84	0.84	0.92	0.84	0.84
Heavy Vehicles, %	2	2	2	2	10	10	2	7	7
Mvmt Flow	0	15	43	0	68	27	0	13	21
Number of Lanes	0	1	1	0	1	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	7.7	7.6	7.2
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	38%
Vol Thru, %	0%	100%	71%	0%
Vol Right, %	0%	0%	29%	62%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	13	36	80	29
LT Vol	13	0	0	11
Through Vol	0	36	57	0
RT Vol	0	0	23	18
Lane Flow Rate	15	43	95	35
Geometry Grp	7	7	5	2
Degree of Util (X)	0.022	0.055	0.109	0.038
Departure Headway (Hd)	5.144	4.643	4.102	3.983
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	696	771	871	884
Service Time	2.872	2.371	2.136	2.073
HCM Lane V/C Ratio	0.022	0.056	0.109	0.04
HCM Control Delay	8	7.6	7.6	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.4	0.1

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	7	18	19	0	69	68	25	0	13	10	40
Future Vol, veh/h	0	7	18	19	0	69	68	25	0	13	10	40
Peak Hour Factor	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	7	7	7	2	7	7	7	2	15	15	15
Mvmt Flow	0	9	23	24	0	86	85	31	0	16	13	50
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	8	8.8	8.2
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	57%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	43%	0%	0%	49%	0%	73%	0%	83%
Vol Right, %	0%	100%	0%	51%	0%	27%	0%	17%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	23	40	7	37	69	93	18	47
LT Vol	13	0	7	0	69	0	18	0
Through Vol	10	0	0	18	0	68	0	39
RT Vol	0	40	0	19	0	25	0	8
Lane Flow Rate	29	50	9	46	86	116	22	59
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.046	0.067	0.014	0.063	0.134	0.158	0.036	0.084
Departure Headway (Hd)	5.779	4.791	5.735	4.871	5.583	4.893	5.77	5.147
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	620	748	625	735	643	734	621	697
Service Time	3.507	2.519	3.465	2.601	3.309	2.618	3.498	2.875
HCM Lane V/C Ratio	0.047	0.067	0.014	0.063	0.134	0.158	0.035	0.085
HCM Control Delay	8.8	7.9	8.5	7.9	9.2	8.5	8.7	8.3
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0	0.2	0.5	0.6	0.1	0.3

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	18	39	8
Future Vol, veh/h	0	18	39	8
Peak Hour Factor	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	23	49	10
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	8.4
HCM LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	17	19	16	37	18	35	155	25	41	423	90
Future Volume (veh/h)	40	17	19	16	37	18	35	155	25	41	423	90
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1900	1845	1845	1845	1759	1759	1900	1792	1792	1900
Adj Flow Rate, veh/h	43	18	21	17	40	20	38	168	27	45	460	98
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	9	9	3	3	3	8	8	8	6	6	6
Cap, veh/h	63	68	79	30	132	112	57	1330	210	67	1300	275
Arrive On Green	0.04	0.09	0.09	0.02	0.07	0.07	0.03	0.46	0.46	0.04	0.46	0.46
Sat Flow, veh/h	1660	732	854	1757	1845	1568	1675	2892	457	1707	2796	592
Grp Volume(v), veh/h	43	0	39	17	40	20	38	96	99	45	279	279
Grp Sat Flow(s),veh/h/ln	1660	0	1586	1757	1845	1568	1675	1671	1677	1707	1703	1685
Q Serve(g_s), s	1.0	0.0	0.9	0.4	0.8	0.5	0.9	1.3	1.4	1.1	4.3	4.3
Cycle Q Clear(g_c), s	1.0	0.0	0.9	0.4	0.8	0.5	0.9	1.3	1.4	1.1	4.3	4.3
Prop In Lane	1.00		0.54	1.00		1.00	1.00		0.27	1.00		0.35
Lane Grp Cap(c), veh/h	63	0	146	30	132	112	57	769	771	67	792	783
V/C Ratio(X)	0.69	0.00	0.27	0.56	0.30	0.18	0.66	0.12	0.13	0.67	0.35	0.36
Avail Cap(c_a), veh/h	244	0	621	172	632	537	205	769	771	251	792	783
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	0.0	17.3	19.9	18.0	17.8	19.5	6.3	6.3	19.4	7.0	7.0
Incr Delay (d2), s/veh	12.4	0.0	1.0	15.4	1.3	0.7	12.2	0.3	0.3	11.1	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.5	0.3	0.5	0.2	0.6	0.7	0.7	0.7	2.2	2.3
LnGrp Delay(d),s/veh	31.8	0.0	18.2	35.3	19.3	18.6	31.7	6.7	6.7	30.5	8.2	8.3
LnGrp LOS	C		B	D	B	B	C	A	A	C	A	A
Approach Vol, veh/h		82			77			233			603	
Approach Delay, s/veh		25.4			22.6			10.8			9.9	
Approach LOS		C			C			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	22.8	4.7	7.8	5.4	23.0	5.5	6.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	18.0	4.0	16.0	5.0	19.0	6.0	14.0
Max Q Clear Time (g_c+I1), s	3.1	3.4	2.4	2.9	2.9	6.3	3.0	2.8
Green Ext Time (p_c), s	0.0	4.1	0.0	0.3	0.0	3.8	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	12.4
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	0	26	4	0	45	67	0	0	3	0	13
Future Vol, veh/h	0	0	26	4	0	45	67	0	0	3	0	13
Peak Hour Factor	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	7	7	7	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	33	5	0	56	84	0	0	4	0	16
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	7.3	7.9	7
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	19%	0%	40%	0%
Vol Thru, %	0%	87%	60%	0%
Vol Right, %	81%	13%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	16	30	112	2
LT Vol	3	0	45	0
Through Vol	0	26	67	0
RT Vol	13	4	0	2
Lane Flow Rate	20	38	140	2
Geometry Grp	1	1	1	1
Degree of Util (X)	0.021	0.043	0.159	0.003
Departure Headway (Hd)	3.79	4.083	4.081	4.472
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	929	875	881	789
Service Time	1.877	2.12	2.098	2.562
HCM Lane V/C Ratio	0.022	0.043	0.159	0.003
HCM Control Delay	7	7.3	7.9	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0.6	0

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	0	0	2
Future Vol, veh/h	0	0	0	2
Peak Hour Factor	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	50	50	50
Mvmt Flow	0	0	0	3
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	7.6
HCM LOS	A

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	56	2	0	13	38	0	3	8
Future Vol, veh/h	0	56	2	0	13	38	0	3	8
Peak Hour Factor	0.92	0.91	0.91	0.92	0.91	0.91	0.92	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	9	9
Mvmt Flow	0	62	2	0	14	42	0	3	9
Number of Lanes	0	1	0	0	1	0	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.6	6.9	7.4
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	97%	27%
Vol Thru, %	25%	0%	73%
Vol Right, %	75%	3%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	51	58	11
LT Vol	0	56	3
Through Vol	13	0	8
RT Vol	38	2	0
Lane Flow Rate	56	64	12
Geometry Grp	1	1	1
Degree of Util (X)	0.056	0.075	0.014
Departure Headway (Hd)	3.608	4.225	4.263
Convergence, Y/N	Yes	Yes	Yes
Cap	988	850	837
Service Time	1.646	2.243	2.304
HCM Lane V/C Ratio	0.057	0.075	0.014
HCM Control Delay	6.9	7.6	7.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0.2	0

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	20	13	6	0	52	16	0	0	16	58	49
Future Vol, veh/h	0	20	13	6	0	52	16	0	0	16	58	49
Peak Hour Factor	0.92	0.83	0.83	0.83	0.92	0.83	0.83	0.83	0.92	0.83	0.83	0.83
Heavy Vehicles, %	2	3	3	3	2	6	6	6	2	3	3	3
Mvmt Flow	0	24	16	7	0	63	19	0	0	19	70	59
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	8.5	9.2	8.2
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	13%	61%	0%	76%	0%	2%
Vol Thru, %	47%	39%	0%	24%	100%	75%
Vol Right, %	40%	0%	100%	0%	0%	23%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	123	33	6	68	0	110
LT Vol	16	20	0	52	0	2
Through Vol	58	13	0	16	0	83
RT Vol	49	0	6	0	0	25
Lane Flow Rate	148	40	7	82	0	133
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.175	0.062	0.009	0.129	0	0.164
Departure Headway (Hd)	4.252	5.574	4.564	5.666	5.281	4.444
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	845	643	783	633	0	808
Service Time	2.27	3.307	2.297	3.397	3.011	2.464
HCM Lane V/C Ratio	0.175	0.062	0.009	0.13	0	0.165
HCM Control Delay	8.2	8.7	7.3	9.2	8	8.3
HCM Lane LOS	A	A	A	A	N	A
HCM 95th-tile Q	0.6	0.2	0	0.4	0	0.6

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations			↕	
Traffic Vol, veh/h	0	2	83	25
Future Vol, veh/h	0	2	83	25
Peak Hour Factor	0.92	0.83	0.83	0.83
Heavy Vehicles, %	2	9	9	9
Mvmt Flow	0	2	100	30
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	8.3
HCM LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	0	189	0	0	0	162	272	6	0	400	78
Future Volume (veh/h)	43	0	189	0	0	0	162	272	6	0	400	78
Number	7	4	14	3	8	18	5	2	12	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		0.99	1.00		1.00	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	1900	1776	1776	1900	1863	1900	1827	1827	1900	0	1810	1900
Adj Flow Rate, veh/h	48	0	210	0	0	0	180	302	7	0	444	87
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	0	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	7	7	7	2	2	2	4	4	4	0	5	5
Cap, veh/h	381	0	274	0	342	0	644	2324	54	0	1510	294
Arrive On Green	0.18	0.00	0.18	0.00	0.00	0.00	0.08	0.67	0.67	0.00	0.53	0.53
Sat Flow, veh/h	1330	0	1492	0	1863	0	1740	3467	80	0	2956	557
Grp Volume(v), veh/h	48	0	210	0	0	0	180	151	158	0	265	266
Grp Sat Flow(s),veh/h/ln	1330	0	1492	0	1863	0	1740	1736	1812	0	1719	1704
Q Serve(g_s), s	1.6	0.0	7.0	0.0	0.0	0.0	2.2	1.7	1.7	0.0	4.5	4.6
Cycle Q Clear(g_c), s	1.6	0.0	7.0	0.0	0.0	0.0	2.2	1.7	1.7	0.0	4.5	4.6
Prop In Lane	1.00		1.00	0.00		0.00	1.00		0.04	0.00		0.33
Lane Grp Cap(c), veh/h	381	0	274	0	342	0	644	1163	1214	0	906	898
V/C Ratio(X)	0.13	0.00	0.77	0.00	0.00	0.00	0.28	0.13	0.13	0.00	0.29	0.30
Avail Cap(c_a), veh/h	566	0	482	0	601	0	791	1163	1214	0	906	898
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	0.0	20.4	0.0	0.0	0.0	4.3	3.1	3.1	0.0	7.0	7.0
Incr Delay (d2), s/veh	0.2	0.0	6.3	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.8	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	0.0	3.3	0.0	0.0	0.0	1.0	0.8	0.9	0.0	2.3	2.4
LnGrp Delay(d),s/veh	18.4	0.0	26.7	0.0	0.0	0.0	4.5	3.4	3.4	0.0	7.8	7.8
LnGrp LOS	B		C				A	A	A		A	A
Approach Vol, veh/h		258			0			489			531	
Approach Delay, s/veh		25.2			0.0			3.8			7.8	
Approach LOS		C						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		39.5		13.2	7.5	32.0		13.2
Change Period (Y+Rc), s		* 4.2		3.5	3.5	* 4.2		3.5
Max Green Setting (Gmax), s		* 35		17.0	8.5	* 23		17.0
Max Q Clear Time (g_c+I1), s		3.7		9.0	4.2	6.6		0.0
Green Ext Time (p_c), s		16.7		0.9	0.2	10.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	9.8
HCM 2010 LOS	A

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	420	74	367	218	35	554
Future Volume (veh/h)	420	74	367	218	35	554
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1845	1845	1810	1810
Adj Flow Rate, veh/h	483	85	422	0	40	637
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	3	3	5	5
Cap, veh/h	804	370	1588	710	60	1941
Arrive On Green	0.23	0.23	0.45	0.00	0.03	0.56
Sat Flow, veh/h	3442	1583	3597	1568	1723	3529
Grp Volume(v), veh/h	483	85	422	0	40	637
Grp Sat Flow(s),veh/h/ln	1721	1583	1752	1568	1723	1719
Q Serve(g_s), s	5.7	2.0	3.4	0.0	1.0	4.5
Cycle Q Clear(g_c), s	5.7	2.0	3.4	0.0	1.0	4.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	804	370	1588	710	60	1941
V/C Ratio(X)	0.60	0.23	0.27	0.00	0.67	0.33
Avail Cap(c_a), veh/h	1284	591	1884	843	219	2550
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	15.6	14.1	7.8	0.0	21.7	5.3
Incr Delay (d2), s/veh	1.5	0.7	0.4	0.0	11.9	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.9	1.7	0.0	0.7	2.2
LnGrp Delay(d),s/veh	17.1	14.8	8.2	0.0	33.7	5.8
LnGrp LOS	B	B	A		C	A
Approach Vol, veh/h	568		422			677
Approach Delay, s/veh	16.8		8.2			7.4
Approach LOS	B		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	5.1	24.8				29.9		15.6
Change Period (Y+Rc), s	3.5	* 4.2				* 4.2		5.0
Max Green Setting (Gmax), s	5.8	* 25				* 34		17.0
Max Q Clear Time (g_c+I1), s	3.0	5.4				6.5		7.7
Green Ext Time (p_c), s	0.0	14.5				19.2		2.9

Intersection Summary	
HCM 2010 Ctrl Delay	10.8
HCM 2010 LOS	B

Notes

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

Intersection	
Int Delay, s/veh	8.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	2	6	97	75	10	9	111	31	34	0	0	0
Future Vol, veh/h	2	6	97	75	10	9	111	31	34	0	0	0
Conflicting Peds, #/hr	20	0	1	1	0	20	17	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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	6	6	6	2	2	2	2	2	2
Mvmt Flow	3	8	129	100	13	12	148	41	45	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	410	400	18	430	377	84	17	0	0
Stage 1	17	17	-	360	360	-	-	-	-
Stage 2	393	383	-	70	17	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.16	6.56	6.26	4.12	-	-
Critical Hdwy Stg 1	-	-	-	6.16	5.56	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.554	4.054	3.354	2.218	-	-
Pot Cap-1 Maneuver	552	538	1061	529	548	964	1600	-	-
Stage 1	-	-	-	650	619	-	-	-	-
Stage 2	632	612	-	-	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	487	478	1045	423	487	964	1599	-	-
Mov Cap-2 Maneuver	487	478	-	423	487	-	-	-	-
Stage 1	-	-	-	586	558	-	-	-	-
Stage 2	550	552	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	9.4	15.9	4.7
HCM LOS	A	C	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	1599	-	-	959	454
HCM Lane V/C Ratio	0.093	-	-	0.146	0.276
HCM Control Delay (s)	7.5	0	-	9.4	15.9
HCM Lane LOS	A	A	-	A	C
HCM 95th %tile Q(veh)	0.3	-	-	0.5	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	399	1	36	411	140	0	0	74	98
Future Volume (veh/h)	0	0	0	399	1	36	411	140	0	0	74	98
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.94
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1792	1792	1900	1845	0	0	1827	1900
Adj Flow Rate, veh/h				469	1	42	484	165	0	0	87	115
Adj No. of Lanes				0	1	1	0	1	0	0	1	0
Peak Hour Factor				0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %				6	6	6	3	3	0	0	4	4
Cap, veh/h				510	1	456	530	181	0	0	90	119
Arrive On Green				0.30	0.30	0.30	0.40	0.40	0.00	0.00	0.13	0.13
Sat Flow, veh/h				1704	4	1524	1326	452	0	0	690	911
Grp Volume(v), veh/h				470	0	42	649	0	0	0	0	202
Grp Sat Flow(s),veh/h/ln				1707	0	1524	1778	0	0	0	0	1601
Q Serve(g_s), s				20.3	0.0	1.5	26.4	0.0	0.0	0.0	0.0	9.6
Cycle Q Clear(g_c), s				20.3	0.0	1.5	26.4	0.0	0.0	0.0	0.0	9.6
Prop In Lane				1.00		1.00	0.75		0.00	0.00		0.57
Lane Grp Cap(c), veh/h				511	0	456	710	0	0	0	0	210
V/C Ratio(X)				0.92	0.00	0.09	0.91	0.00	0.00	0.00	0.00	0.96
Avail Cap(c_a), veh/h				532	0	475	773	0	0	0	0	210
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				25.9	0.0	19.3	21.7	0.0	0.0	0.0	0.0	33.0
Incr Delay (d2), s/veh				21.0	0.0	0.1	14.8	0.0	0.0	0.0	0.0	51.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				12.5	0.0	0.7	15.7	0.0	0.0	0.0	0.0	7.2
LnGrp Delay(d),s/veh				46.9	0.0	19.4	36.5	0.0	0.0	0.0	0.0	84.8
LnGrp LOS				D		B	D					F
Approach Vol, veh/h					512			649			202	
Approach Delay, s/veh					44.6			36.5			84.8	
Approach LOS					D			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		35.1				14.2		27.1
Change Period (Y+Rc), s		4.6				4.2		4.2
Max Green Setting (Gmax), s		33.2				10.0		23.8
Max Q Clear Time (g_c+I1), s		28.4				11.6		22.3
Green Ext Time (p_c), s		2.1				0.0		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	46.7
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	1	245	0	0	0	0	499	272	27	446	0
Future Vol, veh/h	52	1	245	0	0	0	0	499	272	27	446	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	2	2	2	5	5	5	6	6	6
Mvmt Flow	57	1	266	0	0	0	0	542	296	29	485	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1085	1087	485	-	0	0	544	0	0
Stage 1	543	543	-	-	-	-	-	-	-
Stage 2	542	544	-	-	-	-	-	-	-
Critical Hdwy	6.43	6.53	6.23	-	-	-	4.16	-	-
Critical Hdwy Stg 1	5.43	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	-	-	-	2.254	-	-
Pot Cap-1 Maneuver	239	215	580	0	-	-	1005	-	0
Stage 1	580	518	-	0	-	-	-	-	0
Stage 2	581	517	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	230	0	580	-	-	-	1005	-	-
Mov Cap-2 Maneuver	230	0	-	-	-	-	-	-	-
Stage 1	557	0	-	-	-	-	-	-	-
Stage 2	581	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.1	0	0.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	230	580	1005	-
HCM Lane V/C Ratio	-	-	0.25	0.459	0.029	-
HCM Control Delay (s)	-	-	25.8	16.4	8.7	0
HCM Lane LOS	-	-	D	C	A	A
HCM 95th %tile Q(veh)	-	-	1	2.4	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	136	309	168	79	654	238	406	384	107	179	346	87
Future Volume (veh/h)	136	309	168	79	654	238	406	384	107	179	346	87
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1863	1863	1863	1810	1810	1900
Adj Flow Rate, veh/h	156	355	193	91	752	274	467	441	123	206	398	100
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	2	2	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	4	4	4	4	4	4	2	2	2	5	5	5
Cap, veh/h	177	1117	498	158	1078	472	347	1159	510	326	883	219
Arrive On Green	0.10	0.32	0.32	0.09	0.31	0.31	0.10	0.33	0.33	0.10	0.32	0.32
Sat Flow, veh/h	1740	3471	1547	1740	3471	1521	3442	3539	1559	3343	2723	677
Grp Volume(v), veh/h	156	355	193	91	752	274	467	441	123	206	250	248
Grp Sat Flow(s),veh/h/ln	1740	1736	1547	1740	1736	1521	1721	1770	1559	1672	1719	1681
Q Serve(g_s), s	9.0	7.9	9.9	5.1	19.5	15.5	10.3	9.8	5.9	6.0	11.7	12.0
Cycle Q Clear(g_c), s	9.0	7.9	9.9	5.1	19.5	15.5	10.3	9.8	5.9	6.0	11.7	12.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	177	1117	498	158	1078	472	347	1159	510	326	557	545
V/C Ratio(X)	0.88	0.32	0.39	0.58	0.70	0.58	1.35	0.38	0.24	0.63	0.45	0.46
Avail Cap(c_a), veh/h	177	1190	530	170	1176	516	347	1159	510	380	557	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.2	26.2	26.8	44.6	31.0	29.6	45.9	26.4	25.1	44.3	27.3	27.4
Incr Delay (d2), s/veh	36.3	0.2	0.7	4.1	1.9	1.8	173.4	1.0	1.1	2.6	2.6	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	3.8	4.3	2.6	9.6	6.7	13.2	4.9	2.7	2.9	5.9	5.9
LnGrp Delay(d),s/veh	81.5	26.4	27.5	48.7	32.9	31.4	219.3	27.3	26.2	46.9	29.9	30.1
LnGrp LOS	F	C	C	D	C	C	F	C	C	D	C	C
Approach Vol, veh/h		704			1117			1031			704	
Approach Delay, s/veh		38.9			33.8			114.2			34.9	
Approach LOS		D			C			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	38.0	12.9	37.5	14.0	37.7	14.1	36.3
Change Period (Y+Rc), s	3.7	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Green Setting (Gmax), s	11.6	31.8	10.0	35.0	10.3	33.1	10.4	34.6
Max Q Clear Time (g_c+I1), s	8.0	11.8	7.1	11.9	12.3	14.0	11.0	21.5
Green Ext Time (p_c), s	0.2	8.9	0.0	13.8	0.0	8.7	0.0	9.2

Intersection Summary	
HCM 2010 Ctrl Delay	58.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	213	176	266	0	167	0	113	351	0	0	0
Future Volume (veh/h)	2	213	176	266	0	167	0	113	351	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1863	0	1863	0	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	2	239	198	299	0	188	0	127	394	0	0	0
Adj No. of Lanes	0	2	1	1	0	1	0	1	1	0	1	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	0	2	0	2	2	2	2	2
Cap, veh/h	7	870	377	0	0	0	0	655	557	0	655	0
Arrive On Green	0.24	0.24	0.24	0.00	0.00	0.00	0.00	0.35	0.35	0.00	0.00	0.00
Sat Flow, veh/h	29	3602	1560		0		0	1863	1583	0	1863	0
Grp Volume(v), veh/h	129	112	198		0.0		0	127	394	0	0	0
Grp Sat Flow(s),veh/h/ln	1861	1770	1560				0	1863	1583	0	1863	0
Q Serve(g_s), s	1.3	1.2	2.6				0.0	1.1	5.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.3	1.2	2.6				0.0	1.1	5.0	0.0	0.0	0.0
Prop In Lane	0.02		1.00				0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	450	428	377				0	655	557	0	655	0
V/C Ratio(X)	0.29	0.26	0.53				0.00	0.19	0.71	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1889	1796	1584				0	3654	3106	0	3654	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	7.2	7.2	7.7				0.0	5.3	6.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.4				0.0	0.1	0.6	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
%ile BackOfQ(50%),veh/ln	0.7	0.6	1.1				0.0	0.6	2.2	0.0	0.0	0.0
LnGrp Delay(d),s/veh	7.3	7.3	8.1				0.0	5.3	7.2	0.0	0.0	0.0
LnGrp LOS	A	A	A					A	A			
Approach Vol, veh/h		439						521			0	
Approach Delay, s/veh		7.7						6.7			0.0	
Approach LOS		A						A				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		12.4		10.9		12.4		
Change Period (Y+Rc), s		* 4.2		5.3		* 4.2		
Max Green Setting (Gmax), s		* 46		23.7		* 46		
Max Q Clear Time (g_c+I1), s		7.0		4.6		0.0		
Green Ext Time (p_c), s		1.2		1.2		0.0		

Intersection Summary	
HCM 2010 Ctrl Delay	7.2
HCM 2010 LOS	A

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	264	216	84	81	127	48	115	901	196	53	596	191
Future Volume (veh/h)	264	216	84	81	127	48	115	901	196	53	596	191
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	252	263	88	85	134	51	121	948	206	56	627	201
Adj No. of Lanes	1	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	344	361	303	96	151	57	149	1193	259	72	1321	590
Arrive On Green	0.19	0.19	0.19	0.17	0.17	0.17	0.08	0.41	0.41	0.04	0.37	0.37
Sat Flow, veh/h	1774	1863	1561	559	881	335	1774	2894	628	1774	3539	1581
Grp Volume(v), veh/h	252	263	88	270	0	0	121	579	575	56	627	201
Grp Sat Flow(s),veh/h/ln	1774	1863	1561	1776	0	0	1774	1770	1752	1774	1770	1581
Q Serve(g_s), s	14.1	14.0	5.1	15.8	0.0	0.0	7.1	30.3	30.4	3.3	14.3	9.7
Cycle Q Clear(g_c), s	14.1	14.0	5.1	15.8	0.0	0.0	7.1	30.3	30.4	3.3	14.3	9.7
Prop In Lane	1.00		1.00	0.31		0.19	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	344	361	303	304	0	0	149	729	722	72	1321	590
V/C Ratio(X)	0.73	0.73	0.29	0.89	0.00	0.00	0.81	0.79	0.80	0.78	0.47	0.34
Avail Cap(c_a), veh/h	571	599	502	325	0	0	214	783	775	89	1332	595
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	40.1	36.5	42.9	0.0	0.0	47.7	27.2	27.2	50.4	25.3	23.9
Incr Delay (d2), s/veh	3.0	2.8	0.5	25.5	0.0	0.0	14.0	5.5	5.7	28.9	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	7.5	2.3	9.9	0.0	0.0	4.1	15.9	15.8	2.2	7.0	4.3
LnGrp Delay(d),s/veh	43.1	42.9	37.0	68.5	0.0	0.0	61.7	32.7	32.9	79.3	25.6	24.3
LnGrp LOS	D	D	D	E			E	C	C	E	C	C
Approach Vol, veh/h		603			270			1275			884	
Approach Delay, s/veh		42.1			68.5			35.6			28.7	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	49.0		25.3	13.1	44.8		22.7
Change Period (Y+Rc), s	* 4.7	5.3		* 4.7	* 4.2	5.3		4.6
Max Green Setting (Gmax), s	* 5.3	46.9		* 34	* 13	39.9		19.4
Max Q Clear Time (g_c+I1), s	5.3	32.4		16.1	9.1	16.3		17.8
Green Ext Time (p_c), s	0.0	11.3		2.5	0.1	16.5		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	37.8
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	25.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	307	0	6	0	0	90	0	815	13	0	570	191
Future Vol, veh/h	307	0	6	0	0	90	0	815	13	0	570	191
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	1	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	0	-	-	0	-	-	-	-	-	75
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	327	0	6	0	0	96	0	867	14	0	606	203

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1040	-	304	-	-	441	-	0	0	-	-	0
Stage 1	606	-	-	-	-	-	-	-	-	-	-	-
Stage 2	434	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	~ 185	0	692	0	0	564	0	-	-	0	-	0
Stage 1	451	0	-	0	0	-	0	-	-	0	-	0
Stage 2	570	0	-	0	0	-	0	-	-	0	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	~ 154	-	691	-	-	564	-	-	-	-	-	-
Mov Cap-2 Maneuver	~ 281	-	-	-	-	-	-	-	-	-	-	-
Stage 1	451	-	-	-	-	-	-	-	-	-	-	-
Stage 2	473	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	141.4	12.7	0	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	WBLn1	SBT
Capacity (veh/h)	-	-	281	691	564	-
HCM Lane V/C Ratio	-	-	1.162	0.009	0.17	-
HCM Control Delay (s)	-	-	144	10.3	12.7	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	14.3	0	0.6	-

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

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	49	6	361	85	11	180
Future Vol, veh/h	49	6	361	85	11	180
Conflicting Peds, #/hr	0	2	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	6	6	2	2	4	4
Mvmt Flow	54	7	397	93	12	198

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	571	252	0	0	495	0
Stage 1	448	-	-	-	-	-
Stage 2	123	-	-	-	-	-
Critical Hdwy	6.92	7.02	-	-	4.18	-
Critical Hdwy Stg 1	5.92	-	-	-	-	-
Critical Hdwy Stg 2	5.92	-	-	-	-	-
Follow-up Hdwy	3.56	3.36	-	-	2.24	-
Pot Cap-1 Maneuver	442	736	-	-	1051	-
Stage 1	599	-	-	-	-	-
Stage 2	877	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	434	732	-	-	1049	-
Mov Cap-2 Maneuver	434	-	-	-	-	-
Stage 1	597	-	-	-	-	-
Stage 2	866	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.1	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	454	1049	-
HCM Lane V/C Ratio	-	-	0.133	0.012	-
HCM Control Delay (s)	-	-	14.1	8.5	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0	-

Intersection	
Intersection Delay, s/veh	17.4
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	49	272	11	0	123	265	46	0	29	115	127
Future Vol, veh/h	0	49	272	11	0	123	265	46	0	29	115	127
Peak Hour Factor	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	4	4	4	2	3	3	3	2	2	2	2
Mvmt Flow	0	54	299	12	0	135	291	51	0	32	126	140
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	19.9	19.7	13.5
HCM LOS	C	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	20%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	80%	0%	0%	96%	0%	85%	0%	67%
Vol Right, %	0%	100%	0%	4%	0%	15%	0%	33%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	144	127	49	283	123	311	62	123
LT Vol	29	0	49	0	123	0	62	0
Through Vol	115	0	0	272	0	265	0	82
RT Vol	0	127	0	11	0	46	0	41
Lane Flow Rate	158	140	54	311	135	342	68	135
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.342	0.27	0.116	0.624	0.284	0.66	0.159	0.287
Departure Headway (Hd)	7.78	6.956	7.761	7.221	7.574	6.957	8.393	7.637
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	462	515	461	501	474	519	427	469
Service Time	5.536	4.712	5.515	4.975	5.327	4.71	6.155	5.399
HCM Lane V/C Ratio	0.342	0.272	0.117	0.621	0.285	0.659	0.159	0.288
HCM Control Delay	14.6	12.3	11.5	21.3	13.3	22.3	12.7	13.5
HCM Lane LOS	B	B	B	C	B	C	B	B
HCM 95th-tile Q	1.5	1.1	0.4	4.2	1.2	4.8	0.6	1.2

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	62	82	41
Future Vol, veh/h	0	62	82	41
Peak Hour Factor	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	68	90	45
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	13.2
HCM LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	215	193	43	213	0	193	400	62	14	157	58
Future Volume (veh/h)	53	215	193	43	213	0	193	400	62	14	157	58
Number	7	4	14	3	8	18	5	2	12	1	6	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		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	1863	1863	1863	1863	1863	1900	1863	1863	1900	1845	1845	1900
Adj Flow Rate, veh/h	56	229	205	46	227	0	205	426	66	15	167	62
Adj No. of Lanes	1	1	1	1	2	0	2	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	3	3	3
Cap, veh/h	76	494	417	66	920	0	265	1122	173	26	766	274
Arrive On Green	0.04	0.27	0.27	0.04	0.26	0.00	0.08	0.36	0.36	0.01	0.30	0.30
Sat Flow, veh/h	1774	1863	1571	1774	3632	0	3442	3075	473	1757	2527	904
Grp Volume(v), veh/h	56	229	205	46	227	0	205	244	248	15	114	115
Grp Sat Flow(s),veh/h/ln	1774	1863	1571	1774	1770	0	1721	1770	1779	1757	1752	1679
Q Serve(g_s), s	1.6	5.4	5.7	1.3	2.6	0.0	3.0	5.3	5.3	0.4	2.5	2.7
Cycle Q Clear(g_c), s	1.6	5.4	5.7	1.3	2.6	0.0	3.0	5.3	5.3	0.4	2.5	2.7
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.27	1.00		0.54
Lane Grp Cap(c), veh/h	76	494	417	66	920	0	265	646	649	26	531	509
V/C Ratio(X)	0.74	0.46	0.49	0.69	0.25	0.00	0.77	0.38	0.38	0.57	0.21	0.23
Avail Cap(c_a), veh/h	136	896	755	171	1770	0	265	834	838	135	826	791
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00
Uniform Delay (d), s/veh	24.6	16.0	16.1	24.7	15.2	0.0	23.6	12.2	12.2	25.4	13.5	13.6
Incr Delay (d2), s/veh	13.1	1.0	1.3	12.2	0.2	0.0	13.3	1.7	1.7	17.9	0.9	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	2.9	2.6	0.9	1.3	0.0	1.9	2.9	2.9	0.3	1.3	1.4
LnGrp Delay(d),s/veh	37.7	17.0	17.4	37.0	15.4	0.0	36.9	13.8	13.9	43.3	14.4	14.6
LnGrp LOS	D	B	B	D	B		D	B	B	D	B	B
Approach Vol, veh/h		490			273			697			244	
Approach Delay, s/veh		19.5			19.0			20.6			16.3	
Approach LOS		B			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.8	23.5	5.9	17.8	8.0	20.3	6.2	17.5
Change Period (Y+Rc), s	4.0	4.5	4.0	4.0	4.0	4.5	4.0	4.0
Max Green Setting (Gmax), s	4.0	24.5	5.0	25.0	4.0	24.5	4.0	26.0
Max Q Clear Time (g_c+I1), s	2.4	7.3	3.3	7.7	5.0	4.7	3.6	4.6
Green Ext Time (p_c), s	0.0	9.8	0.0	4.7	0.0	10.8	0.0	5.1

Intersection Summary	
HCM 2010 Ctrl Delay	19.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	82	51	599	150	60	325
Future Vol, veh/h	82	51	599	150	60	325
Conflicting Peds, #/hr	5	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	4	4
Mvmt Flow	85	53	618	155	62	335

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	992	387	0	0	773	0
Stage 1	696	-	-	-	-	-
Stage 2	296	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.18	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.24	-
Pot Cap-1 Maneuver	243	611	-	-	825	-
Stage 1	456	-	-	-	-	-
Stage 2	729	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	224	610	-	-	825	-
Mov Cap-2 Maneuver	224	-	-	-	-	-
Stage 1	456	-	-	-	-	-
Stage 2	671	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.2	0	1.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	224	610	825	-
HCM Lane V/C Ratio	-	-	0.377	0.086	0.075	-
HCM Control Delay (s)	-	-	30.5	11.5	9.7	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	1.7	0.3	0.2	-

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBU	SBL	SBR
Lane Configurations									
Traffic Vol, veh/h	0	39	83	0	104	28	0	39	81
Future Vol, veh/h	0	39	83	0	104	28	0	39	81
Peak Hour Factor	0.92	0.96	0.96	0.92	0.96	0.96	0.92	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	41	86	0	108	29	0	41	84
Number of Lanes	0	1	1	0	1	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	8.4	8.2	7.9
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	33%
Vol Thru, %	0%	100%	79%	0%
Vol Right, %	0%	0%	21%	68%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	39	83	132	120
LT Vol	39	0	0	39
Through Vol	0	83	104	0
RT Vol	0	0	28	81
Lane Flow Rate	41	86	138	125
Geometry Grp	7	7	5	2
Degree of Util (X)	0.061	0.118	0.166	0.146
Departure Headway (Hd)	5.433	4.931	4.334	4.212
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	663	731	831	854
Service Time	3.133	2.631	2.349	2.226
HCM Lane V/C Ratio	0.062	0.118	0.166	0.146
HCM Control Delay	8.5	8.3	8.2	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.4	0.6	0.5

Intersection	
Intersection Delay, s/veh	10.4
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	32	85	16	0	47	56	188	0	19	31	85
Future Vol, veh/h	0	32	85	16	0	47	56	188	0	19	31	85
Peak Hour Factor	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	6	6	6	2	3	3	3	2	5	5	5
Mvmt Flow	0	34	91	17	0	51	60	202	0	20	33	91
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	9.9	10.9	9.4
HCM LOS	A	B	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	38%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	62%	0%	0%	84%	0%	23%	0%	33%
Vol Right, %	0%	100%	0%	16%	0%	77%	0%	67%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	50	85	32	101	47	244	128	66
LT Vol	19	0	32	0	47	0	128	0
Through Vol	31	0	0	85	0	56	0	22
RT Vol	0	85	0	16	0	188	0	44
Lane Flow Rate	54	91	34	109	51	262	138	71
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.095	0.138	0.063	0.179	0.088	0.382	0.248	0.109
Departure Headway (Hd)	6.354	5.453	6.553	5.934	6.293	5.244	6.497	5.519
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	565	657	547	605	570	687	553	650
Service Time	4.087	3.186	4.284	3.666	4.022	2.972	4.226	3.248
HCM Lane V/C Ratio	0.096	0.139	0.062	0.18	0.089	0.381	0.25	0.109
HCM Control Delay	9.8	9.1	9.7	10	9.6	11.2	11.4	8.9
HCM Lane LOS	A	A	A	A	A	B	B	A
HCM 95th-tile Q	0.3	0.5	0.2	0.6	0.3	1.8	1	0.4

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	128	22	44
Future Vol, veh/h	0	128	22	44
Peak Hour Factor	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	138	24	47
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	10.5
HCM LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	87	121	15	50	44	167	608	44	40	307	74
Future Volume (veh/h)	90	87	121	15	50	44	167	608	44	40	307	74
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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	1863	1863	1900	1863	1863	1863	1863	1863	1900	1845	1845	1900
Adj Flow Rate, veh/h	95	92	127	16	53	46	176	640	46	42	323	78
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	3	3	3
Cap, veh/h	122	138	191	28	270	229	223	1408	101	63	926	220
Arrive On Green	0.07	0.20	0.20	0.02	0.14	0.14	0.13	0.42	0.42	0.04	0.33	0.33
Sat Flow, veh/h	1774	700	967	1774	1863	1583	1774	3348	240	1757	2805	667
Grp Volume(v), veh/h	95	0	219	16	53	46	176	338	348	42	200	201
Grp Sat Flow(s),veh/h/ln	1774	0	1667	1774	1863	1583	1774	1770	1819	1757	1752	1720
Q Serve(g_s), s	2.6	0.0	5.9	0.4	1.2	1.2	4.7	6.6	6.6	1.1	4.2	4.3
Cycle Q Clear(g_c), s	2.6	0.0	5.9	0.4	1.2	1.2	4.7	6.6	6.6	1.1	4.2	4.3
Prop In Lane	1.00		0.58	1.00		1.00	1.00		0.13	1.00		0.39
Lane Grp Cap(c), veh/h	122	0	329	28	270	229	223	744	765	63	579	568
V/C Ratio(X)	0.78	0.00	0.66	0.56	0.20	0.20	0.79	0.45	0.46	0.67	0.35	0.35
Avail Cap(c_a), veh/h	330	0	551	146	423	360	293	744	765	181	579	568
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.2	0.0	18.0	23.7	18.2	18.2	20.5	10.1	10.1	23.1	12.3	12.3
Incr Delay (d2), s/veh	10.1	0.0	2.3	16.4	0.4	0.4	10.2	2.0	1.9	11.7	1.6	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	1.6	0.0	2.9	0.3	0.6	0.6	2.9	3.6	3.7	0.8	2.3	2.3
LnGrp Delay(d),s/veh	32.3	0.0	20.3	40.0	18.6	18.7	30.7	12.1	12.0	34.8	13.9	14.0
LnGrp LOS	C		C	D	B	B	C	B	B	C	B	B
Approach Vol, veh/h		314			115			862			443	
Approach Delay, s/veh		23.9			21.6			15.8			15.9	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	24.4	4.8	13.6	10.1	20.0	7.3	11.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	19.0	4.0	16.0	8.0	16.0	9.0	11.0
Max Q Clear Time (g_c+I1), s	3.1	8.6	2.4	7.9	6.7	6.3	4.6	3.2
Green Ext Time (p_c), s	0.0	4.8	0.0	1.1	0.1	4.6	0.1	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.7
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	0	52	1	0	17	38	0	0	0	0	35
Future Vol, veh/h	0	0	52	1	0	17	38	0	0	0	0	35
Peak Hour Factor	0.92	0.84	0.84	0.84	0.92	0.84	0.84	0.84	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	11	11	11	2	3	3	3
Mvmt Flow	0	0	62	1	0	20	45	0	0	0	0	42
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	7.4	7.7	6.8
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	31%	100%
Vol Thru, %	0%	98%	69%	0%
Vol Right, %	100%	2%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	35	53	55	1
LT Vol	0	0	17	1
Through Vol	0	52	38	0
RT Vol	35	1	0	0
Lane Flow Rate	42	63	65	1
Geometry Grp	1	1	1	1
Degree of Util (X)	0.041	0.071	0.078	0.001
Departure Headway (Hd)	3.572	4.046	4.271	4.388
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	990	885	840	807
Service Time	1.639	2.071	2.292	2.46
HCM Lane V/C Ratio	0.042	0.071	0.077	0.001
HCM Control Delay	6.8	7.4	7.7	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.3	0

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	1	0	0
Future Vol, veh/h	0	1	0	0
Peak Hour Factor	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	1	0	0
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	7.5
HCM LOS	A

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	35	0	0	12	43	0	5	17
Future Vol, veh/h	0	35	0	0	12	43	0	5	17
Peak Hour Factor	0.92	0.86	0.86	0.92	0.86	0.86	0.92	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	41	0	0	14	50	0	6	20
Number of Lanes	0	1	0	0	1	0	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.5	6.8	7.3
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	100%	23%
Vol Thru, %	22%	0%	77%
Vol Right, %	78%	0%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	55	35	22
LT Vol	0	35	5
Through Vol	12	0	17
RT Vol	43	0	0
Lane Flow Rate	64	41	26
Geometry Grp	1	1	1
Degree of Util (X)	0.063	0.048	0.029
Departure Headway (Hd)	3.555	4.29	4.099
Convergence, Y/N	Yes	Yes	Yes
Cap	1005	835	873
Service Time	1.584	2.313	2.128
HCM Lane V/C Ratio	0.064	0.049	0.03
HCM Control Delay	6.8	7.5	7.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0.2	0.1

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	21	11	4	0	43	13	2	0	5	54	32
Future Vol, veh/h	0	21	11	4	0	43	13	2	0	5	54	32
Peak Hour Factor	0.92	0.97	0.97	0.97	0.92	0.97	0.97	0.97	0.92	0.97	0.97	0.97
Heavy Vehicles, %	2	3	3	3	2	5	5	5	2	7	7	7
Mvmt Flow	0	22	11	4	0	44	13	2	0	5	56	33
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	8.3	8.6	7.7
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	5%	66%	0%	77%	0%	2%
Vol Thru, %	59%	34%	0%	23%	0%	76%
Vol Right, %	35%	0%	100%	0%	100%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	91	32	4	56	2	95
LT Vol	5	21	0	43	0	2
Through Vol	54	11	0	13	0	72
RT Vol	32	0	4	0	2	21
Lane Flow Rate	94	33	4	58	2	98
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.109	0.049	0.005	0.087	0.002	0.113
Departure Headway (Hd)	4.182	5.362	4.328	5.428	4.339	4.165
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	860	670	829	663	827	864
Service Time	2.19	3.075	2.042	3.141	2.052	2.173
HCM Lane V/C Ratio	0.109	0.049	0.005	0.087	0.002	0.113
HCM Control Delay	7.7	8.4	7.1	8.7	7.1	7.7
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.4	0.2	0	0.3	0	0.4

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	2	72	21
Future Vol, veh/h	0	2	72	21
Peak Hour Factor	0.92	0.97	0.97	0.97
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	2	74	22
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	7.7
HCM LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	0	211	1	0	1	105	748	0	0	489	54
Future Volume (veh/h)	100	0	211	1	0	1	105	748	0	0	489	54
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1267	1900	1863	1863	1900	0	1863	1900
Adj Flow Rate, veh/h	104	0	220	1	0	1	109	779	0	0	509	56
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	0	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	50	50	50	2	2	2	0	2	2
Cap, veh/h	421	0	299	165	21	84	619	2348	0	0	1725	189
Arrive On Green	0.19	0.00	0.19	0.19	0.00	0.19	0.06	0.66	0.00	0.00	0.54	0.54
Sat Flow, veh/h	1487	0	1559	329	110	439	1774	3632	0	0	3304	352
Grp Volume(v), veh/h	104	0	220	2	0	0	109	779	0	0	280	285
Grp Sat Flow(s),veh/h/ln	1487	0	1559	879	0	0	1774	1770	0	0	1770	1794
Q Serve(g_s), s	0.0	0.0	7.1	0.0	0.0	0.0	1.3	5.0	0.0	0.0	4.6	4.6
Cycle Q Clear(g_c), s	2.7	0.0	7.1	2.7	0.0	0.0	1.3	5.0	0.0	0.0	4.6	4.6
Prop In Lane	1.00		1.00	0.50		0.50	1.00		0.00	0.00		0.20
Lane Grp Cap(c), veh/h	421	0	299	270	0	0	619	2348	0	0	950	963
V/C Ratio(X)	0.25	0.00	0.74	0.01	0.00	0.00	0.18	0.33	0.00	0.00	0.29	0.30
Avail Cap(c_a), veh/h	602	0	502	387	0	0	763	2348	0	0	950	963
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	0.0	20.2	17.4	0.0	0.0	4.2	3.9	0.0	0.0	6.8	6.8
Incr Delay (d2), s/veh	0.4	0.0	5.0	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	3.4	0.0	0.0	0.0	0.6	2.5	0.0	0.0	2.5	2.5
LnGrp Delay(d),s/veh	18.9	0.0	25.2	17.4	0.0	0.0	4.4	4.2	0.0	0.0	7.5	7.5
LnGrp LOS	B		C	B			A	A			A	A
Approach Vol, veh/h		324			2			888			565	
Approach Delay, s/veh		23.1			17.4			4.3			7.5	
Approach LOS		C			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		39.4		13.7	6.7	32.7		13.7
Change Period (Y+Rc), s		* 4.2		3.5	3.5	* 4.2		3.5
Max Green Setting (Gmax), s		* 35		17.1	7.5	* 24		17.1
Max Q Clear Time (g_c+I1), s		7.0		9.1	3.3	6.6		4.7
Green Ext Time (p_c), s		23.0		1.2	0.1	15.2		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	8.8
HCM 2010 LOS	A

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	303	66	787	411	80	621
Future Volume (veh/h)	303	66	787	411	80	621
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	309	67	803	0	82	634
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	579	267	1775	794	104	2247
Arrive On Green	0.17	0.17	0.50	0.00	0.06	0.63
Sat Flow, veh/h	3442	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	309	67	803	0	82	634
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1770
Q Serve(g_s), s	3.8	1.7	6.8	0.0	2.1	3.7
Cycle Q Clear(g_c), s	3.8	1.7	6.8	0.0	2.1	3.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	579	267	1775	794	104	2247
V/C Ratio(X)	0.53	0.25	0.45	0.00	0.79	0.28
Avail Cap(c_a), veh/h	1252	576	1803	807	247	2560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	16.9	7.5	0.0	21.7	3.8
Incr Delay (d2), s/veh	1.6	1.0	0.8	0.0	12.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.8	3.4	0.0	1.4	1.9
LnGrp Delay(d),s/veh	19.4	17.9	8.3	0.0	34.3	4.1
LnGrp LOS	B	B	A		C	A
Approach Vol, veh/h	376		803			716
Approach Delay, s/veh	19.1		8.3			7.6
Approach LOS	B		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.2	27.6				33.9		12.9
Change Period (Y+Rc), s	3.5	* 4.2				* 4.2		5.0
Max Green Setting (Gmax), s	6.5	* 24				* 34		17.0
Max Q Clear Time (g_c+I1), s	4.1	8.8				5.7		5.8
Green Ext Time (p_c), s	0.0	13.5				23.9		2.1

Intersection Summary	
HCM 2010 Ctrl Delay	10.2
HCM 2010 LOS	B

Notes

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

Intersection	
Int Delay, s/veh	8.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	2	10	75	168	6	6	77	34	102	0	0	0
Future Vol, veh/h	2	10	75	168	6	6	77	34	102	0	0	0
Conflicting Peds, #/hr	25	0	0	0	0	25	25	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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	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	2	10	78	175	6	6	80	35	106	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	305	327	25	293	274	114	25	0	0
Stage 1	25	25	-	249	249	-	-	-	-
Stage 2	280	302	-	44	25	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	-	-	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	647	591	1051	659	633	939	1589	-	-
Stage 1	-	-	-	755	701	-	-	-	-
Stage 2	727	664	-	-	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	598	547	1029	575	586	939	1589	-	-
Mov Cap-2 Maneuver	598	547	-	575	586	-	-	-	-
Stage 1	-	-	-	713	662	-	-	-	-
Stage 2	676	627	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	9.3	14.1	2.7
HCM LOS	A	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	1589	-	-	921	583
HCM Lane V/C Ratio	0.05	-	-	0.098	0.322
HCM Control Delay (s)	7.4	0	-	9.3	14.1
HCM Lane LOS	A	A	-	A	B
HCM 95th %tile Q(veh)	0.2	-	-	0.3	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	373	3	21	338	192	0	0	91	152
Future Volume (veh/h)	0	0	0	373	3	21	338	192	0	0	91	152
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.96
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1900	1863	0	0	1863	1900
Adj Flow Rate, veh/h				385	3	22	348	198	0	0	94	157
Adj No. of Lanes				0	1	1	0	1	0	0	1	0
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				454	4	408	403	229	0	0	104	174
Arrive On Green				0.26	0.26	0.26	0.35	0.35	0.00	0.00	0.17	0.17
Sat Flow, veh/h				1761	14	1583	1151	655	0	0	610	1018
Grp Volume(v), veh/h				388	0	22	546	0	0	0	0	251
Grp Sat Flow(s),veh/h/ln				1775	0	1583	1805	0	0	0	0	1628
Q Serve(g_s), s				12.2	0.0	0.6	16.5	0.0	0.0	0.0	0.0	8.9
Cycle Q Clear(g_c), s				12.2	0.0	0.6	16.5	0.0	0.0	0.0	0.0	8.9
Prop In Lane				0.99		1.00	0.64		0.00	0.00		0.63
Lane Grp Cap(c), veh/h				458	0	408	632	0	0	0	0	278
V/C Ratio(X)				0.85	0.00	0.05	0.86	0.00	0.00	0.00	0.00	0.90
Avail Cap(c_a), veh/h				539	0	481	745	0	0	0	0	278
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				20.7	0.0	16.4	17.8	0.0	0.0	0.0	0.0	23.9
Incr Delay (d2), s/veh				11.1	0.0	0.1	9.5	0.0	0.0	0.0	0.0	30.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.3	0.0	0.3	9.9	0.0	0.0	0.0	0.0	6.3
LnGrp Delay(d),s/veh				31.7	0.0	16.4	27.3	0.0	0.0	0.0	0.0	54.5
LnGrp LOS				C		B	C					D
Approach Vol, veh/h					410			546			251	
Approach Delay, s/veh					30.9			27.3			54.5	
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		25.1				14.2		19.3
Change Period (Y+Rc), s		4.6				4.2		4.2
Max Green Setting (Gmax), s		24.2				10.0		17.8
Max Q Clear Time (g_c+I1), s		18.5				10.9		14.2
Green Ext Time (p_c), s		2.0				0.0		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	34.2
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	66	16	298	0	0	0	0	464	694	23	441	0
Future Vol, veh/h	66	16	298	0	0	0	0	464	694	23	441	0
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	-	-	200	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	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	70	17	317	0	0	0	0	494	738	24	469	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1012	1012	469	-	0	0	494	0	0
Stage 1	518	518	-	-	-	-	-	-	-
Stage 2	494	494	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	265	239	594	0	-	-	1070	-	0
Stage 1	598	533	-	0	-	-	-	-	0
Stage 2	613	546	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	257	0	594	-	-	-	1070	-	-
Mov Cap-2 Maneuver	257	0	-	-	-	-	-	-	-
Stage 1	580	0	-	-	-	-	-	-	-
Stage 2	613	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.6	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	257	594	1070	-
HCM Lane V/C Ratio	-	-	0.339	0.534	0.023	-
HCM Control Delay (s)	-	-	26	17.8	8.4	0
HCM Lane LOS	-	-	D	C	A	A
HCM 95th %tile Q(veh)	-	-	1.4	3.1	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	287	836	439	176	482	276	283	505	153	199	395	80
Future Volume (veh/h)	287	836	439	176	482	276	283	505	153	199	395	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	299	871	457	183	502	288	295	526	159	207	411	83
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	319	1214	533	212	1001	437	317	1069	469	304	873	175
Arrive On Green	0.18	0.34	0.34	0.12	0.28	0.28	0.09	0.30	0.30	0.09	0.30	0.30
Sat Flow, veh/h	1774	3539	1553	1774	3539	1546	3442	3539	1553	3442	2927	585
Grp Volume(v), veh/h	299	871	457	183	502	288	295	526	159	207	247	247
Grp Sat Flow(s),veh/h/ln	1774	1770	1553	1774	1770	1546	1721	1770	1553	1721	1770	1742
Q Serve(g_s), s	18.8	24.2	31.0	11.4	13.4	18.5	9.6	13.8	9.0	6.6	12.9	13.1
Cycle Q Clear(g_c), s	18.8	24.2	31.0	11.4	13.4	18.5	9.6	13.8	9.0	6.6	12.9	13.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.34
Lane Grp Cap(c), veh/h	319	1214	533	212	1001	437	317	1069	469	304	528	520
V/C Ratio(X)	0.94	0.72	0.86	0.86	0.50	0.66	0.93	0.49	0.34	0.68	0.47	0.48
Avail Cap(c_a), veh/h	319	1214	533	253	1065	465	317	1069	469	305	528	520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.7	32.3	34.5	48.8	33.8	35.7	50.9	32.3	30.7	49.9	32.3	32.4
Incr Delay (d2), s/veh	34.4	2.3	13.5	22.1	0.6	3.7	33.1	1.6	2.0	6.0	3.0	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.3	12.2	15.2	6.9	6.6	8.4	6.0	7.0	4.1	3.4	6.7	6.8
LnGrp Delay(d),s/veh	80.2	34.6	48.1	70.9	34.4	39.3	84.0	33.9	32.6	56.0	35.3	35.5
LnGrp LOS	F	C	D	E	C	D	F	C	C	E	D	D
Approach Vol, veh/h		1627			973			980			701	
Approach Delay, s/veh		46.8			42.7			48.8			41.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	38.7	17.2	43.3	14.1	38.3	24.0	36.6
Change Period (Y+Rc), s	3.7	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Green Setting (Gmax), s	10.0	34.1	16.1	38.2	10.4	33.7	20.3	34.0
Max Q Clear Time (g_c+I1), s	8.6	15.8	13.4	33.0	11.6	15.1	20.8	20.5
Green Ext Time (p_c), s	0.1	9.4	0.1	4.7	0.0	9.4	0.0	10.3

Intersection Summary	
HCM 2010 Ctrl Delay	45.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	80	74	85	212	43	151	427	39	17	769	170
Future Volume (veh/h)	65	80	74	85	212	43	151	427	39	17	769	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1845	1845	1845	1827	1827	1827
Adj Flow Rate, veh/h	71	88	81	93	233	47	166	469	43	19	845	187
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	237	249	209	339	287	58	202	1536	687	29	1201	537
Arrive On Green	0.13	0.13	0.13	0.19	0.19	0.19	0.12	0.44	0.44	0.02	0.35	0.35
Sat Flow, veh/h	1774	1863	1562	1774	1505	304	1757	3505	1568	1740	3471	1553
Grp Volume(v), veh/h	71	88	81	93	0	280	166	469	43	19	845	187
Grp Sat Flow(s),veh/h/ln	1774	1863	1562	1774	0	1809	1757	1752	1568	1740	1736	1553
Q Serve(g_s), s	3.2	3.8	4.2	3.9	0.0	13.0	8.1	7.6	1.4	1.0	18.4	7.8
Cycle Q Clear(g_c), s	3.2	3.8	4.2	3.9	0.0	13.0	8.1	7.6	1.4	1.0	18.4	7.8
Prop In Lane	1.00		1.00	1.00		0.17	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	237	249	209	339	0	345	202	1536	687	29	1201	537
V/C Ratio(X)	0.30	0.35	0.39	0.27	0.00	0.81	0.82	0.31	0.06	0.65	0.70	0.35
Avail Cap(c_a), veh/h	689	723	606	433	0	442	297	1784	798	113	1426	638
HCM Platoon Ratio	1.00	1.00	1.00	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	34.3	34.5	34.7	30.3	0.0	33.9	37.9	15.9	14.2	42.8	24.8	21.3
Incr Delay (d2), s/veh	0.7	0.9	1.2	0.9	0.0	11.9	11.1	0.1	0.0	21.3	1.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	2.0	1.9	2.0	0.0	7.6	4.5	3.7	0.6	0.6	9.0	3.4
LnGrp Delay(d),s/veh	35.0	35.4	35.9	31.2	0.0	45.8	49.0	16.1	14.3	64.1	26.2	21.8
LnGrp LOS	C	D	D	C		D	D	B	B	E	C	C
Approach Vol, veh/h		240			373			678			1051	
Approach Delay, s/veh		35.4			42.2			24.0			26.1	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	43.7		16.4	14.3	35.6		21.3
Change Period (Y+Rc), s	* 4.7	5.3		* 4.7	* 4.2	5.3		4.6
Max Green Setting (Gmax), s	* 5.7	44.6		* 34	* 15	36.0		21.4
Max Q Clear Time (g_c+I1), s	3.0	9.6		6.2	10.1	20.4		15.0
Green Ext Time (p_c), s	0.0	15.8		0.9	0.2	9.9		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	29.0
HCM 2010 LOS	C

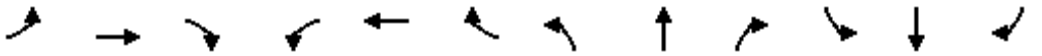
Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	0	3	0	0	97	0	1	14	0	588	348
Future Volume (veh/h)	85	0	3	0	0	97	0	1	14	0	588	348
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1667	1667	0	1863	1863	0	1845	1900	0	1845	1845
Adj Flow Rate, veh/h	90	0	0	0	0	0	0	1	15	0	626	0
Adj No. of Lanes	0	1	1	0	1	1	0	2	0	0	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	14	14	14	0	2	2	0	3	3	0	3	3
Cap, veh/h	128	0	114	0	10	9	0	839	749	0	1677	750
Arrive On Green	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.48	0.00	0.48	0.00
Sat Flow, veh/h	1587	0	1417	0	1863	1583	0	1845	1565	0	3597	1568
Grp Volume(v), veh/h	90	0	0	0	0	0	0	1	15	0	626	0
Grp Sat Flow(s),veh/h/ln	1587	0	1417	0	1863	1583	0	1752	1565	0	1752	1568
Q Serve(g_s), s	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	2.1	0.0
Cycle Q Clear(g_c), s	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	2.1	0.0
Prop In Lane	1.00		1.00	0.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	128	0	114	0	10	9	0	839	749	0	1677	750
V/C Ratio(X)	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.37	0.00
Avail Cap(c_a), veh/h	1313	0	1172	0	719	611	0	2705	2416	0	5218	2334
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	8.1	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	0.0	3.0	0.0
Incr Delay (d2), s/veh	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
LnGrp Delay(d),s/veh	15.1	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	0.0	3.1	0.0
LnGrp LOS	B							A	A		A	
Approach Vol, veh/h		90			0			16			626	
Approach Delay, s/veh		15.1			0.0			2.5			3.1	
Approach LOS		B						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		12.7		5.5		12.7		0.0
Change Period (Y+Rc), s		* 4		4.0		4.0		3.0
Max Green Setting (Gmax), s		* 28		15.0		27.0		7.0
Max Q Clear Time (g_c+I1), s		2.1		3.0		4.1		0.0
Green Ext Time (p_c), s		4.7		0.3		4.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	4.6
HCM 2010 LOS	A

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	399	1	36	411	140	0	0	74	98
Future Volume (vph)	0	0	0	399	1	36	411	140	0	0	74	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.2	4.2		4.6			4.2	4.2
Lane Util. Factor					1.00	1.00		1.00			1.00	1.00
Frpb, ped/bikes					1.00	1.00		1.00			1.00	0.92
Flpb, ped/bikes					1.00	1.00		1.00			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					0.95	1.00		0.96			1.00	1.00
Satd. Flow (prot)					1707	1524		1778			1827	1429
Flt Permitted					0.95	1.00		0.96			1.00	1.00
Satd. Flow (perm)					1707	1524		1778			1827	1429
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	0	0	0	469	1	42	484	165	0	0	87	115
RTOR Reduction (vph)	0	0	0	0	0	29	0	0	0	0	0	102
Lane Group Flow (vph)	0	0	0	0	470	13	0	649	0	0	87	13
Confl. Peds. (#/hr)												15
Heavy Vehicles (%)	2%	2%	2%	6%	6%	6%	3%	3%	3%	4%	4%	4%
Turn Type				Split	NA	Perm	Split	NA			NA	Perm
Protected Phases				8	8		2	2			6	
Permitted Phases						8						6
Actuated Green, G (s)					25.9	25.9		33.5			9.1	9.1
Effective Green, g (s)					25.9	25.9		33.5			9.1	9.1
Actuated g/C Ratio					0.32	0.32		0.41			0.11	0.11
Clearance Time (s)					4.2	4.2		4.6			4.2	4.2
Vehicle Extension (s)					3.5	3.5		3.5			3.5	3.5
Lane Grp Cap (vph)					542	484		730			203	159
v/s Ratio Prot					c0.28			c0.36			c0.05	
v/s Ratio Perm						0.01						0.01
v/c Ratio					0.87	0.03		0.89			0.43	0.08
Uniform Delay, d1					26.2	19.1		22.3			33.8	32.5
Progression Factor					1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2					14.0	0.0		13.0			1.7	0.3
Delay (s)					40.2	19.2		35.3			35.5	32.7
Level of Service					D	B		D			D	C
Approach Delay (s)		0.0			38.4			35.3			33.9	
Approach LOS		A			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	36.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	81.5	Sum of lost time (s)	13.0
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)	136	309	168	79	654	238	406	384	107	179	346	87
Future Volume (veh/h)	136	309	168	79	654	238	406	384	107	179	346	87
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1863	1863	1863	1810	1810	1900
Adj Flow Rate, veh/h	156	355	193	91	752	274	467	441	123	206	398	100
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	2	2	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	4	4	4	4	4	4	2	2	2	5	5	5
Cap, veh/h	177	1117	655	158	1078	624	347	1159	654	326	883	219
Arrive On Green	0.10	0.32	0.32	0.09	0.31	0.31	0.10	0.33	0.33	0.10	0.32	0.32
Sat Flow, veh/h	1740	3471	1547	1740	3471	1521	3442	3539	1559	3343	2723	677
Grp Volume(v), veh/h	156	355	193	91	752	274	467	441	123	206	250	248
Grp Sat Flow(s),veh/h/ln	1740	1736	1547	1740	1736	1521	1721	1770	1559	1672	1719	1681
Q Serve(g_s), s	9.0	7.9	8.4	5.1	19.5	13.3	10.3	9.8	5.1	6.0	11.7	12.0
Cycle Q Clear(g_c), s	9.0	7.9	8.4	5.1	19.5	13.3	10.3	9.8	5.1	6.0	11.7	12.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	177	1117	655	158	1078	624	347	1159	654	326	557	545
V/C Ratio(X)	0.88	0.32	0.29	0.58	0.70	0.44	1.35	0.38	0.19	0.63	0.45	0.46
Avail Cap(c_a), veh/h	177	1190	687	170	1176	667	347	1159	654	377	557	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.2	26.2	19.4	44.6	31.0	21.8	45.9	26.4	18.8	44.3	27.3	27.4
Incr Delay (d2), s/veh	36.3	0.2	0.4	4.1	1.9	0.7	173.4	1.0	0.6	2.7	2.6	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	3.8	3.7	2.6	9.6	5.7	13.2	4.9	2.3	2.9	5.9	5.9
LnGrp Delay(d),s/veh	81.5	26.4	19.8	48.7	32.9	22.5	219.3	27.3	19.4	47.0	29.9	30.1
LnGrp LOS	F	C	B	D	C	C	F	C	B	D	C	C
Approach Vol, veh/h		704			1117			1031			704	
Approach Delay, s/veh		36.8			31.6			113.3			35.0	
Approach LOS		D			C			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	38.0	12.9	37.5	14.0	37.7	14.1	36.3
Change Period (Y+Rc), s	3.7	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Green Setting (Gmax), s	11.5	31.9	10.0	35.0	10.3	33.1	10.4	34.6
Max Q Clear Time (g_c+I1), s	8.0	11.8	7.1	10.4	12.3	14.0	11.0	21.5
Green Ext Time (p_c), s	0.2	8.9	0.0	14.4	0.0	8.7	0.0	9.2

Intersection Summary	
HCM 2010 Ctrl Delay	57.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	264	216	84	81	127	48	115	901	196	53	596	191
Future Volume (veh/h)	264	216	84	81	127	48	115	901	196	53	596	191
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	252	263	88	85	134	51	121	948	206	56	627	201
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	359	377	316	241	175	67	166	1452	650	72	1283	573
Arrive On Green	0.20	0.20	0.20	0.14	0.14	0.14	0.09	0.41	0.41	0.04	0.36	0.36
Sat Flow, veh/h	1774	1863	1562	1774	1287	490	1774	3539	1583	1774	3539	1581
Grp Volume(v), veh/h	252	263	88	85	0	185	121	948	206	56	627	201
Grp Sat Flow(s),veh/h/ln	1774	1863	1562	1774	0	1776	1774	1770	1583	1774	1770	1581
Q Serve(g_s), s	12.1	12.0	4.4	4.0	0.0	9.2	6.1	19.8	8.1	2.9	12.6	8.5
Cycle Q Clear(g_c), s	12.1	12.0	4.4	4.0	0.0	9.2	6.1	19.8	8.1	2.9	12.6	8.5
Prop In Lane	1.00		1.00	1.00		0.28	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	359	377	316	241	0	242	166	1452	650	72	1283	573
V/C Ratio(X)	0.70	0.70	0.28	0.35	0.00	0.77	0.73	0.65	0.32	0.78	0.49	0.35
Avail Cap(c_a), veh/h	660	693	581	356	0	357	310	1734	776	161	1456	650
HCM Platoon Ratio	1.00	1.00	1.00	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	34.0	33.9	30.9	35.9	0.0	38.2	40.4	21.8	18.3	43.6	22.6	21.3
Incr Delay (d2), s/veh	2.5	2.3	0.5	1.9	0.0	10.7	6.0	0.8	0.3	16.4	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	6.4	1.9	2.1	0.0	5.2	3.3	9.8	3.6	1.7	6.2	3.8
LnGrp Delay(d),s/veh	36.5	36.3	31.4	37.8	0.0	48.8	46.4	22.5	18.6	59.9	23.0	21.8
LnGrp LOS	D	D	C	D		D	D	C	B	E	C	C
Approach Vol, veh/h		603			270			1275			884	
Approach Delay, s/veh		35.6			45.4			24.2			25.0	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.4	42.9		23.3	12.8	38.5		17.1
Change Period (Y+Rc), s	* 4.7	5.3		* 4.7	* 4.2	5.3		4.6
Max Green Setting (Gmax), s	* 8.3	44.9		* 34	* 16	37.7		18.4
Max Q Clear Time (g_c+I1), s	4.9	21.8		14.1	8.1	14.6		11.2
Green Ext Time (p_c), s	0.0	15.8		2.5	0.2	15.8		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	28.6
HCM 2010 LOS	C

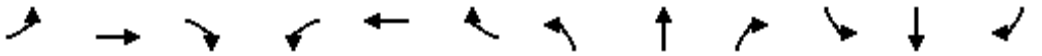
Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	307	0	6	0	0	90	0	1	13	0	570	191
Future Volume (veh/h)	307	0	6	0	0	90	0	1	13	0	570	191
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	0	1863	1863	0	1863	1900	0	1863	1863
Adj Flow Rate, veh/h	327	0	0	0	0	0	0	1	14	0	606	0
Adj No. of Lanes	0	1	1	0	1	1	0	2	0	0	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	0	2	2	0	2	2	0	2	2
Cap, veh/h	504	0	449	0	8	7	0	671	600	0	1343	601
Arrive On Green	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38	0.00	0.38	0.00
Sat Flow, veh/h	1774	0	1583	0	1863	1583	0	1863	1581	0	3632	1583
Grp Volume(v), veh/h	327	0	0	0	0	0	0	1	14	0	606	0
Grp Sat Flow(s),veh/h/ln	1774	0	1583	0	1863	1583	0	1770	1581	0	1770	1583
Q Serve(g_s), s	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	3.0	0.0
Cycle Q Clear(g_c), s	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	3.0	0.0
Prop In Lane	1.00		1.00	0.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	504	0	449	0	8	7	0	671	600	0	1343	601
V/C Ratio(X)	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.45	0.00
Avail Cap(c_a), veh/h	1643	0	1467	0	392	333	0	1714	1531	0	3278	1467
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	7.5	0.0	0.0	0.0	0.0	0.0	0.0	4.6	4.6	0.0	5.5	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.5	0.0
LnGrp Delay(d),s/veh	8.9	0.0	0.0	0.0	0.0	0.0	0.0	4.6	4.6	0.0	5.8	0.0
LnGrp LOS	A							A	A		A	
Approach Vol, veh/h		327			0			15			606	
Approach Delay, s/veh		8.9			0.0			4.6			5.8	
Approach LOS		A						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		13.0		10.7		13.0		0.0
Change Period (Y+Rc), s		* 4		4.0		4.0		3.0
Max Green Setting (Gmax), s		* 23		22.0		22.0		5.0
Max Q Clear Time (g_c+I1), s		2.1		5.8		5.0		0.0
Green Ext Time (p_c), s		4.2		1.8		3.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	6.8
HCM 2010 LOS	A

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	373	3	21	338	192	0	0	91	152
Future Volume (vph)	0	0	0	373	3	21	338	192	0	0	91	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.2	4.2		4.6			4.2	4.2
Lane Util. Factor					1.00	1.00		1.00			1.00	1.00
Frpb, ped/bikes					1.00	1.00		1.00			1.00	0.94
Flpb, ped/bikes					1.00	1.00		1.00			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					0.95	1.00		0.97			1.00	1.00
Satd. Flow (prot)					1775	1583		1805			1863	1482
Flt Permitted					0.95	1.00		0.97			1.00	1.00
Satd. Flow (perm)					1775	1583		1805			1863	1482
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	0	385	3	22	348	198	0	0	94	157
RTOR Reduction (vph)	0	0	0	0	0	16	0	0	0	0	0	134
Lane Group Flow (vph)	0	0	0	0	388	6	0	546	0	0	94	23
Confl. Peds. (#/hr)												15
Turn Type				Split	NA	Perm	Split	NA			NA	Perm
Protected Phases				8	8		2	2			6	
Permitted Phases						8						6
Actuated Green, G (s)					16.3	16.3		21.5			8.7	8.7
Effective Green, g (s)					16.3	16.3		21.5			8.7	8.7
Actuated g/C Ratio					0.27	0.27		0.36			0.15	0.15
Clearance Time (s)					4.2	4.2		4.6			4.2	4.2
Vehicle Extension (s)					3.5	3.5		3.5			3.5	3.5
Lane Grp Cap (vph)					486	433		652			272	216
v/s Ratio Prot					c0.22			c0.30			c0.05	
v/s Ratio Perm						0.00						0.02
v/c Ratio					0.80	0.01		0.84			0.35	0.11
Uniform Delay, d1					20.1	15.7		17.4			22.8	22.0
Progression Factor					1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2					9.1	0.0		9.4			0.9	0.3
Delay (s)					29.2	15.8		26.8			23.7	22.3
Level of Service					C	B		C			C	C
Approach Delay (s)		0.0			28.5			26.8			22.8	
Approach LOS		A			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	26.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	59.5	Sum of lost time (s)	13.0
Intersection Capacity Utilization	71.4%	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)	287	836	439	176	482	276	283	505	153	199	395	80
Future Volume (veh/h)	287	836	439	176	482	276	283	505	153	199	395	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	299	871	457	183	502	288	295	526	159	207	411	83
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	319	1212	678	212	998	576	317	1070	659	305	874	175
Arrive On Green	0.18	0.34	0.34	0.12	0.28	0.28	0.09	0.30	0.30	0.09	0.30	0.30
Sat Flow, veh/h	1774	3539	1553	1774	3539	1546	3442	3539	1553	3442	2927	585
Grp Volume(v), veh/h	299	871	457	183	502	288	295	526	159	207	247	247
Grp Sat Flow(s),veh/h/ln	1774	1770	1553	1774	1770	1546	1721	1770	1553	1721	1770	1742
Q Serve(g_s), s	18.8	24.2	26.6	11.4	13.4	16.3	9.6	13.7	7.4	6.6	12.8	13.1
Cycle Q Clear(g_c), s	18.8	24.2	26.6	11.4	13.4	16.3	9.6	13.7	7.4	6.6	12.8	13.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.34
Lane Grp Cap(c), veh/h	319	1212	678	212	998	576	317	1070	659	305	529	520
V/C Ratio(X)	0.94	0.72	0.67	0.86	0.50	0.50	0.93	0.49	0.24	0.68	0.47	0.47
Avail Cap(c_a), veh/h	319	1212	678	253	1067	606	317	1070	659	305	529	520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.6	32.4	25.6	48.7	33.9	27.5	50.9	32.3	21.0	49.9	32.2	32.3
Incr Delay (d2), s/veh	34.2	2.3	3.0	22.1	0.6	1.0	32.8	1.6	0.9	6.0	3.0	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.3	12.2	12.0	6.9	6.6	7.1	6.0	7.0	3.3	3.4	6.7	6.8
LnGrp Delay(d),s/veh	79.8	34.6	28.5	70.8	34.4	28.4	83.7	33.9	21.9	55.8	35.2	35.4
LnGrp LOS	E	C	C	E	C	C	F	C	C	E	D	D
Approach Vol, veh/h		1627			973			980			701	
Approach Delay, s/veh		41.2			39.5			46.9			41.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	38.7	17.2	43.2	14.1	38.3	24.0	36.4
Change Period (Y+Rc), s	3.7	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Green Setting (Gmax), s	10.0	34.1	16.1	38.2	10.4	33.7	20.3	34.0
Max Q Clear Time (g_c+I1), s	8.6	15.7	13.4	28.6	11.6	15.1	20.8	18.3
Green Ext Time (p_c), s	0.1	9.4	0.1	8.3	0.0	9.4	0.0	12.1

Intersection Summary	
HCM 2010 Ctrl Delay	42.2
HCM 2010 LOS	D

Notes

Appendix E

Intersection
Level of Service
Calculations

Existing Plus Project
Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	108	97	227	0	325	0	64	145	0	0	0
Future Volume (veh/h)	1	108	97	227	0	325	0	64	145	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1845	1845	1845	0	1845	0	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	1	123	110	258	0	369	0	73	165	0	0	0
Adj No. of Lanes	0	2	1	1	0	1	0	1	1	0	1	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	0	3	0	6	6	2	2	2
Cap, veh/h	5	600	262	0	0	0	0	442	376	0	459	0
Arrive On Green	0.17	0.17	0.17	0.00	0.00	0.00	0.00	0.25	0.25	0.00	0.00	0.00
Sat Flow, veh/h	28	3568	1555		0		0	1792	1524	0	1863	0
Grp Volume(v), veh/h	66	58	110		0.0		0	73	165	0	0	0
Grp Sat Flow(s),veh/h/ln	1843	1752	1555				0	1792	1524	0	1863	0
Q Serve(g_s), s	0.5	0.5	1.0				0.0	0.5	1.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.5	0.5	1.0				0.0	0.5	1.5	0.0	0.0	0.0
Prop In Lane	0.02		1.00				0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	310	295	262				0	442	376	0	459	0
V/C Ratio(X)	0.21	0.20	0.42				0.00	0.17	0.44	0.00	0.00	0.00
Avail Cap(c_a), veh/h	2918	2774	2462				0	3180	2703	0	3305	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	5.8	5.8	6.0				0.0	4.8	5.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.4				0.0	0.1	0.3	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
%ile BackOfQ(50%),veh/ln	0.3	0.2	0.5				0.0	0.3	0.6	0.0	0.0	0.0
LnGrp Delay(d),s/veh	6.0	5.9	6.4				0.0	4.9	5.5	0.0	0.0	0.0
LnGrp LOS	A	A	A					A	A			
Approach Vol, veh/h		234						238			0	
Approach Delay, s/veh		6.2						5.3			0.0	
Approach LOS		A						A				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		8.2		8.0		8.2		
Change Period (Y+Rc), s		* 4.2		5.3		* 4.2		
Max Green Setting (Gmax), s		* 29		25.7		* 29		
Max Q Clear Time (g_c+I1), s		3.5		3.0		0.0		
Green Ext Time (p_c), s		0.5		0.6		0.0		

Intersection Summary	
HCM 2010 Ctrl Delay	5.7
HCM 2010 LOS	A

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	80	74	85	212	43	151	450	39	17	782	189
Future Volume (veh/h)	99	80	74	85	212	43	151	450	39	17	782	189
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	1845	1845	1900	1827	1827	1827
Adj Flow Rate, veh/h	98	103	81	93	233	47	166	495	43	19	859	208
Adj No. of Lanes	1	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	219	230	192	103	258	52	197	1405	122	29	1180	528
Arrive On Green	0.12	0.12	0.12	0.23	0.23	0.23	0.11	0.43	0.43	0.02	0.34	0.34
Sat Flow, veh/h	1774	1863	1560	449	1125	227	1757	3264	283	1740	3471	1553
Grp Volume(v), veh/h	98	103	81	373	0	0	166	265	273	19	859	208
Grp Sat Flow(s),veh/h/ln	1774	1863	1560	1800	0	0	1757	1752	1795	1740	1736	1553
Q Serve(g_s), s	4.9	4.9	4.6	19.4	0.0	0.0	8.9	9.8	9.8	1.0	20.9	9.8
Cycle Q Clear(g_c), s	4.9	4.9	4.6	19.4	0.0	0.0	8.9	9.8	9.8	1.0	20.9	9.8
Prop In Lane	1.00		1.00	0.25		0.13	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	219	230	192	413	0	0	197	754	772	29	1180	528
V/C Ratio(X)	0.45	0.45	0.42	0.90	0.00	0.00	0.84	0.35	0.35	0.66	0.73	0.39
Avail Cap(c_a), veh/h	626	658	551	437	0	0	197	775	794	103	1369	613
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	39.2	39.0	36.1	0.0	0.0	41.9	18.4	18.4	47.1	27.9	24.2
Incr Delay (d2), s/veh	1.4	1.4	1.5	22.6	0.0	0.0	26.8	0.3	0.3	22.8	1.8	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	2.6	2.1	12.2	0.0	0.0	5.8	4.8	4.9	0.7	10.3	4.3
LnGrp Delay(d),s/veh	40.6	40.5	40.5	58.6	0.0	0.0	68.7	18.8	18.8	69.9	29.7	24.8
LnGrp LOS	D	D	D	E			E	B	B	E	C	C
Approach Vol, veh/h		282			373			704			1086	
Approach Delay, s/veh		40.6			58.6			30.5			29.5	
Approach LOS		D			E			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	6.3	46.7		16.6	15.0	38.0		26.7
Change Period (Y+Rc), s	* 4.7	5.3		* 4.7	* 4.2	5.3		4.6
Max Green Setting (Gmax), s	* 5.7	42.6		* 34	* 11	38.0		23.4
Max Q Clear Time (g_c+I1), s	3.0	11.8		6.9	10.9	22.9		21.4
Green Ext Time (p_c), s	0.0	15.3		1.1	0.0	9.8		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	35.5
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	108	0	3	0	0	97	0	435	14	0	588	361
Future Vol, veh/h	108	0	3	0	0	97	0	435	14	0	588	361
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	0	-	-	0	-	-	-	-	-	75
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, %	14	14	14	2	2	2	3	3	3	3	3	3
Mvmt Flow	115	0	3	0	0	103	0	463	15	0	626	384

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	857	-	313	-	-	241	-	0	0	-	-	0
Stage 1	626	-	-	-	-	-	-	-	-	-	-	-
Stage 2	231	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.78	-	7.18	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	6.78	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.78	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.64	-	3.44	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	232	0	649	0	0	760	0	-	-	0	-	0
Stage 1	411	0	-	0	0	-	0	-	-	0	-	0
Stage 2	718	0	-	0	0	-	0	-	-	0	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	200	-	649	-	-	759	-	-	-	-	-	-
Mov Cap-2 Maneuver	311	-	-	-	-	-	-	-	-	-	-	-
Stage 1	411	-	-	-	-	-	-	-	-	-	-	-
Stage 2	620	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	22.9	10.5	0	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	WBLn1	SBT
Capacity (veh/h)	-	-	311	649	759	-
HCM Lane V/C Ratio	-	-	0.369	0.005	0.136	-
HCM Control Delay (s)	-	-	23.2	10.6	10.5	-
HCM Lane LOS	-	-	C	B	B	-
HCM 95th %tile Q(veh)	-	-	1.6	0	0.5	-

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	69	3	114	42	3	358
Future Vol, veh/h	69	3	114	42	3	358
Conflicting Peds, #/hr	0	2	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	9	9	7	7	4	4
Mvmt Flow	78	3	128	47	3	402

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	365	95	0	0	180	0
Stage 1	157	-	-	-	-	-
Stage 2	208	-	-	-	-	-
Critical Hdwy	6.98	7.08	-	-	4.18	-
Critical Hdwy Stg 1	5.98	-	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.24	-
Pot Cap-1 Maneuver	590	921	-	-	1378	-
Stage 1	835	-	-	-	-	-
Stage 2	786	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	586	916	-	-	1376	-
Mov Cap-2 Maneuver	586	-	-	-	-	-
Stage 1	832	-	-	-	-	-
Stage 2	784	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	595	1376	-
HCM Lane V/C Ratio	-	-	0.136	0.002	-
HCM Control Delay (s)	-	-	12	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0	-

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	13	80	4	0	48	107	19	0	7	51	36
Future Vol, veh/h	0	13	80	4	0	48	107	19	0	7	51	36
Peak Hour Factor	0.92	0.86	0.86	0.86	0.92	0.86	0.86	0.86	0.92	0.86	0.86	0.86
Heavy Vehicles, %	2	17	17	17	2	8	8	8	2	7	7	7
Mvmt Flow	0	15	93	5	0	56	124	22	0	8	59	42
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	9.4	9.5	8.7
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	12%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	88%	0%	0%	95%	0%	85%	0%	78%
Vol Right, %	0%	100%	0%	5%	0%	15%	0%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	58	36	13	84	48	126	43	82
LT Vol	7	0	13	0	48	0	43	0
Through Vol	51	0	0	80	0	107	0	64
RT Vol	0	36	0	4	0	19	0	18
Lane Flow Rate	67	42	15	98	56	147	50	95
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.107	0.057	0.026	0.153	0.092	0.217	0.085	0.144
Departure Headway (Hd)	5.695	4.928	6.191	5.654	5.939	5.33	6.085	5.427
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	626	722	575	631	601	670	587	658
Service Time	3.459	2.693	3.959	3.422	3.698	3.089	3.846	3.187
HCM Lane V/C Ratio	0.107	0.058	0.026	0.155	0.093	0.219	0.085	0.144
HCM Control Delay	9.1	8	9.1	9.5	9.3	9.6	9.4	9.1
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.4	0.2	0.1	0.5	0.3	0.8	0.3	0.5

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	43	64	18
Future Vol, veh/h	0	43	64	18
Peak Hour Factor	0.92	0.86	0.86	0.86
Heavy Vehicles, %	2	7	7	7
Mvmt Flow	0	50	74	21
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	9.2
HCM LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	51	99	27	85	0	59	142	29	3	396	30
Future Volume (veh/h)	9	51	99	27	85	0	59	142	29	3	396	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1792	1792	1900	1743	1743	1900	1792	1792	1900
Adj Flow Rate, veh/h	10	55	106	29	91	0	63	153	31	3	426	32
Adj No. of Lanes	1	1	1	1	2	0	2	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	11	11	11	6	6	6	9	9	9	6	6	6
Cap, veh/h	17	292	246	47	637	0	159	1132	224	6	1171	88
Arrive On Green	0.01	0.17	0.17	0.03	0.19	0.00	0.05	0.41	0.41	0.00	0.36	0.36
Sat Flow, veh/h	1630	1712	1445	1707	3495	0	3221	2756	546	1707	3212	240
Grp Volume(v), veh/h	10	55	106	29	91	0	63	91	93	3	225	233
Grp Sat Flow(s),veh/h/ln	1630	1712	1445	1707	1703	0	1610	1656	1646	1707	1703	1750
Q Serve(g_s), s	0.3	1.2	2.8	0.7	0.9	0.0	0.8	1.4	1.5	0.1	4.1	4.1
Cycle Q Clear(g_c), s	0.3	1.2	2.8	0.7	0.9	0.0	0.8	1.4	1.5	0.1	4.1	4.1
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.33	1.00		0.14
Lane Grp Cap(c), veh/h	17	292	246	47	637	0	159	680	676	6	621	638
V/C Ratio(X)	0.59	0.19	0.43	0.62	0.14	0.00	0.40	0.13	0.14	0.54	0.36	0.37
Avail Cap(c_a), veh/h	153	1007	850	201	2084	0	303	955	949	161	982	1009
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00
Uniform Delay (d), s/veh	20.9	15.1	15.8	20.4	14.4	0.0	19.6	7.8	7.8	21.1	9.9	9.9
Incr Delay (d2), s/veh	27.9	0.4	1.7	12.8	0.1	0.0	1.6	0.4	0.4	62.1	1.6	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.6	1.2	0.5	0.5	0.0	0.4	0.7	0.8	0.1	2.2	2.2
LnGrp Delay(d),s/veh	48.9	15.5	17.5	33.3	14.6	0.0	21.2	8.2	8.2	83.2	11.5	11.5
LnGrp LOS	D	B	B	C	B		C	A	A	F	B	B
Approach Vol, veh/h		171			120			247			461	
Approach Delay, s/veh		18.7			19.1			11.5			12.0	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.1	22.0	5.2	11.2	6.1	20.0	4.4	12.0
Change Period (Y+Rc), s	4.0	4.5	4.0	4.0	4.0	4.5	4.0	4.0
Max Green Setting (Gmax), s	4.0	24.5	5.0	25.0	4.0	24.5	4.0	26.0
Max Q Clear Time (g_c+I1), s	2.1	3.5	2.7	4.8	2.8	6.1	2.3	2.9
Green Ext Time (p_c), s	0.0	10.1	0.0	1.6	0.0	9.2	0.0	1.7

Intersection Summary	
HCM 2010 Ctrl Delay	13.9
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	3.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	133	24	199	50	57	456
Future Vol, veh/h	133	24	199	50	57	456
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	9	9	7	7
Mvmt Flow	151	27	226	57	65	518

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	646	143	0	0	285	0
Stage 1	257	-	-	-	-	-
Stage 2	389	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.24	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.27	-
Pot Cap-1 Maneuver	404	879	-	-	1239	-
Stage 1	762	-	-	-	-	-
Stage 2	654	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	382	878	-	-	1239	-
Mov Cap-2 Maneuver	382	-	-	-	-	-
Stage 1	761	-	-	-	-	-
Stage 2	620	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.8	0	0.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	382	878	1239	-
HCM Lane V/C Ratio	-	-	0.396	0.031	0.052	-
HCM Control Delay (s)	-	-	20.5	9.2	8.1	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	1.8	0.1	0.2	-

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBU	SBL	SBR
Lane Configurations									
Traffic Vol, veh/h	0	13	87	0	144	28	0	13	18
Future Vol, veh/h	0	13	87	0	144	28	0	13	18
Peak Hour Factor	0.92	0.84	0.84	0.92	0.84	0.84	0.92	0.84	0.84
Heavy Vehicles, %	2	2	2	2	10	10	2	7	7
Mvmt Flow	0	15	104	0	171	33	0	15	21
Number of Lanes	0	1	1	0	1	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	8.2	8.6	7.7
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	42%
Vol Thru, %	0%	100%	84%	0%
Vol Right, %	0%	0%	16%	58%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	13	87	172	31
LT Vol	13	0	0	13
Through Vol	0	87	144	0
RT Vol	0	0	28	18
Lane Flow Rate	15	104	205	37
Geometry Grp	7	7	5	2
Degree of Util (X)	0.022	0.135	0.24	0.046
Departure Headway (Hd)	5.203	4.702	4.225	4.49
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	684	757	842	802
Service Time	2.964	2.462	2.293	2.49
HCM Lane V/C Ratio	0.022	0.137	0.243	0.046
HCM Control Delay	8.1	8.2	8.6	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.5	0.9	0.1

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	25	44	30	0	100	74	25	0	25	33	90
Future Vol, veh/h	0	25	44	30	0	100	74	25	0	25	33	90
Peak Hour Factor	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	7	7	7	2	7	7	7	2	15	15	15
Mvmt Flow	0	31	55	38	0	125	93	31	0	31	41	113
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	9.2	9.9	9.2
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	43%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	57%	0%	0%	59%	0%	75%	0%	81%
Vol Right, %	0%	100%	0%	41%	0%	25%	0%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	58	90	25	74	100	99	18	70
LT Vol	25	0	25	0	100	0	18	0
Through Vol	33	0	0	44	0	74	0	57
RT Vol	0	90	0	30	0	25	0	13
Lane Flow Rate	72	112	31	92	125	124	22	88
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.123	0.161	0.054	0.139	0.21	0.184	0.039	0.136
Departure Headway (Hd)	6.087	5.164	6.195	5.405	6.035	5.354	6.241	5.605
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	585	689	573	657	591	665	569	634
Service Time	3.868	2.944	3.985	3.193	3.813	3.131	4.031	3.395
HCM Lane V/C Ratio	0.123	0.163	0.054	0.14	0.212	0.186	0.039	0.139
HCM Control Delay	9.7	8.9	9.3	9.1	10.4	9.4	9.3	9.3
HCM Lane LOS	A	A	A	A	B	A	A	A
HCM 95th-tile Q	0.4	0.6	0.2	0.5	0.8	0.7	0.1	0.5

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	18	57	13
Future Vol, veh/h	0	18	57	13
Peak Hour Factor	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	23	71	16
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	9.3
HCM LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	17	49	16	37	18	46	155	25	41	423	116
Future Volume (veh/h)	86	17	49	16	37	18	46	155	25	41	423	116
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1900	1845	1845	1845	1759	1759	1900	1792	1792	1900
Adj Flow Rate, veh/h	93	18	53	17	40	20	50	168	27	45	460	126
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	9	9	3	3	3	8	8	8	6	6	6
Cap, veh/h	114	50	147	30	142	121	70	1284	203	66	1167	317
Arrive On Green	0.07	0.13	0.13	0.02	0.08	0.08	0.04	0.44	0.44	0.04	0.44	0.44
Sat Flow, veh/h	1660	389	1146	1757	1845	1568	1675	2891	457	1707	2645	719
Grp Volume(v), veh/h	93	0	71	17	40	20	50	96	99	45	295	291
Grp Sat Flow(s),veh/h/ln	1660	0	1535	1757	1845	1568	1675	1671	1677	1707	1703	1662
Q Serve(g_s), s	2.4	0.0	1.8	0.4	0.9	0.5	1.3	1.5	1.5	1.1	5.0	5.1
Cycle Q Clear(g_c), s	2.4	0.0	1.8	0.4	0.9	0.5	1.3	1.5	1.5	1.1	5.0	5.1
Prop In Lane	1.00		0.75	1.00		1.00	1.00		0.27	1.00		0.43
Lane Grp Cap(c), veh/h	114	0	197	30	142	121	70	742	745	66	751	733
V/C Ratio(X)	0.82	0.00	0.36	0.57	0.28	0.17	0.71	0.13	0.13	0.68	0.39	0.40
Avail Cap(c_a), veh/h	231	0	570	163	599	510	194	742	745	238	751	733
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	0.0	17.1	21.0	18.8	18.6	20.4	7.1	7.1	20.4	8.1	8.2
Incr Delay (d2), s/veh	13.0	0.0	1.1	15.6	1.1	0.6	12.6	0.4	0.4	11.7	1.5	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.8	0.3	0.5	0.2	0.8	0.7	0.8	0.7	2.6	2.7
LnGrp Delay(d),s/veh	32.8	0.0	18.2	36.7	19.8	19.2	33.0	7.4	7.4	32.1	9.7	9.8
LnGrp LOS	C		B	D	B	B	C	A	A	C	A	A
Approach Vol, veh/h		164			77			245			631	
Approach Delay, s/veh		26.5			23.4			12.6			11.3	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	23.1	4.7	9.5	5.8	23.0	7.0	7.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	18.0	4.0	16.0	5.0	19.0	6.0	14.0
Max Q Clear Time (g_c+I1), s	3.1	3.5	2.4	3.8	3.3	7.1	4.4	2.9
Green Ext Time (p_c), s	0.0	4.2	0.0	0.4	0.0	3.8	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	14.7
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	0	36	4	0	51	84	0	0	3	0	16
Future Vol, veh/h	0	0	36	4	0	51	84	0	0	3	0	16
Peak Hour Factor	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	7	7	7	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	45	5	0	64	105	0	0	4	0	20
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	7.4	8.1	7
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	16%	0%	38%	0%
Vol Thru, %	0%	90%	62%	0%
Vol Right, %	84%	10%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	19	40	135	2
LT Vol	3	0	51	0
Through Vol	0	36	84	0
RT Vol	16	4	0	2
Lane Flow Rate	24	50	169	2
Geometry Grp	1	1	1	1
Degree of Util (X)	0.026	0.057	0.192	0.003
Departure Headway (Hd)	3.942	4.131	4.092	4.655
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	914	863	878	773
Service Time	1.942	2.178	2.115	2.656
HCM Lane V/C Ratio	0.026	0.058	0.192	0.003
HCM Control Delay	7	7.4	8.1	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.7	0

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	0	0	2
Future Vol, veh/h	0	0	0	2
Peak Hour Factor	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	50	50	50
Mvmt Flow	0	0	0	3
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	7.7
HCM LOS	A

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	67	2	0	13	45	0	3	8
Future Vol, veh/h	0	67	2	0	13	45	0	3	8
Peak Hour Factor	0.92	0.91	0.91	0.92	0.91	0.91	0.92	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	9	9
Mvmt Flow	0	74	2	0	14	49	0	3	9
Number of Lanes	0	1	0	0	1	0	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.7	6.9	7.4
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	97%	27%
Vol Thru, %	22%	0%	73%
Vol Right, %	78%	3%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	58	69	11
LT Vol	0	67	3
Through Vol	13	0	8
RT Vol	45	2	0
Lane Flow Rate	64	76	12
Geometry Grp	1	1	1
Degree of Util (X)	0.064	0.089	0.014
Departure Headway (Hd)	3.609	4.243	4.289
Convergence, Y/N	Yes	Yes	Yes
Cap	986	845	830
Service Time	1.655	2.263	2.339
HCM Lane V/C Ratio	0.065	0.09	0.014
HCM Control Delay	6.9	7.7	7.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0.3	0

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	25	13	6	0	52	16	0	0	16	60	49
Future Vol, veh/h	0	25	13	6	0	52	16	0	0	16	60	49
Peak Hour Factor	0.92	0.83	0.83	0.83	0.92	0.83	0.83	0.83	0.92	0.83	0.83	0.83
Heavy Vehicles, %	2	3	3	3	2	6	6	6	2	3	3	3
Mvmt Flow	0	30	16	7	0	63	19	0	0	19	72	59
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	8.6	9.3	8.2
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	13%	66%	0%	76%	0%	2%
Vol Thru, %	48%	34%	0%	24%	100%	72%
Vol Right, %	39%	0%	100%	0%	0%	26%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	125	38	6	68	0	121
LT Vol	16	25	0	52	0	2
Through Vol	60	13	0	16	0	87
RT Vol	49	0	6	0	0	32
Lane Flow Rate	151	46	7	82	0	146
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.179	0.072	0.009	0.13	0	0.18
Departure Headway (Hd)	4.289	5.638	4.602	5.71	5.325	4.445
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	837	635	777	628	0	808
Service Time	2.31	3.373	2.336	3.443	3.058	2.466
HCM Lane V/C Ratio	0.18	0.072	0.009	0.131	0	0.181
HCM Control Delay	8.2	8.8	7.4	9.3	8.1	8.4
HCM Lane LOS	A	A	A	A	N	A
HCM 95th-tile Q	0.6	0.2	0	0.4	0	0.7

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations			↕	
Traffic Vol, veh/h	0	2	87	32
Future Vol, veh/h	0	2	87	32
Peak Hour Factor	0.92	0.83	0.83	0.83
Heavy Vehicles, %	2	9	9	9
Mvmt Flow	0	2	105	39
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	8.4
HCM LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	0	189	0	0	0	162	283	6	0	430	78
Future Volume (veh/h)	43	0	189	0	0	0	162	283	6	0	430	78
Number	7	4	14	3	8	18	5	2	12	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		0.99	1.00		1.00	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	1900	1776	1776	1900	1863	1900	1827	1827	1900	0	1810	1900
Adj Flow Rate, veh/h	48	0	210	0	0	0	180	314	7	0	478	87
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	0	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	7	7	7	2	2	2	4	4	4	0	5	5
Cap, veh/h	381	0	274	0	342	0	627	2326	52	0	1530	277
Arrive On Green	0.18	0.00	0.18	0.00	0.00	0.00	0.08	0.67	0.67	0.00	0.53	0.53
Sat Flow, veh/h	1330	0	1492	0	1863	0	1740	3471	77	0	2994	526
Grp Volume(v), veh/h	48	0	210	0	0	0	180	157	164	0	282	283
Grp Sat Flow(s),veh/h/ln	1330	0	1492	0	1863	0	1740	1736	1813	0	1719	1710
Q Serve(g_s), s	1.6	0.0	7.0	0.0	0.0	0.0	2.2	1.7	1.7	0.0	4.9	4.9
Cycle Q Clear(g_c), s	1.6	0.0	7.0	0.0	0.0	0.0	2.2	1.7	1.7	0.0	4.9	4.9
Prop In Lane	1.00		1.00	0.00		0.00	1.00		0.04	0.00		0.31
Lane Grp Cap(c), veh/h	381	0	274	0	342	0	627	1163	1215	0	906	901
V/C Ratio(X)	0.13	0.00	0.77	0.00	0.00	0.00	0.29	0.13	0.14	0.00	0.31	0.31
Avail Cap(c_a), veh/h	566	0	482	0	601	0	774	1163	1215	0	906	901
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	0.0	20.4	0.0	0.0	0.0	4.4	3.1	3.1	0.0	7.0	7.1
Incr Delay (d2), s/veh	0.2	0.0	6.3	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	3.3	0.0	0.0	0.0	1.0	0.9	0.9	0.0	2.5	2.5
LnGrp Delay(d),s/veh	18.4	0.0	26.7	0.0	0.0	0.0	4.6	3.4	3.4	0.0	7.9	8.0
LnGrp LOS	B		C				A	A	A		A	A
Approach Vol, veh/h		258			0			501			565	
Approach Delay, s/veh		25.2			0.0			3.8			8.0	
Approach LOS		C						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		39.5		13.2	7.5	32.0		13.2
Change Period (Y+Rc), s		* 4.2		3.5	3.5	* 4.2		3.5
Max Green Setting (Gmax), s		* 35		17.0	8.5	* 23		17.0
Max Q Clear Time (g_c+I1), s		3.7		9.0	4.2	6.9		0.0
Green Ext Time (p_c), s		17.6		0.9	0.2	11.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	9.7
HCM 2010 LOS	A

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	420	80	372	218	47	572
Future Volume (veh/h)	420	80	372	218	47	572
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1845	1845	1810	1810
Adj Flow Rate, veh/h	483	92	428	0	54	657
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	3	3	5	5
Cap, veh/h	801	369	1572	703	75	1952
Arrive On Green	0.23	0.23	0.45	0.00	0.04	0.57
Sat Flow, veh/h	3442	1583	3597	1568	1723	3529
Grp Volume(v), veh/h	483	92	428	0	54	657
Grp Sat Flow(s),veh/h/ln	1721	1583	1752	1568	1723	1719
Q Serve(g_s), s	5.8	2.2	3.5	0.0	1.4	4.7
Cycle Q Clear(g_c), s	5.8	2.2	3.5	0.0	1.4	4.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	801	369	1572	703	75	1952
V/C Ratio(X)	0.60	0.25	0.27	0.00	0.72	0.34
Avail Cap(c_a), veh/h	1269	584	1862	833	217	2520
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	15.8	14.4	8.0	0.0	21.8	5.3
Incr Delay (d2), s/veh	1.6	0.7	0.4	0.0	12.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	1.0	1.8	0.0	0.9	2.3
LnGrp Delay(d),s/veh	17.4	15.2	8.4	0.0	34.2	5.8
LnGrp LOS	B	B	A		C	A
Approach Vol, veh/h	575		428			711
Approach Delay, s/veh	17.0		8.4			7.9
Approach LOS	B		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	5.5	24.9				30.4		15.7
Change Period (Y+Rc), s	3.5	* 4.2				* 4.2		5.0
Max Green Setting (Gmax), s	5.8	* 25				* 34		17.0
Max Q Clear Time (g_c+I1), s	3.4	5.5				6.7		7.8
Green Ext Time (p_c), s	0.0	14.6				19.5		3.0

Intersection Summary	
HCM 2010 Ctrl Delay	11.1
HCM 2010 LOS	B

Notes

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

Intersection	
Int Delay, s/veh	12.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	2	6	97	162	10	9	111	31	85	0	0	0
Future Vol, veh/h	2	6	97	162	10	9	111	31	85	0	0	0
Conflicting Peds, #/hr	20	0	1	1	0	20	17	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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	6	6	6	2	2	2	2	2	2
Mvmt Flow	3	8	129	216	13	12	148	41	113	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	444	468	18	464	411	118	17	0	0
Stage 1	17	17	-	394	394	-	-	-	-
Stage 2	427	451	-	70	17	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.16	6.56	6.26	4.12	-	-
Critical Hdwy Stg 1	-	-	-	6.16	5.56	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.554	4.054	3.354	2.218	-	-
Pot Cap-1 Maneuver	524	493	1061	502	525	923	1600	-	-
Stage 1	-	-	-	623	598	-	-	-	-
Stage 2	606	571	-	-	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	460	436	1045	399	464	923	1599	-	-
Mov Cap-2 Maneuver	460	436	-	399	464	-	-	-	-
Stage 1	-	-	-	559	536	-	-	-	-
Stage 2	523	512	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	9.5	25.2	3.7
HCM LOS	A	D	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	1599	-	-	947	414
HCM Lane V/C Ratio	0.093	-	-	0.148	0.583
HCM Control Delay (s)	7.5	0	-	9.5	25.2
HCM Lane LOS	A	A	-	A	D
HCM 95th %tile Q(veh)	0.3	-	-	0.5	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	399	1	36	411	191	0	0	79	180
Future Volume (veh/h)	0	0	0	399	1	36	411	191	0	0	79	180
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.94
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1792	1792	1900	1845	0	0	1827	1900
Adj Flow Rate, veh/h				469	1	42	484	225	0	0	93	212
Adj No. of Lanes				0	1	1	0	1	0	0	1	0
Peak Hour Factor				0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %				6	6	6	3	3	0	0	4	4
Cap, veh/h				503	1	450	505	235	0	0	60	136
Arrive On Green				0.30	0.30	0.30	0.41	0.41	0.00	0.00	0.13	0.13
Sat Flow, veh/h				1704	4	1524	1218	566	0	0	474	1081
Grp Volume(v), veh/h				470	0	42	709	0	0	0	0	305
Grp Sat Flow(s),veh/h/ln				1707	0	1524	1784	0	0	0	0	1556
Q Serve(g_s), s				21.3	0.0	1.6	30.7	0.0	0.0	0.0	0.0	10.0
Cycle Q Clear(g_c), s				21.3	0.0	1.6	30.7	0.0	0.0	0.0	0.0	10.0
Prop In Lane				1.00		1.00	0.68		0.00	0.00		0.70
Lane Grp Cap(c), veh/h				504	0	450	740	0	0	0	0	196
V/C Ratio(X)				0.93	0.00	0.09	0.96	0.00	0.00	0.00	0.00	1.56
Avail Cap(c_a), veh/h				512	0	457	746	0	0	0	0	196
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				27.2	0.0	20.3	22.6	0.0	0.0	0.0	0.0	34.7
Incr Delay (d2), s/veh				24.0	0.0	0.1	23.1	0.0	0.0	0.0	0.0	274.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				13.3	0.0	0.7	19.7	0.0	0.0	0.0	0.0	19.2
LnGrp Delay(d),s/veh				51.2	0.0	20.4	45.7	0.0	0.0	0.0	0.0	309.0
LnGrp LOS				D		C	D					F
Approach Vol, veh/h					512			709			305	
Approach Delay, s/veh					48.7			45.7			309.0	
Approach LOS					D			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		37.6				14.2		27.7
Change Period (Y+Rc), s		4.6				4.2		4.2
Max Green Setting (Gmax), s		33.2				10.0		23.8
Max Q Clear Time (g_c+I1), s		32.7				12.0		23.3
Green Ext Time (p_c), s		0.3				0.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	99.3
HCM 2010 LOS	F

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	101	1	246	0	0	0	0	501	272	27	451	0
Future Vol, veh/h	101	1	246	0	0	0	0	501	272	27	451	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	2	2	2	5	5	5	6	6	6
Mvmt Flow	110	1	267	0	0	0	0	545	296	29	490	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1094	1096	490	-	0	0	547	0	0
Stage 1	549	549	-	-	-	-	-	-	-
Stage 2	545	547	-	-	-	-	-	-	-
Critical Hdwy	6.43	6.53	6.23	-	-	-	4.16	-	-
Critical Hdwy Stg 1	5.43	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	-	-	-	2.254	-	-
Pot Cap-1 Maneuver	236	212	576	0	-	-	1003	-	0
Stage 1	577	515	-	0	-	-	-	-	0
Stage 2	579	516	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	227	0	576	-	-	-	1003	-	-
Mov Cap-2 Maneuver	227	0	-	-	-	-	-	-	-
Stage 1	554	0	-	-	-	-	-	-	-
Stage 2	579	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22	0	0.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	227	576	1003	-
HCM Lane V/C Ratio	-	-	0.488	0.464	0.029	-
HCM Control Delay (s)	-	-	35.1	16.5	8.7	0
HCM Lane LOS	-	-	E	C	A	A
HCM 95th %tile Q(veh)	-	-	2.5	2.4	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	136	309	168	86	654	249	406	386	111	180	351	87
Future Volume (veh/h)	136	309	168	86	654	249	406	386	111	180	351	87
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1863	1863	1863	1810	1810	1900
Adj Flow Rate, veh/h	156	355	193	99	752	286	467	444	128	207	403	100
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	2	2	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	4	4	4	4	4	4	2	2	2	5	5	5
Cap, veh/h	177	1113	496	160	1078	473	347	1158	510	326	885	217
Arrive On Green	0.10	0.32	0.32	0.09	0.31	0.31	0.10	0.33	0.33	0.10	0.32	0.32
Sat Flow, veh/h	1740	3471	1547	1740	3471	1521	3442	3539	1559	3343	2731	671
Grp Volume(v), veh/h	156	355	193	99	752	286	467	444	128	207	252	251
Grp Sat Flow(s),veh/h/ln	1740	1736	1547	1740	1736	1521	1721	1770	1559	1672	1719	1682
Q Serve(g_s), s	9.0	7.9	9.9	5.6	19.5	16.3	10.3	9.9	6.1	6.1	11.9	12.1
Cycle Q Clear(g_c), s	9.0	7.9	9.9	5.6	19.5	16.3	10.3	9.9	6.1	6.1	11.9	12.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	177	1113	496	160	1078	473	347	1158	510	326	557	545
V/C Ratio(X)	0.88	0.32	0.39	0.62	0.70	0.61	1.35	0.38	0.25	0.63	0.45	0.46
Avail Cap(c_a), veh/h	177	1190	530	170	1176	515	347	1158	510	380	557	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.3	26.3	26.9	44.6	31.0	29.9	45.9	26.4	25.2	44.3	27.3	27.4
Incr Delay (d2), s/veh	36.3	0.2	0.7	6.0	1.9	2.2	173.6	1.0	1.2	2.7	2.6	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	3.8	4.3	3.0	9.6	7.2	13.2	5.0	2.8	2.9	6.0	6.1
LnGrp Delay(d),s/veh	81.6	26.5	27.6	50.7	32.9	32.1	219.5	27.4	26.4	47.0	30.0	30.2
LnGrp LOS	F	C	C	D	C	C	F	C	C	D	C	C
Approach Vol, veh/h		704			1137			1039			710	
Approach Delay, s/veh		39.0			34.2			113.6			35.0	
Approach LOS		D			C			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	38.0	13.1	37.3	14.0	37.7	14.1	36.3
Change Period (Y+Rc), s	3.7	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Green Setting (Gmax), s	11.6	31.8	10.0	35.0	10.3	33.1	10.4	34.6
Max Q Clear Time (g_c+I1), s	8.1	11.9	7.6	11.9	12.3	14.1	11.0	21.5
Green Ext Time (p_c), s	0.2	9.0	0.0	13.9	0.0	8.8	0.0	9.3

Intersection Summary	
HCM 2010 Ctrl Delay	58.3
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	4.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	58	42	11	92	80	44
Future Vol, veh/h	58	42	11	92	80	44
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	63	46	12	100	87	48

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	109	0	210	86
Stage 1	-	-	-	-	86	-
Stage 2	-	-	-	-	124	-
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	-	-	1481	-	778	973
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	902	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1481	-	771	973
Mov Cap-2 Maneuver	-	-	-	-	771	-
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	894	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	10.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	832	-	-	1481	-
HCM Lane V/C Ratio	0.162	-	-	0.008	-
HCM Control Delay (s)	10.2	-	-	7.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	85	23	13	63	127	60
Future Vol, veh/h	85	23	13	63	127	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	92	25	14	68	138	65

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	268	171	203	0	-	0
Stage 1	171	-	-	-	-	-
Stage 2	97	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	721	873	1369	-	-	-
Stage 1	859	-	-	-	-	-
Stage 2	927	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	713	873	1369	-	-	-
Mov Cap-2 Maneuver	713	-	-	-	-	-
Stage 1	859	-	-	-	-	-
Stage 2	917	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	1.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1369	-	742	-	-
HCM Lane V/C Ratio	0.01	-	0.158	-	-
HCM Control Delay (s)	7.7	0	10.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.6	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	213	176	303	0	167	0	113	377	0	0	0
Future Volume (veh/h)	2	213	176	303	0	167	0	113	377	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1863	0	1863	0	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	2	239	198	340	0	188	0	127	424	0	0	0
Adj No. of Lanes	0	2	1	1	0	1	0	1	1	0	1	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	0	2	0	2	2	2	2	2
Cap, veh/h	7	861	373	0	0	0	0	683	581	0	683	0
Arrive On Green	0.24	0.24	0.24	0.00	0.00	0.00	0.00	0.37	0.37	0.00	0.00	0.00
Sat Flow, veh/h	29	3602	1560		0		0	1863	1583	0	1863	0
Grp Volume(v), veh/h	129	112	198		0.0		0	127	424	0	0	0
Grp Sat Flow(s),veh/h/ln	1861	1770	1560				0	1863	1583	0	1863	0
Q Serve(g_s), s	1.4	1.2	2.7				0.0	1.1	5.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.4	1.2	2.7				0.0	1.1	5.6	0.0	0.0	0.0
Prop In Lane	0.02		1.00				0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	445	423	373				0	683	581	0	683	0
V/C Ratio(X)	0.29	0.26	0.53				0.00	0.19	0.73	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1830	1740	1534				0	3540	3009	0	3540	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	7.5	7.4	8.0				0.0	5.2	6.6	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.4				0.0	0.0	0.7	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
%ile BackOfQ(50%),veh/ln	0.7	0.6	1.1				0.0	0.6	2.5	0.0	0.0	0.0
LnGrp Delay(d),s/veh	7.6	7.6	8.4				0.0	5.2	7.3	0.0	0.0	0.0
LnGrp LOS	A	A	A					A	A			
Approach Vol, veh/h		439						551			0	
Approach Delay, s/veh		8.0						6.8			0.0	
Approach LOS		A						A				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		13.0		11.1		13.0		
Change Period (Y+Rc), s		* 4.2		5.3		* 4.2		
Max Green Setting (Gmax), s		* 46		23.7		* 46		
Max Q Clear Time (g_c+I1), s		7.6		4.7		0.0		
Green Ext Time (p_c), s		1.3		1.2		0.0		

Intersection Summary	
HCM 2010 Ctrl Delay	7.3
HCM 2010 LOS	A

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	216	84	81	127	48	115	918	196	53	621	228
Future Volume (veh/h)	290	216	84	81	127	48	115	918	196	53	621	228
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	266	282	88	85	134	51	121	966	206	56	654	240
Adj No. of Lanes	1	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	357	375	315	95	150	57	149	1189	253	72	1311	586
Arrive On Green	0.20	0.20	0.20	0.17	0.17	0.17	0.08	0.41	0.41	0.04	0.37	0.37
Sat Flow, veh/h	1774	1863	1562	559	881	335	1774	2905	619	1774	3539	1581
Grp Volume(v), veh/h	266	282	88	270	0	0	121	588	584	56	654	240
Grp Sat Flow(s),veh/h/ln	1774	1863	1562	1776	0	0	1774	1770	1754	1774	1770	1581
Q Serve(g_s), s	15.2	15.4	5.2	16.1	0.0	0.0	7.3	31.8	31.9	3.4	15.4	12.2
Cycle Q Clear(g_c), s	15.2	15.4	5.2	16.1	0.0	0.0	7.3	31.8	31.9	3.4	15.4	12.2
Prop In Lane	1.00		1.00	0.31		0.19	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	357	375	315	302	0	0	149	725	718	72	1311	586
V/C Ratio(X)	0.74	0.75	0.28	0.89	0.00	0.00	0.81	0.81	0.81	0.78	0.50	0.41
Avail Cap(c_a), veh/h	559	587	492	318	0	0	210	767	760	87	1311	586
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.6	40.6	36.6	43.9	0.0	0.0	48.7	28.3	28.3	51.4	26.3	25.3
Incr Delay (d2), s/veh	3.1	3.0	0.5	26.8	0.0	0.0	14.9	6.5	6.7	30.0	0.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	8.2	2.3	10.1	0.0	0.0	4.2	16.8	16.7	2.3	7.6	5.4
LnGrp Delay(d),s/veh	43.7	43.7	37.0	70.7	0.0	0.0	63.6	34.8	34.9	81.4	26.6	25.8
LnGrp LOS	D	D	D	E			E	C	C	F	C	C
Approach Vol, veh/h		636			270			1293			950	
Approach Delay, s/veh		42.8			70.7			37.5			29.7	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	49.6		26.5	13.3	45.4		23.0
Change Period (Y+Rc), s	* 4.7	5.3		* 4.7	* 4.2	5.3		4.6
Max Green Setting (Gmax), s	* 5.3	46.9		* 34	* 13	39.9		19.4
Max Q Clear Time (g_c+I1), s	5.4	33.9		17.4	9.3	17.4		18.1
Green Ext Time (p_c), s	0.0	10.4		2.6	0.1	16.4		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	39.1
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	30.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	324	0	6	0	0	90	0	815	13	0	570	216
Future Vol, veh/h	324	0	6	0	0	90	0	815	13	0	570	216
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	1	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	0	-	-	0	-	-	-	-	-	75
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	345	0	6	0	0	96	0	867	14	0	606	230

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1040	-	304	-	-	441	-	0	0	-	-	0
Stage 1	606	-	-	-	-	-	-	-	-	-	-	-
Stage 2	434	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	~ 185	0	692	0	0	564	0	-	-	0	-	0
Stage 1	451	0	-	0	0	-	0	-	-	0	-	0
Stage 2	570	0	-	0	0	-	0	-	-	0	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	~ 154	-	691	-	-	564	-	-	-	-	-	-
Mov Cap-2 Maneuver	~ 281	-	-	-	-	-	-	-	-	-	-	-
Stage 1	451	-	-	-	-	-	-	-	-	-	-	-
Stage 2	473	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	164.2	12.7	0	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	WBLn1	SBT
Capacity (veh/h)	-	-	281	691	564	-
HCM Lane V/C Ratio	-	-	1.227	0.009	0.17	-
HCM Control Delay (s)	-	-	167.1	10.3	12.7	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	16	0	0.6	-

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

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	56	6	378	90	11	205
Future Vol, veh/h	56	6	378	90	11	205
Conflicting Peds, #/hr	0	2	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	6	6	2	2	4	4
Mvmt Flow	62	7	415	99	12	225

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	607	264	0	0	519	0
Stage 1	470	-	-	-	-	-
Stage 2	137	-	-	-	-	-
Critical Hdwy	6.92	7.02	-	-	4.18	-
Critical Hdwy Stg 1	5.92	-	-	-	-	-
Critical Hdwy Stg 2	5.92	-	-	-	-	-
Follow-up Hdwy	3.56	3.36	-	-	2.24	-
Pot Cap-1 Maneuver	419	722	-	-	1029	-
Stage 1	584	-	-	-	-	-
Stage 2	863	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	412	718	-	-	1027	-
Mov Cap-2 Maneuver	412	-	-	-	-	-
Stage 1	582	-	-	-	-	-
Stage 2	852	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.9	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	430	1027	-
HCM Lane V/C Ratio	-	-	0.158	0.012	-
HCM Control Delay (s)	-	-	14.9	8.5	0.1
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0	-

Intersection	
Intersection Delay, s/veh	19.2
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	49	272	11	0	123	265	46	0	29	142	127
Future Vol, veh/h	0	49	272	11	0	123	265	46	0	29	142	127
Peak Hour Factor	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	4	4	4	2	3	3	3	2	2	2	2
Mvmt Flow	0	54	299	12	0	135	291	51	0	32	156	140
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	22	22.1	14.9
HCM LOS	C	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	17%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	83%	0%	0%	96%	0%	85%	0%	75%
Vol Right, %	0%	100%	0%	4%	0%	15%	0%	25%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	171	127	49	283	123	311	62	162
LT Vol	29	0	49	0	123	0	62	0
Through Vol	142	0	0	272	0	265	0	121
RT Vol	0	127	0	11	0	46	0	41
Lane Flow Rate	188	140	54	311	135	342	68	178
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.418	0.279	0.121	0.655	0.298	0.694	0.163	0.391
Departure Headway (Hd)	8.009	7.199	8.123	7.581	7.93	7.311	8.6	7.9
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	447	497	440	476	451	492	416	454
Service Time	5.784	4.974	5.897	5.355	5.701	5.081	6.379	5.679
HCM Lane V/C Ratio	0.421	0.282	0.123	0.653	0.299	0.695	0.163	0.392
HCM Control Delay	16.5	12.8	12	23.7	14.1	25.2	13.1	15.7
HCM Lane LOS	C	B	B	C	B	D	B	C
HCM 95th-tile Q	2	1.1	0.4	4.6	1.2	5.3	0.6	1.8

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	62	121	41
Future Vol, veh/h	0	62	121	41
Peak Hour Factor	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	68	133	45
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	15
HCM LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	215	193	53	213	0	193	422	69	14	189	58
Future Volume (veh/h)	53	215	193	53	213	0	193	422	69	14	189	58
Number	7	4	14	3	8	18	5	2	12	1	6	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		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	1863	1863	1863	1863	1863	1900	1863	1863	1900	1845	1845	1900
Adj Flow Rate, veh/h	56	229	205	56	227	0	205	449	73	15	201	62
Adj No. of Lanes	1	1	1	1	2	0	2	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	3	3	3
Cap, veh/h	75	487	411	75	925	0	257	1139	184	26	832	250
Arrive On Green	0.04	0.26	0.26	0.04	0.26	0.00	0.07	0.37	0.37	0.01	0.31	0.31
Sat Flow, veh/h	1774	1863	1571	1774	3632	0	3442	3052	493	1757	2655	796
Grp Volume(v), veh/h	56	229	205	56	227	0	205	259	263	15	131	132
Grp Sat Flow(s),veh/h/ln	1774	1863	1571	1774	1770	0	1721	1770	1776	1757	1752	1699
Q Serve(g_s), s	1.7	5.5	5.9	1.7	2.7	0.0	3.1	5.8	5.8	0.5	3.0	3.1
Cycle Q Clear(g_c), s	1.7	5.5	5.9	1.7	2.7	0.0	3.1	5.8	5.8	0.5	3.0	3.1
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.28	1.00		0.47
Lane Grp Cap(c), veh/h	75	487	411	75	925	0	257	661	663	26	549	533
V/C Ratio(X)	0.75	0.47	0.50	0.75	0.25	0.00	0.80	0.39	0.40	0.57	0.24	0.25
Avail Cap(c_a), veh/h	133	870	733	166	1719	0	257	810	813	131	802	777
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00
Uniform Delay (d), s/veh	25.4	16.7	16.8	25.4	15.6	0.0	24.4	12.3	12.3	26.2	13.6	13.7
Incr Delay (d2), s/veh	13.7	1.0	1.3	13.7	0.2	0.0	16.0	1.7	1.8	18.1	1.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.0	2.7	1.1	1.3	0.0	2.1	3.1	3.2	0.3	1.6	1.6
LnGrp Delay(d),s/veh	39.1	17.7	18.1	39.1	15.8	0.0	40.4	14.1	14.1	44.3	14.7	14.8
LnGrp LOS	D	B	B	D	B		D	B	B	D	B	B
Approach Vol, veh/h		490			283			727			278	
Approach Delay, s/veh		20.3			20.4			21.5			16.3	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.8	24.5	6.3	18.0	8.0	21.3	6.3	18.0
Change Period (Y+Rc), s	4.0	4.5	4.0	4.0	4.0	4.5	4.0	4.0
Max Green Setting (Gmax), s	4.0	24.5	5.0	25.0	4.0	24.5	4.0	26.0
Max Q Clear Time (g_c+I1), s	2.5	7.8	3.7	7.9	5.1	5.1	3.7	4.7
Green Ext Time (p_c), s	0.0	10.2	0.0	4.6	0.0	11.4	0.0	5.1

Intersection Summary	
HCM 2010 Ctrl Delay	20.2
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	3.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	89	51	628	155	60	367
Future Vol, veh/h	89	51	628	155	60	367
Conflicting Peds, #/hr	5	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	4	4
Mvmt Flow	92	53	647	160	62	378

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1046	405	0	0	808	0
Stage 1	728	-	-	-	-	-
Stage 2	318	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.18	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.24	-
Pot Cap-1 Maneuver	224	595	-	-	800	-
Stage 1	439	-	-	-	-	-
Stage 2	710	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	206	595	-	-	800	-
Mov Cap-2 Maneuver	206	-	-	-	-	-
Stage 1	439	-	-	-	-	-
Stage 2	652	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27	0	1.4
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	206	595	800	-
HCM Lane V/C Ratio	-	-	0.445	0.088	0.077	-
HCM Control Delay (s)	-	-	35.8	11.6	9.9	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	2.1	0.3	0.3	-

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBU	SBL	SBR
Lane Configurations									
Traffic Vol, veh/h	0	39	175	0	173	31	0	44	81
Future Vol, veh/h	0	39	175	0	173	31	0	44	81
Peak Hour Factor	0.92	0.96	0.96	0.92	0.96	0.96	0.92	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	41	182	0	180	32	0	46	84
Number of Lanes	0	1	1	0	1	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	9.3	9.2	8.6
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	35%
Vol Thru, %	0%	100%	85%	0%
Vol Right, %	0%	0%	15%	65%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	39	175	204	125
LT Vol	39	0	0	44
Through Vol	0	175	173	0
RT Vol	0	0	31	81
Lane Flow Rate	41	182	212	130
Geometry Grp	7	7	5	2
Degree of Util (X)	0.062	0.254	0.266	0.167
Departure Headway (Hd)	5.513	5.01	4.513	4.625
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	650	716	795	775
Service Time	3.244	2.741	2.543	2.655
HCM Lane V/C Ratio	0.063	0.254	0.267	0.168
HCM Control Delay	8.6	9.4	9.2	8.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	1	1.1	0.6

Intersection	
Intersection Delay, s/veh	11.9
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	45	95	32	0	102	82	188	0	35	49	123
Future Vol, veh/h	0	45	95	32	0	102	82	188	0	35	49	123
Peak Hour Factor	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	6	6	6	2	3	3	3	2	5	5	5
Mvmt Flow	0	48	102	34	0	110	88	202	0	38	53	132
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	11.2	13	10.8
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	42%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	58%	0%	0%	75%	0%	30%	0%	40%
Vol Right, %	0%	100%	0%	25%	0%	70%	0%	60%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	84	123	45	127	102	270	128	107
LT Vol	35	0	45	0	102	0	128	0
Through Vol	49	0	0	95	0	82	0	43
RT Vol	0	123	0	32	0	188	0	64
Lane Flow Rate	90	132	48	137	110	290	138	115
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.174	0.221	0.097	0.246	0.207	0.468	0.271	0.197
Departure Headway (Hd)	6.933	6.008	7.182	6.493	6.81	5.808	7.101	6.167
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	515	594	497	550	525	618	504	579
Service Time	4.705	3.78	4.956	4.267	4.572	3.57	4.873	3.938
HCM Lane V/C Ratio	0.175	0.222	0.097	0.249	0.21	0.469	0.274	0.199
HCM Control Delay	11.2	10.5	10.7	11.4	11.4	13.6	12.5	10.5
HCM Lane LOS	B	B	B	B	B	B	B	B
HCM 95th-tile Q	0.6	0.8	0.3	1	0.8	2.5	1.1	0.7

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	128	43	64
Future Vol, veh/h	0	128	43	64
Peak Hour Factor	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	138	46	69
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	11.6
HCM LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	87	135	15	50	44	199	608	44	40	307	123
Future Volume (veh/h)	124	87	135	15	50	44	199	608	44	40	307	123
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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	1863	1863	1900	1863	1863	1863	1863	1863	1900	1845	1845	1900
Adj Flow Rate, veh/h	131	92	142	16	53	46	209	640	46	42	323	129
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	3	3	3
Cap, veh/h	169	133	205	28	231	196	259	1433	103	62	779	305
Arrive On Green	0.10	0.20	0.20	0.02	0.12	0.12	0.15	0.43	0.43	0.04	0.32	0.32
Sat Flow, veh/h	1774	653	1007	1774	1863	1583	1774	3349	240	1757	2456	961
Grp Volume(v), veh/h	131	0	234	16	53	46	209	338	348	42	229	223
Grp Sat Flow(s),veh/h/ln	1774	0	1660	1774	1863	1583	1774	1770	1819	1757	1752	1664
Q Serve(g_s), s	3.6	0.0	6.6	0.5	1.3	1.3	5.8	6.8	6.8	1.2	5.2	5.3
Cycle Q Clear(g_c), s	3.6	0.0	6.6	0.5	1.3	1.3	5.8	6.8	6.8	1.2	5.2	5.3
Prop In Lane	1.00		0.61	1.00		1.00	1.00		0.13	1.00		0.58
Lane Grp Cap(c), veh/h	169	0	338	28	231	196	259	757	778	62	556	528
V/C Ratio(X)	0.77	0.00	0.69	0.57	0.23	0.23	0.81	0.45	0.45	0.68	0.41	0.42
Avail Cap(c_a), veh/h	317	0	527	141	406	345	282	757	778	174	556	528
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.3	0.0	18.6	24.6	19.9	19.9	20.8	10.2	10.2	24.0	13.5	13.6
Incr Delay (d2), s/veh	7.3	0.0	2.5	16.6	0.5	0.6	14.9	1.9	1.9	12.2	2.2	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	3.2	0.3	0.7	0.6	3.9	3.7	3.8	0.8	2.8	2.8
LnGrp Delay(d),s/veh	29.6	0.0	21.2	41.2	20.4	20.5	35.7	12.1	12.1	36.2	15.7	16.0
LnGrp LOS	C		C	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		365			115			895			494	
Approach Delay, s/veh		24.2			23.3			17.6			17.6	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	25.6	4.8	14.3	11.4	20.0	8.8	10.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	19.0	4.0	16.0	8.0	16.0	9.0	11.0
Max Q Clear Time (g_c+I1), s	3.2	8.8	2.5	8.6	7.8	7.3	5.6	3.3
Green Ext Time (p_c), s	0.0	5.0	0.0	1.1	0.0	4.5	0.1	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	19.2
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	0	71	1	0	21	51	0	0	0	0	41
Future Vol, veh/h	0	0	71	1	0	21	51	0	0	0	0	41
Peak Hour Factor	0.92	0.84	0.84	0.84	0.92	0.84	0.84	0.84	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	11	11	11	2	3	3	3
Mvmt Flow	0	0	85	1	0	25	61	0	0	0	0	49
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	7.6	7.8	6.9
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	29%	100%
Vol Thru, %	0%	99%	71%	0%
Vol Right, %	100%	1%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	41	72	72	1
LT Vol	0	0	21	1
Through Vol	0	71	51	0
RT Vol	41	1	0	0
Lane Flow Rate	49	86	86	1
Geometry Grp	1	1	1	1
Degree of Util (X)	0.049	0.097	0.102	0.001
Departure Headway (Hd)	3.644	4.077	4.297	4.468
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	965	877	833	789
Service Time	1.733	2.111	2.327	2.564
HCM Lane V/C Ratio	0.051	0.098	0.103	0.001
HCM Control Delay	6.9	7.6	7.8	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0.3	0

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	1	0	0
Future Vol, veh/h	0	1	0	0
Peak Hour Factor	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	1	0	0
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	7.6
HCM LOS	A

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	44	0	0	12	56	0	5	17
Future Vol, veh/h	0	44	0	0	12	56	0	5	17
Peak Hour Factor	0.92	0.86	0.86	0.92	0.86	0.86	0.92	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	51	0	0	14	65	0	6	20
Number of Lanes	0	1	0	0	1	0	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.6	6.9	7.3
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	100%	23%
Vol Thru, %	18%	0%	77%
Vol Right, %	82%	0%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	68	44	22
LT Vol	0	44	5
Through Vol	12	0	17
RT Vol	56	0	0
Lane Flow Rate	79	51	26
Geometry Grp	1	1	1
Degree of Util (X)	0.078	0.061	0.029
Departure Headway (Hd)	3.548	4.315	4.128
Convergence, Y/N	Yes	Yes	Yes
Cap	1006	830	864
Service Time	1.584	2.342	2.167
HCM Lane V/C Ratio	0.079	0.061	0.03
HCM Control Delay	6.9	7.6	7.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	0.2	0.1

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	30	11	4	0	43	13	2	0	5	58	32
Future Vol, veh/h	0	30	11	4	0	43	13	2	0	5	58	32
Peak Hour Factor	0.92	0.97	0.97	0.97	0.92	0.97	0.97	0.97	0.92	0.97	0.97	0.97
Heavy Vehicles, %	2	3	3	3	2	5	5	5	2	7	7	7
Mvmt Flow	0	31	11	4	0	44	13	2	0	5	60	33
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	8.4	8.6	7.8
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	5%	73%	0%	77%	0%	2%
Vol Thru, %	61%	27%	0%	23%	0%	72%
Vol Right, %	34%	0%	100%	0%	100%	26%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	95	41	4	56	2	104
LT Vol	5	30	0	43	0	2
Through Vol	58	11	0	13	0	75
RT Vol	32	0	4	0	2	27
Lane Flow Rate	98	42	4	58	2	107
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.115	0.064	0.005	0.088	0.003	0.124
Departure Headway (Hd)	4.228	5.43	4.359	5.468	4.378	4.174
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	850	661	823	657	819	861
Service Time	2.241	3.148	2.076	3.185	2.095	2.187
HCM Lane V/C Ratio	0.115	0.064	0.005	0.088	0.002	0.124
HCM Control Delay	7.8	8.5	7.1	8.7	7.1	7.8
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.4	0.2	0	0.3	0	0.4

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations			↕	
Traffic Vol, veh/h	0	2	75	27
Future Vol, veh/h	0	2	75	27
Peak Hour Factor	0.92	0.97	0.97	0.97
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	2	77	28
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	7.8
HCM LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	0	211	1	0	1	105	780	0	0	503	54
Future Volume (veh/h)	100	0	211	1	0	1	105	780	0	0	503	54
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1267	1900	1863	1863	1900	0	1863	1900
Adj Flow Rate, veh/h	104	0	220	1	0	1	109	812	0	0	524	56
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	0	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	50	50	50	2	2	2	0	2	2
Cap, veh/h	421	0	299	165	21	84	612	2348	0	0	1730	184
Arrive On Green	0.19	0.00	0.19	0.19	0.00	0.19	0.06	0.66	0.00	0.00	0.54	0.54
Sat Flow, veh/h	1487	0	1559	329	110	439	1774	3632	0	0	3315	343
Grp Volume(v), veh/h	104	0	220	2	0	0	109	812	0	0	287	293
Grp Sat Flow(s),veh/h/ln	1487	0	1559	879	0	0	1774	1770	0	0	1770	1795
Q Serve(g_s), s	0.0	0.0	7.1	0.0	0.0	0.0	1.3	5.3	0.0	0.0	4.8	4.8
Cycle Q Clear(g_c), s	2.7	0.0	7.1	2.7	0.0	0.0	1.3	5.3	0.0	0.0	4.8	4.8
Prop In Lane	1.00		1.00	0.50		0.50	1.00		0.00	0.00		0.19
Lane Grp Cap(c), veh/h	421	0	299	270	0	0	612	2348	0	0	950	964
V/C Ratio(X)	0.25	0.00	0.74	0.01	0.00	0.00	0.18	0.35	0.00	0.00	0.30	0.30
Avail Cap(c_a), veh/h	602	0	502	387	0	0	756	2348	0	0	950	964
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	0.0	20.2	17.4	0.0	0.0	4.3	3.9	0.0	0.0	6.8	6.8
Incr Delay (d2), s/veh	0.4	0.0	5.0	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	3.4	0.0	0.0	0.0	0.6	2.6	0.0	0.0	2.5	2.6
LnGrp Delay(d),s/veh	18.9	0.0	25.2	17.4	0.0	0.0	4.4	4.3	0.0	0.0	7.6	7.6
LnGrp LOS	B		C	B			A	A			A	A
Approach Vol, veh/h		324			2			921			580	
Approach Delay, s/veh		23.1			17.4			4.3			7.6	
Approach LOS		C			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		39.4		13.7	6.7	32.7		13.7
Change Period (Y+Rc), s		* 4.2		3.5	3.5	* 4.2		3.5
Max Green Setting (Gmax), s		* 35		17.1	7.5	* 24		17.1
Max Q Clear Time (g_c+I1), s		7.3		9.1	3.3	6.8		4.7
Green Ext Time (p_c), s		23.2		1.2	0.1	15.3		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	8.7
HCM 2010 LOS	A

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	303	78	807	411	88	627
Future Volume (veh/h)	303	78	807	411	88	627
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	309	80	823	0	90	640
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	583	268	1756	786	114	2248
Arrive On Green	0.17	0.17	0.50	0.00	0.06	0.64
Sat Flow, veh/h	3442	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	309	80	823	0	90	640
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1770
Q Serve(g_s), s	3.9	2.1	7.2	0.0	2.4	3.8
Cycle Q Clear(g_c), s	3.9	2.1	7.2	0.0	2.4	3.8
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	583	268	1756	786	114	2248
V/C Ratio(X)	0.53	0.30	0.47	0.00	0.79	0.28
Avail Cap(c_a), veh/h	1243	572	1790	801	245	2541
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	17.1	7.8	0.0	21.7	3.8
Incr Delay (d2), s/veh	1.6	1.3	0.9	0.0	11.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	1.0	3.6	0.0	1.5	1.9
LnGrp Delay(d),s/veh	19.4	18.4	8.7	0.0	32.9	4.1
LnGrp LOS	B	B	A		C	A
Approach Vol, veh/h	389		823			730
Approach Delay, s/veh	19.2		8.7			7.7
Approach LOS	B		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.5	27.6				34.1		13.0
Change Period (Y+Rc), s	3.5	* 4.2				* 4.2		5.0
Max Green Setting (Gmax), s	6.5	* 24				* 34		17.0
Max Q Clear Time (g_c+I1), s	4.4	9.2				5.8		5.9
Green Ext Time (p_c), s	0.0	13.3				24.1		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	10.4
HCM 2010 LOS	B

Notes

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

Intersection	
Int Delay, s/veh	9.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	2	10	75	237	6	6	77	34	194	0	0	0
Future Vol, veh/h	2	10	75	237	6	6	77	34	194	0	0	0
Conflicting Peds, #/hr	25	0	0	0	0	25	25	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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	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	2	10	78	247	6	6	80	35	202	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	353	423	25	341	322	161	25	0	0
Stage 1	25	25	-	297	297	-	-	-	-
Stage 2	328	398	-	44	25	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	-	-	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	602	522	1051	613	595	884	1589	-	-
Stage 1	-	-	-	712	668	-	-	-	-
Stage 2	685	603	-	-	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	554	480	1029	532	548	884	1589	-	-
Mov Cap-2 Maneuver	554	480	-	532	548	-	-	-	-
Stage 1	-	-	-	669	628	-	-	-	-
Stage 2	633	567	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	9.5	17.8	1.9
HCM LOS	A	C	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	1589	-	-	894	538
HCM Lane V/C Ratio	0.05	-	-	0.101	0.482
HCM Control Delay (s)	7.4	0	-	9.5	17.8
HCM Lane LOS	A	A	-	A	C
HCM 95th %tile Q(veh)	0.2	-	-	0.3	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	373	3	21	338	284	0	0	94	218
Future Volume (veh/h)	0	0	0	373	3	21	338	284	0	0	94	218
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.95
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1900	1863	0	0	1863	1900
Adj Flow Rate, veh/h				385	3	22	348	293	0	0	97	225
Adj No. of Lanes				0	1	1	0	1	0	0	1	0
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				445	3	400	373	314	0	0	77	179
Arrive On Green				0.25	0.25	0.25	0.38	0.38	0.00	0.00	0.16	0.16
Sat Flow, veh/h				1761	14	1583	985	829	0	0	482	1118
Grp Volume(v), veh/h				388	0	22	641	0	0	0	0	322
Grp Sat Flow(s),veh/h/ln				1775	0	1583	1814	0	0	0	0	1601
Q Serve(g_s), s				13.1	0.0	0.7	21.2	0.0	0.0	0.0	0.0	10.0
Cycle Q Clear(g_c), s				13.1	0.0	0.7	21.2	0.0	0.0	0.0	0.0	10.0
Prop In Lane				0.99		1.00	0.54		0.00	0.00		0.70
Lane Grp Cap(c), veh/h				449	0	400	688	0	0	0	0	256
V/C Ratio(X)				0.86	0.00	0.05	0.93	0.00	0.00	0.00	0.00	1.26
Avail Cap(c_a), veh/h				505	0	451	702	0	0	0	0	256
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				22.3	0.0	17.7	18.6	0.0	0.0	0.0	0.0	26.3
Incr Delay (d2), s/veh				13.7	0.0	0.1	19.2	0.0	0.0	0.0	0.0	143.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.1	0.0	0.3	14.2	0.0	0.0	0.0	0.0	14.6
LnGrp Delay(d),s/veh				36.1	0.0	17.8	37.8	0.0	0.0	0.0	0.0	169.9
LnGrp LOS				D		B	D					F
Approach Vol, veh/h					410			641			322	
Approach Delay, s/veh					35.1			37.8			169.9	
Approach LOS					D			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		28.3				14.2		20.0
Change Period (Y+Rc), s		4.6				4.2		4.2
Max Green Setting (Gmax), s		24.2				10.0		17.8
Max Q Clear Time (g_c+I1), s		23.2				12.0		15.1
Green Ext Time (p_c), s		0.5				0.0		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	68.0
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	153	16	311	0	0	0	0	469	694	23	444	0
Future Vol, veh/h	153	16	311	0	0	0	0	469	694	23	444	0
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	-	-	200	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	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	163	17	331	0	0	0	0	499	738	24	472	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1020	1020	472	-	0	0	499	0	0
Stage 1	521	521	-	-	-	-	-	-	-
Stage 2	499	499	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	262	237	592	0	-	-	1065	-	0
Stage 1	596	532	-	0	-	-	-	-	0
Stage 2	610	544	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	254	0	592	-	-	-	1065	-	-
Mov Cap-2 Maneuver	254	0	-	-	-	-	-	-	-
Stage 1	578	0	-	-	-	-	-	-	-
Stage 2	610	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	28.7	0	0.4
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	254	592	1065	-
HCM Lane V/C Ratio	-	-	0.708	0.559	0.023	-
HCM Control Delay (s)	-	-	47.4	18.5	8.5	0
HCM Lane LOS	-	-	E	C	A	A
HCM 95th %tile Q(veh)	-	-	4.8	3.4	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	287	836	439	181	482	277	283	510	160	212	398	80
Future Volume (veh/h)	287	836	439	181	482	277	283	510	160	212	398	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	299	871	457	189	502	289	295	531	167	221	415	83
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	318	1207	529	218	1007	440	316	1066	468	304	873	173
Arrive On Green	0.18	0.34	0.34	0.12	0.28	0.28	0.09	0.30	0.30	0.09	0.30	0.30
Sat Flow, veh/h	1774	3539	1553	1774	3539	1547	3442	3539	1553	3442	2932	581
Grp Volume(v), veh/h	299	871	457	189	502	289	295	531	167	221	249	249
Grp Sat Flow(s),veh/h/ln	1774	1770	1553	1774	1770	1547	1721	1770	1553	1721	1770	1743
Q Serve(g_s), s	18.8	24.4	31.1	11.8	13.4	18.6	9.6	14.0	9.5	7.1	13.0	13.3
Cycle Q Clear(g_c), s	18.8	24.4	31.1	11.8	13.4	18.6	9.6	14.0	9.5	7.1	13.0	13.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	318	1207	529	218	1007	440	316	1066	468	304	527	519
V/C Ratio(X)	0.94	0.72	0.86	0.87	0.50	0.66	0.93	0.50	0.36	0.73	0.47	0.48
Avail Cap(c_a), veh/h	318	1207	529	252	1063	464	316	1066	468	304	527	519
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.9	32.6	34.8	48.7	33.8	35.6	51.1	32.5	31.0	50.3	32.5	32.6
Incr Delay (d2), s/veh	35.0	2.3	14.2	23.4	0.5	3.6	33.6	1.7	2.1	8.5	3.0	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	12.3	12.2	15.4	7.2	6.6	8.4	6.1	7.1	4.4	3.7	6.8	6.8
LnGrp Delay(d),s/veh	80.8	35.0	49.0	72.2	34.3	39.3	84.7	34.2	33.1	58.8	35.5	35.7
LnGrp LOS	F	C	D	E	C	D	F	C	C	E	D	D
Approach Vol, veh/h		1627			980			993			719	
Approach Delay, s/veh		47.3			43.1			49.0			42.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	38.7	17.6	43.2	14.1	38.3	24.0	36.8
Change Period (Y+Rc), s	3.7	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Green Setting (Gmax), s	10.0	34.1	16.1	38.2	10.4	33.7	20.3	34.0
Max Q Clear Time (g_c+I1), s	9.1	16.0	13.8	33.1	11.6	15.3	20.8	20.6
Green Ext Time (p_c), s	0.1	9.4	0.1	4.6	0.0	9.5	0.0	10.5

Intersection Summary	
HCM 2010 Ctrl Delay	46.0
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	138	81	46	148	56	23
Future Vol, veh/h	138	81	46	148	56	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	150	88	50	161	61	25

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	238	0	455	194
Stage 1	-	-	-	-	194	-
Stage 2	-	-	-	-	261	-
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	-	-	1329	-	563	847
Stage 1	-	-	-	-	839	-
Stage 2	-	-	-	-	783	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1329	-	540	847
Mov Cap-2 Maneuver	-	-	-	-	540	-
Stage 1	-	-	-	-	839	-
Stage 2	-	-	-	-	751	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	11.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	604	-	-	1329	-
HCM Lane V/C Ratio	0.142	-	-	0.038	-
HCM Control Delay (s)	11.9	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	72	17	25	135	85	92
Future Vol, veh/h	72	17	25	135	85	92
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	78	18	27	147	92	100

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	343	142	192	0	-	0
Stage 1	142	-	-	-	-	-
Stage 2	201	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	653	906	1381	-	-	-
Stage 1	885	-	-	-	-	-
Stage 2	833	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	639	906	1381	-	-	-
Mov Cap-2 Maneuver	639	-	-	-	-	-
Stage 1	885	-	-	-	-	-
Stage 2	816	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.2	1.2	0
HCM LOS	B		

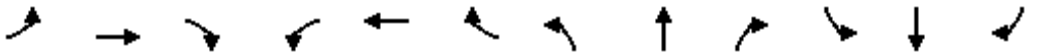
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1381	-	677	-	-
HCM Lane V/C Ratio	0.02	-	0.143	-	-
HCM Control Delay (s)	7.7	0	11.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	0	3	0	0	97	0	1	14	0	588	361
Future Volume (veh/h)	108	0	3	0	0	97	0	1	14	0	588	361
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1667	1667	0	1863	1863	0	1845	1900	0	1845	1845
Adj Flow Rate, veh/h	115	0	0	0	0	0	0	1	15	0	626	0
Adj No. of Lanes	0	1	1	0	1	1	0	2	0	0	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	14	14	14	0	2	2	0	3	3	0	3	3
Cap, veh/h	153	0	137	0	10	9	0	827	738	0	1654	740
Arrive On Green	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.47	0.00	0.47	0.00
Sat Flow, veh/h	1587	0	1417	0	1863	1583	0	1845	1565	0	3597	1568
Grp Volume(v), veh/h	115	0	0	0	0	0	0	1	15	0	626	0
Grp Sat Flow(s),veh/h/ln	1587	0	1417	0	1863	1583	0	1752	1565	0	1752	1568
Q Serve(g_s), s	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	2.1	0.0
Cycle Q Clear(g_c), s	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	2.1	0.0
Prop In Lane	1.00		1.00	0.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	153	0	137	0	10	9	0	827	738	0	1654	740
V/C Ratio(X)	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.38	0.00
Avail Cap(c_a), veh/h	1285	0	1147	0	704	598	0	2647	2364	0	5106	2284
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	8.2	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	0.0	3.1	0.0
Incr Delay (d2), s/veh	7.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
LnGrp Delay(d),s/veh	15.4	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	0.0	3.3	0.0
LnGrp LOS	B							A	A		A	
Approach Vol, veh/h		115			0			16			626	
Approach Delay, s/veh		15.4			0.0			2.6			3.3	
Approach LOS		B						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		12.7		5.8		12.7		0.0
Change Period (Y+Rc), s		* 4		4.0		4.0		3.0
Max Green Setting (Gmax), s		* 28		15.0		27.0		7.0
Max Q Clear Time (g_c+I1), s		2.1		3.3		4.1		0.0
Green Ext Time (p_c), s		4.7		0.4		4.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	5.1
HCM 2010 LOS	A

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	399	1	36	411	191	0	0	79	180
Future Volume (vph)	0	0	0	399	1	36	411	191	0	0	79	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.2	4.2		4.6			4.2	4.0
Lane Util. Factor					1.00	1.00		1.00			1.00	1.00
Frpb, ped/bikes					1.00	1.00		1.00			1.00	0.97
Flpb, ped/bikes					1.00	1.00		1.00			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					0.95	1.00		0.97			1.00	1.00
Satd. Flow (prot)					1707	1524		1784			1827	1510
Flt Permitted					0.95	1.00		0.97			1.00	1.00
Satd. Flow (perm)					1707	1524		1784			1827	1510
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	0	0	0	469	1	42	484	225	0	0	93	212
RTOR Reduction (vph)	0	0	0	0	0	29	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	470	13	0	709	0	0	93	212
Confl. Peds. (#/hr)												15
Heavy Vehicles (%)	2%	2%	2%	6%	6%	6%	3%	3%	3%	4%	4%	4%
Turn Type				Split	NA	Perm	Split	NA			NA	Free
Protected Phases				8	8		2	2			6	
Permitted Phases						8						Free
Actuated Green, G (s)					26.2	26.2		36.4			9.1	84.7
Effective Green, g (s)					26.2	26.2		36.4			9.1	84.7
Actuated g/C Ratio					0.31	0.31		0.43			0.11	1.00
Clearance Time (s)					4.2	4.2		4.6			4.2	
Vehicle Extension (s)					3.5	3.5		3.5			3.5	
Lane Grp Cap (vph)					528	471		766			196	1510
v/s Ratio Prot					c0.28			c0.40			c0.05	
v/s Ratio Perm						0.01						0.14
v/c Ratio					0.89	0.03		0.93			0.47	0.14
Uniform Delay, d1					27.9	20.4		22.9			35.6	0.0
Progression Factor					1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2					17.3	0.0		17.2			2.1	0.2
Delay (s)					45.2	20.4		40.0			37.7	0.2
Level of Service					D	C		D			D	A
Approach Delay (s)		0.0			43.1			40.0			11.6	
Approach LOS		A			D			D			B	

Intersection Summary			
HCM 2000 Control Delay	35.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	84.7	Sum of lost time (s)	13.0
Intersection Capacity Utilization	69.0%	ICU Level of Service	C
Analysis Period (min)	15		

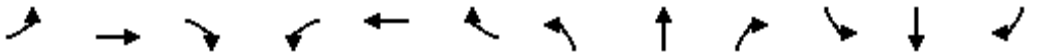
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	324	0	6	0	0	90	0	1	13	0	570	216
Future Volume (veh/h)	324	0	6	0	0	90	0	1	13	0	570	216
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	0	1863	1863	0	1863	1900	0	1863	1863
Adj Flow Rate, veh/h	345	0	0	0	0	0	0	1	14	0	606	0
Adj No. of Lanes	0	1	1	0	1	1	0	2	0	0	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	0	2	2	0	2	2	0	2	2
Cap, veh/h	531	0	474	0	8	7	0	657	587	0	1314	588
Arrive On Green	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.37	0.00	0.37	0.00
Sat Flow, veh/h	1774	0	1583	0	1863	1583	0	1863	1581	0	3632	1583
Grp Volume(v), veh/h	345	0	0	0	0	0	0	1	14	0	606	0
Grp Sat Flow(s),veh/h/ln	1774	0	1583	0	1863	1583	0	1770	1581	0	1770	1583
Q Serve(g_s), s	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	3.2	0.0
Cycle Q Clear(g_c), s	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	3.2	0.0
Prop In Lane	1.00		1.00	0.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	531	0	474	0	8	7	0	657	587	0	1314	588
V/C Ratio(X)	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.46	0.00
Avail Cap(c_a), veh/h	1682	0	1501	0	384	326	0	1605	1434	0	3064	1371
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	7.4	0.0	0.0	0.0	0.0	0.0	0.0	4.8	4.8	0.0	5.8	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.6	0.0
LnGrp Delay(d),s/veh	8.7	0.0	0.0	0.0	0.0	0.0	0.0	4.8	4.9	0.0	6.0	0.0
LnGrp LOS	A							A	A		A	
Approach Vol, veh/h		345			0			15			606	
Approach Delay, s/veh		8.7			0.0			4.9			6.0	
Approach LOS		A						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		13.0		11.3		13.0		0.0
Change Period (Y+Rc), s		* 4		4.0		4.0		3.0
Max Green Setting (Gmax), s		* 22		23.0		21.0		5.0
Max Q Clear Time (g_c+I1), s		2.1		6.1		5.2		0.0
Green Ext Time (p_c), s		4.2		1.9		3.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	7.0
HCM 2010 LOS	A

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	373	3	21	338	284	0	0	94	218
Future Volume (vph)	0	0	0	373	3	21	338	284	0	0	94	218
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.2	4.2		4.6			4.2	4.0
Lane Util. Factor					1.00	1.00		1.00			1.00	1.00
Frpb, ped/bikes					1.00	1.00		1.00			1.00	0.97
Flpb, ped/bikes					1.00	1.00		1.00			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					0.95	1.00		0.97			1.00	1.00
Satd. Flow (prot)					1775	1583		1814			1863	1540
Flt Permitted					0.95	1.00		0.97			1.00	1.00
Satd. Flow (perm)					1775	1583		1814			1863	1540
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	0	385	3	22	348	293	0	0	97	225
RTOR Reduction (vph)	0	0	0	0	0	16	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	388	6	0	641	0	0	97	225
Confl. Peds. (#/hr)												15
Turn Type				Split	NA	Perm	Split	NA			NA	Free
Protected Phases				8	8		2	2			6	
Permitted Phases						8						Free
Actuated Green, G (s)					18.2	18.2		27.9			9.0	68.1
Effective Green, g (s)					18.2	18.2		27.9			9.0	68.1
Actuated g/C Ratio					0.27	0.27		0.41			0.13	1.00
Clearance Time (s)					4.2	4.2		4.6			4.2	
Vehicle Extension (s)					3.5	3.5		3.5			3.5	
Lane Grp Cap (vph)					474	423		743			246	1540
v/s Ratio Prot					c0.22			c0.35			c0.05	
v/s Ratio Perm						0.00						0.15
v/c Ratio					0.82	0.01		0.86			0.39	0.15
Uniform Delay, d1					23.4	18.4		18.4			27.1	0.0
Progression Factor					1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2					10.8	0.0		10.4			1.2	0.2
Delay (s)					34.2	18.4		28.7			28.3	0.2
Level of Service					C	B		C			C	A
Approach Delay (s)		0.0			33.4			28.7			8.7	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	25.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	68.1	Sum of lost time (s)	13.0
Intersection Capacity Utilization	68.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Appendix F

Intersection
Level of Service
Calculations

Background Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	161	117	223	0	385	0	69	124	17	26	0
Future Volume (veh/h)	1	161	117	223	0	385	0	69	124	17	26	0
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1845	1845	1845	0	1845	0	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	1	183	133	253	0	438	0	78	141	19	30	0
Adj No. of Lanes	0	2	1	1	0	1	0	1	1	0	1	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	0	3	0	6	6	2	2	2
Cap, veh/h	4	701	305	0	0	0	0	432	367	389	299	0
Arrive On Green	0.20	0.20	0.20	0.00	0.00	0.00	0.00	0.24	0.24	0.24	0.24	0.00
Sat Flow, veh/h	19	3577	1555		0		0	1792	1524	387	1240	0
Grp Volume(v), veh/h	99	85	133		0.0		0	78	141	49	0	0
Grp Sat Flow(s),veh/h/ln	1844	1752	1555				0	1792	1524	1627	0	0
Q Serve(g_s), s	0.8	0.7	1.3				0.0	0.6	1.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.7	1.3				0.0	0.6	1.3	0.3	0.0	0.0
Prop In Lane	0.01		1.00				0.00		1.00	0.39		0.00
Lane Grp Cap(c), veh/h	361	343	305				0	432	367	688	0	0
V/C Ratio(X)	0.27	0.25	0.44				0.00	0.18	0.38	0.07	0.00	0.00
Avail Cap(c_a), veh/h	2808	2669	2368				0	3059	2600	2896	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.8	5.7	6.0				0.0	5.1	5.4	5.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.1	0.4				0.0	0.1	0.2	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
%ile BackOfQ(50%),veh/ln	0.4	0.3	0.5				0.0	0.3	0.6	0.2	0.0	0.0
LnGrp Delay(d),s/veh	5.9	5.9	6.3				0.0	5.2	5.6	5.0	0.0	0.0
LnGrp LOS	A	A	A					A	A	A		
Approach Vol, veh/h		317						219			49	
Approach Delay, s/veh		6.1						5.4			5.0	
Approach LOS		A						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		8.3		8.6		8.3		
Change Period (Y+Rc), s		* 4.2		5.3		* 4.2		
Max Green Setting (Gmax), s		* 29		25.7		* 29		
Max Q Clear Time (g_c+I1), s		3.3		3.3		2.3		
Green Ext Time (p_c), s		0.8		0.8		0.8		

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)	86	137	79	117	261	67	163	452	76	46	805	184
Future Volume (veh/h)	86	137	79	117	261	67	163	452	76	46	805	184
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	1845	1845	1900	1827	1827	1827
Adj Flow Rate, veh/h	95	151	87	129	287	74	179	497	84	51	885	202
Adj No. of Lanes	1	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	230	241	202	111	246	63	190	1218	205	65	1179	527
Arrive On Green	0.13	0.13	0.13	0.23	0.23	0.23	0.11	0.41	0.41	0.04	0.34	0.34
Sat Flow, veh/h	1774	1863	1561	472	1049	271	1757	3003	505	1740	3471	1553
Grp Volume(v), veh/h	95	151	87	490	0	0	179	289	292	51	885	202
Grp Sat Flow(s),veh/h/ln	1774	1863	1561	1791	0	0	1757	1752	1756	1740	1736	1553
Q Serve(g_s), s	4.9	7.7	5.1	23.4	0.0	0.0	10.1	11.7	11.8	2.9	22.6	9.9
Cycle Q Clear(g_c), s	4.9	7.7	5.1	23.4	0.0	0.0	10.1	11.7	11.8	2.9	22.6	9.9
Prop In Lane	1.00		1.00	0.26		0.15	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	230	241	202	420	0	0	190	711	712	65	1179	527
V/C Ratio(X)	0.41	0.63	0.43	1.17	0.00	0.00	0.94	0.41	0.41	0.79	0.75	0.38
Avail Cap(c_a), veh/h	604	635	532	420	0	0	190	748	749	99	1321	591
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	41.2	40.1	38.2	0.0	0.0	44.2	21.1	21.2	47.7	29.2	25.0
Incr Delay (d2), s/veh	1.2	2.7	1.4	98.0	0.0	0.0	48.7	0.5	0.5	20.2	2.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	4.1	2.3	22.9	0.0	0.0	7.4	5.7	5.8	1.8	11.2	4.3
LnGrp Delay(d),s/veh	41.2	43.8	41.5	136.2	0.0	0.0	92.9	21.6	21.6	67.8	31.5	25.6
LnGrp LOS	D	D	D	F			F	C	C	E	C	C
Approach Vol, veh/h		333			490			760			1138	
Approach Delay, s/veh		42.5			136.2			38.4			32.1	
Approach LOS		D			F			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.4	45.8		17.6	15.0	39.2		28.0
Change Period (Y+Rc), s	* 4.7	5.3		* 4.7	* 4.2	5.3		4.6
Max Green Setting (Gmax), s	* 5.7	42.6		* 34	* 11	38.0		23.4
Max Q Clear Time (g_c+I1), s	4.9	13.8		9.7	12.1	24.6		25.4
Green Ext Time (p_c), s	0.0	15.6		1.4	0.0	9.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	53.9
HCM 2010 LOS	D

Notes

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	129	0	3	0	0	97	0	450	14	0	607	408
Future Vol, veh/h	129	0	3	0	0	97	0	450	14	0	607	408
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	0	-	-	0	-	-	-	-	-	75
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, %	14	14	14	2	2	2	3	3	3	3	3	3
Mvmt Flow	137	0	3	0	0	103	0	479	15	0	646	434

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	885	-	323	-	-	249	-	0	0	-	-	0
Stage 1	646	-	-	-	-	-	-	-	-	-	-	-
Stage 2	239	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.78	-	7.18	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	6.78	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.78	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.64	-	3.44	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	221	0	639	0	0	751	0	-	-	0	-	0
Stage 1	399	0	-	0	0	-	0	-	-	0	-	0
Stage 2	710	0	-	0	0	-	0	-	-	0	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	191	-	639	-	-	750	-	-	-	-	-	-
Mov Cap-2 Maneuver	301	-	-	-	-	-	-	-	-	-	-	-
Stage 1	399	-	-	-	-	-	-	-	-	-	-	-
Stage 2	612	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	26.2	10.6	0	0
HCM LOS	D	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	WBLn1	SBT
Capacity (veh/h)	-	-	301	639	750	-
HCM Lane V/C Ratio	-	-	0.456	0.005	0.138	-
HCM Control Delay (s)	-	-	26.6	10.7	10.6	-
HCM Lane LOS	-	-	D	B	B	-
HCM 95th %tile Q(veh)	-	-	2.3	0	0.5	-

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	65	3	135	35	3	405
Future Vol, veh/h	65	3	135	35	3	405
Conflicting Peds, #/hr	0	2	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	9	9	7	7	4	4
Mvmt Flow	73	3	152	39	3	455

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	410	103	0	0	196	0
Stage 1	176	-	-	-	-	-
Stage 2	234	-	-	-	-	-
Critical Hdwy	6.98	7.08	-	-	4.18	-
Critical Hdwy Stg 1	5.98	-	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.24	-
Pot Cap-1 Maneuver	552	910	-	-	1360	-
Stage 1	816	-	-	-	-	-
Stage 2	762	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	548	905	-	-	1358	-
Mov Cap-2 Maneuver	548	-	-	-	-	-
Stage 1	813	-	-	-	-	-
Stage 2	760	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.5	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	558	1358	-
HCM Lane V/C Ratio	-	-	0.137	0.002	-
HCM Control Delay (s)	-	-	12.5	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0	-

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	42	94	4	0	48	140	19	0	7	14	36
Future Vol, veh/h	0	42	94	4	0	48	140	19	0	7	14	36
Peak Hour Factor	0.92	0.86	0.86	0.86	0.92	0.86	0.86	0.86	0.92	0.86	0.86	0.86
Heavy Vehicles, %	2	17	17	17	2	8	8	8	2	7	7	7
Mvmt Flow	0	49	109	5	0	56	163	22	0	8	16	42
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	9.6	9.9	8.6
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	33%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	67%	0%	0%	96%	0%	88%	0%	51%
Vol Right, %	0%	100%	0%	4%	0%	12%	0%	49%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	21	36	42	98	48	159	43	87
LT Vol	7	0	42	0	48	0	43	0
Through Vol	14	0	0	94	0	140	0	44
RT Vol	0	36	0	4	0	19	0	43
Lane Flow Rate	24	42	49	114	56	185	50	101
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.041	0.06	0.083	0.177	0.092	0.273	0.087	0.152
Departure Headway (Hd)	6.039	5.164	6.131	5.599	5.902	5.315	6.255	5.402
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	589	687	581	637	604	673	570	660
Service Time	3.817	2.942	3.901	3.369	3.664	3.077	4.022	3.169
HCM Lane V/C Ratio	0.041	0.061	0.084	0.179	0.093	0.275	0.088	0.153
HCM Control Delay	9.1	8.3	9.5	9.6	9.3	10.1	9.6	9.1
HCM Lane LOS	A	A	A	A	A	B	A	A
HCM 95th-tile Q	0.1	0.2	0.3	0.6	0.3	1.1	0.3	0.5

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	43	44	43
Future Vol, veh/h	0	43	44	43
Peak Hour Factor	0.92	0.86	0.86	0.86
Heavy Vehicles, %	2	7	7	7
Mvmt Flow	0	50	51	50
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	9.3
HCM LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	59	105	22	103	0	67	156	21	3	425	44
Future Volume (veh/h)	9	59	105	22	103	0	67	156	21	3	425	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1792	1792	1900	1743	1743	1900	1792	1792	1900
Adj Flow Rate, veh/h	10	63	113	24	111	0	72	168	23	3	457	47
Adj No. of Lanes	1	1	1	1	2	0	2	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	11	11	11	6	6	6	9	9	9	6	6	6
Cap, veh/h	17	306	258	39	652	0	171	1241	167	6	1165	119
Arrive On Green	0.01	0.18	0.18	0.02	0.19	0.00	0.05	0.42	0.42	0.00	0.37	0.37
Sat Flow, veh/h	1630	1712	1445	1707	3495	0	3221	2933	396	1707	3119	319
Grp Volume(v), veh/h	10	63	113	24	111	0	72	94	97	3	249	255
Grp Sat Flow(s),veh/h/ln	1630	1712	1445	1707	1703	0	1610	1656	1673	1707	1703	1735
Q Serve(g_s), s	0.3	1.4	3.1	0.6	1.2	0.0	1.0	1.5	1.6	0.1	4.8	4.8
Cycle Q Clear(g_c), s	0.3	1.4	3.1	0.6	1.2	0.0	1.0	1.5	1.6	0.1	4.8	4.8
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.24	1.00		0.18
Lane Grp Cap(c), veh/h	17	306	258	39	652	0	171	701	708	6	636	648
V/C Ratio(X)	0.59	0.21	0.44	0.61	0.17	0.00	0.42	0.13	0.14	0.54	0.39	0.39
Avail Cap(c_a), veh/h	147	964	814	192	1995	0	290	914	923	154	940	958
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00
Uniform Delay (d), s/veh	21.9	15.5	16.2	21.5	15.0	0.0	20.4	7.8	7.8	22.1	10.2	10.2
Incr Delay (d2), s/veh	28.1	0.5	1.7	14.2	0.2	0.0	1.6	0.4	0.4	62.2	1.8	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	0.3	0.7	1.4	0.4	0.6	0.0	0.5	0.8	0.8	0.1	2.5	2.6
LnGrp Delay(d),s/veh	50.0	16.0	17.9	35.7	15.2	0.0	22.0	8.2	8.2	84.3	12.0	12.0
LnGrp LOS	D	B	B	D	B		C	A	A	F	B	B
Approach Vol, veh/h		186			135			263			507	
Approach Delay, s/veh		19.0			18.8			12.0			12.4	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.1	23.3	5.0	11.9	6.4	21.1	4.5	12.5
Change Period (Y+Rc), s	4.0	4.5	4.0	4.0	4.0	4.5	4.0	4.0
Max Green Setting (Gmax), s	4.0	24.5	5.0	25.0	4.0	24.5	4.0	26.0
Max Q Clear Time (g_c+I1), s	2.1	3.6	2.6	5.1	3.0	6.8	2.3	3.2
Green Ext Time (p_c), s	0.0	10.9	0.0	1.9	0.0	9.7	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay	14.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	3.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	139	24	203	53	57	477
Future Vol, veh/h	139	24	203	53	57	477
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	9	9	7	7
Mvmt Flow	158	27	231	60	65	542

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	664	147	0	0	293	0
Stage 1	263	-	-	-	-	-
Stage 2	401	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.24	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.27	-
Pot Cap-1 Maneuver	394	873	-	-	1230	-
Stage 1	757	-	-	-	-	-
Stage 2	645	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	373	872	-	-	1230	-
Mov Cap-2 Maneuver	373	-	-	-	-	-
Stage 1	756	-	-	-	-	-
Stage 2	611	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.8	0	0.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	373	872	1230	-
HCM Lane V/C Ratio	-	-	0.423	0.031	0.053	-
HCM Control Delay (s)	-	-	21.6	9.3	8.1	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	2	0.1	0.2	-

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBU	SBL	SBR
Lane Configurations									
Traffic Vol, veh/h	0	13	53	0	81	23	0	11	18
Future Vol, veh/h	0	13	53	0	81	23	0	11	18
Peak Hour Factor	0.92	0.84	0.84	0.92	0.84	0.84	0.92	0.84	0.84
Heavy Vehicles, %	2	2	2	2	10	10	2	7	7
Mvmt Flow	0	15	63	0	96	27	0	13	21
Number of Lanes	0	1	1	0	1	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	7.8	7.9	7.4
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	38%
Vol Thru, %	0%	100%	78%	0%
Vol Right, %	0%	0%	22%	62%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	13	53	104	29
LT Vol	13	0	0	11
Through Vol	0	53	81	0
RT Vol	0	0	23	18
Lane Flow Rate	15	63	124	35
Geometry Grp	7	7	5	2
Degree of Util (X)	0.022	0.082	0.143	0.04
Departure Headway (Hd)	5.158	4.657	4.157	4.186
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	693	768	858	861
Service Time	2.896	2.394	2.202	2.186
HCM Lane V/C Ratio	0.022	0.082	0.145	0.041
HCM Control Delay	8	7.8	7.9	7.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.3	0.5	0.1

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	7	35	19	0	73	92	25	0	13	10	62
Future Vol, veh/h	0	7	35	19	0	73	92	25	0	13	10	62
Peak Hour Factor	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	7	7	7	2	7	7	7	2	15	15	15
Mvmt Flow	0	9	44	24	0	91	115	31	0	16	13	78
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	8.4	9.2	8.5
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	57%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	43%	0%	0%	65%	0%	79%	0%	83%
Vol Right, %	0%	100%	0%	35%	0%	21%	0%	17%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	23	62	7	54	73	117	18	47
LT Vol	13	0	7	0	73	0	18	0
Through Vol	10	0	0	35	0	92	0	39
RT Vol	0	62	0	19	0	25	0	8
Lane Flow Rate	29	78	9	68	91	146	22	59
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.047	0.106	0.014	0.096	0.144	0.204	0.037	0.087
Departure Headway (Hd)	5.932	4.943	5.856	5.105	5.683	5.031	5.952	5.328
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	603	724	611	701	631	714	601	672
Service Time	3.67	2.68	3.596	2.845	3.415	2.762	3.69	3.067
HCM Lane V/C Ratio	0.048	0.108	0.015	0.097	0.144	0.204	0.037	0.088
HCM Control Delay	9	8.3	8.7	8.4	9.4	9.1	8.9	8.6
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.4	0	0.3	0.5	0.8	0.1	0.3

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	18	39	8
Future Vol, veh/h	0	18	39	8
Peak Hour Factor	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	23	49	10
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	8.7
HCM LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	17	53	16	37	18	62	200	25	41	473	93
Future Volume (veh/h)	48	17	53	16	37	18	62	200	25	41	473	93
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1900	1845	1845	1845	1759	1759	1900	1792	1792	1900
Adj Flow Rate, veh/h	52	18	58	17	40	20	67	217	27	45	514	101
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	9	9	3	3	3	8	8	8	6	6	6
Cap, veh/h	72	38	122	30	145	124	86	1382	170	66	1274	249
Arrive On Green	0.04	0.10	0.10	0.02	0.08	0.08	0.05	0.46	0.46	0.04	0.45	0.45
Sat Flow, veh/h	1660	362	1167	1757	1845	1568	1675	2996	368	1707	2839	555
Grp Volume(v), veh/h	52	0	76	17	40	20	67	120	124	45	307	308
Grp Sat Flow(s),veh/h/ln	1660	0	1529	1757	1845	1568	1675	1671	1693	1707	1703	1692
Q Serve(g_s), s	1.3	0.0	2.0	0.4	0.9	0.5	1.7	1.8	1.8	1.1	5.1	5.2
Cycle Q Clear(g_c), s	1.3	0.0	2.0	0.4	0.9	0.5	1.7	1.8	1.8	1.1	5.1	5.2
Prop In Lane	1.00		0.76	1.00		1.00	1.00		0.22	1.00		0.33
Lane Grp Cap(c), veh/h	72	0	160	30	145	124	86	771	781	66	764	759
V/C Ratio(X)	0.72	0.00	0.47	0.57	0.28	0.16	0.78	0.16	0.16	0.68	0.40	0.41
Avail Cap(c_a), veh/h	235	0	578	166	610	518	198	771	781	242	764	759
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.0	0.0	17.9	20.7	18.4	18.2	19.8	6.6	6.6	20.1	7.9	7.9
Incr Delay (d2), s/veh	12.9	0.0	2.2	15.6	1.0	0.6	13.8	0.4	0.4	11.5	1.6	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.9	0.3	0.5	0.2	1.1	0.9	0.9	0.7	2.7	2.7
LnGrp Delay(d),s/veh	32.9	0.0	20.0	36.2	19.4	18.8	33.6	7.0	7.1	31.6	9.4	9.5
LnGrp LOS	C		C	D	B	B	C	A	A	C	A	A
Approach Vol, veh/h		128			77			311			660	
Approach Delay, s/veh		25.3			22.9			12.8			11.0	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	23.5	4.7	8.4	6.2	23.0	5.8	7.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	18.0	4.0	16.0	5.0	19.0	6.0	14.0
Max Q Clear Time (g_c+I1), s	3.1	3.8	2.4	4.0	3.7	7.2	3.3	2.9
Green Ext Time (p_c), s	0.0	4.6	0.0	0.5	0.0	4.2	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	13.8
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	0	33	4	0	45	76	0	0	3	0	13
Future Vol, veh/h	0	0	33	4	0	45	76	0	0	3	0	13
Peak Hour Factor	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	7	7	7	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	41	5	0	56	95	0	0	4	0	16
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	7.4	7.9	7
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	19%	0%	37%	0%
Vol Thru, %	0%	89%	63%	0%
Vol Right, %	81%	11%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	16	37	121	2
LT Vol	3	0	45	0
Through Vol	0	33	76	0
RT Vol	13	4	0	2
Lane Flow Rate	20	46	151	2
Geometry Grp	1	1	1	1
Degree of Util (X)	0.021	0.053	0.172	0.003
Departure Headway (Hd)	3.824	4.106	4.082	4.506
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	919	869	880	782
Service Time	1.92	2.146	2.1	2.605
HCM Lane V/C Ratio	0.022	0.053	0.172	0.003
HCM Control Delay	7	7.4	7.9	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.6	0

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	0	0	2
Future Vol, veh/h	0	0	0	2
Peak Hour Factor	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	50	50	50
Mvmt Flow	0	0	0	3
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	7.6
HCM LOS	A

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	64	2	0	13	43	0	3	8
Future Vol, veh/h	0	64	2	0	13	43	0	3	8
Peak Hour Factor	0.92	0.91	0.91	0.92	0.91	0.91	0.92	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	9	9
Mvmt Flow	0	70	2	0	14	47	0	3	9
Number of Lanes	0	1	0	0	1	0	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.7	6.9	7.4
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	97%	27%
Vol Thru, %	23%	0%	73%
Vol Right, %	77%	3%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	56	66	11
LT Vol	0	64	3
Through Vol	13	0	8
RT Vol	43	2	0
Lane Flow Rate	62	73	12
Geometry Grp	1	1	1
Degree of Util (X)	0.062	0.085	0.014
Departure Headway (Hd)	3.608	4.238	4.281
Convergence, Y/N	Yes	Yes	Yes
Cap	986	846	832
Service Time	1.652	2.258	2.329
HCM Lane V/C Ratio	0.063	0.086	0.014
HCM Control Delay	6.9	7.7	7.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0.3	0

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	21	13	7	0	52	16	0	0	18	64	49
Future Vol, veh/h	0	21	13	7	0	52	16	0	0	18	64	49
Peak Hour Factor	0.92	0.83	0.83	0.83	0.92	0.83	0.83	0.83	0.92	0.83	0.83	0.83
Heavy Vehicles, %	2	3	3	3	2	6	6	6	2	3	3	3
Mvmt Flow	0	25	16	8	0	63	19	0	0	22	77	59
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	8.6	9.3	8.3
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	14%	62%	0%	76%	0%	2%
Vol Thru, %	49%	38%	0%	24%	100%	76%
Vol Right, %	37%	0%	100%	0%	0%	23%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	131	34	7	68	0	120
LT Vol	18	21	0	52	0	2
Through Vol	64	13	0	16	0	91
RT Vol	49	0	7	0	0	27
Lane Flow Rate	158	41	8	82	0	145
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.188	0.064	0.011	0.13	0	0.179
Departure Headway (Hd)	4.289	5.632	4.616	5.719	5.333	4.464
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	838	636	774	627	0	805
Service Time	2.31	3.368	2.352	3.454	3.068	2.486
HCM Lane V/C Ratio	0.189	0.064	0.01	0.131	0	0.18
HCM Control Delay	8.3	8.8	7.4	9.3	8.1	8.5
HCM Lane LOS	A	A	A	A	N	A
HCM 95th-tile Q	0.7	0.2	0	0.4	0	0.6

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations			↕	
Traffic Vol, veh/h	0	2	91	27
Future Vol, veh/h	0	2	91	27
Peak Hour Factor	0.92	0.83	0.83	0.83
Heavy Vehicles, %	2	9	9	9
Mvmt Flow	0	2	110	33
Number of Lanes	0	0	1	0

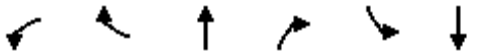
Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	8.5
HCM LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	0	190	0	0	0	164	366	6	0	482	79
Future Volume (veh/h)	43	0	190	0	0	0	164	366	6	0	482	79
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		1.00	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	1900	1776	1776	1900	1863	1900	1827	1827	1900	0	1810	1900
Adj Flow Rate, veh/h	48	0	211	0	0	0	182	407	7	0	536	88
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	0	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	7	7	7	2	2	2	4	4	4	0	5	5
Cap, veh/h	382	0	275	0	343	0	599	2338	40	0	1553	254
Arrive On Green	0.18	0.00	0.18	0.00	0.00	0.00	0.08	0.67	0.67	0.00	0.53	0.53
Sat Flow, veh/h	1330	0	1492	0	1863	0	1740	3491	60	0	3045	483
Grp Volume(v), veh/h	48	0	211	0	0	0	182	202	212	0	311	313
Grp Sat Flow(s),veh/h/ln	1330	0	1492	0	1863	0	1740	1736	1816	0	1719	1718
Q Serve(g_s), s	1.6	0.0	7.1	0.0	0.0	0.0	2.2	2.3	2.3	0.0	5.5	5.6
Cycle Q Clear(g_c), s	1.6	0.0	7.1	0.0	0.0	0.0	2.2	2.3	2.3	0.0	5.5	5.6
Prop In Lane	1.00		1.00	0.00		0.00	1.00		0.03	0.00		0.28
Lane Grp Cap(c), veh/h	382	0	275	0	343	0	599	1162	1216	0	904	903
V/C Ratio(X)	0.13	0.00	0.77	0.00	0.00	0.00	0.30	0.17	0.17	0.00	0.34	0.35
Avail Cap(c_a), veh/h	566	0	481	0	601	0	745	1162	1216	0	904	903
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	0.0	20.4	0.0	0.0	0.0	4.5	3.3	3.3	0.0	7.2	7.2
Incr Delay (d2), s/veh	0.2	0.0	6.3	0.0	0.0	0.0	0.3	0.3	0.3	0.0	1.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	3.4	0.0	0.0	0.0	1.1	1.2	1.2	0.0	2.9	2.9
LnGrp Delay(d),s/veh	18.4	0.0	26.7	0.0	0.0	0.0	4.8	3.6	3.6	0.0	8.3	8.3
LnGrp LOS	B		C				A	A	A		A	A
Approach Vol, veh/h		259			0			596			624	
Approach Delay, s/veh		25.2			0.0			3.9			8.3	
Approach LOS		C						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		39.5		13.2	7.6	31.9		13.2
Change Period (Y+Rc), s		* 4.2		3.5	3.5	* 4.2		3.5
Max Green Setting (Gmax), s		* 35		17.0	8.5	* 23		17.0
Max Q Clear Time (g_c+I1), s		4.3		9.1	4.2	7.6		0.0
Green Ext Time (p_c), s		20.1		0.9	0.2	11.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	9.5
HCM 2010 LOS	A

Notes



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	486	83	454	273	42	630
Future Volume (veh/h)	486	83	454	273	42	630
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1845	1845	1810	1810
Adj Flow Rate, veh/h	559	95	522	0	48	724
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	3	3	5	5
Cap, veh/h	847	390	1615	723	67	1959
Arrive On Green	0.25	0.25	0.46	0.00	0.04	0.57
Sat Flow, veh/h	3442	1583	3597	1568	1723	3529
Grp Volume(v), veh/h	559	95	522	0	48	724
Grp Sat Flow(s),veh/h/ln	1721	1583	1752	1568	1723	1719
Q Serve(g_s), s	7.3	2.4	4.7	0.0	1.4	5.7
Cycle Q Clear(g_c), s	7.3	2.4	4.7	0.0	1.4	5.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	847	390	1615	723	67	1959
V/C Ratio(X)	0.66	0.24	0.32	0.00	0.72	0.37
Avail Cap(c_a), veh/h	1171	539	1719	769	200	2326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	17.0	15.1	8.5	0.0	23.7	5.9
Incr Delay (d2), s/veh	1.9	0.7	0.5	0.0	13.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	1.1	2.4	0.0	0.9	2.8
LnGrp Delay(d),s/veh	18.8	15.8	9.1	0.0	36.9	6.4
LnGrp LOS	B	B	A		D	A
Approach Vol, veh/h	654		522			772
Approach Delay, s/veh	18.4		9.1			8.3
Approach LOS	B		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	5.4	27.2				32.7		17.3
Change Period (Y+Rc), s	3.5	* 4.2				* 4.2		5.0
Max Green Setting (Gmax), s	5.8	* 25				* 34		17.0
Max Q Clear Time (g_c+I1), s	3.4	6.7				7.7		9.3
Green Ext Time (p_c), s	0.0	14.9				20.7		3.0

Intersection Summary	
HCM 2010 Ctrl Delay	11.9
HCM 2010 LOS	B

Notes

Intersection	
Int Delay, s/veh	9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	2	6	97	94	10	9	111	31	64	0	0	0
Future Vol, veh/h	2	6	97	94	10	9	111	31	64	0	0	0
Conflicting Peds, #/hr	20	0	1	1	0	20	17	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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	6	6	6	2	2	2	2	2	2
Mvmt Flow	3	8	129	125	13	12	148	41	85	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	430	440	18	450	397	104	17	0	0
Stage 1	17	17	-	380	380	-	-	-	-
Stage 2	413	423	-	70	17	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.16	6.56	6.26	4.12	-	-
Critical Hdwy Stg 1	-	-	-	6.16	5.56	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.554	4.054	3.354	2.218	-	-
Pot Cap-1 Maneuver	535	511	1061	513	534	940	1600	-	-
Stage 1	-	-	-	634	607	-	-	-	-
Stage 2	616	588	-	-	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	470	453	1045	409	473	940	1599	-	-
Mov Cap-2 Maneuver	470	453	-	409	473	-	-	-	-
Stage 1	-	-	-	570	546	-	-	-	-
Stage 2	533	529	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	9.4	17.6	4
HCM LOS	A	C	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	1599	-	-	952	434
HCM Lane V/C Ratio	0.093	-	-	0.147	0.347
HCM Control Delay (s)	7.5	0	-	9.4	17.6
HCM Lane LOS	A	A	-	A	C
HCM 95th %tile Q(veh)	0.3	-	-	0.5	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	412	1	36	435	170	0	0	76	117
Future Volume (veh/h)	0	0	0	412	1	36	435	170	0	0	76	117
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.94
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1792	1792	1900	1845	0	0	1827	1900
Adj Flow Rate, veh/h				485	1	42	512	200	0	0	89	138
Adj No. of Lanes				0	1	1	0	1	0	0	1	0
Peak Hour Factor				0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %				6	6	6	3	3	0	0	4	4
Cap, veh/h				507	1	453	531	208	0	0	78	120
Arrive On Green				0.30	0.30	0.30	0.41	0.41	0.00	0.00	0.13	0.13
Sat Flow, veh/h				1704	4	1524	1280	500	0	0	621	963
Grp Volume(v), veh/h				486	0	42	712	0	0	0	0	227
Grp Sat Flow(s),veh/h/ln				1707	0	1524	1781	0	0	0	0	1585
Q Serve(g_s), s				22.4	0.0	1.6	31.2	0.0	0.0	0.0	0.0	10.0
Cycle Q Clear(g_c), s				22.4	0.0	1.6	31.2	0.0	0.0	0.0	0.0	10.0
Prop In Lane				1.00		1.00	0.72		0.00	0.00		0.61
Lane Grp Cap(c), veh/h				508	0	453	739	0	0	0	0	198
V/C Ratio(X)				0.96	0.00	0.09	0.96	0.00	0.00	0.00	0.00	1.15
Avail Cap(c_a), veh/h				508	0	453	739	0	0	0	0	198
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				27.6	0.0	20.3	22.8	0.0	0.0	0.0	0.0	35.0
Incr Delay (d2), s/veh				29.3	0.0	0.1	24.5	0.0	0.0	0.0	0.0	108.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				14.7	0.0	0.7	20.3	0.0	0.0	0.0	0.0	10.3
LnGrp Delay(d),s/veh				56.9	0.0	20.4	47.3	0.0	0.0	0.0	0.0	143.7
LnGrp LOS				E		C	D					F
Approach Vol, veh/h					528			712			227	
Approach Delay, s/veh					54.0			47.3			143.7	
Approach LOS					D			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		37.8				14.2		28.0
Change Period (Y+Rc), s		4.6				4.2		4.2
Max Green Setting (Gmax), s		33.2				10.0		23.8
Max Q Clear Time (g_c+I1), s		33.2				12.0		24.4
Green Ext Time (p_c), s		0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	64.6
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	79	1	264	0	0	0	0	526	285	27	461	0
Future Vol, veh/h	79	1	264	0	0	0	0	526	285	27	461	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	2	2	2	5	5	5	6	6	6
Mvmt Flow	86	1	287	0	0	0	0	572	310	29	501	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1132	1134	501	-	0	0	574	0	0
Stage 1	560	560	-	-	-	-	-	-	-
Stage 2	572	574	-	-	-	-	-	-	-
Critical Hdwy	6.43	6.53	6.23	-	-	-	4.16	-	-
Critical Hdwy Stg 1	5.43	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	-	-	-	2.254	-	-
Pot Cap-1 Maneuver	224	202	568	0	-	-	979	-	0
Stage 1	570	509	-	0	-	-	-	-	0
Stage 2	563	502	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	215	0	568	-	-	-	979	-	-
Mov Cap-2 Maneuver	215	0	-	-	-	-	-	-	-
Stage 1	547	0	-	-	-	-	-	-	-
Stage 2	563	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.1	0	0.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	215	568	979	-
HCM Lane V/C Ratio	-	-	0.404	0.505	0.03	-
HCM Control Delay (s)	-	-	32.7	17.6	8.8	0
HCM Lane LOS	-	-	D	C	A	A
HCM 95th %tile Q(veh)	-	-	1.8	2.8	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	354	170	126	685	276	408	398	158	223	358	89
Future Volume (veh/h)	138	354	170	126	685	276	408	398	158	223	358	89
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1863	1863	1863	1810	1810	1900
Adj Flow Rate, veh/h	159	407	195	145	787	317	469	457	182	256	411	102
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	2	2	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	4	4	4	4	4	4	2	2	2	5	5	5
Cap, veh/h	176	1107	494	169	1094	480	345	1150	507	325	879	216
Arrive On Green	0.10	0.32	0.32	0.10	0.32	0.32	0.10	0.32	0.32	0.10	0.32	0.32
Sat Flow, veh/h	1740	3471	1547	1740	3471	1522	3442	3539	1558	3343	2730	671
Grp Volume(v), veh/h	159	407	195	145	787	317	469	457	182	256	257	256
Grp Sat Flow(s),veh/h/ln	1740	1736	1547	1740	1736	1522	1721	1770	1558	1672	1719	1682
Q Serve(g_s), s	9.3	9.3	10.1	8.4	20.6	18.5	10.3	10.3	9.2	7.7	12.3	12.5
Cycle Q Clear(g_c), s	9.3	9.3	10.1	8.4	20.6	18.5	10.3	10.3	9.2	7.7	12.3	12.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	176	1107	494	169	1094	480	345	1150	507	325	554	542
V/C Ratio(X)	0.90	0.37	0.40	0.86	0.72	0.66	1.36	0.40	0.36	0.79	0.46	0.47
Avail Cap(c_a), veh/h	176	1182	527	169	1168	512	345	1150	507	377	554	542
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.7	27.0	27.3	45.7	31.2	30.5	46.2	26.9	26.5	45.4	27.8	27.9
Incr Delay (d2), s/veh	41.5	0.3	0.7	32.7	2.3	3.4	179.7	1.0	2.0	9.3	2.8	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	4.5	4.4	5.6	10.2	8.2	13.4	5.2	4.2	4.0	6.2	6.3
LnGrp Delay(d),s/veh	87.2	27.3	28.0	78.4	33.4	33.8	226.0	27.9	28.5	54.6	30.6	30.8
LnGrp LOS	F	C	C	E	C	C	F	C	C	D	C	C
Approach Vol, veh/h		761			1249			1108			769	
Approach Delay, s/veh		40.0			38.8			111.9			38.7	
Approach LOS		D			D			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	38.0	13.7	37.4	14.0	37.7	14.1	37.0
Change Period (Y+Rc), s	3.7	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Green Setting (Gmax), s	11.6	31.8	10.0	35.0	10.3	33.1	10.4	34.6
Max Q Clear Time (g_c+I1), s	9.7	12.3	10.4	12.1	12.3	14.5	11.3	22.6
Green Ext Time (p_c), s	0.2	9.4	0.0	14.8	0.0	9.1	0.0	9.0

Intersection Summary	
HCM 2010 Ctrl Delay	59.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	275	189	223	0	385	0	123	391	20	32	0
Future Volume (veh/h)	29	275	189	223	0	385	0	123	391	20	32	0
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1863	0	1863	0	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	33	309	212	251	0	433	0	138	439	22	36	0
Adj No. of Lanes	0	2	1	1	0	1	0	1	1	0	1	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	0	2	0	2	2	2	2	2
Cap, veh/h	86	846	402	0	0	0	0	708	601	318	421	0
Arrive On Green	0.26	0.26	0.26	0.00	0.00	0.00	0.00	0.38	0.38	0.38	0.38	0.00
Sat Flow, veh/h	333	3282	1562		0		0	1863	1583	338	1108	0
Grp Volume(v), veh/h	183	159	212		0.0		0	138	439	58	0	0
Grp Sat Flow(s),veh/h/ln	1846	1770	1562				0	1863	1583	1445	0	0
Q Serve(g_s), s	2.1	1.9	3.1				0.0	1.3	6.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.1	1.9	3.1				0.0	1.3	6.2	0.5	0.0	0.0
Prop In Lane	0.18		1.00				0.00		1.00	0.38		0.00
Lane Grp Cap(c), veh/h	476	456	402				0	708	601	738	0	0
V/C Ratio(X)	0.38	0.35	0.53				0.00	0.20	0.73	0.08	0.00	0.00
Avail Cap(c_a), veh/h	1669	1600	1412				0	3255	2767	2473	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.0	7.9	8.4				0.0	5.4	7.0	5.2	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.2	0.4				0.0	0.0	0.6	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
%ile BackOfQ(50%),veh/ln	1.1	1.0	1.3				0.0	0.7	2.8	0.3	0.0	0.0
LnGrp Delay(d),s/veh	8.2	8.1	8.8				0.0	5.5	7.6	5.2	0.0	0.0
LnGrp LOS	A	A	A					A	A	A		
Approach Vol, veh/h		554						577			58	
Approach Delay, s/veh		8.4						7.1			5.2	
Approach LOS		A						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		14.2		12.1		14.2		
Change Period (Y+Rc), s		* 4.2		5.3		* 4.2		
Max Green Setting (Gmax), s		* 46		23.7		* 46		
Max Q Clear Time (g_c+I1), s		8.2		5.1		2.5		
Green Ext Time (p_c), s		1.7		1.6		1.7		

Intersection Summary	
HCM 2010 Ctrl Delay	7.6
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	299	287	100	134	199	84	127	951	248	89	668	209
Future Volume (veh/h)	299	287	100	134	199	84	127	951	248	89	668	209
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	308	311	105	141	209	88	134	1001	261	94	703	220
Adj No. of Lanes	1	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	387	406	341	97	143	60	161	1107	288	82	1266	565
Arrive On Green	0.22	0.22	0.22	0.17	0.17	0.17	0.09	0.40	0.40	0.05	0.36	0.36
Sat Flow, veh/h	1774	1863	1564	570	845	356	1774	2782	723	1774	3539	1581
Grp Volume(v), veh/h	308	311	105	438	0	0	134	635	627	94	703	220
Grp Sat Flow(s),veh/h/ln	1774	1863	1564	1771	0	0	1774	1770	1735	1774	1770	1581
Q Serve(g_s), s	18.8	18.0	6.4	19.4	0.0	0.0	8.5	38.6	39.0	5.3	18.2	11.9
Cycle Q Clear(g_c), s	18.8	18.0	6.4	19.4	0.0	0.0	8.5	38.6	39.0	5.3	18.2	11.9
Prop In Lane	1.00		1.00	0.32		0.20	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	387	406	341	300	0	0	161	704	691	82	1266	565
V/C Ratio(X)	0.80	0.77	0.31	1.46	0.00	0.00	0.83	0.90	0.91	1.15	0.56	0.39
Avail Cap(c_a), veh/h	528	554	465	300	0	0	198	724	710	82	1266	565
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.4	42.1	37.6	47.6	0.0	0.0	51.2	32.4	32.5	54.6	29.5	27.5
Incr Delay (d2), s/veh	5.9	4.3	0.5	224.7	0.0	0.0	21.0	14.5	15.4	144.0	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	9.7	2.8	28.1	0.0	0.0	5.1	21.7	21.6	5.9	9.0	5.3
LnGrp Delay(d),s/veh	48.3	46.4	38.1	272.2	0.0	0.0	72.2	46.9	47.9	198.6	30.1	28.0
LnGrp LOS	D	D	D	F			E	D	D	F	C	C
Approach Vol, veh/h		724			438			1396			1017	
Approach Delay, s/veh		46.0			272.2			49.8			45.2	
Approach LOS		D			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	50.9		29.7	14.6	46.3		24.0
Change Period (Y+Rc), s	* 4.7	5.3		* 4.7	* 4.2	5.3		4.6
Max Green Setting (Gmax), s	* 5.3	46.9		* 34	* 13	39.9		19.4
Max Q Clear Time (g_c+I1), s	7.3	41.0		20.8	10.5	20.2		21.4
Green Ext Time (p_c), s	0.0	4.6		2.7	0.1	15.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	75.0
HCM 2010 LOS	E

Notes

Intersection	
Int Delay, s/veh	55.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	375	0	6	0	0	90	0	861	13	0	614	273
Future Vol, veh/h	375	0	6	0	0	90	0	861	13	0	614	273
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	1	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	0	-	-	0	-	-	-	-	-	75
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	399	0	6	0	0	96	0	916	14	0	653	290

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1111	-	328	-	-	466	-	0	0	-	-	0
Stage 1	653	-	-	-	-	-	-	-	-	-	-	-
Stage 2	458	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	~ 164	0	668	0	0	543	0	-	-	0	-	0
Stage 1	423	0	-	0	0	-	0	-	-	0	-	0
Stage 2	552	0	-	0	0	-	0	-	-	0	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	~ 135	-	667	-	-	543	-	-	-	-	-	-
Mov Cap-2 Maneuver	~ 262	-	-	-	-	-	-	-	-	-	-	-
Stage 1	423	-	-	-	-	-	-	-	-	-	-	-
Stage 2	455	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	284.4	13	0	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	WBLn1	SBT
Capacity (veh/h)	-	-	262	667	543	-
HCM Lane V/C Ratio	-	-	1.523	0.01	0.176	-
HCM Control Delay (s)	-	-	288.8	10.4	13	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	23.5	0	0.6	-

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

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	49	6	429	85	11	262
Future Vol, veh/h	49	6	429	85	11	262
Conflicting Peds, #/hr	0	2	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	6	6	2	2	4	4
Mvmt Flow	54	7	471	93	12	288

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	691	289	0	0	570	0
Stage 1	523	-	-	-	-	-
Stage 2	168	-	-	-	-	-
Critical Hdwy	6.92	7.02	-	-	4.18	-
Critical Hdwy Stg 1	5.92	-	-	-	-	-
Critical Hdwy Stg 2	5.92	-	-	-	-	-
Follow-up Hdwy	3.56	3.36	-	-	2.24	-
Pot Cap-1 Maneuver	370	696	-	-	985	-
Stage 1	548	-	-	-	-	-
Stage 2	833	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	363	692	-	-	983	-
Mov Cap-2 Maneuver	363	-	-	-	-	-
Stage 1	546	-	-	-	-	-
Stage 2	821	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.2	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	383	983	-
HCM Lane V/C Ratio	-	-	0.158	0.012	-
HCM Control Delay (s)	-	-	16.2	8.7	0.1
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0	-

Intersection	
Intersection Delay, s/veh	22.3
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	97	294	11	0	123	308	46	0	29	115	127
Future Vol, veh/h	0	97	294	11	0	123	308	46	0	29	115	127
Peak Hour Factor	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	4	4	4	2	3	3	3	2	2	2	2
Mvmt Flow	0	107	323	12	0	135	338	51	0	32	126	140
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	23.7	28.7	14.7
HCM LOS	C	D	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	20%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	80%	0%	0%	96%	0%	87%	0%	53%
Vol Right, %	0%	100%	0%	4%	0%	13%	0%	47%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	144	127	97	305	123	354	62	156
LT Vol	29	0	97	0	123	0	62	0
Through Vol	115	0	0	294	0	308	0	82
RT Vol	0	127	0	11	0	46	0	74
Lane Flow Rate	158	140	107	335	135	389	68	171
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.366	0.291	0.241	0.709	0.3	0.799	0.168	0.381
Departure Headway (Hd)	8.332	7.504	8.154	7.613	8.001	7.394	8.871	8.009
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	430	477	439	473	447	486	403	447
Service Time	6.112	5.283	5.931	5.39	5.775	5.168	6.654	5.791
HCM Lane V/C Ratio	0.367	0.294	0.244	0.708	0.302	0.8	0.169	0.383
HCM Control Delay	15.9	13.4	13.5	27	14.2	33.7	13.5	15.7
HCM Lane LOS	C	B	B	D	B	D	B	C
HCM 95th-tile Q	1.7	1.2	0.9	5.5	1.2	7.4	0.6	1.8

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	62	82	74
Future Vol, veh/h	0	62	82	74
Peak Hour Factor	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	68	90	81
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	15.1
HCM LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	227	203	44	227	0	205	468	63	14	221	76
Future Volume (veh/h)	53	227	203	44	227	0	205	468	63	14	221	76
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	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	1863	1863	1863	1863	1863	1900	1863	1863	1900	1845	1845	1900
Adj Flow Rate, veh/h	56	241	216	47	241	0	218	498	67	15	235	81
Adj No. of Lanes	1	1	1	1	2	0	2	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	3	3	3
Cap, veh/h	74	494	417	66	923	0	248	1210	162	26	845	284
Arrive On Green	0.04	0.27	0.27	0.04	0.26	0.00	0.07	0.39	0.39	0.01	0.33	0.33
Sat Flow, veh/h	1774	1863	1571	1774	3632	0	3442	3138	420	1757	2575	864
Grp Volume(v), veh/h	56	241	216	47	241	0	218	280	285	15	158	158
Grp Sat Flow(s),veh/h/ln	1774	1863	1571	1774	1770	0	1721	1770	1789	1757	1752	1687
Q Serve(g_s), s	1.7	6.1	6.5	1.5	3.0	0.0	3.5	6.4	6.5	0.5	3.7	3.9
Cycle Q Clear(g_c), s	1.7	6.1	6.5	1.5	3.0	0.0	3.5	6.4	6.5	0.5	3.7	3.9
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.24	1.00		0.51
Lane Grp Cap(c), veh/h	74	494	417	66	923	0	248	682	689	26	575	554
V/C Ratio(X)	0.76	0.49	0.52	0.71	0.26	0.00	0.88	0.41	0.41	0.57	0.27	0.29
Avail Cap(c_a), veh/h	128	839	707	160	1658	0	248	781	789	127	773	744
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00
Uniform Delay (d), s/veh	26.3	17.2	17.4	26.4	16.3	0.0	25.5	12.5	12.5	27.2	13.8	13.8
Incr Delay (d2), s/veh	14.5	1.1	1.4	13.3	0.2	0.0	28.2	1.8	1.8	18.3	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.2	3.0	0.9	1.5	0.0	2.6	3.5	3.5	0.4	1.9	2.0
LnGrp Delay(d),s/veh	40.8	18.3	18.8	39.7	16.5	0.0	53.7	14.3	14.3	45.5	14.9	15.1
LnGrp LOS	D	B	B	D	B		D	B	B	D	B	B
Approach Vol, veh/h		513			288			783			331	
Approach Delay, s/veh		21.0			20.3			25.3			16.4	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.8	25.9	6.1	18.7	8.0	22.7	6.3	18.5
Change Period (Y+Rc), s	4.0	4.5	4.0	4.0	4.0	4.5	4.0	4.0
Max Green Setting (Gmax), s	4.0	24.5	5.0	25.0	4.0	24.5	4.0	26.0
Max Q Clear Time (g_c+I1), s	2.5	8.5	3.5	8.5	5.5	5.9	3.7	5.0
Green Ext Time (p_c), s	0.0	10.8	0.0	4.8	0.0	12.2	0.0	5.4

Intersection Summary	
HCM 2010 Ctrl Delay	21.8
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	3.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	92	51	669	160	60	390
Future Vol, veh/h	92	51	669	160	60	390
Conflicting Peds, #/hr	5	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	4	4
Mvmt Flow	95	53	690	165	62	402

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1103	428	0	0	856	0
Stage 1	773	-	-	-	-	-
Stage 2	330	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.18	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.24	-
Pot Cap-1 Maneuver	206	575	-	-	767	-
Stage 1	416	-	-	-	-	-
Stage 2	701	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	188	575	-	-	767	-
Mov Cap-2 Maneuver	188	-	-	-	-	-
Stage 1	416	-	-	-	-	-
Stage 2	642	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	31.4	0	1.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	188	575	767	-
HCM Lane V/C Ratio	-	-	0.504	0.091	0.081	-
HCM Control Delay (s)	-	-	42.2	11.9	10.1	-
HCM Lane LOS	-	-	E	B	B	-
HCM 95th %tile Q(veh)	-	-	2.5	0.3	0.3	-

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBU	SBL	SBR
Lane Configurations									
Traffic Vol, veh/h	0	39	112	0	133	28	0	39	81
Future Vol, veh/h	0	39	112	0	133	28	0	39	81
Peak Hour Factor	0.92	0.96	0.96	0.92	0.96	0.96	0.92	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	41	117	0	139	29	0	41	84
Number of Lanes	0	1	1	0	1	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	8.6	8.6	8.1
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	33%
Vol Thru, %	0%	100%	83%	0%
Vol Right, %	0%	0%	17%	68%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	39	112	161	120
LT Vol	39	0	0	39
Through Vol	0	112	133	0
RT Vol	0	0	28	81
Lane Flow Rate	41	117	168	125
Geometry Grp	7	7	5	2
Degree of Util (X)	0.061	0.161	0.205	0.151
Departure Headway (Hd)	5.448	4.967	4.397	4.35
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	659	727	817	826
Service Time	3.169	2.667	2.418	2.369
HCM Lane V/C Ratio	0.062	0.161	0.206	0.151
HCM Control Delay	8.5	8.6	8.6	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.6	0.8	0.5

Intersection	
Intersection Delay, s/veh	11.1
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	32	114	16	0	73	85	188	0	19	31	96
Future Vol, veh/h	0	32	114	16	0	73	85	188	0	19	31	96
Peak Hour Factor	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	6	6	6	2	3	3	3	2	5	5	5
Mvmt Flow	0	34	123	17	0	78	91	202	0	20	33	103
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	10.6	11.9	9.8
HCM LOS	B	B	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	38%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	62%	0%	0%	88%	0%	31%	0%	33%
Vol Right, %	0%	100%	0%	12%	0%	69%	0%	67%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	50	96	32	130	73	273	128	66
LT Vol	19	0	32	0	73	0	128	0
Through Vol	31	0	0	114	0	85	0	22
RT Vol	0	96	0	16	0	188	0	44
Lane Flow Rate	54	103	34	140	78	294	138	71
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.099	0.165	0.064	0.238	0.14	0.443	0.26	0.115
Departure Headway (Hd)	6.65	5.746	6.732	6.138	6.426	5.434	6.799	5.819
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	538	623	532	584	558	663	529	615
Service Time	4.397	3.493	4.479	3.884	4.165	3.171	4.542	3.561
HCM Lane V/C Ratio	0.1	0.165	0.064	0.24	0.14	0.443	0.261	0.115
HCM Control Delay	10.1	9.6	9.9	10.8	10.2	12.4	11.9	9.3
HCM Lane LOS	B	A	A	B	B	B	B	A
HCM 95th-tile Q	0.3	0.6	0.2	0.9	0.5	2.3	1	0.4

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	128	22	44
Future Vol, veh/h	0	128	22	44
Peak Hour Factor	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	138	24	47
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	11
HCM LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	87	158	15	50	44	216	682	44	40	372	84
Future Volume (veh/h)	96	87	158	15	50	44	216	682	44	40	372	84
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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	1863	1863	1900	1863	1863	1863	1863	1863	1900	1845	1845	1900
Adj Flow Rate, veh/h	101	92	166	16	53	46	227	718	46	42	392	88
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	3	3	3
Cap, veh/h	130	126	228	28	292	249	273	1441	92	61	876	195
Arrive On Green	0.07	0.21	0.21	0.02	0.16	0.16	0.15	0.43	0.43	0.03	0.31	0.31
Sat Flow, veh/h	1774	589	1062	1774	1863	1583	1774	3377	216	1757	2846	632
Grp Volume(v), veh/h	101	0	258	16	53	46	227	376	388	42	240	240
Grp Sat Flow(s),veh/h/ln	1774	0	1650	1774	1863	1583	1774	1770	1824	1757	1752	1726
Q Serve(g_s), s	2.9	0.0	7.6	0.5	1.3	1.3	6.5	8.0	8.1	1.2	5.7	5.8
Cycle Q Clear(g_c), s	2.9	0.0	7.6	0.5	1.3	1.3	6.5	8.0	8.1	1.2	5.7	5.8
Prop In Lane	1.00		0.64	1.00		1.00	1.00		0.12	1.00		0.37
Lane Grp Cap(c), veh/h	130	0	354	28	292	249	273	755	778	61	539	531
V/C Ratio(X)	0.77	0.00	0.73	0.57	0.18	0.19	0.83	0.50	0.50	0.68	0.44	0.45
Avail Cap(c_a), veh/h	307	0	508	137	394	335	273	755	778	169	539	531
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	19.0	25.4	19.0	19.0	21.3	10.8	10.9	24.8	14.4	14.5
Incr Delay (d2), s/veh	9.4	0.0	3.0	16.7	0.3	0.4	19.1	2.3	2.3	12.5	2.6	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	3.7	0.4	0.7	0.6	4.6	4.4	4.5	0.8	3.1	3.1
LnGrp Delay(d),s/veh	33.0	0.0	22.0	42.1	19.3	19.4	40.4	13.2	13.1	37.3	17.1	17.2
LnGrp LOS	C		C	D	B	B	D	B	B	D	B	B
Approach Vol, veh/h		359			115			991			522	
Approach Delay, s/veh		25.1			22.5			19.4			18.8	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	26.2	4.8	15.2	12.0	20.0	7.8	12.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	19.0	4.0	16.0	8.0	16.0	9.0	11.0
Max Q Clear Time (g_c+I1), s	3.2	10.1	2.5	9.6	8.5	7.8	4.9	3.3
Green Ext Time (p_c), s	0.0	4.9	0.0	1.1	0.0	4.6	0.1	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	20.5
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	0	62	1	0	17	47	0	0	0	0	35
Future Vol, veh/h	0	0	62	1	0	17	47	0	0	0	0	35
Peak Hour Factor	0.92	0.84	0.84	0.84	0.92	0.84	0.84	0.84	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	11	11	11	2	3	3	3
Mvmt Flow	0	0	74	1	0	20	56	0	0	0	0	42
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	7.5	7.7	6.8
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	27%	100%
Vol Thru, %	0%	98%	73%	0%
Vol Right, %	100%	2%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	35	63	64	1
LT Vol	0	0	17	1
Through Vol	0	62	47	0
RT Vol	35	1	0	0
Lane Flow Rate	42	75	76	1
Geometry Grp	1	1	1	1
Degree of Util (X)	0.042	0.085	0.09	0.001
Departure Headway (Hd)	3.612	4.057	4.272	4.429
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	977	883	839	798
Service Time	1.688	2.085	2.297	2.511
HCM Lane V/C Ratio	0.043	0.085	0.091	0.001
HCM Control Delay	6.8	7.5	7.7	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.3	0.3	0

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	1	0	0
Future Vol, veh/h	0	1	0	0
Peak Hour Factor	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	1	0	0
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	7.5
HCM LOS	A

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	40	0	0	12	50	0	5	17
Future Vol, veh/h	0	40	0	0	12	50	0	5	17
Peak Hour Factor	0.92	0.86	0.86	0.92	0.86	0.86	0.92	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	47	0	0	14	58	0	6	20
Number of Lanes	0	1	0	0	1	0	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.6	6.9	7.3
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	100%	23%
Vol Thru, %	19%	0%	77%
Vol Right, %	81%	0%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	62	40	22
LT Vol	0	40	5
Through Vol	12	0	17
RT Vol	50	0	0
Lane Flow Rate	72	47	26
Geometry Grp	1	1	1
Degree of Util (X)	0.071	0.056	0.029
Departure Headway (Hd)	3.55	4.303	4.115
Convergence, Y/N	Yes	Yes	Yes
Cap	1005	833	868
Service Time	1.585	2.328	2.151
HCM Lane V/C Ratio	0.072	0.056	0.03
HCM Control Delay	6.9	7.6	7.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0.2	0.1

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	24	11	9	0	43	13	2	0	9	59	32
Future Vol, veh/h	0	24	11	9	0	43	13	2	0	9	59	32
Peak Hour Factor	0.92	0.97	0.97	0.97	0.92	0.97	0.97	0.97	0.92	0.97	0.97	0.97
Heavy Vehicles, %	2	3	3	3	2	5	5	5	2	7	7	7
Mvmt Flow	0	25	11	9	0	44	13	2	0	9	61	33
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	8.1	8.6	7.8
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	9%	69%	0%	77%	0%	2%
Vol Thru, %	59%	31%	0%	23%	0%	76%
Vol Right, %	32%	0%	100%	0%	100%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	35	9	56	2	104
LT Vol	9	24	0	43	0	2
Through Vol	59	11	0	13	0	79
RT Vol	32	0	9	0	2	23
Lane Flow Rate	103	36	9	58	2	107
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.121	0.054	0.011	0.088	0.003	0.125
Departure Headway (Hd)	4.24	5.423	4.374	5.481	4.392	4.198
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	848	662	820	656	817	857
Service Time	2.251	3.139	2.09	3.196	2.106	2.208
HCM Lane V/C Ratio	0.121	0.054	0.011	0.088	0.002	0.125
HCM Control Delay	7.8	8.4	7.1	8.7	7.1	7.8
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.4	0.2	0	0.3	0	0.4

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations			↕	
Traffic Vol, veh/h	0	2	79	23
Future Vol, veh/h	0	2	79	23
Peak Hour Factor	0.92	0.97	0.97	0.97
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	2	81	24
Number of Lanes	0	0	1	0

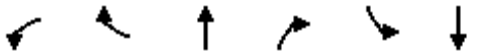
Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	7.8
HCM LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	0	218	1	0	1	109	871	0	0	611	55
Future Volume (veh/h)	100	0	218	1	0	1	109	871	0	0	611	55
Number	7	4	14	3	8	18	5	2	12	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		0.98	0.99		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1267	1900	1863	1863	1900	0	1863	1900
Adj Flow Rate, veh/h	104	0	227	1	0	1	114	907	0	0	636	57
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	0	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	50	50	50	2	2	2	0	2	2
Cap, veh/h	426	0	305	166	21	86	557	2336	0	0	1749	157
Arrive On Green	0.20	0.00	0.20	0.20	0.00	0.20	0.06	0.66	0.00	0.00	0.53	0.53
Sat Flow, veh/h	1485	0	1559	331	108	439	1774	3632	0	0	3374	294
Grp Volume(v), veh/h	104	0	227	2	0	0	114	907	0	0	343	350
Grp Sat Flow(s),veh/h/ln	1485	0	1559	878	0	0	1774	1770	0	0	1770	1805
Q Serve(g_s), s	0.0	0.0	7.3	0.0	0.0	0.0	1.3	6.3	0.0	0.0	6.0	6.0
Cycle Q Clear(g_c), s	2.7	0.0	7.3	2.7	0.0	0.0	1.3	6.3	0.0	0.0	6.0	6.0
Prop In Lane	1.00		1.00	0.50		0.50	1.00		0.00	0.00		0.16
Lane Grp Cap(c), veh/h	426	0	305	273	0	0	557	2336	0	0	944	962
V/C Ratio(X)	0.24	0.00	0.74	0.01	0.00	0.00	0.20	0.39	0.00	0.00	0.36	0.36
Avail Cap(c_a), veh/h	599	0	500	385	0	0	698	2336	0	0	944	962
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	18.3	0.0	20.2	17.3	0.0	0.0	4.6	4.1	0.0	0.0	7.2	7.2
Incr Delay (d2), s/veh	0.4	0.0	5.1	0.0	0.0	0.0	0.2	0.5	0.0	0.0	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	3.6	0.0	0.0	0.0	0.7	3.2	0.0	0.0	3.1	3.2
LnGrp Delay(d),s/veh	18.8	0.0	25.2	17.3	0.0	0.0	4.8	4.6	0.0	0.0	8.3	8.3
LnGrp LOS	B		C	B			A	A			A	A
Approach Vol, veh/h		331			2			1021			693	
Approach Delay, s/veh		23.2			17.3			4.6			8.3	
Approach LOS		C			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		39.4		13.9	6.8	32.6		13.9
Change Period (Y+Rc), s		* 4.2		3.5	3.5	* 4.2		3.5
Max Green Setting (Gmax), s		* 35		17.1	7.5	* 24		17.1
Max Q Clear Time (g_c+I1), s		8.3		9.3	3.3	8.0		4.7
Green Ext Time (p_c), s		24.1		1.2	0.1	15.0		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	8.9
HCM 2010 LOS	A

Notes



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	422	77	906	509	90	738
Future Volume (veh/h)	422	77	906	509	90	738
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	431	79	924	0	92	753
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	705	324	1692	757	117	2171
Arrive On Green	0.20	0.20	0.48	0.00	0.07	0.61
Sat Flow, veh/h	3442	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	431	79	924	0	92	753
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1770
Q Serve(g_s), s	5.8	2.1	9.3	0.0	2.6	5.3
Cycle Q Clear(g_c), s	5.8	2.1	9.3	0.0	2.6	5.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	705	324	1692	757	117	2171
V/C Ratio(X)	0.61	0.24	0.55	0.00	0.78	0.35
Avail Cap(c_a), veh/h	1156	532	1692	757	228	2363
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	18.3	16.8	9.3	0.0	23.3	4.8
Incr Delay (d2), s/veh	1.8	0.8	1.3	0.0	10.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	1.0	4.8	0.0	1.6	2.6
LnGrp Delay(d),s/veh	20.1	17.7	10.6	0.0	34.1	5.2
LnGrp LOS	C	B	B		C	A
Approach Vol, veh/h	510		924			845
Approach Delay, s/veh	19.8		10.6			8.4
Approach LOS	B		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.9	28.4				35.3		15.4
Change Period (Y+Rc), s	3.5	* 4.2				* 4.2		5.0
Max Green Setting (Gmax), s	6.5	* 24				* 34		17.0
Max Q Clear Time (g_c+I1), s	4.6	11.3				7.3		7.8
Green Ext Time (p_c), s	0.0	11.9				23.8		2.6

Intersection Summary	
HCM 2010 Ctrl Delay	11.8
HCM 2010 LOS	B

Notes

Intersection	
Int Delay, s/veh	8.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	2	10	75	202	6	6	77	34	138	0	0	0
Future Vol, veh/h	2	10	75	202	6	6	77	34	138	0	0	0
Conflicting Peds, #/hr	25	0	0	0	0	25	25	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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	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	2	10	78	210	6	6	80	35	144	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	324	365	25	312	293	132	25	0	0
Stage 1	25	25	-	268	268	-	-	-	-
Stage 2	299	340	-	44	25	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	-	-	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	629	563	1051	641	618	917	1589	-	-
Stage 1	-	-	-	738	687	-	-	-	-
Stage 2	710	639	-	-	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	580	520	1029	558	571	917	1589	-	-
Mov Cap-2 Maneuver	580	520	-	558	571	-	-	-	-
Stage 1	-	-	-	696	648	-	-	-	-
Stage 2	659	603	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	9.4	15.5	2.3
HCM LOS	A	C	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	1589	-	-	910	565
HCM Lane V/C Ratio	0.05	-	-	0.1	0.395
HCM Control Delay (s)	7.4	0	-	9.4	15.5
HCM Lane LOS	A	A	-	A	C
HCM 95th %tile Q(veh)	0.2	-	-	0.3	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	397	3	21	378	228	0	0	96	186
Future Volume (veh/h)	0	0	0	397	3	21	378	228	0	0	96	186
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.95
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1900	1863	0	0	1863	1900
Adj Flow Rate, veh/h				409	3	22	390	235	0	0	99	192
Adj No. of Lanes				0	1	1	0	1	0	0	1	0
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				463	3	416	420	253	0	0	87	168
Arrive On Green				0.26	0.26	0.26	0.37	0.37	0.00	0.00	0.16	0.16
Sat Flow, veh/h				1762	13	1583	1127	679	0	0	549	1064
Grp Volume(v), veh/h				412	0	22	625	0	0	0	0	291
Grp Sat Flow(s),veh/h/ln				1775	0	1583	1806	0	0	0	0	1613
Q Serve(g_s), s				14.1	0.0	0.7	21.0	0.0	0.0	0.0	0.0	10.0
Cycle Q Clear(g_c), s				14.1	0.0	0.7	21.0	0.0	0.0	0.0	0.0	10.0
Prop In Lane				0.99		1.00	0.62		0.00	0.00		0.66
Lane Grp Cap(c), veh/h				466	0	416	674	0	0	0	0	255
V/C Ratio(X)				0.88	0.00	0.05	0.93	0.00	0.00	0.00	0.00	1.14
Avail Cap(c_a), veh/h				500	0	446	692	0	0	0	0	255
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				22.3	0.0	17.4	19.0	0.0	0.0	0.0	0.0	26.6
Incr Delay (d2), s/veh				16.4	0.0	0.1	18.7	0.0	0.0	0.0	0.0	99.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.0	0.0	0.3	13.9	0.0	0.0	0.0	0.0	11.4
LnGrp Delay(d),s/veh				38.8	0.0	17.5	37.6	0.0	0.0	0.0	0.0	125.8
LnGrp LOS				D		B	D					F
Approach Vol, veh/h					434			625			291	
Approach Delay, s/veh					37.7			37.6			125.8	
Approach LOS					D			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		28.2				14.2		20.8
Change Period (Y+Rc), s		4.6				4.2		4.2
Max Green Setting (Gmax), s		24.2				10.0		17.8
Max Q Clear Time (g_c+I1), s		23.0				12.0		16.1
Green Ext Time (p_c), s		0.6				0.0		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	56.7
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	98	16	345	0	0	0	0	507	707	23	470	0
Future Vol, veh/h	98	16	345	0	0	0	0	507	707	23	470	0
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	-	-	200	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	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	104	17	367	0	0	0	0	539	752	24	500	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1088	1088	500	-	0	0	539	0	0
Stage 1	549	549	-	-	-	-	-	-	-
Stage 2	539	539	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	239	216	571	0	-	-	1029	-	0
Stage 1	579	516	-	0	-	-	-	-	0
Stage 2	585	522	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	231	0	571	-	-	-	1029	-	-
Mov Cap-2 Maneuver	231	0	-	-	-	-	-	-	-
Stage 1	560	0	-	-	-	-	-	-	-
Stage 2	585	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	25.6	0	0.4
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	231	571	1029	-
HCM Lane V/C Ratio	-	-	0.525	0.643	0.024	-
HCM Control Delay (s)	-	-	36.6	21.9	8.6	0
HCM Lane LOS	-	-	E	C	A	A
HCM 95th %tile Q(veh)	-	-	2.8	4.6	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	289	907	442	251	559	354	287	524	232	253	414	83
Future Volume (veh/h)	289	907	442	251	559	354	287	524	232	253	414	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	301	945	460	261	582	369	299	546	242	264	431	86
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	314	1171	513	249	1041	455	312	1052	461	300	861	170
Arrive On Green	0.18	0.33	0.33	0.14	0.29	0.29	0.09	0.30	0.30	0.09	0.29	0.29
Sat Flow, veh/h	1774	3539	1552	1774	3539	1548	3442	3539	1553	3442	2933	580
Grp Volume(v), veh/h	301	945	460	261	582	369	299	546	242	264	259	258
Grp Sat Flow(s),veh/h/ln	1774	1770	1552	1774	1770	1548	1721	1770	1553	1721	1770	1743
Q Serve(g_s), s	19.3	28.0	32.4	16.1	15.9	25.4	9.9	14.7	14.9	8.7	13.9	14.1
Cycle Q Clear(g_c), s	19.3	28.0	32.4	16.1	15.9	25.4	9.9	14.7	14.9	8.7	13.9	14.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	314	1171	513	249	1041	455	312	1052	461	300	520	512
V/C Ratio(X)	0.96	0.81	0.90	1.05	0.56	0.81	0.96	0.52	0.52	0.88	0.50	0.50
Avail Cap(c_a), veh/h	314	1178	516	249	1048	459	312	1052	461	300	520	512
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.8	35.1	36.5	49.3	34.2	37.5	52.0	33.5	33.6	51.8	33.5	33.6
Incr Delay (d2), s/veh	39.8	4.4	18.4	70.4	0.8	10.9	39.9	1.8	4.2	24.6	3.4	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	12.9	14.4	16.4	12.7	7.9	12.2	6.4	7.5	6.9	5.2	7.2	7.3
LnGrp Delay(d),s/veh	86.7	39.5	54.9	119.8	35.0	48.4	91.8	35.4	37.8	76.4	36.9	37.1
LnGrp LOS	F	D	D	F	D	D	F	D	D	E	D	D
Approach Vol, veh/h		1706			1212			1087			781	
Approach Delay, s/veh		52.0			57.4			51.4			50.3	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	38.7	19.8	42.6	14.1	38.3	24.0	38.4
Change Period (Y+Rc), s	3.7	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Green Setting (Gmax), s	10.0	34.1	16.1	38.2	10.4	33.7	20.3	34.0
Max Q Clear Time (g_c+I1), s	10.7	16.9	18.1	34.4	11.9	16.1	21.3	27.4
Green Ext Time (p_c), s	0.0	9.7	0.0	3.6	0.0	9.9	0.0	6.1

Intersection Summary	
HCM 2010 Ctrl Delay	53.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	137	79	117	261	67	163	452	76	46	805	184
Future Volume (veh/h)	86	137	79	117	261	67	163	452	76	46	805	184
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1845	1845	1845	1827	1827	1827
Adj Flow Rate, veh/h	95	151	87	129	287	74	179	497	84	51	885	202
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	232	244	205	411	331	85	212	1398	625	65	1113	498
Arrive On Green	0.13	0.13	0.13	0.23	0.23	0.23	0.12	0.40	0.40	0.04	0.32	0.32
Sat Flow, veh/h	1774	1863	1562	1774	1429	369	1757	3505	1568	1740	3471	1553
Grp Volume(v), veh/h	95	151	87	129	0	361	179	497	84	51	885	202
Grp Sat Flow(s),veh/h/ln	1774	1863	1562	1774	0	1798	1757	1752	1568	1740	1736	1553
Q Serve(g_s), s	4.7	7.3	4.9	5.8	0.0	18.5	9.6	9.5	3.3	2.8	22.3	9.7
Cycle Q Clear(g_c), s	4.7	7.3	4.9	5.8	0.0	18.5	9.6	9.5	3.3	2.8	22.3	9.7
Prop In Lane	1.00		1.00	1.00		0.20	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	232	244	205	411	0	416	212	1398	625	65	1113	498
V/C Ratio(X)	0.41	0.62	0.43	0.31	0.00	0.87	0.84	0.36	0.13	0.79	0.80	0.41
Avail Cap(c_a), veh/h	629	661	554	459	0	465	257	1398	625	171	1209	541
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	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	38.2	39.4	38.3	30.5	0.0	35.4	41.3	20.2	18.3	45.8	29.7	25.4
Incr Delay (d2), s/veh	1.2	2.5	1.4	0.9	0.0	16.8	19.0	0.2	0.1	18.4	3.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	3.9	2.2	2.9	0.0	11.1	5.7	4.7	1.4	1.7	11.3	4.2
LnGrp Delay(d),s/veh	39.4	41.9	39.7	31.5	0.0	52.2	60.3	20.4	18.4	64.2	33.3	26.1
LnGrp LOS	D	D	D	C		D	E	C	B	E	C	C
Approach Vol, veh/h		333			490			760			1138	
Approach Delay, s/veh		40.6			46.7			29.6			33.4	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.3	43.5		17.3	15.8	36.0		26.8
Change Period (Y+Rc), s	* 4.7	5.3		* 4.7	* 4.2	5.3		4.6
Max Green Setting (Gmax), s	* 9.4	37.5		* 34	* 14	33.4		24.8
Max Q Clear Time (g_c+I1), s	4.8	11.5		9.3	11.6	24.3		20.5
Green Ext Time (p_c), s	0.0	14.7		1.4	0.1	6.4		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	35.6
HCM 2010 LOS	D

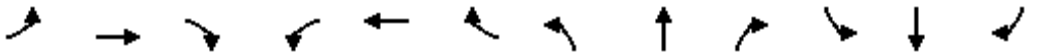
Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	0	3	0	0	97	0	1	14	0	607	408
Future Volume (veh/h)	129	0	3	0	0	97	0	1	14	0	607	408
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1667	1667	0	1863	1863	0	1845	1900	0	1845	1845
Adj Flow Rate, veh/h	137	0	0	0	0	0	0	1	15	0	646	0
Adj No. of Lanes	0	1	1	0	1	1	0	2	0	0	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	14	14	14	0	2	2	0	3	3	0	3	3
Cap, veh/h	177	0	158	0	10	8	0	824	736	0	1649	737
Arrive On Green	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.47	0.00	0.47	0.00
Sat Flow, veh/h	1587	0	1417	0	1863	1583	0	1845	1565	0	3597	1568
Grp Volume(v), veh/h	137	0	0	0	0	0	0	1	15	0	646	0
Grp Sat Flow(s),veh/h/ln	1587	0	1417	0	1863	1583	0	1752	1565	0	1752	1568
Q Serve(g_s), s	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	2.3	0.0
Cycle Q Clear(g_c), s	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	2.3	0.0
Prop In Lane	1.00		1.00	0.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	177	0	158	0	10	8	0	824	736	0	1649	737
V/C Ratio(X)	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.39	0.00
Avail Cap(c_a), veh/h	1328	0	1185	0	682	579	0	2474	2209	0	4764	2131
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	8.3	0.0	0.0	0.0	0.0	0.0	0.0	2.7	2.7	0.0	3.3	0.0
Incr Delay (d2), s/veh	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0
LnGrp Delay(d),s/veh	15.3	0.0	0.0	0.0	0.0	0.0	0.0	2.7	2.7	0.0	3.4	0.0
LnGrp LOS	B							A	A		A	
Approach Vol, veh/h		137			0			16			646	
Approach Delay, s/veh		15.3			0.0			2.7			3.4	
Approach LOS		B						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		13.0		6.1		13.0		0.0
Change Period (Y+Rc), s		* 4		4.0		4.0		3.0
Max Green Setting (Gmax), s		* 27		16.0		26.0		7.0
Max Q Clear Time (g_c+I1), s		2.1		3.6		4.3		0.0
Green Ext Time (p_c), s		4.8		0.5		4.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	5.5
HCM 2010 LOS	A

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	412	1	36	435	170	0	0	76	117
Future Volume (vph)	0	0	0	412	1	36	435	170	0	0	76	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.2	4.2		4.6			4.2	4.0
Lane Util. Factor					1.00	1.00		1.00			1.00	1.00
Frpb, ped/bikes					1.00	1.00		1.00			1.00	0.97
Flpb, ped/bikes					1.00	1.00		1.00			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					0.95	1.00		0.97			1.00	1.00
Satd. Flow (prot)					1707	1524		1781			1827	1510
Flt Permitted					0.95	1.00		0.97			1.00	1.00
Satd. Flow (perm)					1707	1524		1781			1827	1510
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	0	0	0	485	1	42	512	200	0	0	89	138
RTOR Reduction (vph)	0	0	0	0	0	29	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	486	13	0	712	0	0	89	138
Confl. Peds. (#/hr)												15
Heavy Vehicles (%)	2%	2%	2%	6%	6%	6%	3%	3%	3%	4%	4%	4%
Turn Type				Split	NA	Perm	Split	NA			NA	Free
Protected Phases				8	8		2	2			6	
Permitted Phases						8						Free
Actuated Green, G (s)					26.6	26.6		36.8			9.1	85.5
Effective Green, g (s)					26.6	26.6		36.8			9.1	85.5
Actuated g/C Ratio					0.31	0.31		0.43			0.11	1.00
Clearance Time (s)					4.2	4.2		4.6			4.2	
Vehicle Extension (s)					3.5	3.5		3.5			3.5	
Lane Grp Cap (vph)					531	474		766			194	1510
v/s Ratio Prot					c0.28			c0.40			c0.05	
v/s Ratio Perm						0.01						0.09
v/c Ratio					0.92	0.03		0.93			0.46	0.09
Uniform Delay, d1					28.4	20.5		23.1			35.9	0.0
Progression Factor					1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2					20.7	0.0		17.7			2.0	0.1
Delay (s)					49.1	20.5		40.8			37.9	0.1
Level of Service					D	C		D			D	A
Approach Delay (s)		0.0			46.8			40.8			14.9	
Approach LOS		A			D			D			B	

Intersection Summary				
HCM 2000 Control Delay	39.0	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.86			
Actuated Cycle Length (s)	85.5	Sum of lost time (s)	13.0	
Intersection Capacity Utilization	69.9%	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)	138	354	170	126	685	276	408	398	158	223	358	89
Future Volume (veh/h)	138	354	170	126	685	276	408	398	158	223	358	89
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1863	1863	1863	1810	1810	1900
Adj Flow Rate, veh/h	159	407	195	145	787	317	469	457	182	256	411	102
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	2	2	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	4	4	4	4	4	4	2	2	2	5	5	5
Cap, veh/h	176	1107	649	169	1094	631	345	1150	661	325	879	216
Arrive On Green	0.10	0.32	0.32	0.10	0.32	0.32	0.10	0.32	0.32	0.10	0.32	0.32
Sat Flow, veh/h	1740	3471	1547	1740	3471	1522	3442	3539	1558	3343	2730	671
Grp Volume(v), veh/h	159	407	195	145	787	317	469	457	182	256	257	256
Grp Sat Flow(s),veh/h/ln	1740	1736	1547	1740	1736	1522	1721	1770	1558	1672	1719	1682
Q Serve(g_s), s	9.3	9.3	8.6	8.4	20.6	15.9	10.3	10.3	7.9	7.7	12.3	12.5
Cycle Q Clear(g_c), s	9.3	9.3	8.6	8.4	20.6	15.9	10.3	10.3	7.9	7.7	12.3	12.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	176	1107	649	169	1094	631	345	1150	661	325	554	542
V/C Ratio(X)	0.90	0.37	0.30	0.86	0.72	0.50	1.36	0.40	0.28	0.79	0.46	0.47
Avail Cap(c_a), veh/h	176	1182	682	169	1168	663	345	1150	661	377	554	542
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.7	27.0	19.8	45.7	31.2	22.4	46.2	26.9	19.4	45.4	27.8	27.9
Incr Delay (d2), s/veh	41.5	0.3	0.4	32.7	2.3	0.9	179.7	1.0	1.0	9.3	2.8	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	4.5	3.7	5.6	10.2	6.8	13.4	5.2	3.5	4.0	6.2	6.3
LnGrp Delay(d),s/veh	87.2	27.3	20.2	78.4	33.4	23.3	226.0	27.9	20.5	54.6	30.6	30.8
LnGrp LOS	F	C	C	E	C	C	F	C	C	D	C	C
Approach Vol, veh/h		761			1249			1108			769	
Approach Delay, s/veh		38.0			36.1			110.5			38.7	
Approach LOS		D			D			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	38.0	13.7	37.4	14.0	37.7	14.1	37.0
Change Period (Y+Rc), s	3.7	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Green Setting (Gmax), s	11.6	31.8	10.0	35.0	10.3	33.1	10.4	34.6
Max Q Clear Time (g_c+I1), s	9.7	12.3	10.4	11.3	12.3	14.5	11.3	22.6
Green Ext Time (p_c), s	0.2	9.4	0.0	15.2	0.0	9.1	0.0	9.0

Intersection Summary	
HCM 2010 Ctrl Delay	58.2
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	299	287	100	134	199	84	127	951	248	89	668	209
Future Volume (veh/h)	299	287	100	134	199	84	127	951	248	89	668	209
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	308	311	105	141	209	88	134	1001	261	94	703	220
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	390	410	344	335	235	99	162	1242	556	118	1169	522
Arrive On Green	0.22	0.22	0.22	0.19	0.19	0.19	0.09	0.35	0.35	0.07	0.33	0.33
Sat Flow, veh/h	1774	1863	1564	1774	1246	524	1774	3539	1583	1774	3539	1580
Grp Volume(v), veh/h	308	311	105	141	0	297	134	1001	261	94	703	220
Grp Sat Flow(s),veh/h/ln	1774	1863	1564	1774	0	1770	1774	1770	1583	1774	1770	1580
Q Serve(g_s), s	18.2	17.4	6.2	7.8	0.0	18.2	8.2	28.4	14.2	5.8	18.4	12.0
Cycle Q Clear(g_c), s	18.2	17.4	6.2	7.8	0.0	18.2	8.2	28.4	14.2	5.8	18.4	12.0
Prop In Lane	1.00		1.00	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	390	410	344	335	0	334	162	1242	556	118	1169	522
V/C Ratio(X)	0.79	0.76	0.31	0.42	0.00	0.89	0.83	0.81	0.47	0.80	0.60	0.42
Avail Cap(c_a), veh/h	544	572	480	358	0	357	214	1303	583	133	1169	522
HCM Platoon Ratio	1.00	1.00	1.00	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	40.9	40.6	36.2	39.7	0.0	43.9	49.6	32.6	28.0	51.1	31.1	28.9
Incr Delay (d2), s/veh	5.2	3.8	0.5	1.8	0.0	23.8	17.7	3.8	0.7	25.5	0.9	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.5	9.3	2.7	4.0	0.0	11.1	4.9	14.6	6.4	3.7	9.1	5.4
LnGrp Delay(d),s/veh	46.1	44.4	36.7	41.5	0.0	67.7	67.3	36.4	28.8	76.7	32.0	29.6
LnGrp LOS	D	D	D	D		E	E	D	C	E	C	C
Approach Vol, veh/h		724			438			1396			1017	
Approach Delay, s/veh		44.0			59.3			38.0			35.6	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.1	44.3		29.1	14.4	42.0		25.6
Change Period (Y+Rc), s	* 4.7	5.3		* 4.7	* 4.2	5.3		4.6
Max Green Setting (Gmax), s	* 8.3	40.9		* 34	* 13	36.3		22.4
Max Q Clear Time (g_c+I1), s	7.8	30.4		20.2	10.2	20.4		20.2
Green Ext Time (p_c), s	0.0	8.5		2.8	0.1	12.6		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	41.1
HCM 2010 LOS	D

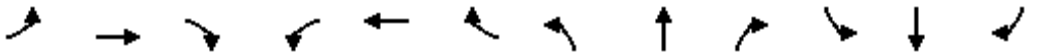
Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	375	0	6	0	0	90	0	1	13	0	614	273
Future Volume (veh/h)	375	0	6	0	0	90	0	1	13	0	614	273
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	0	1863	1863	0	1863	1900	0	1863	1863
Adj Flow Rate, veh/h	399	0	0	0	0	0	0	1	14	0	653	0
Adj No. of Lanes	0	1	1	0	1	1	0	2	0	0	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	0	2	2	0	2	2	0	2	2
Cap, veh/h	595	0	531	0	7	6	0	647	578	0	1295	579
Arrive On Green	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.37	0.00	0.37	0.00
Sat Flow, veh/h	1774	0	1583	0	1863	1583	0	1863	1581	0	3632	1583
Grp Volume(v), veh/h	399	0	0	0	0	0	0	1	14	0	653	0
Grp Sat Flow(s),veh/h/ln	1774	0	1583	0	1863	1583	0	1770	1581	0	1770	1583
Q Serve(g_s), s	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	3.8	0.0
Cycle Q Clear(g_c), s	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	3.8	0.0
Prop In Lane	1.00		1.00	0.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	595	0	531	0	7	6	0	647	578	0	1295	579
V/C Ratio(X)	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.50	0.00
Avail Cap(c_a), veh/h	1589	0	1418	0	348	295	0	1387	1239	0	2641	1182
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	7.6	0.0	0.0	0.0	0.0	0.0	0.0	5.4	5.4	0.0	6.6	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.9	0.0
LnGrp Delay(d),s/veh	8.9	0.0	0.0	0.0	0.0	0.0	0.0	5.4	5.5	0.0	6.9	0.0
LnGrp LOS	A							A	A		A	
Approach Vol, veh/h		399			0			15			653	
Approach Delay, s/veh		8.9			0.0			5.4			6.9	
Approach LOS		A						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		13.8		13.0		13.8		0.0
Change Period (Y+Rc), s		* 4		4.0		4.0		3.0
Max Green Setting (Gmax), s		* 21		24.0		20.0		5.0
Max Q Clear Time (g_c+I1), s		2.2		7.2		5.8		0.0
Green Ext Time (p_c), s		4.4		2.3		3.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	7.7
HCM 2010 LOS	A

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	397	3	21	378	228	0	0	96	186
Future Volume (vph)	0	0	0	397	3	21	378	228	0	0	96	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.2	4.2		4.6			4.2	4.0
Lane Util. Factor					1.00	1.00		1.00			1.00	1.00
Frpb, ped/bikes					1.00	1.00		1.00			1.00	0.97
Flpb, ped/bikes					1.00	1.00		1.00			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					0.95	1.00		0.97			1.00	1.00
Satd. Flow (prot)					1775	1583		1806			1863	1540
Flt Permitted					0.95	1.00		0.97			1.00	1.00
Satd. Flow (perm)					1775	1583		1806			1863	1540
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	0	409	3	22	390	235	0	0	99	192
RTOR Reduction (vph)	0	0	0	0	0	16	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	412	6	0	625	0	0	99	192
Confl. Peds. (#/hr)												15
Turn Type				Split	NA	Perm	Split	NA			NA	Free
Protected Phases				8	8		2	2			6	
Permitted Phases						8						Free
Actuated Green, G (s)					19.1	19.1		27.4			9.0	68.5
Effective Green, g (s)					19.1	19.1		27.4			9.0	68.5
Actuated g/C Ratio					0.28	0.28		0.40			0.13	1.00
Clearance Time (s)					4.2	4.2		4.6			4.2	
Vehicle Extension (s)					3.5	3.5		3.5			3.5	
Lane Grp Cap (vph)					494	441		722			244	1540
v/s Ratio Prot					c0.23			c0.35			c0.05	
v/s Ratio Perm						0.00						0.12
v/c Ratio					0.83	0.01		0.87			0.41	0.12
Uniform Delay, d1					23.2	17.9		18.9			27.3	0.0
Progression Factor					1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2					11.8	0.0		10.8			1.3	0.2
Delay (s)					35.0	17.9		29.7			28.6	0.2
Level of Service					D	B		C			C	A
Approach Delay (s)		0.0			34.2			29.7			9.8	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	26.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	68.5	Sum of lost time (s)	13.0
Intersection Capacity Utilization	69.1%	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)	289	907	442	251	559	354	287	524	232	253	414	83
Future Volume (veh/h)	289	907	442	251	559	354	287	524	232	253	414	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	301	945	460	261	582	369	299	546	242	264	431	86
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	302	1095	627	274	1039	603	321	1054	707	322	875	173
Arrive On Green	0.17	0.31	0.31	0.15	0.29	0.29	0.09	0.30	0.30	0.09	0.30	0.30
Sat Flow, veh/h	1774	3539	1550	1774	3539	1548	3442	3539	1553	3442	2933	580
Grp Volume(v), veh/h	301	945	460	261	582	369	299	546	242	264	259	258
Grp Sat Flow(s),veh/h/ln	1774	1770	1550	1774	1770	1548	1721	1770	1553	1721	1770	1743
Q Serve(g_s), s	19.4	28.9	28.9	16.7	15.9	22.0	9.9	14.7	11.6	8.6	13.8	14.0
Cycle Q Clear(g_c), s	19.4	28.9	28.9	16.7	15.9	22.0	9.9	14.7	11.6	8.6	13.8	14.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	302	1095	627	274	1039	603	321	1054	707	322	528	520
V/C Ratio(X)	1.00	0.86	0.73	0.95	0.56	0.61	0.93	0.52	0.34	0.82	0.49	0.50
Avail Cap(c_a), veh/h	302	1105	631	274	1049	607	321	1054	707	351	528	520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.6	37.3	29.1	48.1	34.2	28.3	51.6	33.4	20.4	51.0	33.1	33.2
Incr Delay (d2), s/veh	51.2	7.4	4.7	41.7	0.8	2.1	32.8	1.8	1.3	13.3	3.2	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.7	15.2	13.2	11.4	7.9	9.7	6.2	7.5	5.2	4.7	7.2	7.2
LnGrp Delay(d),s/veh	98.7	44.7	33.8	89.7	35.1	30.4	84.4	35.2	21.7	64.3	36.3	36.5
LnGrp LOS	F	D	C	F	D	C	F	D	C	E	D	D
Approach Vol, veh/h		1706			1212			1087			781	
Approach Delay, s/veh		51.3			45.4			45.8			45.8	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	38.8	21.4	40.1	14.4	38.8	23.2	38.3
Change Period (Y+Rc), s	3.7	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Green Setting (Gmax), s	11.7	33.2	17.7	35.8	10.7	34.2	19.5	34.0
Max Q Clear Time (g_c+I1), s	10.6	16.7	18.7	30.9	11.9	16.0	21.4	24.0
Green Ext Time (p_c), s	0.1	9.5	0.0	4.6	0.0	10.1	0.0	9.0

Intersection Summary	
HCM 2010 Ctrl Delay	47.7
HCM 2010 LOS	D

Appendix G

Intersection
Level of Service
Calculations

Background Plus Project
Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	161	117	242	0	385	0	69	158	17	26	0
Future Volume (veh/h)	19	161	117	242	0	385	0	69	158	17	26	0
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1845	1845	1845	0	1845	0	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	22	183	133	275	0	438	0	78	180	19	30	0
Adj No. of Lanes	0	2	1	1	0	1	0	1	1	0	1	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	0	3	0	6	6	2	2	2
Cap, veh/h	74	649	314	0	0	0	0	466	396	374	332	0
Arrive On Green	0.20	0.20	0.20	0.00	0.00	0.00	0.00	0.26	0.26	0.26	0.26	0.00
Sat Flow, veh/h	366	3212	1554		0		0	1792	1524	351	1277	0
Grp Volume(v), veh/h	110	95	133		0.0		0	78	180	49	0	0
Grp Sat Flow(s),veh/h/ln	1826	1752	1554				0	1792	1524	1628	0	0
Q Serve(g_s), s	0.9	0.8	1.3				0.0	0.6	1.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.9	0.8	1.3				0.0	0.6	1.8	0.4	0.0	0.0
Prop In Lane	0.20		1.00				0.00		1.00	0.39		0.00
Lane Grp Cap(c), veh/h	369	354	314				0	466	396	706	0	0
V/C Ratio(X)	0.30	0.27	0.42				0.00	0.17	0.45	0.07	0.00	0.00
Avail Cap(c_a), veh/h	2659	2551	2263				0	2925	2486	2736	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.0	5.9	6.1				0.0	5.1	5.5	5.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.2	0.3				0.0	0.1	0.3	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
%ile BackOfQ(50%),veh/ln	0.4	0.4	0.6				0.0	0.3	0.7	0.2	0.0	0.0
LnGrp Delay(d),s/veh	6.1	6.1	6.5				0.0	5.1	5.8	5.0	0.0	0.0
LnGrp LOS	A	A	A					A	A	A		
Approach Vol, veh/h		338						258			49	
Approach Delay, s/veh		6.3						5.6			5.0	
Approach LOS		A						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		8.8		8.9		8.8		
Change Period (Y+Rc), s		* 4.2		5.3		* 4.2		
Max Green Setting (Gmax), s		* 29		25.7		* 29		
Max Q Clear Time (g_c+I1), s		3.8		3.3		2.4		
Green Ext Time (p_c), s		0.8		0.9		0.8		

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)	120	137	79	117	261	67	163	175	76	46	818	203
Future Volume (veh/h)	120	137	79	117	261	67	163	175	76	46	818	203
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	1845	1845	1900	1827	1827	1827
Adj Flow Rate, veh/h	132	151	87	129	287	74	179	192	84	51	899	223
Adj No. of Lanes	1	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	232	244	204	112	248	64	192	963	406	65	1157	518
Arrive On Green	0.13	0.13	0.13	0.24	0.24	0.24	0.11	0.40	0.40	0.04	0.33	0.33
Sat Flow, veh/h	1774	1863	1562	472	1049	271	1757	2404	1014	1740	3471	1553
Grp Volume(v), veh/h	132	151	87	490	0	0	179	138	138	51	899	223
Grp Sat Flow(s),veh/h/ln	1774	1863	1562	1791	0	0	1757	1752	1666	1740	1736	1553
Q Serve(g_s), s	6.9	7.6	5.1	23.4	0.0	0.0	10.0	5.1	5.4	2.9	23.0	11.1
Cycle Q Clear(g_c), s	6.9	7.6	5.1	23.4	0.0	0.0	10.0	5.1	5.4	2.9	23.0	11.1
Prop In Lane	1.00		1.00	0.26		0.15	1.00		0.61	1.00		1.00
Lane Grp Cap(c), veh/h	232	244	204	424	0	0	192	702	667	65	1157	518
V/C Ratio(X)	0.57	0.62	0.43	1.16	0.00	0.00	0.93	0.20	0.21	0.79	0.78	0.43
Avail Cap(c_a), veh/h	610	640	537	424	0	0	192	755	717	100	1333	597
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	40.7	39.6	37.8	0.0	0.0	43.7	19.3	19.4	47.2	29.7	25.7
Incr Delay (d2), s/veh	2.2	2.6	1.4	93.9	0.0	0.0	46.2	0.2	0.2	19.7	2.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	4.1	2.3	22.6	0.0	0.0	7.3	2.5	2.5	1.7	11.4	4.8
LnGrp Delay(d),s/veh	42.6	43.2	41.0	131.6	0.0	0.0	89.9	19.5	19.6	66.9	32.4	26.3
LnGrp LOS	D	D	D	F			F	B	B	E	C	C
Approach Vol, veh/h		370			490			455			1173	
Approach Delay, s/veh		42.5			131.6			47.2			32.7	
Approach LOS		D			F			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.4	44.9		17.6	15.0	38.3		28.0
Change Period (Y+Rc), s	* 4.7	5.3		* 4.7	* 4.2	5.3		4.6
Max Green Setting (Gmax), s	* 5.7	42.6		* 34	* 11	38.0		23.4
Max Q Clear Time (g_c+I1), s	4.9	7.4		9.6	12.0	25.0		25.4
Green Ext Time (p_c), s	0.0	13.9		1.5	0.0	7.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	56.3
HCM 2010 LOS	E

Notes

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	152	0	3	0	0	97	0	450	14	0	607	421
Future Vol, veh/h	152	0	3	0	0	97	0	450	14	0	607	421
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	0	-	-	0	-	-	-	-	-	75
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, %	14	14	14	2	2	2	3	3	3	3	3	3
Mvmt Flow	162	0	3	0	0	103	0	479	15	0	646	448

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	885	-	323	-	-	249	-	0	0	-	-	0
Stage 1	646	-	-	-	-	-	-	-	-	-	-	-
Stage 2	239	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.78	-	7.18	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	6.78	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.78	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.64	-	3.44	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	221	0	639	0	0	751	0	-	-	0	-	0
Stage 1	399	0	-	0	0	-	0	-	-	0	-	0
Stage 2	710	0	-	0	0	-	0	-	-	0	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	191	-	639	-	-	750	-	-	-	-	-	-
Mov Cap-2 Maneuver	301	-	-	-	-	-	-	-	-	-	-	-
Stage 1	399	-	-	-	-	-	-	-	-	-	-	-
Stage 2	612	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	29.6	10.6	0	0
HCM LOS	D	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	WBLn1	SBT
Capacity (veh/h)	-	-	301	639	750	-
HCM Lane V/C Ratio	-	-	0.537	0.005	0.138	-
HCM Control Delay (s)	-	-	30	10.7	10.6	-
HCM Lane LOS	-	-	D	B	B	-
HCM 95th %tile Q(veh)	-	-	3	0	0.5	-

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	69	3	158	42	3	418
Future Vol, veh/h	69	3	158	42	3	418
Conflicting Peds, #/hr	0	2	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	9	9	7	7	4	4
Mvmt Flow	78	3	178	47	3	470

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	448	119	0	0	230	0
Stage 1	206	-	-	-	-	-
Stage 2	242	-	-	-	-	-
Critical Hdwy	6.98	7.08	-	-	4.18	-
Critical Hdwy Stg 1	5.98	-	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.24	-
Pot Cap-1 Maneuver	522	888	-	-	1321	-
Stage 1	788	-	-	-	-	-
Stage 2	755	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	518	883	-	-	1319	-
Mov Cap-2 Maneuver	518	-	-	-	-	-
Stage 1	785	-	-	-	-	-
Stage 2	753	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.1	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	527	1319	-
HCM Lane V/C Ratio	-	-	0.154	0.003	-
HCM Control Delay (s)	-	-	13.1	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0	-

Intersection	
Intersection Delay, s/veh	9.9
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	42	94	4	0	48	140	19	0	7	51	36
Future Vol, veh/h	0	42	94	4	0	48	140	19	0	7	51	36
Peak Hour Factor	0.92	0.86	0.86	0.86	0.92	0.86	0.86	0.86	0.92	0.86	0.86	0.86
Heavy Vehicles, %	2	17	17	17	2	8	8	8	2	7	7	7
Mvmt Flow	0	49	109	5	0	56	163	22	0	8	59	42
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	9.9	10.3	9.1
HCM LOS	A	B	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	12%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	88%	0%	0%	96%	0%	88%	0%	60%
Vol Right, %	0%	100%	0%	4%	0%	12%	0%	40%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	58	36	42	98	48	159	43	107
LT Vol	7	0	42	0	48	0	43	0
Through Vol	51	0	0	94	0	140	0	64
RT Vol	0	36	0	4	0	19	0	43
Lane Flow Rate	67	42	49	114	56	185	50	124
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.114	0.062	0.087	0.187	0.094	0.283	0.088	0.192
Departure Headway (Hd)	6.088	5.319	6.437	5.904	6.195	5.507	6.439	5.65
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	591	676	560	612	582	645	560	640
Service Time	3.795	3.026	4.137	3.604	3.895	3.306	4.139	3.35
HCM Lane V/C Ratio	0.113	0.062	0.087	0.186	0.096	0.287	0.089	0.194
HCM Control Delay	9.6	8.4	9.7	10	9.5	10.5	9.8	9.7
HCM Lane LOS	A	A	A	A	A	B	A	A
HCM 95th-tile Q	0.4	0.2	0.3	0.7	0.3	1.2	0.3	0.7

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	43	64	43
Future Vol, veh/h	0	43	64	43
Peak Hour Factor	0.92	0.86	0.86	0.86
Heavy Vehicles, %	2	7	7	7
Mvmt Flow	0	50	74	50
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	9.7
HCM LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	59	105	27	103	0	67	186	30	3	442	44
Future Volume (veh/h)	9	59	105	27	103	0	67	186	30	3	442	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1792	1792	1900	1743	1743	1900	1792	1792	1900
Adj Flow Rate, veh/h	10	63	113	29	111	0	72	200	32	3	475	47
Adj No. of Lanes	1	1	1	1	2	0	2	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	11	11	11	6	6	6	9	9	9	6	6	6
Cap, veh/h	17	303	255	46	658	0	169	1236	195	6	1195	118
Arrive On Green	0.01	0.18	0.18	0.03	0.19	0.00	0.05	0.43	0.43	0.00	0.38	0.38
Sat Flow, veh/h	1630	1712	1445	1707	3495	0	3221	2867	452	1707	3131	309
Grp Volume(v), veh/h	10	63	113	29	111	0	72	114	118	3	258	264
Grp Sat Flow(s),veh/h/ln	1630	1712	1445	1707	1703	0	1610	1656	1663	1707	1703	1737
Q Serve(g_s), s	0.3	1.4	3.2	0.8	1.2	0.0	1.0	1.9	2.0	0.1	5.0	5.1
Cycle Q Clear(g_c), s	0.3	1.4	3.2	0.8	1.2	0.0	1.0	1.9	2.0	0.1	5.0	5.1
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.27	1.00		0.18
Lane Grp Cap(c), veh/h	17	303	255	46	658	0	169	714	717	6	650	663
V/C Ratio(X)	0.59	0.21	0.44	0.63	0.17	0.00	0.43	0.16	0.16	0.54	0.40	0.40
Avail Cap(c_a), veh/h	143	939	793	187	1943	0	283	890	894	150	915	934
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00
Uniform Delay (d), s/veh	22.5	16.0	16.8	21.9	15.3	0.0	20.9	7.9	7.9	22.7	10.3	10.3
Incr Delay (d2), s/veh	28.3	0.5	1.7	13.3	0.2	0.0	1.7	0.5	0.5	62.3	1.8	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	0.3	0.7	1.4	0.5	0.6	0.0	0.5	1.0	1.0	0.1	2.7	2.8
LnGrp Delay(d),s/veh	50.7	16.5	18.5	35.3	15.5	0.0	22.6	8.4	8.4	84.9	12.1	12.1
LnGrp LOS	D	B	B	D	B		C	A	A	F	B	B
Approach Vol, veh/h		186			140			304			525	
Approach Delay, s/veh		19.5			19.6			11.8			12.5	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.1	24.1	5.2	12.1	6.4	21.9	4.5	12.8
Change Period (Y+Rc), s	4.0	4.5	4.0	4.0	4.0	4.5	4.0	4.0
Max Green Setting (Gmax), s	4.0	24.5	5.0	25.0	4.0	24.5	4.0	26.0
Max Q Clear Time (g_c+I1), s	2.1	4.0	2.8	5.2	3.0	7.1	2.3	3.2
Green Ext Time (p_c), s	0.0	11.5	0.0	1.9	0.0	10.3	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay	14.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	4.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	143	24	242	60	57	499
Future Vol, veh/h	143	24	242	60	57	499
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	9	9	7	7
Mvmt Flow	163	27	275	68	65	567

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	724	174	0	0	345	0
Stage 1	311	-	-	-	-	-
Stage 2	413	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.24	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.27	-
Pot Cap-1 Maneuver	361	839	-	-	1175	-
Stage 1	716	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	340	838	-	-	1175	-
Mov Cap-2 Maneuver	340	-	-	-	-	-
Stage 1	715	-	-	-	-	-
Stage 2	601	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.7	0	0.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	340	838	1175	-
HCM Lane V/C Ratio	-	-	0.478	0.033	0.055	-
HCM Control Delay (s)	-	-	24.9	9.4	8.2	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	2.5	0.1	0.2	-

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBU	SBL	SBR
Lane Configurations									
Traffic Vol, veh/h	0	13	104	0	168	28	0	13	18
Future Vol, veh/h	0	13	104	0	168	28	0	13	18
Peak Hour Factor	0.92	0.84	0.84	0.92	0.84	0.84	0.92	0.84	0.84
Heavy Vehicles, %	2	2	2	2	10	10	2	7	7
Mvmt Flow	0	15	124	0	200	33	0	15	21
Number of Lanes	0	1	1	0	1	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	8.4	9	7.8
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	42%
Vol Thru, %	0%	100%	86%	0%
Vol Right, %	0%	0%	14%	58%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	13	104	196	31
LT Vol	13	0	0	13
Through Vol	0	104	168	0
RT Vol	0	0	28	18
Lane Flow Rate	15	124	233	37
Geometry Grp	7	7	5	2
Degree of Util (X)	0.022	0.162	0.276	0.047
Departure Headway (Hd)	5.217	4.716	4.252	4.602
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	681	754	835	783
Service Time	2.987	2.485	2.33	2.602
HCM Lane V/C Ratio	0.022	0.164	0.279	0.047
HCM Control Delay	8.1	8.4	9	7.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.6	1.1	0.1

Intersection	
Intersection Delay, s/veh	9.9
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	25	61	30	0	104	98	25	0	25	33	114
Future Vol, veh/h	0	25	61	30	0	104	98	25	0	25	33	114
Peak Hour Factor	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	7	7	7	2	7	7	7	2	15	15	15
Mvmt Flow	0	31	76	38	0	130	123	31	0	31	41	143
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	9.7	10.4	9.7
HCM LOS	A	B	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	43%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	57%	0%	0%	67%	0%	80%	0%	81%
Vol Right, %	0%	100%	0%	33%	0%	20%	0%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	58	114	25	91	104	123	18	70
LT Vol	25	0	25	0	104	0	18	0
Through Vol	33	0	0	61	0	98	0	57
RT Vol	0	114	0	30	0	25	0	13
Lane Flow Rate	72	142	31	114	130	154	22	88
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.128	0.215	0.056	0.18	0.226	0.24	0.041	0.144
Departure Headway (Hd)	6.363	5.437	6.451	5.712	6.254	5.617	6.559	5.921
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	566	663	556	629	576	643	547	606
Service Time	4.071	3.145	4.177	3.438	3.975	3.327	4.287	3.649
HCM Lane V/C Ratio	0.127	0.214	0.056	0.181	0.226	0.24	0.04	0.145
HCM Control Delay	10	9.6	9.6	9.7	10.8	10.1	9.6	9.6
HCM Lane LOS	A	A	A	A	B	B	A	A
HCM 95th-tile Q	0.4	0.8	0.2	0.7	0.9	0.9	0.1	0.5

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	18	57	13
Future Vol, veh/h	0	18	57	13
Peak Hour Factor	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	23	71	16
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	9.6
HCM LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	17	83	16	37	18	73	200	25	41	473	119
Future Volume (veh/h)	94	17	83	16	37	18	73	200	25	41	473	119
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1900	1845	1845	1845	1759	1759	1900	1792	1792	1900
Adj Flow Rate, veh/h	102	18	90	17	40	20	79	217	27	45	514	129
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	9	9	3	3	3	8	8	8	6	6	6
Cap, veh/h	126	35	176	30	149	127	96	1335	164	65	1152	288
Arrive On Green	0.08	0.14	0.14	0.02	0.08	0.08	0.06	0.45	0.45	0.04	0.43	0.43
Sat Flow, veh/h	1660	252	1262	1757	1845	1568	1675	2996	368	1707	2699	674
Grp Volume(v), veh/h	102	0	108	17	40	20	79	120	124	45	323	320
Grp Sat Flow(s),veh/h/ln	1660	0	1514	1757	1845	1568	1675	1671	1693	1707	1703	1670
Q Serve(g_s), s	2.7	0.0	2.9	0.4	0.9	0.5	2.1	1.9	2.0	1.2	6.0	6.0
Cycle Q Clear(g_c), s	2.7	0.0	2.9	0.4	0.9	0.5	2.1	1.9	2.0	1.2	6.0	6.0
Prop In Lane	1.00		0.83	1.00		1.00	1.00		0.22	1.00		0.40
Lane Grp Cap(c), veh/h	126	0	211	30	149	127	96	745	754	65	727	713
V/C Ratio(X)	0.81	0.00	0.51	0.57	0.27	0.16	0.82	0.16	0.16	0.69	0.45	0.45
Avail Cap(c_a), veh/h	224	0	544	158	580	493	188	745	754	230	727	713
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.3	0.0	17.7	21.7	19.2	19.1	20.8	7.4	7.4	21.1	9.0	9.0
Incr Delay (d2), s/veh	11.5	0.0	1.9	15.8	1.0	0.6	15.8	0.5	0.5	12.0	2.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	1.3	0.3	0.5	0.2	1.4	1.0	1.0	0.8	3.2	3.2
LnGrp Delay(d),s/veh	31.8	0.0	19.6	37.5	20.2	19.6	36.5	7.8	7.9	33.2	11.0	11.1
LnGrp LOS	C		B	D	C	B	D	A	A	C	B	B
Approach Vol, veh/h		210			77			323			688	
Approach Delay, s/veh		25.5			23.9			14.9			12.5	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	23.8	4.8	10.2	6.6	23.0	7.4	7.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	18.0	4.0	16.0	5.0	19.0	6.0	14.0
Max Q Clear Time (g_c+I1), s	3.2	4.0	2.4	4.9	4.1	8.0	4.7	2.9
Green Ext Time (p_c), s	0.0	4.8	0.0	0.6	0.0	4.1	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	15.9
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	0	43	4	0	51	93	0	0	3	0	16
Future Vol, veh/h	0	0	43	4	0	51	93	0	0	3	0	16
Peak Hour Factor	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	7	7	7	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	54	5	0	64	116	0	0	4	0	20
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	7.5	8.2	7.1
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	16%	0%	35%	0%
Vol Thru, %	0%	91%	65%	0%
Vol Right, %	84%	9%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	19	47	144	2
LT Vol	3	0	51	0
Through Vol	0	43	93	0
RT Vol	16	4	0	2
Lane Flow Rate	24	59	180	2
Geometry Grp	1	1	1	1
Degree of Util (X)	0.026	0.068	0.205	0.003
Departure Headway (Hd)	3.987	4.148	4.094	4.702
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	903	858	877	766
Service Time	1.987	2.198	2.119	2.702
HCM Lane V/C Ratio	0.027	0.069	0.205	0.003
HCM Control Delay	7.1	7.5	8.2	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.8	0

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	0	0	2
Future Vol, veh/h	0	0	0	2
Peak Hour Factor	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	50	50	50
Mvmt Flow	0	0	0	3
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	7.7
HCM LOS	A

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	75	2	0	13	50	0	3	8
Future Vol, veh/h	0	75	2	0	13	50	0	3	8
Peak Hour Factor	0.92	0.91	0.91	0.92	0.91	0.91	0.92	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	9	9
Mvmt Flow	0	82	2	0	14	55	0	3	9
Number of Lanes	0	1	0	0	1	0	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.8	6.9	7.4
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	97%	27%
Vol Thru, %	21%	0%	73%
Vol Right, %	79%	3%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	63	77	11
LT Vol	0	75	3
Through Vol	13	0	8
RT Vol	50	2	0
Lane Flow Rate	69	85	12
Geometry Grp	1	1	1
Degree of Util (X)	0.07	0.1	0.014
Departure Headway (Hd)	3.615	4.256	4.309
Convergence, Y/N	Yes	Yes	Yes
Cap	983	843	825
Service Time	1.666	2.277	2.367
HCM Lane V/C Ratio	0.07	0.101	0.015
HCM Control Delay	6.9	7.8	7.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0.3	0

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	26	13	7	0	52	16	0	0	18	66	49
Future Vol, veh/h	0	26	13	7	0	52	16	0	0	18	66	49
Peak Hour Factor	0.92	0.83	0.83	0.83	0.92	0.83	0.83	0.83	0.92	0.83	0.83	0.83
Heavy Vehicles, %	2	3	3	3	2	6	6	6	2	3	3	3
Mvmt Flow	0	31	16	8	0	63	19	0	0	22	80	59
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	8.7	9.4	8.4
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	14%	67%	0%	76%	0%	2%
Vol Thru, %	50%	33%	0%	24%	100%	73%
Vol Right, %	37%	0%	100%	0%	0%	26%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	133	39	7	68	0	131
LT Vol	18	26	0	52	0	2
Through Vol	66	13	0	16	0	95
RT Vol	49	0	7	0	0	34
Lane Flow Rate	160	47	8	82	0	158
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.193	0.074	0.011	0.131	0	0.196
Departure Headway (Hd)	4.328	5.696	4.655	5.765	5.38	4.468
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	830	628	767	622	0	803
Service Time	2.35	3.437	2.395	3.504	3.119	2.491
HCM Lane V/C Ratio	0.193	0.075	0.01	0.132	0	0.197
HCM Control Delay	8.4	8.9	7.4	9.4	8.1	8.6
HCM Lane LOS	A	A	A	A	N	A
HCM 95th-tile Q	0.7	0.2	0	0.4	0	0.7

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations			↕	
Traffic Vol, veh/h	0	2	95	34
Future Vol, veh/h	0	2	95	34
Peak Hour Factor	0.92	0.83	0.83	0.83
Heavy Vehicles, %	2	9	9	9
Mvmt Flow	0	2	114	41
Number of Lanes	0	0	1	0

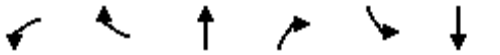
Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	8.6
HCM LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	0	190	0	0	0	164	377	6	0	512	79
Future Volume (veh/h)	43	0	190	0	0	0	164	377	6	0	512	79
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		1.00	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	1900	1776	1776	1900	1863	1900	1827	1827	1900	0	1810	1900
Adj Flow Rate, veh/h	48	0	211	0	0	0	182	419	7	0	569	88
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	0	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	7	7	7	2	2	2	4	4	4	0	5	5
Cap, veh/h	382	0	275	0	343	0	584	2339	39	0	1568	242
Arrive On Green	0.18	0.00	0.18	0.00	0.00	0.00	0.08	0.67	0.67	0.00	0.53	0.53
Sat Flow, veh/h	1330	0	1492	0	1863	0	1740	3493	58	0	3072	460
Grp Volume(v), veh/h	48	0	211	0	0	0	182	208	218	0	327	330
Grp Sat Flow(s),veh/h/ln	1330	0	1492	0	1863	0	1740	1736	1816	0	1719	1723
Q Serve(g_s), s	1.6	0.0	7.1	0.0	0.0	0.0	2.2	2.4	2.4	0.0	5.9	5.9
Cycle Q Clear(g_c), s	1.6	0.0	7.1	0.0	0.0	0.0	2.2	2.4	2.4	0.0	5.9	5.9
Prop In Lane	1.00		1.00	0.00		0.00	1.00		0.03	0.00		0.27
Lane Grp Cap(c), veh/h	382	0	275	0	343	0	584	1162	1216	0	904	906
V/C Ratio(X)	0.13	0.00	0.77	0.00	0.00	0.00	0.31	0.18	0.18	0.00	0.36	0.36
Avail Cap(c_a), veh/h	566	0	481	0	601	0	730	1162	1216	0	904	906
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	0.0	20.4	0.0	0.0	0.0	4.6	3.3	3.3	0.0	7.3	7.3
Incr Delay (d2), s/veh	0.2	0.0	6.3	0.0	0.0	0.0	0.3	0.3	0.3	0.0	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	3.4	0.0	0.0	0.0	1.1	1.2	1.3	0.0	3.0	3.0
LnGrp Delay(d),s/veh	18.4	0.0	26.7	0.0	0.0	0.0	4.9	3.6	3.6	0.0	8.4	8.5
LnGrp LOS	B		C				A	A	A		A	A
Approach Vol, veh/h		259			0			608			657	
Approach Delay, s/veh		25.2			0.0			4.0			8.5	
Approach LOS		C						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		39.5		13.2	7.6	31.9		13.2
Change Period (Y+Rc), s		* 4.2		3.5	3.5	* 4.2		3.5
Max Green Setting (Gmax), s		* 35		17.0	8.5	* 23		17.0
Max Q Clear Time (g_c+I1), s		4.4		9.1	4.2	7.9		0.0
Green Ext Time (p_c), s		20.9		0.9	0.2	12.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	9.5
HCM 2010 LOS	A

Notes



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	486	89	459	273	54	648
Future Volume (veh/h)	486	89	459	273	54	648
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1845	1845	1810	1810
Adj Flow Rate, veh/h	559	102	528	0	62	745
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	3	3	5	5
Cap, veh/h	845	389	1600	716	79	1966
Arrive On Green	0.25	0.25	0.46	0.00	0.05	0.57
Sat Flow, veh/h	3442	1583	3597	1568	1723	3529
Grp Volume(v), veh/h	559	102	528	0	62	745
Grp Sat Flow(s),veh/h/ln	1721	1583	1752	1568	1723	1719
Q Serve(g_s), s	7.4	2.6	4.9	0.0	1.8	6.0
Cycle Q Clear(g_c), s	7.4	2.6	4.9	0.0	1.8	6.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	845	389	1600	716	79	1966
V/C Ratio(X)	0.66	0.26	0.33	0.00	0.78	0.38
Avail Cap(c_a), veh/h	1161	534	1704	762	198	2306
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	17.1	15.3	8.8	0.0	23.8	5.9
Incr Delay (d2), s/veh	1.9	0.8	0.6	0.0	15.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	1.2	2.5	0.0	1.2	2.9
LnGrp Delay(d),s/veh	19.0	16.1	9.3	0.0	38.9	6.5
LnGrp LOS	B	B	A		D	A
Approach Vol, veh/h	661		528			807
Approach Delay, s/veh	18.6		9.3			8.9
Approach LOS	B		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	5.8	27.2				33.0		17.4
Change Period (Y+Rc), s	3.5	* 4.2				* 4.2		5.0
Max Green Setting (Gmax), s	5.8	* 25				* 34		17.0
Max Q Clear Time (g_c+I1), s	3.8	6.9				8.0		9.4
Green Ext Time (p_c), s	0.0	15.0				20.9		3.0

Intersection Summary	
HCM 2010 Ctrl Delay	12.2
HCM 2010 LOS	B

Notes

Intersection	
Int Delay, s/veh	14.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	2	6	97	181	10	9	111	31	115	0	0	0
Future Vol, veh/h	2	6	97	181	10	9	111	31	115	0	0	0
Conflicting Peds, #/hr	20	0	1	1	0	20	17	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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	6	6	6	2	2	2	2	2	2
Mvmt Flow	3	8	129	241	13	12	148	41	153	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	464	508	18	484	431	138	17	0	0
Stage 1	17	17	-	414	414	-	-	-	-
Stage 2	447	491	-	70	17	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.16	6.56	6.26	4.12	-	-
Critical Hdwy Stg 1	-	-	-	6.16	5.56	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.554	4.054	3.354	2.218	-	-
Pot Cap-1 Maneuver	508	468	1061	487	511	900	1600	-	-
Stage 1	-	-	-	608	586	-	-	-	-
Stage 2	591	548	-	-	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	444	412	1045	386	450	900	1599	-	-
Mov Cap-2 Maneuver	444	412	-	386	450	-	-	-	-
Stage 1	-	-	-	544	524	-	-	-	-
Stage 2	508	490	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	9.5	30.4	3.2
HCM LOS	A	D	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	1599	-	-	938	399
HCM Lane V/C Ratio	0.093	-	-	0.149	0.668
HCM Control Delay (s)	7.5	0	-	9.5	30.4
HCM Lane LOS	A	A	-	A	D
HCM 95th %tile Q(veh)	0.3	-	-	0.5	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	412	1	36	435	221	0	0	81	199
Future Volume (veh/h)	0	0	0	412	1	36	435	221	0	0	81	199
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.94
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1792	1792	1900	1845	0	0	1827	1900
Adj Flow Rate, veh/h				485	1	42	512	260	0	0	95	234
Adj No. of Lanes				0	1	1	0	1	0	0	1	0
Peak Hour Factor				0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %				6	6	6	3	3	0	0	4	4
Cap, veh/h				507	1	453	491	250	0	0	56	138
Arrive On Green				0.30	0.30	0.30	0.41	0.41	0.00	0.00	0.13	0.13
Sat Flow, veh/h				1704	4	1524	1184	601	0	0	447	1102
Grp Volume(v), veh/h				486	0	42	772	0	0	0	0	329
Grp Sat Flow(s),veh/h/ln				1707	0	1524	1785	0	0	0	0	1550
Q Serve(g_s), s				22.4	0.0	1.6	33.2	0.0	0.0	0.0	0.0	10.0
Cycle Q Clear(g_c), s				22.4	0.0	1.6	33.2	0.0	0.0	0.0	0.0	10.0
Prop In Lane				1.00		1.00	0.66		0.00	0.00		0.71
Lane Grp Cap(c), veh/h				508	0	453	741	0	0	0	0	194
V/C Ratio(X)				0.96	0.00	0.09	1.04	0.00	0.00	0.00	0.00	1.70
Avail Cap(c_a), veh/h				508	0	453	741	0	0	0	0	194
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				27.6	0.0	20.3	23.4	0.0	0.0	0.0	0.0	35.0
Incr Delay (d2), s/veh				29.3	0.0	0.1	44.5	0.0	0.0	0.0	0.0	335.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				14.7	0.0	0.7	25.4	0.0	0.0	0.0	0.0	22.3
LnGrp Delay(d),s/veh				56.9	0.0	20.4	67.9	0.0	0.0	0.0	0.0	370.5
LnGrp LOS				E		C	F					F
Approach Vol, veh/h					528			772			329	
Approach Delay, s/veh					54.0			67.9			370.5	
Approach LOS					D			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		37.8				14.2		28.0
Change Period (Y+Rc), s		4.6				4.2		4.2
Max Green Setting (Gmax), s		33.2				10.0		23.8
Max Q Clear Time (g_c+I1), s		35.2				12.0		24.4
Green Ext Time (p_c), s		0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	124.5
HCM 2010 LOS	F

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	128	1	265	0	0	0	0	528	285	27	466	0
Future Vol, veh/h	128	1	265	0	0	0	0	528	285	27	466	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	2	2	2	5	5	5	6	6	6
Mvmt Flow	139	1	288	0	0	0	0	574	310	29	507	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1139	1141	507	-	0	0	576	0	0
Stage 1	565	565	-	-	-	-	-	-	-
Stage 2	574	576	-	-	-	-	-	-	-
Critical Hdwy	6.43	6.53	6.23	-	-	-	4.16	-	-
Critical Hdwy Stg 1	5.43	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	-	-	-	2.254	-	-
Pot Cap-1 Maneuver	222	200	564	0	-	-	978	-	0
Stage 1	567	506	-	0	-	-	-	-	0
Stage 2	561	501	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	213	0	564	-	-	-	978	-	-
Mov Cap-2 Maneuver	213	0	-	-	-	-	-	-	-
Stage 1	544	0	-	-	-	-	-	-	-
Stage 2	561	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	28.2	0	0.5
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	213	564	978	-
HCM Lane V/C Ratio	-	-	0.658	0.511	0.03	-
HCM Control Delay (s)	-	-	49.5	17.9	8.8	0
HCM Lane LOS	-	-	E	C	A	A
HCM 95th %tile Q(veh)	-	-	4	2.9	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	354	170	133	685	287	408	400	162	224	363	89
Future Volume (veh/h)	138	354	170	133	685	287	408	400	162	224	363	89
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1863	1863	1863	1810	1810	1900
Adj Flow Rate, veh/h	159	407	195	153	787	330	469	460	186	257	417	102
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	2	2	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	4	4	4	4	4	4	2	2	2	5	5	5
Cap, veh/h	176	1108	494	169	1094	480	345	1150	506	325	882	214
Arrive On Green	0.10	0.32	0.32	0.10	0.32	0.32	0.10	0.32	0.32	0.10	0.32	0.32
Sat Flow, veh/h	1740	3471	1547	1740	3471	1522	3442	3539	1558	3343	2739	664
Grp Volume(v), veh/h	159	407	195	153	787	330	469	460	186	257	260	259
Grp Sat Flow(s),veh/h/ln	1740	1736	1547	1740	1736	1522	1721	1770	1558	1672	1719	1684
Q Serve(g_s), s	9.3	9.3	10.1	8.9	20.6	19.5	10.3	10.4	9.4	7.7	12.4	12.7
Cycle Q Clear(g_c), s	9.3	9.3	10.1	8.9	20.6	19.5	10.3	10.4	9.4	7.7	12.4	12.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	176	1108	494	169	1094	480	345	1150	506	325	553	542
V/C Ratio(X)	0.90	0.37	0.39	0.90	0.72	0.69	1.36	0.40	0.37	0.79	0.47	0.48
Avail Cap(c_a), veh/h	176	1182	527	169	1168	512	345	1150	506	377	553	542
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.7	27.0	27.3	45.9	31.2	30.8	46.3	26.9	26.6	45.4	27.9	27.9
Incr Delay (d2), s/veh	41.5	0.3	0.7	42.8	2.3	4.1	179.9	1.0	2.0	9.5	2.9	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	4.5	4.4	6.3	10.2	8.7	13.5	5.2	4.3	4.0	6.4	6.3
LnGrp Delay(d),s/veh	87.2	27.3	28.0	88.7	33.4	34.9	226.1	28.0	28.7	54.9	30.7	30.9
LnGrp LOS	F	C	C	F	C	C	F	C	C	D	C	C
Approach Vol, veh/h		761			1270			1115			776	
Approach Delay, s/veh		40.0			40.5			111.4			38.8	
Approach LOS		D			D			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	38.0	13.7	37.4	14.0	37.7	14.1	37.0
Change Period (Y+Rc), s	3.7	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Green Setting (Gmax), s	11.6	31.8	10.0	35.0	10.3	33.1	10.4	34.6
Max Q Clear Time (g_c+I1), s	9.7	12.4	10.9	12.1	12.3	14.7	11.3	22.6
Green Ext Time (p_c), s	0.2	9.5	0.0	14.9	0.0	9.2	0.0	9.1

Intersection Summary	
HCM 2010 Ctrl Delay	60.2
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	3.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	75	42	11	116	80	44
Future Vol, veh/h	75	42	11	116	80	44
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	82	46	12	126	87	48

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	127	0	254	104
Stage 1	-	-	-	-	104	-
Stage 2	-	-	-	-	150	-
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	-	-	1459	-	735	951
Stage 1	-	-	-	-	920	-
Stage 2	-	-	-	-	878	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1459	-	728	951
Mov Cap-2 Maneuver	-	-	-	-	728	-
Stage 1	-	-	-	-	920	-
Stage 2	-	-	-	-	870	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	794	-	-	1459	-
HCM Lane V/C Ratio	0.17	-	-	0.008	-
HCM Control Delay (s)	10.5	-	-	7.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	85	23	13	85	131	60
Future Vol, veh/h	85	23	13	85	131	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	92	25	14	92	142	65

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	296	175	208	0	-	0
Stage 1	175	-	-	-	-	-
Stage 2	121	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	695	868	1363	-	-	-
Stage 1	855	-	-	-	-	-
Stage 2	904	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	687	868	1363	-	-	-
Mov Cap-2 Maneuver	687	-	-	-	-	-
Stage 1	855	-	-	-	-	-
Stage 2	894	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11	1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1363	-	719	-	-
HCM Lane V/C Ratio	0.01	-	0.163	-	-
HCM Control Delay (s)	7.7	0	11	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.6	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	275	189	323	0	249	0	123	417	0	0	0
Future Volume (veh/h)	29	275	189	323	0	249	0	123	417	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1863	0	1863	0	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	33	309	212	363	0	280	0	138	469	0	0	0
Adj No. of Lanes	0	2	1	1	0	1	0	1	1	0	1	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	0	2	0	2	2	2	2	2
Cap, veh/h	85	841	400	0	0	0	0	720	612	0	720	0
Arrive On Green	0.26	0.26	0.26	0.00	0.00	0.00	0.00	0.39	0.39	0.00	0.00	0.00
Sat Flow, veh/h	333	3282	1562		0		0	1863	1583	0	1863	0
Grp Volume(v), veh/h	183	159	212		0.0		0	138	469	0	0	0
Grp Sat Flow(s),veh/h/ln	1846	1770	1562				0	1863	1583	0	1863	0
Q Serve(g_s), s	2.2	2.0	3.1				0.0	1.3	6.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.2	2.0	3.1				0.0	1.3	6.9	0.0	0.0	0.0
Prop In Lane	0.18		1.00				0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	473	453	400				0	720	612	0	720	0
V/C Ratio(X)	0.39	0.35	0.53				0.00	0.19	0.77	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1646	1578	1393				0	3210	2728	0	3210	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	8.2	8.1	8.5				0.0	5.4	7.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.2	0.4				0.0	0.0	0.8	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
%ile BackOfQ(50%),veh/ln	1.1	1.0	1.3				0.0	0.7	3.0	0.0	0.0	0.0
LnGrp Delay(d),s/veh	8.4	8.3	8.9				0.0	5.5	7.9	0.0	0.0	0.0
LnGrp LOS	A	A	A					A	A			
Approach Vol, veh/h		554						607			0	
Approach Delay, s/veh		8.5						7.3			0.0	
Approach LOS		A						A				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		14.5		12.1		14.5		
Change Period (Y+Rc), s		* 4.2		5.3		* 4.2		
Max Green Setting (Gmax), s		* 46		23.7		* 46		
Max Q Clear Time (g_c+I1), s		8.9		5.1		0.0		
Green Ext Time (p_c), s		1.4		1.6		0.0		

Intersection Summary	
HCM 2010 Ctrl Delay	7.9
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	287	100	134	199	84	127	968	248	89	693	246
Future Volume (veh/h)	325	287	100	134	199	84	127	968	248	89	693	246
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	322	330	105	141	209	88	134	1019	261	94	729	259
Adj No. of Lanes	1	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	398	418	351	96	142	60	161	1105	282	81	1255	561
Arrive On Green	0.22	0.22	0.22	0.17	0.17	0.17	0.09	0.40	0.40	0.05	0.35	0.35
Sat Flow, veh/h	1774	1863	1564	570	845	356	1774	2794	713	1774	3539	1581
Grp Volume(v), veh/h	322	330	105	438	0	0	134	644	636	94	729	259
Grp Sat Flow(s),veh/h/ln	1774	1863	1564	1771	0	0	1774	1770	1737	1774	1770	1581
Q Serve(g_s), s	19.9	19.3	6.5	19.4	0.0	0.0	8.6	40.0	40.4	5.3	19.4	14.6
Cycle Q Clear(g_c), s	19.9	19.3	6.5	19.4	0.0	0.0	8.6	40.0	40.4	5.3	19.4	14.6
Prop In Lane	1.00		1.00	0.32		0.20	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	398	418	351	297	0	0	161	700	687	81	1255	561
V/C Ratio(X)	0.81	0.79	0.30	1.47	0.00	0.00	0.83	0.92	0.93	1.16	0.58	0.46
Avail Cap(c_a), veh/h	523	549	461	297	0	0	196	717	704	81	1255	561
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	42.3	37.3	48.2	0.0	0.0	51.7	33.2	33.4	55.2	30.4	28.8
Incr Delay (d2), s/veh	7.0	5.7	0.5	231.1	0.0	0.0	21.5	17.1	18.2	148.3	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	10.6	2.8	28.5	0.0	0.0	5.2	22.8	22.7	5.9	9.5	6.5
LnGrp Delay(d),s/veh	49.6	48.0	37.8	279.2	0.0	0.0	73.3	50.3	51.6	203.5	31.1	29.5
LnGrp LOS	D	D	D	F			E	D	D	F	C	C
Approach Vol, veh/h		757			438			1414			1082	
Approach Delay, s/veh		47.3			279.2			53.1			45.7	
Approach LOS		D			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	51.0		30.7	14.7	46.3		24.0
Change Period (Y+Rc), s	* 4.7	5.3		* 4.7	* 4.2	5.3		4.6
Max Green Setting (Gmax), s	* 5.3	46.9		* 34	* 13	39.9		19.4
Max Q Clear Time (g_c+I1), s	7.3	42.4		21.9	10.6	21.4		21.4
Green Ext Time (p_c), s	0.0	3.3		2.8	0.1	15.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	76.6
HCM 2010 LOS	E

Notes

Intersection	
Int Delay, s/veh	63.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	392	0	6	0	0	90	0	861	13	0	614	298
Future Vol, veh/h	392	0	6	0	0	90	0	861	13	0	614	298
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	1	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	0	-	-	0	-	-	-	-	-	75
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	417	0	6	0	0	96	0	916	14	0	653	317

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1111	-	328	-	-	466	-	0	0	-	-	0
Stage 1	653	-	-	-	-	-	-	-	-	-	-	-
Stage 2	458	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	~ 164	0	668	0	0	543	0	-	-	0	-	0
Stage 1	423	0	-	0	0	-	0	-	-	0	-	0
Stage 2	552	0	-	0	0	-	0	-	-	0	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	~ 135	-	667	-	-	543	-	-	-	-	-	-
Mov Cap-2 Maneuver	~ 262	-	-	-	-	-	-	-	-	-	-	-
Stage 1	423	-	-	-	-	-	-	-	-	-	-	-
Stage 2	455	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 313.3	13	0	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	WBLn1	SBT
Capacity (veh/h)	-	-	262	667	543	-
HCM Lane V/C Ratio	-	-	1.592	0.01	0.176	-
HCM Control Delay (s)	-	-	$ 317.9	10.4	13	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	25.5	0	0.6	-

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

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	56	6	446	90	11	287
Future Vol, veh/h	56	6	446	90	11	287
Conflicting Peds, #/hr	0	2	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	6	6	2	2	4	4
Mvmt Flow	62	7	490	99	12	315

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	727	302	0	0	594	0
Stage 1	545	-	-	-	-	-
Stage 2	182	-	-	-	-	-
Critical Hdwy	6.92	7.02	-	-	4.18	-
Critical Hdwy Stg 1	5.92	-	-	-	-	-
Critical Hdwy Stg 2	5.92	-	-	-	-	-
Follow-up Hdwy	3.56	3.36	-	-	2.24	-
Pot Cap-1 Maneuver	351	682	-	-	965	-
Stage 1	534	-	-	-	-	-
Stage 2	819	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	344	678	-	-	963	-
Mov Cap-2 Maneuver	344	-	-	-	-	-
Stage 1	532	-	-	-	-	-
Stage 2	807	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.3	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	361	963	-
HCM Lane V/C Ratio	-	-	0.189	0.013	-
HCM Control Delay (s)	-	-	17.3	8.8	0.1
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.7	0	-

Intersection	
Intersection Delay, s/veh	26.1
Intersection LOS	D

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	97	294	11	0	123	308	46	0	29	142	127
Future Vol, veh/h	0	97	294	11	0	123	308	46	0	29	142	127
Peak Hour Factor	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	4	4	4	2	3	3	3	2	2	2	2
Mvmt Flow	0	107	323	12	0	135	338	51	0	32	156	140
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	27.8	35.1	16.6
HCM LOS	D	E	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	17%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	83%	0%	0%	96%	0%	87%	0%	62%
Vol Right, %	0%	100%	0%	4%	0%	13%	0%	38%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	171	127	97	305	123	354	62	195
LT Vol	29	0	97	0	123	0	62	0
Through Vol	142	0	0	294	0	308	0	121
RT Vol	0	127	0	11	0	46	0	74
Lane Flow Rate	188	140	107	335	135	389	68	214
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.454	0.305	0.256	0.757	0.32	0.854	0.174	0.5
Departure Headway (Hd)	8.695	7.88	8.646	8.131	8.511	7.901	9.202	8.406
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	415	456	416	446	424	459	390	429
Service Time	6.447	5.631	6.393	5.85	6.225	5.615	6.955	6.159
HCM Lane V/C Ratio	0.453	0.307	0.257	0.751	0.318	0.847	0.174	0.499
HCM Control Delay	18.5	14.1	14.4	32.1	15.2	42	13.9	19.3
HCM Lane LOS	C	B	B	D	C	E	B	C
HCM 95th-tile Q	2.3	1.3	1	6.3	1.4	8.6	0.6	2.7

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	62	121	74
Future Vol, veh/h	0	62	121	74
Peak Hour Factor	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	68	133	81
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	18
HCM LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	227	203	54	227	0	205	490	70	14	253	76
Future Volume (veh/h)	53	227	203	54	227	0	205	490	70	14	253	76
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	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	1863	1863	1863	1863	1863	1900	1863	1863	1900	1845	1845	1900
Adj Flow Rate, veh/h	56	241	216	57	241	0	218	521	74	15	269	81
Adj No. of Lanes	1	1	1	1	2	0	2	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	3	3	3
Cap, veh/h	73	488	412	74	929	0	242	1218	172	26	895	264
Arrive On Green	0.04	0.26	0.26	0.04	0.26	0.00	0.07	0.39	0.39	0.01	0.34	0.34
Sat Flow, veh/h	1774	1863	1571	1774	3632	0	3442	3114	441	1757	2667	786
Grp Volume(v), veh/h	56	241	216	57	241	0	218	295	300	15	175	175
Grp Sat Flow(s),veh/h/ln	1774	1863	1571	1774	1770	0	1721	1770	1785	1757	1752	1701
Q Serve(g_s), s	1.8	6.2	6.7	1.8	3.1	0.0	3.6	6.9	7.0	0.5	4.2	4.3
Cycle Q Clear(g_c), s	1.8	6.2	6.7	1.8	3.1	0.0	3.6	6.9	7.0	0.5	4.2	4.3
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.25	1.00		0.46
Lane Grp Cap(c), veh/h	73	488	412	74	929	0	242	692	698	26	588	571
V/C Ratio(X)	0.76	0.49	0.52	0.77	0.26	0.00	0.90	0.43	0.43	0.58	0.30	0.31
Avail Cap(c_a), veh/h	125	819	691	156	1619	0	242	763	769	124	755	733
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00
Uniform Delay (d), s/veh	27.0	17.8	17.9	27.0	16.6	0.0	26.2	12.7	12.7	27.8	13.9	14.0
Incr Delay (d2), s/veh	15.1	1.1	1.5	15.3	0.2	0.0	32.7	1.9	1.9	18.4	1.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	3.4	3.0	1.2	1.5	0.0	2.8	3.7	3.8	0.4	2.2	2.3
LnGrp Delay(d),s/veh	42.0	18.9	19.4	42.2	16.8	0.0	58.9	14.6	14.6	46.3	15.2	15.4
LnGrp LOS	D	B	B	D	B		E	B	B	D	B	B
Approach Vol, veh/h		513			298			813			365	
Approach Delay, s/veh		21.6			21.7			26.5			16.6	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.8	26.7	6.4	18.9	8.0	23.6	6.3	18.9
Change Period (Y+Rc), s	4.0	4.5	4.0	4.0	4.0	4.5	4.0	4.0
Max Green Setting (Gmax), s	4.0	24.5	5.0	25.0	4.0	24.5	4.0	26.0
Max Q Clear Time (g_c+I1), s	2.5	9.0	3.8	8.7	5.6	6.3	3.8	5.1
Green Ext Time (p_c), s	0.0	11.1	0.0	4.8	0.0	12.6	0.0	5.4

Intersection Summary	
HCM 2010 Ctrl Delay	22.7
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	99	51	698	165	60	432
Future Vol, veh/h	99	51	698	165	60	432
Conflicting Peds, #/hr	5	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	4	4
Mvmt Flow	102	53	720	170	62	445

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1157	446	0	0	891	0
Stage 1	806	-	-	-	-	-
Stage 2	351	-	-	-	-	-
Critical Hdwy	7.54	6.94	-	-	4.18	-
Critical Hdwy Stg 1	6.54	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.24	-
Pot Cap-1 Maneuver	151	560	-	-	744	-
Stage 1	342	-	-	-	-	-
Stage 2	639	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	141	560	-	-	744	-
Mov Cap-2 Maneuver	141	-	-	-	-	-
Stage 1	342	-	-	-	-	-
Stage 2	583	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	56.1	0	1.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	141	560	744	-
HCM Lane V/C Ratio	-	-	0.724	0.094	0.083	-
HCM Control Delay (s)	-	-	78.7	12.1	10.3	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	4.2	0.3	0.3	-

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBU	SBL	SBR
Lane Configurations									
Traffic Vol, veh/h	0	39	204	0	202	31	0	44	81
Future Vol, veh/h	0	39	204	0	202	31	0	44	81
Peak Hour Factor	0.92	0.96	0.96	0.92	0.96	0.96	0.92	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	41	213	0	210	32	0	46	84
Number of Lanes	0	1	1	0	1	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	9.7	9.6	8.8
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	35%
Vol Thru, %	0%	100%	87%	0%
Vol Right, %	0%	0%	13%	65%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	39	204	233	125
LT Vol	39	0	0	44
Through Vol	0	204	202	0
RT Vol	0	0	31	81
Lane Flow Rate	41	212	243	130
Geometry Grp	7	7	5	2
Degree of Util (X)	0.063	0.298	0.308	0.172
Departure Headway (Hd)	5.548	5.045	4.568	4.761
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	646	712	786	751
Service Time	3.283	2.78	2.603	2.8
HCM Lane V/C Ratio	0.063	0.298	0.309	0.173
HCM Control Delay	8.7	9.9	9.6	8.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	1.2	1.3	0.6

Intersection	
Intersection Delay, s/veh	13
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	45	124	32	0	128	111	188	0	35	49	134
Future Vol, veh/h	0	45	124	32	0	128	111	188	0	35	49	134
Peak Hour Factor	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	6	6	6	2	3	3	3	2	5	5	5
Mvmt Flow	0	48	133	34	0	138	119	202	0	38	53	144
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	12.2	14.6	11.5
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	42%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	58%	0%	0%	79%	0%	37%	0%	40%
Vol Right, %	0%	100%	0%	21%	0%	63%	0%	60%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	84	134	45	156	128	299	128	107
LT Vol	35	0	45	0	128	0	128	0
Through Vol	49	0	0	124	0	111	0	43
RT Vol	0	134	0	32	0	188	0	64
Lane Flow Rate	90	144	48	168	138	322	138	115
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.182	0.253	0.099	0.314	0.266	0.537	0.284	0.207
Departure Headway (Hd)	7.237	6.309	7.387	6.73	6.966	6.011	7.421	6.483
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	492	565	481	530	513	595	480	549
Service Time	5.033	4.105	5.186	4.529	4.75	3.794	5.217	4.279
HCM Lane V/C Ratio	0.183	0.255	0.1	0.317	0.269	0.541	0.287	0.209
HCM Control Delay	11.7	11.3	11	12.6	12.3	15.6	13.2	11
HCM Lane LOS	B	B	B	B	B	C	B	B
HCM 95th-tile Q	0.7	1	0.3	1.3	1.1	3.2	1.2	0.8

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	128	43	64
Future Vol, veh/h	0	128	43	64
Peak Hour Factor	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	138	46	69
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	12.2
HCM LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	87	172	15	50	44	248	682	44	40	372	133
Future Volume (veh/h)	130	87	172	15	50	44	248	682	44	40	372	133
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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	1863	1863	1900	1863	1863	1863	1863	1863	1900	1845	1845	1900
Adj Flow Rate, veh/h	137	92	181	16	53	46	261	718	46	42	392	140
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	3	3	3
Cap, veh/h	177	123	242	28	258	219	270	1426	91	61	773	272
Arrive On Green	0.10	0.22	0.22	0.02	0.14	0.14	0.15	0.42	0.42	0.03	0.30	0.30
Sat Flow, veh/h	1774	555	1091	1774	1863	1583	1774	3377	216	1757	2535	894
Grp Volume(v), veh/h	137	0	273	16	53	46	261	376	388	42	269	263
Grp Sat Flow(s),veh/h/ln	1774	0	1645	1774	1863	1583	1774	1770	1824	1757	1752	1676
Q Serve(g_s), s	4.0	0.0	8.1	0.5	1.3	1.4	7.7	8.2	8.2	1.2	6.6	6.8
Cycle Q Clear(g_c), s	4.0	0.0	8.1	0.5	1.3	1.4	7.7	8.2	8.2	1.2	6.6	6.8
Prop In Lane	1.00		0.66	1.00		1.00	1.00		0.12	1.00		0.53
Lane Grp Cap(c), veh/h	177	0	366	28	258	219	270	747	770	61	534	511
V/C Ratio(X)	0.78	0.00	0.75	0.57	0.21	0.21	0.97	0.50	0.50	0.69	0.50	0.51
Avail Cap(c_a), veh/h	304	0	502	135	390	332	270	747	770	167	534	511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	0.0	19.0	25.7	20.1	20.1	22.1	11.1	11.1	25.0	15.0	15.0
Incr Delay (d2), s/veh	7.1	0.0	4.0	16.8	0.4	0.5	45.1	2.4	2.3	12.7	3.4	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	4.0	0.4	0.7	0.6	7.1	4.5	4.6	0.8	3.6	3.7
LnGrp Delay(d),s/veh	30.2	0.0	23.0	42.4	20.4	20.5	67.2	13.5	13.5	37.7	18.4	18.7
LnGrp LOS	C		C	D	C	C	E	B	B	D	B	B
Approach Vol, veh/h		410			115			1025			574	
Approach Delay, s/veh		25.4			23.5			27.2			19.9	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	26.2	4.8	15.7	12.0	20.0	9.2	11.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	19.0	4.0	16.0	8.0	16.0	9.0	11.0
Max Q Clear Time (g_c+I1), s	3.2	10.2	2.5	10.1	9.7	8.8	6.0	3.4
Green Ext Time (p_c), s	0.0	5.1	0.0	1.1	0.0	4.3	0.1	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	24.7
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	0	81	1	0	21	60	0	0	0	0	41
Future Vol, veh/h	0	0	81	1	0	21	60	0	0	0	0	41
Peak Hour Factor	0.92	0.84	0.84	0.84	0.92	0.84	0.84	0.84	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	11	11	11	2	3	3	3
Mvmt Flow	0	0	96	1	0	25	71	0	0	0	0	49
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	7.6	7.9	7
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	26%	100%
Vol Thru, %	0%	99%	74%	0%
Vol Right, %	100%	1%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	41	82	81	1
LT Vol	0	0	21	1
Through Vol	0	81	60	0
RT Vol	41	1	0	0
Lane Flow Rate	49	98	96	1
Geometry Grp	1	1	1	1
Degree of Util (X)	0.051	0.111	0.115	0.002
Departure Headway (Hd)	3.785	4.086	4.3	4.616
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	952	874	831	780
Service Time	1.785	2.129	2.338	2.617
HCM Lane V/C Ratio	0.051	0.112	0.116	0.001
HCM Control Delay	7	7.6	7.9	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.4	0.4	0

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	1	0	0
Future Vol, veh/h	0	1	0	0
Peak Hour Factor	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	1	0	0
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	7.6
HCM LOS	A

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	49	0	0	12	63	0	5	17
Future Vol, veh/h	0	49	0	0	12	63	0	5	17
Peak Hour Factor	0.92	0.86	0.86	0.92	0.86	0.86	0.92	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	57	0	0	14	73	0	6	20
Number of Lanes	0	1	0	0	1	0	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.7	6.9	7.3
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	100%	23%
Vol Thru, %	16%	0%	77%
Vol Right, %	84%	0%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	75	49	22
LT Vol	0	49	5
Through Vol	12	0	17
RT Vol	63	0	0
Lane Flow Rate	87	57	26
Geometry Grp	1	1	1
Degree of Util (X)	0.086	0.069	0.029
Departure Headway (Hd)	3.55	4.33	4.147
Convergence, Y/N	Yes	Yes	Yes
Cap	1004	827	860
Service Time	1.59	2.357	2.19
HCM Lane V/C Ratio	0.087	0.069	0.03
HCM Control Delay	6.9	7.7	7.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	0.2	0.1

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	33	11	9	0	43	13	2	0	9	63	32
Future Vol, veh/h	0	33	11	9	0	43	13	2	0	9	63	32
Peak Hour Factor	0.92	0.97	0.97	0.97	0.92	0.97	0.97	0.97	0.92	0.97	0.97	0.97
Heavy Vehicles, %	2	3	3	3	2	5	5	5	2	7	7	7
Mvmt Flow	0	34	11	9	0	44	13	2	0	9	65	33
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	8.4	8.7	7.9
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	9%	75%	0%	77%	0%	2%
Vol Thru, %	61%	25%	0%	23%	0%	73%
Vol Right, %	31%	0%	100%	0%	100%	26%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	104	44	9	56	2	113
LT Vol	9	33	0	43	0	2
Through Vol	63	11	0	13	0	82
RT Vol	32	0	9	0	2	29
Lane Flow Rate	107	45	9	58	2	116
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.128	0.069	0.011	0.089	0.003	0.136
Departure Headway (Hd)	4.283	5.485	4.403	5.521	4.431	4.207
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	840	655	814	651	809	854
Service Time	2.299	3.207	2.126	3.242	2.152	2.223
HCM Lane V/C Ratio	0.127	0.069	0.011	0.089	0.002	0.136
HCM Control Delay	7.9	8.6	7.2	8.8	7.2	7.9
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.4	0.2	0	0.3	0	0.5

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations			↕	
Traffic Vol, veh/h	0	2	82	29
Future Vol, veh/h	0	2	82	29
Peak Hour Factor	0.92	0.97	0.97	0.97
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	2	85	30
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	7.9
HCM LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	0	216	1	0	1	109	903	0	0	625	55
Future Volume (veh/h)	100	0	216	1	0	1	109	903	0	0	625	55
Number	7	4	14	3	8	18	5	2	12	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		0.98	0.99		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1267	1900	1863	1863	1900	0	1863	1900
Adj Flow Rate, veh/h	104	0	225	1	0	1	114	941	0	0	651	57
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	0	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	50	50	50	2	2	2	0	2	2
Cap, veh/h	424	0	303	166	21	85	552	2339	0	0	1756	154
Arrive On Green	0.19	0.00	0.19	0.19	0.00	0.19	0.06	0.66	0.00	0.00	0.53	0.53
Sat Flow, veh/h	1485	0	1559	331	108	439	1774	3632	0	0	3381	288
Grp Volume(v), veh/h	104	0	225	2	0	0	114	941	0	0	350	358
Grp Sat Flow(s),veh/h/ln	1485	0	1559	878	0	0	1774	1770	0	0	1770	1806
Q Serve(g_s), s	0.0	0.0	7.2	0.0	0.0	0.0	1.3	6.5	0.0	0.0	6.1	6.1
Cycle Q Clear(g_c), s	2.7	0.0	7.2	2.7	0.0	0.0	1.3	6.5	0.0	0.0	6.1	6.1
Prop In Lane	1.00		1.00	0.50		0.50	1.00		0.00	0.00		0.16
Lane Grp Cap(c), veh/h	424	0	303	272	0	0	552	2339	0	0	945	964
V/C Ratio(X)	0.25	0.00	0.74	0.01	0.00	0.00	0.21	0.40	0.00	0.00	0.37	0.37
Avail Cap(c_a), veh/h	600	0	501	385	0	0	693	2339	0	0	945	964
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	0.0	20.2	17.3	0.0	0.0	4.6	4.2	0.0	0.0	7.2	7.2
Incr Delay (d2), s/veh	0.4	0.0	5.0	0.0	0.0	0.0	0.2	0.5	0.0	0.0	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	3.5	0.0	0.0	0.0	0.7	3.3	0.0	0.0	3.2	3.3
LnGrp Delay(d),s/veh	18.8	0.0	25.2	17.3	0.0	0.0	4.8	4.7	0.0	0.0	8.3	8.3
LnGrp LOS	B		C	B			A	A			A	A
Approach Vol, veh/h		329			2			1055			708	
Approach Delay, s/veh		23.2			17.3			4.7			8.3	
Approach LOS		C			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		39.4		13.9	6.8	32.6		13.9
Change Period (Y+Rc), s		* 4.2		3.5	3.5	* 4.2		3.5
Max Green Setting (Gmax), s		* 35		17.1	7.5	* 24		17.1
Max Q Clear Time (g_c+I1), s		8.5		9.2	3.3	8.1		4.7
Green Ext Time (p_c), s		24.2		1.2	0.1	15.0		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	8.8
HCM 2010 LOS	A

Notes

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	422	89	926	509	98	744
Future Volume (veh/h)	422	89	926	509	98	744
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	431	91	945	0	100	759
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	706	325	1675	750	128	2174
Arrive On Green	0.21	0.21	0.47	0.00	0.07	0.61
Sat Flow, veh/h	3442	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	431	91	945	0	100	759
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1770
Q Serve(g_s), s	5.8	2.5	9.8	0.0	2.8	5.4
Cycle Q Clear(g_c), s	5.8	2.5	9.8	0.0	2.8	5.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	706	325	1675	750	128	2174
V/C Ratio(X)	0.61	0.28	0.56	0.00	0.78	0.35
Avail Cap(c_a), veh/h	1148	528	1675	750	226	2347
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	17.1	9.6	0.0	23.2	4.8
Incr Delay (d2), s/veh	1.8	1.0	1.4	0.0	9.9	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	1.2	5.0	0.0	1.7	2.7
LnGrp Delay(d),s/veh	20.2	18.1	11.0	0.0	33.1	5.3
LnGrp LOS	C	B	B		C	A
Approach Vol, veh/h	522		945			859
Approach Delay, s/veh	19.8		11.0			8.5
Approach LOS	B		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.2	28.3				35.5		15.5
Change Period (Y+Rc), s	3.5	* 4.2				* 4.2		5.0
Max Green Setting (Gmax), s	6.5	* 24				* 34		17.0
Max Q Clear Time (g_c+I1), s	4.8	11.8				7.4		7.8
Green Ext Time (p_c), s	0.0	11.5				23.9		2.7

Intersection Summary	
HCM 2010 Ctrl Delay	12.1
HCM 2010 LOS	B

Notes

Intersection	
Int Delay, s/veh	10.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	2	10	75	271	6	6	77	34	230	0	0	0
Future Vol, veh/h	2	10	75	271	6	6	77	34	230	0	0	0
Conflicting Peds, #/hr	25	0	0	0	0	25	25	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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	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	2	10	78	282	6	6	80	35	240	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	372	460	25	360	341	180	25	0	0
Stage 1	25	25	-	316	316	-	-	-	-
Stage 2	347	435	-	44	25	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	-	-	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	585	498	1051	596	581	863	1589	-	-
Stage 1	-	-	-	695	655	-	-	-	-
Stage 2	669	580	-	-	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	537	458	1029	516	534	863	1589	-	-
Mov Cap-2 Maneuver	537	458	-	516	534	-	-	-	-
Stage 1	-	-	-	653	615	-	-	-	-
Stage 2	617	545	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	9.5	20.5	1.7
HCM LOS	A	C	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	1589	-	-	884	521
HCM Lane V/C Ratio	0.05	-	-	0.103	0.566
HCM Control Delay (s)	7.4	0	-	9.5	20.5
HCM Lane LOS	A	A	-	A	C
HCM 95th %tile Q(veh)	0.2	-	-	0.3	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	397	3	21	378	320	0	0	99	252
Future Volume (veh/h)	0	0	0	397	3	21	378	320	0	0	99	252
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.95
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1900	1863	0	0	1863	1900
Adj Flow Rate, veh/h				409	3	22	390	330	0	0	102	260
Adj No. of Lanes				0	1	1	0	1	0	0	1	0
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				461	3	415	372	315	0	0	70	179
Arrive On Green				0.26	0.26	0.26	0.38	0.38	0.00	0.00	0.16	0.16
Sat Flow, veh/h				1762	13	1583	982	831	0	0	449	1144
Grp Volume(v), veh/h				412	0	22	720	0	0	0	0	362
Grp Sat Flow(s),veh/h/ln				1775	0	1583	1814	0	0	0	0	1593
Q Serve(g_s), s				14.3	0.0	0.7	24.2	0.0	0.0	0.0	0.0	10.0
Cycle Q Clear(g_c), s				14.3	0.0	0.7	24.2	0.0	0.0	0.0	0.0	10.0
Prop In Lane				0.99		1.00	0.54		0.00	0.00		0.72
Lane Grp Cap(c), veh/h				465	0	415	686	0	0	0	0	249
V/C Ratio(X)				0.89	0.00	0.05	1.05	0.00	0.00	0.00	0.00	1.45
Avail Cap(c_a), veh/h				494	0	441	686	0	0	0	0	249
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				22.7	0.0	17.7	19.9	0.0	0.0	0.0	0.0	27.0
Incr Delay (d2), s/veh				17.1	0.0	0.1	47.9	0.0	0.0	0.0	0.0	224.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.2	0.0	0.3	21.1	0.0	0.0	0.0	0.0	19.9
LnGrp Delay(d),s/veh				39.8	0.0	17.7	67.7	0.0	0.0	0.0	0.0	251.8
LnGrp LOS				D		B	F					F
Approach Vol, veh/h					434			720			362	
Approach Delay, s/veh					38.7			67.7			251.8	
Approach LOS					D			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		28.8				14.2		20.9
Change Period (Y+Rc), s		4.6				4.2		4.2
Max Green Setting (Gmax), s		24.2				10.0		17.8
Max Q Clear Time (g_c+I1), s		26.2				12.0		16.3
Green Ext Time (p_c), s		0.0				0.0		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	103.4
HCM 2010 LOS	F

Intersection	
Int Delay, s/veh	11.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	185	16	358	0	0	0	0	512	707	23	473	0
Future Vol, veh/h	185	16	358	0	0	0	0	512	707	23	473	0
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	-	-	200	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	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	197	17	381	0	0	0	0	545	752	24	503	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1097	1097	503	-	0	0	545	0	0
Stage 1	552	552	-	-	-	-	-	-	-
Stage 2	545	545	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	236	213	569	0	-	-	1024	-	0
Stage 1	577	515	-	0	-	-	-	-	0
Stage 2	581	519	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	228	0	569	-	-	-	1024	-	-
Mov Cap-2 Maneuver	228	0	-	-	-	-	-	-	-
Stage 1	558	0	-	-	-	-	-	-	-
Stage 2	581	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	47.1	0	0.4
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	228	569	1024	-
HCM Lane V/C Ratio	-	-	0.938	0.669	0.024	-
HCM Control Delay (s)	-	-	89.6	23.2	8.6	0
HCM Lane LOS	-	-	F	C	A	A
HCM 95th %tile Q(veh)	-	-	8.1	5	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	289	907	442	256	559	355	287	529	239	266	417	83
Future Volume (veh/h)	289	907	442	256	559	355	287	529	239	266	417	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	301	945	460	267	582	370	299	551	249	277	434	86
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	314	1171	513	249	1041	455	312	1052	461	300	862	169
Arrive On Green	0.18	0.33	0.33	0.14	0.29	0.29	0.09	0.30	0.30	0.09	0.29	0.29
Sat Flow, veh/h	1774	3539	1552	1774	3539	1548	3442	3539	1553	3442	2936	577
Grp Volume(v), veh/h	301	945	460	267	582	370	299	551	249	277	260	260
Grp Sat Flow(s),veh/h/ln	1774	1770	1552	1774	1770	1548	1721	1770	1553	1721	1770	1744
Q Serve(g_s), s	19.3	28.0	32.4	16.1	15.9	25.4	9.9	14.9	15.4	9.2	14.0	14.2
Cycle Q Clear(g_c), s	19.3	28.0	32.4	16.1	15.9	25.4	9.9	14.9	15.4	9.2	14.0	14.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	314	1171	513	249	1041	455	312	1052	461	300	520	512
V/C Ratio(X)	0.96	0.81	0.90	1.07	0.56	0.81	0.96	0.52	0.54	0.92	0.50	0.51
Avail Cap(c_a), veh/h	314	1178	516	249	1048	459	312	1052	461	300	520	512
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.8	35.1	36.5	49.3	34.2	37.6	52.0	33.6	33.8	52.0	33.6	33.6
Incr Delay (d2), s/veh	39.8	4.4	18.4	77.7	0.8	11.1	39.9	1.9	4.5	32.8	3.4	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.9	14.4	16.4	13.2	7.9	12.3	6.4	7.5	7.2	5.7	7.3	7.4
LnGrp Delay(d),s/veh	86.7	39.5	54.9	127.1	35.0	48.6	91.8	35.4	38.2	84.8	37.0	37.2
LnGrp LOS	F	D	D	F	D	D	F	D	D	F	D	D
Approach Vol, veh/h		1706			1219			1099			797	
Approach Delay, s/veh		52.0			59.3			51.4			53.7	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	38.7	19.8	42.6	14.1	38.3	24.0	38.4
Change Period (Y+Rc), s	3.7	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Green Setting (Gmax), s	10.0	34.1	16.1	38.2	10.4	33.7	20.3	34.0
Max Q Clear Time (g_c+I1), s	11.2	17.4	18.1	34.4	11.9	16.2	21.3	27.4
Green Ext Time (p_c), s	0.0	9.6	0.0	3.6	0.0	9.9	0.0	6.0

Intersection Summary	
HCM 2010 Ctrl Delay	54.0
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	197	81	46	177	56	23
Future Vol, veh/h	197	81	46	177	56	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	214	88	50	192	61	25

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	302	0	550	258
Stage 1	-	-	-	-	258	-
Stage 2	-	-	-	-	292	-
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	-	-	1259	-	496	781
Stage 1	-	-	-	-	785	-
Stage 2	-	-	-	-	758	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1259	-	474	781
Mov Cap-2 Maneuver	-	-	-	-	474	-
Stage 1	-	-	-	-	785	-
Stage 2	-	-	-	-	725	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	13
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	535	-	-	1259	-
HCM Lane V/C Ratio	0.161	-	-	0.04	-
HCM Control Delay (s)	13	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	72	17	25	146	111	92
Future Vol, veh/h	72	17	25	146	111	92
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	78	18	27	159	121	100

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	384	171	221	0	-	0
Stage 1	171	-	-	-	-	-
Stage 2	213	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	619	873	1348	-	-	-
Stage 1	859	-	-	-	-	-
Stage 2	823	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	605	873	1348	-	-	-
Mov Cap-2 Maneuver	605	-	-	-	-	-
Stage 1	859	-	-	-	-	-
Stage 2	805	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	1.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1348	-	643	-	-
HCM Lane V/C Ratio	0.02	-	0.15	-	-
HCM Control Delay (s)	7.7	0	11.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	137	79	117	261	67	163	175	76	46	818	203
Future Volume (veh/h)	120	137	79	117	261	67	163	175	76	46	818	203
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1845	1845	1845	1827	1827	1827
Adj Flow Rate, veh/h	132	151	87	129	287	74	179	192	84	51	899	223
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	234	245	206	401	323	83	196	1422	636	65	1167	522
Arrive On Green	0.13	0.13	0.13	0.23	0.23	0.23	0.11	0.41	0.41	0.04	0.34	0.34
Sat Flow, veh/h	1774	1863	1562	1774	1429	369	1757	3505	1568	1740	3471	1553
Grp Volume(v), veh/h	132	151	87	129	0	361	179	192	84	51	899	223
Grp Sat Flow(s),veh/h/ln	1774	1863	1562	1774	0	1798	1757	1752	1568	1740	1736	1553
Q Serve(g_s), s	6.8	7.4	5.0	5.9	0.0	18.8	9.8	3.3	3.3	2.8	22.5	10.8
Cycle Q Clear(g_c), s	6.8	7.4	5.0	5.9	0.0	18.8	9.8	3.3	3.3	2.8	22.5	10.8
Prop In Lane	1.00		1.00	1.00		0.20	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	234	245	206	401	0	407	196	1422	636	65	1167	522
V/C Ratio(X)	0.57	0.62	0.42	0.32	0.00	0.89	0.91	0.14	0.13	0.79	0.77	0.43
Avail Cap(c_a), veh/h	623	654	549	429	0	435	196	1543	690	102	1363	610
HCM Platoon Ratio	1.00	1.00	1.00	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	39.4	39.7	38.6	31.3	0.0	36.3	42.5	18.1	18.1	46.2	28.8	24.9
Incr Delay (d2), s/veh	2.1	2.5	1.4	1.0	0.0	20.4	40.8	0.1	0.1	18.8	2.5	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	4.0	2.2	3.0	0.0	11.6	6.9	1.6	1.4	1.7	11.1	4.7
LnGrp Delay(d),s/veh	41.6	42.2	40.0	32.2	0.0	56.7	83.3	18.1	18.2	65.0	31.3	25.6
LnGrp LOS	D	D	D	C		E	F	B	B	E	C	C
Approach Vol, veh/h		370			490			455			1173	
Approach Delay, s/veh		41.5			50.2			43.8			31.7	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.3	44.6		17.4	15.0	37.9		26.5
Change Period (Y+Rc), s	* 4.7	5.3		* 4.7	* 4.2	5.3		4.6
Max Green Setting (Gmax), s	* 5.7	42.6		* 34	* 11	38.0		23.4
Max Q Clear Time (g_c+I1), s	4.8	5.3		9.4	11.8	24.5		20.8
Green Ext Time (p_c), s	0.0	13.9		1.5	0.0	8.1		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	39.0
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	0	3	0	0	97	0	1	14	0	607	421
Future Volume (veh/h)	152	0	3	0	0	97	0	1	14	0	607	421
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1667	1667	0	1863	1863	0	1845	1900	0	1845	1845
Adj Flow Rate, veh/h	162	0	0	0	0	0	0	1	15	0	646	0
Adj No. of Lanes	0	1	1	0	1	1	0	2	0	0	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	14	14	14	0	2	2	0	3	3	0	3	3
Cap, veh/h	216	0	193	0	10	9	0	755	674	0	1509	675
Arrive On Green	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.43	0.00	0.43	0.00
Sat Flow, veh/h	1587	0	1417	0	1863	1583	0	1845	1564	0	3597	1568
Grp Volume(v), veh/h	162	0	0	0	0	0	0	1	15	0	646	0
Grp Sat Flow(s),veh/h/ln	1587	0	1417	0	1863	1583	0	1752	1564	0	1752	1568
Q Serve(g_s), s	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	2.4	0.0
Cycle Q Clear(g_c), s	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	2.4	0.0
Prop In Lane	1.00		1.00	0.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	216	0	193	0	10	9	0	755	674	0	1509	675
V/C Ratio(X)	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.43	0.00
Avail Cap(c_a), veh/h	1376	0	1228	0	1716	1458	0	1614	1441	0	3038	1359
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	7.7	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.7	0.0
Incr Delay (d2), s/veh	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0
LnGrp Delay(d),s/veh	12.8	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.9	0.0
LnGrp LOS	B							A	A		A	
Approach Vol, veh/h		162			0			16			646	
Approach Delay, s/veh		12.8			0.0			3.0			3.9	
Approach LOS		B						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		11.9		6.5		11.9		0.0
Change Period (Y+Rc), s		* 4		4.0		4.0		3.0
Max Green Setting (Gmax), s		* 17		16.0		16.0		17.0
Max Q Clear Time (g_c+I1), s		2.1		3.8		4.4		0.0
Green Ext Time (p_c), s		4.0		0.6		3.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	5.6
HCM 2010 LOS	A

Notes

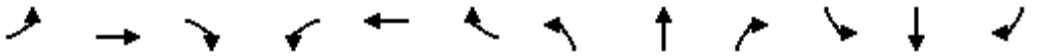
Intersection	
Int Delay, s/veh	3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	143	24	242	60	57	499
Future Vol, veh/h	143	24	242	60	57	499
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	9	9	7	7
Mvmt Flow	163	27	275	68	65	567

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	724	174	0	0	345	0
Stage 1	311	-	-	-	-	-
Stage 2	413	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.24	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.27	-
Pot Cap-1 Maneuver	361	839	-	-	1175	-
Stage 1	716	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	340	838	-	-	1175	-
Mov Cap-2 Maneuver	451	-	-	-	-	-
Stage 1	715	-	-	-	-	-
Stage 2	601	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.3	0	0.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	451	838	1175	-
HCM Lane V/C Ratio	-	-	0.36	0.033	0.055	-
HCM Control Delay (s)	-	-	17.4	9.4	8.2	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	1.6	0.1	0.2	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	412	1	36	435	221	0	0	81	199
Future Volume (vph)	0	0	0	412	1	36	435	221	0	0	81	199
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.2	4.2		4.6			4.2	4.0
Lane Util. Factor					1.00	1.00		1.00			1.00	1.00
Frpb, ped/bikes					1.00	1.00		1.00			1.00	0.97
Flpb, ped/bikes					1.00	1.00		1.00			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					0.95	1.00		0.97			1.00	1.00
Satd. Flow (prot)					1707	1524		1785			1827	1510
Flt Permitted					0.95	1.00		0.97			1.00	1.00
Satd. Flow (perm)					1707	1524		1785			1827	1510
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	0	0	0	485	1	42	512	260	0	0	95	234
RTOR Reduction (vph)	0	0	0	0	0	29	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	486	13	0	772	0	0	95	234
Confl. Peds. (#/hr)												15
Heavy Vehicles (%)	2%	2%	2%	6%	6%	6%	3%	3%	3%	4%	4%	4%
Turn Type				Split	NA	Perm	Split	NA			NA	Free
Protected Phases				8	8		2	2			6	
Permitted Phases						8						Free
Actuated Green, G (s)					26.5	26.5		39.5			9.1	88.1
Effective Green, g (s)					26.5	26.5		39.5			9.1	88.1
Actuated g/C Ratio					0.30	0.30		0.45			0.10	1.00
Clearance Time (s)					4.2	4.2		4.6			4.2	
Vehicle Extension (s)					3.5	3.5		3.5			3.5	
Lane Grp Cap (vph)					513	458		800			188	1510
v/s Ratio Prot					c0.28			c0.43			c0.05	
v/s Ratio Perm						0.01						0.15
v/c Ratio					0.95	0.03		0.96			0.51	0.15
Uniform Delay, d1					30.1	21.7		23.6			37.4	0.0
Progression Factor					1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2					27.0	0.0		23.5			2.5	0.2
Delay (s)					57.1	21.7		47.1			39.9	0.2
Level of Service					E	C		D			D	A
Approach Delay (s)		0.0			54.3			47.1			11.7	
Approach LOS		A			D			D			B	

Intersection Summary			
HCM 2000 Control Delay	42.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	88.1	Sum of lost time (s)	13.0
Intersection Capacity Utilization	72.6%	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)	325	287	100	134	199	84	127	968	248	89	693	246
Future Volume (veh/h)	325	287	100	134	199	84	127	968	248	89	693	246
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	322	330	105	141	209	88	134	1019	261	94	729	259
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	401	421	353	304	213	90	162	1365	610	83	1223	546
Arrive On Green	0.23	0.23	0.23	0.17	0.17	0.17	0.09	0.39	0.39	0.05	0.35	0.35
Sat Flow, veh/h	1774	1863	1564	1774	1246	524	1774	3539	1583	1774	3539	1581
Grp Volume(v), veh/h	322	330	105	141	0	297	134	1019	261	94	729	259
Grp Sat Flow(s),veh/h/ln	1774	1863	1564	1774	0	1770	1774	1770	1583	1774	1770	1581
Q Serve(g_s), s	19.4	18.9	6.3	8.1	0.0	18.9	8.4	28.1	13.7	5.3	19.2	14.5
Cycle Q Clear(g_c), s	19.4	18.9	6.3	8.1	0.0	18.9	8.4	28.1	13.7	5.3	19.2	14.5
Prop In Lane	1.00		1.00	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	401	421	353	304	0	303	162	1365	610	83	1223	546
V/C Ratio(X)	0.80	0.78	0.30	0.46	0.00	0.98	0.83	0.75	0.43	1.13	0.60	0.47
Avail Cap(c_a), veh/h	534	561	471	304	0	303	201	1466	656	83	1247	557
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	41.2	36.4	42.2	0.0	46.7	50.6	30.0	25.6	54.0	30.5	29.0
Incr Delay (d2), s/veh	6.5	5.2	0.5	2.3	0.0	46.1	20.4	2.1	0.6	138.9	0.8	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	10.2	10.3	2.8	4.2	0.0	13.1	5.0	14.1	6.1	5.8	9.6	6.4
LnGrp Delay(d),s/veh	47.9	46.5	36.8	44.6	0.0	92.9	71.0	32.1	26.2	192.9	31.4	29.8
LnGrp LOS	D	D	D	D		F	E	C	C	F	C	C
Approach Vol, veh/h		757			438			1414			1082	
Approach Delay, s/veh		45.7			77.3			34.7			45.0	
Approach LOS		D			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	49.0		30.3	14.5	44.4		24.0
Change Period (Y+Rc), s	* 4.7	5.3		* 4.7	* 4.2	5.3		4.6
Max Green Setting (Gmax), s	* 5.3	46.9		* 34	* 13	39.9		19.4
Max Q Clear Time (g_c+I1), s	7.3	30.1		21.4	10.4	21.2		20.9
Green Ext Time (p_c), s	0.0	13.5		2.8	0.1	14.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	45.0
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	392	0	6	0	0	90	0	1	13	0	614	298
Future Volume (veh/h)	392	0	6	0	0	90	0	1	13	0	614	298
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	0	1863	1863	0	1863	1900	0	1863	1863
Adj Flow Rate, veh/h	417	0	0	0	0	0	0	1	14	0	653	0
Adj No. of Lanes	0	1	1	0	1	1	0	2	0	0	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	0	2	2	0	2	2	0	2	2
Cap, veh/h	615	0	549	0	7	6	0	639	571	0	1279	572
Arrive On Green	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.36	0.00	0.36	0.00
Sat Flow, veh/h	1774	0	1583	0	1863	1583	0	1863	1581	0	3632	1583
Grp Volume(v), veh/h	417	0	0	0	0	0	0	1	14	0	653	0
Grp Sat Flow(s),veh/h/ln	1774	0	1583	0	1863	1583	0	1770	1581	0	1770	1583
Q Serve(g_s), s	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	4.0	0.0
Cycle Q Clear(g_c), s	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	4.0	0.0
Prop In Lane	1.00		1.00	0.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	615	0	549	0	7	6	0	639	571	0	1279	572
V/C Ratio(X)	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.51	0.00
Avail Cap(c_a), veh/h	1553	0	1386	0	340	289	0	1355	1211	0	2582	1155
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	7.6	0.0	0.0	0.0	0.0	0.0	0.0	5.6	5.6	0.0	6.9	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	2.0	0.0
LnGrp Delay(d),s/veh	9.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	5.7	0.0	7.2	0.0
LnGrp LOS	A							A	A		A	
Approach Vol, veh/h		417			0			15			653	
Approach Delay, s/veh		9.0			0.0			5.7			7.2	
Approach LOS		A						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		13.9		13.5		13.9		0.0
Change Period (Y+Rc), s		* 4		4.0		4.0		3.0
Max Green Setting (Gmax), s		* 21		24.0		20.0		5.0
Max Q Clear Time (g_c+I1), s		2.2		7.5		6.0		0.0
Green Ext Time (p_c), s		4.4		2.4		3.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	7.8
HCM 2010 LOS	A

Notes

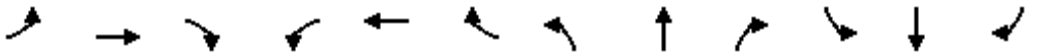
Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	99	51	698	165	60	432
Future Vol, veh/h	99	51	698	165	60	432
Conflicting Peds, #/hr	5	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	4	4
Mvmt Flow	102	53	720	170	62	445

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1157	446	0	0	891	0
Stage 1	806	-	-	-	-	-
Stage 2	351	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.18	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.24	-
Pot Cap-1 Maneuver	190	560	-	-	744	-
Stage 1	400	-	-	-	-	-
Stage 2	684	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	173	560	-	-	744	-
Mov Cap-2 Maneuver	296	-	-	-	-	-
Stage 1	400	-	-	-	-	-
Stage 2	624	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.6	0	1.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	296	560	744	-
HCM Lane V/C Ratio	-	-	0.345	0.094	0.083	-
HCM Control Delay (s)	-	-	23.4	12.1	10.3	-
HCM Lane LOS	-	-	C	B	B	-
HCM 95th %tile Q(veh)	-	-	1.5	0.3	0.3	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	397	3	21	378	320	0	0	99	252
Future Volume (vph)	0	0	0	397	3	21	378	320	0	0	99	252
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.2	4.2		4.6			4.2	4.0
Lane Util. Factor					1.00	1.00		1.00			1.00	1.00
Frpb, ped/bikes					1.00	1.00		1.00			1.00	0.97
Flpb, ped/bikes					1.00	1.00		1.00			1.00	1.00
Frt					1.00	0.85		1.00			1.00	0.85
Flt Protected					0.95	1.00		0.97			1.00	1.00
Satd. Flow (prot)					1775	1583		1814			1863	1540
Flt Permitted					0.95	1.00		0.97			1.00	1.00
Satd. Flow (perm)					1775	1583		1814			1863	1540
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	0	409	3	22	390	330	0	0	102	260
RTOR Reduction (vph)	0	0	0	0	0	16	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	412	6	0	720	0	0	102	260
Confl. Peds. (#/hr)												15
Turn Type				Split	NA	Perm	Split	NA			NA	Free
Protected Phases				8	8		2	2			6	
Permitted Phases						8						Free
Actuated Green, G (s)					22.3	22.3		36.2			9.2	80.7
Effective Green, g (s)					22.3	22.3		36.2			9.2	80.7
Actuated g/C Ratio					0.28	0.28		0.45			0.11	1.00
Clearance Time (s)					4.2	4.2		4.6			4.2	
Vehicle Extension (s)					3.5	3.5		3.5			3.5	
Lane Grp Cap (vph)					490	437		813			212	1540
v/s Ratio Prot					c0.23			c0.40			c0.05	
v/s Ratio Perm						0.00						0.17
v/c Ratio					0.84	0.01		0.89			0.48	0.17
Uniform Delay, d1					27.5	21.2		20.4			33.5	0.0
Progression Factor					1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2					12.6	0.0		11.6			2.0	0.2
Delay (s)					40.1	21.2		31.9			35.5	0.2
Level of Service					D	C		C			D	A
Approach Delay (s)		0.0			39.2			31.9			10.2	
Approach LOS		A			D			C			B	

Intersection Summary			
HCM 2000 Control Delay	28.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	80.7	Sum of lost time (s)	13.0
Intersection Capacity Utilization	73.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Appendix H

Intersection
Level of Service
Calculations

Cumulative
Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	366	132	243	0	538	0	69	200	17	26	0
Future Volume (veh/h)	29	366	132	243	0	538	0	69	200	17	26	0
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1845	1845	1845	0	1845	0	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	33	416	150	276	0	611	0	78	227	19	30	0
Adj No. of Lanes	0	2	1	1	0	1	0	1	1	0	1	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	0	3	0	6	6	2	2	2
Cap, veh/h	73	963	450	0	0	0	0	476	405	321	344	0
Arrive On Green	0.29	0.29	0.29	0.00	0.00	0.00	0.00	0.27	0.27	0.27	0.27	0.00
Sat Flow, veh/h	252	3333	1557		0		0	1792	1524	326	1295	0
Grp Volume(v), veh/h	240	209	150		0.0		0	78	227	49	0	0
Grp Sat Flow(s),veh/h/ln	1832	1752	1557				0	1792	1524	1621	0	0
Q Serve(g_s), s	2.3	2.1	1.6				0.0	0.7	2.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.3	2.1	1.6				0.0	0.7	2.7	0.4	0.0	0.0
Prop In Lane	0.14		1.00				0.00		1.00	0.39		0.00
Lane Grp Cap(c), veh/h	529	506	450				0	476	405	665	0	0
V/C Ratio(X)	0.45	0.41	0.33				0.00	0.16	0.56	0.07	0.00	0.00
Avail Cap(c_a), veh/h	2207	2111	1876				0	2420	2057	2234	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.2	6.1	6.0				0.0	6.0	6.8	5.9	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.2	0.2				0.0	0.1	0.5	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.0	0.7				0.0	0.4	1.2	0.2	0.0	0.0
LnGrp Delay(d),s/veh	6.4	6.3	6.1				0.0	6.1	7.2	6.0	0.0	0.0
LnGrp LOS	A	A	A					A	A	A		
Approach Vol, veh/h		599						305			49	
Approach Delay, s/veh		6.3						6.9			6.0	
Approach LOS		A						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		9.9		11.5		9.9		
Change Period (Y+Rc), s		* 4.2		5.3		* 4.2		
Max Green Setting (Gmax), s		* 29		25.7		* 29		
Max Q Clear Time (g_c+I1), s		4.7		4.3		2.4		
Green Ext Time (p_c), s		0.9		1.9		0.9		

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)	147	341	95	161	340	145	229	552	167	169	898	212
Future Volume (veh/h)	147	341	95	161	340	145	229	552	167	169	898	212
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	1845	1845	1900	1827	1827	1827
Adj Flow Rate, veh/h	162	375	104	177	374	159	252	607	184	186	987	233
Adj No. of Lanes	1	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	415	436	368	87	185	78	160	946	286	84	1103	493
Arrive On Green	0.23	0.23	0.23	0.20	0.20	0.20	0.09	0.36	0.36	0.05	0.32	0.32
Sat Flow, veh/h	1774	1863	1571	441	933	397	1757	2653	803	1740	3471	1553
Grp Volume(v), veh/h	162	375	104	710	0	0	252	401	390	186	987	233
Grp Sat Flow(s),veh/h/ln	1774	1863	1571	1771	0	0	1757	1752	1703	1740	1736	1553
Q Serve(g_s), s	9.1	22.8	6.4	23.4	0.0	0.0	10.8	22.6	22.6	5.7	32.1	14.2
Cycle Q Clear(g_c), s	9.1	22.8	6.4	23.4	0.0	0.0	10.8	22.6	22.6	5.7	32.1	14.2
Prop In Lane	1.00		1.00	0.25		0.22	1.00		0.47	1.00		1.00
Lane Grp Cap(c), veh/h	415	436	368	350	0	0	160	625	607	84	1103	493
V/C Ratio(X)	0.39	0.86	0.28	2.03	0.00	0.00	1.57	0.64	0.64	2.22	0.90	0.47
Avail Cap(c_a), veh/h	510	536	452	350	0	0	160	631	613	84	1115	499
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.2	43.4	37.1	47.4	0.0	0.0	53.7	31.7	31.8	56.3	38.5	32.4
Incr Delay (d2), s/veh	0.6	11.4	0.4	471.8	0.0	0.0	284.7	2.3	2.4	584.7	9.6	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	4.5	13.1	2.8	57.3	0.0	0.0	17.9	11.3	11.0	16.3	16.8	6.2
LnGrp Delay(d),s/veh	38.8	54.8	37.6	519.3	0.0	0.0	338.4	34.1	34.2	641.0	48.1	33.2
LnGrp LOS	D	D	D	F			F	C	C	F	D	C
Approach Vol, veh/h		641			710			1043			1406	
Approach Delay, s/veh		47.9			519.3			107.6			124.1	
Approach LOS		D			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.4	47.5		32.4	15.0	42.9		28.0
Change Period (Y+Rc), s	* 4.7	5.3		* 4.7	* 4.2	5.3		4.6
Max Green Setting (Gmax), s	* 5.7	42.6		* 34	* 11	38.0		23.4
Max Q Clear Time (g_c+I1), s	7.7	24.6		24.8	12.8	34.1		25.4
Green Ext Time (p_c), s	0.0	13.5		2.2	0.0	3.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	180.6
HCM 2010 LOS	F

Notes

Intersection	
Int Delay, s/veh	13.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	236	0	3	0	0	97	0	665	14	0	657	451
Future Vol, veh/h	236	0	3	0	0	97	0	665	14	0	657	451
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	0	-	-	0	-	-	-	-	-	75
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, %	14	14	14	2	2	2	3	3	3	3	3	3
Mvmt Flow	251	0	3	0	0	103	0	707	15	0	699	480

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1053	-	349	-	-	363	-	0	0	-	-	0
Stage 1	699	-	-	-	-	-	-	-	-	-	-	-
Stage 2	354	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.78	-	7.18	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	6.78	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.78	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.64	-	3.44	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	~ 165	0	614	0	0	634	0	-	-	0	-	0
Stage 1	370	0	-	0	0	-	0	-	-	0	-	0
Stage 2	604	0	-	0	0	-	0	-	-	0	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	~ 138	-	614	-	-	633	-	-	-	-	-	-
Mov Cap-2 Maneuver	256	-	-	-	-	-	-	-	-	-	-	-
Stage 1	370	-	-	-	-	-	-	-	-	-	-	-
Stage 2	506	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	92.6	11.8	0	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	WBLn1	SBT
Capacity (veh/h)	-	-	256	614	633	-
HCM Lane V/C Ratio	-	-	0.981	0.005	0.163	-
HCM Control Delay (s)	-	-	93.6	10.9	11.8	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	9.4	0	0.6	-

Notes

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

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	69	3	232	42	3	508
Future Vol, veh/h	69	3	232	42	3	508
Conflicting Peds, #/hr	0	2	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	9	9	7	7	4	4
Mvmt Flow	78	3	261	47	3	571

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	581	161	0	0	313	0
Stage 1	289	-	-	-	-	-
Stage 2	292	-	-	-	-	-
Critical Hdwy	6.98	7.08	-	-	4.18	-
Critical Hdwy Stg 1	5.98	-	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.24	-
Pot Cap-1 Maneuver	428	834	-	-	1230	-
Stage 1	714	-	-	-	-	-
Stage 2	712	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	425	829	-	-	1228	-
Mov Cap-2 Maneuver	425	-	-	-	-	-
Stage 1	711	-	-	-	-	-
Stage 2	709	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.2	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	434	1228	-
HCM Lane V/C Ratio	-	-	0.186	0.003	-
HCM Control Delay (s)	-	-	15.2	7.9	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.7	0	-

Intersection	
Intersection Delay, s/veh	10.7
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	84	128	4	0	52	159	19	0	7	54	40
Future Vol, veh/h	0	84	128	4	0	52	159	19	0	7	54	40
Peak Hour Factor	0.92	0.86	0.86	0.86	0.92	0.86	0.86	0.86	0.92	0.86	0.86	0.86
Heavy Vehicles, %	2	17	17	17	2	8	8	8	2	7	7	7
Mvmt Flow	0	98	149	5	0	60	185	22	0	8	63	47
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	10.9	11.2	9.7
HCM LOS	B	B	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	11%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	89%	0%	0%	97%	0%	89%	0%	53%
Vol Right, %	0%	100%	0%	3%	0%	11%	0%	47%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	61	40	84	132	52	178	43	122
LT Vol	7	0	84	0	52	0	43	0
Through Vol	54	0	0	128	0	159	0	65
RT Vol	0	40	0	4	0	19	0	57
Lane Flow Rate	71	47	98	153	60	207	50	142
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.128	0.074	0.179	0.259	0.108	0.337	0.095	0.235
Departure Headway (Hd)	6.49	5.721	6.611	6.084	6.45	5.869	6.804	5.966
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	553	626	543	591	556	613	527	601
Service Time	4.229	3.46	4.343	3.815	4.18	3.599	4.539	3.701
HCM Lane V/C Ratio	0.128	0.075	0.18	0.259	0.108	0.338	0.095	0.236
HCM Control Delay	10.2	8.9	10.8	10.9	10	11.6	10.3	10.5
HCM Lane LOS	B	A	B	B	A	B	B	B
HCM 95th-tile Q	0.4	0.2	0.6	1	0.4	1.5	0.3	0.9

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	43	65	57
Future Vol, veh/h	0	43	65	57
Peak Hour Factor	0.92	0.86	0.86	0.86
Heavy Vehicles, %	2	7	7	7
Mvmt Flow	0	50	76	66
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	10.4
HCM LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	76	116	31	107	4	73	254	36	7	517	51
Future Volume (veh/h)	9	76	116	31	107	4	73	254	36	7	517	51
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		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	1712	1712	1712	1792	1792	1900	1743	1743	1900	1792	1792	1900
Adj Flow Rate, veh/h	10	82	125	33	115	4	78	273	39	8	556	55
Adj No. of Lanes	1	1	1	1	2	0	2	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	11	11	11	6	6	6	9	9	9	6	6	6
Cap, veh/h	17	312	264	50	677	23	172	1296	183	14	1252	124
Arrive On Green	0.01	0.18	0.18	0.03	0.20	0.20	0.05	0.44	0.44	0.01	0.40	0.40
Sat Flow, veh/h	1630	1712	1445	1707	3357	116	3221	2914	412	1707	3131	309
Grp Volume(v), veh/h	10	82	125	33	58	61	78	154	158	8	302	309
Grp Sat Flow(s),veh/h/ln	1630	1712	1445	1707	1703	1771	1610	1656	1670	1707	1703	1737
Q Serve(g_s), s	0.3	2.0	3.8	0.9	1.4	1.4	1.2	2.8	2.9	0.2	6.4	6.4
Cycle Q Clear(g_c), s	0.3	2.0	3.8	0.9	1.4	1.4	1.2	2.8	2.9	0.2	6.4	6.4
Prop In Lane	1.00		1.00	1.00		0.07	1.00		0.25	1.00		0.18
Lane Grp Cap(c), veh/h	17	312	264	50	343	357	172	737	743	14	681	695
V/C Ratio(X)	0.59	0.26	0.47	0.66	0.17	0.17	0.45	0.21	0.21	0.56	0.44	0.45
Avail Cap(c_a), veh/h	132	868	733	173	899	934	261	823	830	139	847	864
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.3	17.3	18.0	23.7	16.3	16.3	22.6	8.4	8.4	24.3	10.8	10.8
Incr Delay (d2), s/veh	28.7	0.6	1.9	13.5	0.3	0.3	1.9	0.6	0.7	29.6	2.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.0	1.6	0.6	0.7	0.7	0.6	1.4	1.5	0.2	3.3	3.4
LnGrp Delay(d),s/veh	53.0	17.9	19.9	37.2	16.6	16.6	24.5	9.0	9.0	53.9	12.9	12.9
LnGrp LOS	D	B	B	D	B	B	C	A	A	D	B	B
Approach Vol, veh/h		217			152			390			619	
Approach Delay, s/veh		20.7			21.1			12.1			13.4	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.4	26.4	5.5	13.0	6.6	24.2	4.5	13.9
Change Period (Y+Rc), s	4.0	4.5	4.0	4.0	4.0	4.5	4.0	4.0
Max Green Setting (Gmax), s	4.0	24.5	5.0	25.0	4.0	24.5	4.0	26.0
Max Q Clear Time (g_c+I1), s	2.2	4.9	2.9	5.8	3.2	8.4	2.3	3.4
Green Ext Time (p_c), s	0.0	13.2	0.0	2.1	0.0	11.3	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	15.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	4.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	143	24	322	60	57	584
Future Vol, veh/h	143	24	322	60	57	584
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	9	9	7	7
Mvmt Flow	163	27	366	68	65	664

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	863	219	0	0	436	0
Stage 1	402	-	-	-	-	-
Stage 2	461	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.24	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.27	-
Pot Cap-1 Maneuver	294	785	-	-	1085	-
Stage 1	644	-	-	-	-	-
Stage 2	601	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	276	784	-	-	1085	-
Mov Cap-2 Maneuver	276	-	-	-	-	-
Stage 1	643	-	-	-	-	-
Stage 2	565	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	31.5	0	0.8
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	276	784	1085	-
HCM Lane V/C Ratio	-	-	0.589	0.035	0.06	-
HCM Control Delay (s)	-	-	35.1	9.8	8.5	-
HCM Lane LOS	-	-	E	A	A	-
HCM 95th %tile Q(veh)	-	-	3.5	0.1	0.2	-

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBU	SBL	SBR
Lane Configurations									
Traffic Vol, veh/h	0	13	110	0	195	28	0	13	18
Future Vol, veh/h	0	13	110	0	195	28	0	13	18
Peak Hour Factor	0.92	0.84	0.84	0.92	0.84	0.84	0.92	0.84	0.84
Heavy Vehicles, %	2	2	2	2	10	10	2	7	7
Mvmt Flow	0	15	131	0	232	33	0	15	21
Number of Lanes	0	1	1	0	1	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	8.5	9.3	7.9
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	42%
Vol Thru, %	0%	100%	87%	0%
Vol Right, %	0%	0%	13%	58%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	13	110	223	31
LT Vol	13	0	0	13
Through Vol	0	110	195	0
RT Vol	0	0	28	18
Lane Flow Rate	15	131	265	37
Geometry Grp	7	7	5	2
Degree of Util (X)	0.023	0.172	0.315	0.048
Departure Headway (Hd)	5.234	4.732	4.268	4.691
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	678	750	831	768
Service Time	3.012	2.51	2.351	2.691
HCM Lane V/C Ratio	0.022	0.175	0.319	0.048
HCM Control Delay	8.1	8.5	9.3	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.6	1.4	0.2

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	27	64	30	0	106	99	25	0	25	34	114
Future Vol, veh/h	0	27	64	30	0	106	99	25	0	25	34	114
Peak Hour Factor	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	7	7	7	2	7	7	7	2	15	15	15
Mvmt Flow	0	34	80	38	0	133	124	31	0	31	43	143
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	9.8	10.5	9.8
HCM LOS	A	B	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	42%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	58%	0%	0%	68%	0%	80%	0%	82%
Vol Right, %	0%	100%	0%	32%	0%	20%	0%	18%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	59	114	27	94	106	124	18	71
LT Vol	25	0	27	0	106	0	18	0
Through Vol	34	0	0	64	0	99	0	58
RT Vol	0	114	0	30	0	25	0	13
Lane Flow Rate	74	142	34	118	132	155	22	89
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.131	0.216	0.061	0.187	0.231	0.242	0.041	0.147
Departure Headway (Hd)	6.376	5.454	6.469	5.738	6.274	5.627	6.594	5.958
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	563	660	555	626	574	640	544	603
Service Time	4.101	3.179	4.197	3.465	3.998	3.351	4.323	3.687
HCM Lane V/C Ratio	0.131	0.215	0.061	0.188	0.23	0.242	0.04	0.148
HCM Control Delay	10.1	9.7	9.6	9.8	10.9	10.1	9.6	9.7
HCM Lane LOS	B	A	A	A	B	B	A	A
HCM 95th-tile Q	0.4	0.8	0.2	0.7	0.9	0.9	0.1	0.5

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	18	58	13
Future Vol, veh/h	0	18	58	13
Peak Hour Factor	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	23	73	16
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	9.7
HCM LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	17	115	16	37	18	90	281	25	41	572	120
Future Volume (veh/h)	95	17	115	16	37	18	90	281	25	41	572	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1900	1845	1845	1845	1759	1759	1900	1792	1792	1900
Adj Flow Rate, veh/h	103	18	125	17	40	20	98	305	27	45	622	130
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	9	9	3	3	3	8	8	8	6	6	6
Cap, veh/h	128	28	195	30	163	139	121	1392	122	65	1160	242
Arrive On Green	0.08	0.15	0.15	0.02	0.09	0.09	0.07	0.45	0.45	0.04	0.41	0.41
Sat Flow, veh/h	1660	189	1315	1757	1845	1568	1675	3108	273	1707	2804	585
Grp Volume(v), veh/h	103	0	143	17	40	20	98	163	169	45	377	375
Grp Sat Flow(s),veh/h/ln	1660	0	1505	1757	1845	1568	1675	1671	1710	1707	1703	1686
Q Serve(g_s), s	2.8	0.0	4.1	0.4	0.9	0.5	2.6	2.7	2.8	1.2	7.7	7.7
Cycle Q Clear(g_c), s	2.8	0.0	4.1	0.4	0.9	0.5	2.6	2.7	2.8	1.2	7.7	7.7
Prop In Lane	1.00		0.87	1.00		1.00	1.00		0.16	1.00		0.35
Lane Grp Cap(c), veh/h	128	0	223	30	163	139	121	749	766	65	705	698
V/C Ratio(X)	0.81	0.00	0.64	0.57	0.24	0.14	0.81	0.22	0.22	0.69	0.54	0.54
Avail Cap(c_a), veh/h	217	0	524	153	562	478	182	749	766	223	705	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.9	0.0	18.4	22.4	19.5	19.3	21.0	7.8	7.8	21.8	10.1	10.1
Incr Delay (d2), s/veh	11.3	0.0	3.0	16.0	0.8	0.5	14.7	0.7	0.7	12.4	2.9	3.0
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	1.7	0.0	1.9	0.3	0.5	0.3	1.7	1.4	1.5	0.8	4.1	4.1
LnGrp Delay(d),s/veh	32.1	0.0	21.4	38.4	20.3	19.8	35.7	8.4	8.4	34.2	13.0	13.1
LnGrp LOS	C		C	D	C	B	D	A	A	C	B	B
Approach Vol, veh/h		246			77			430			797	
Approach Delay, s/veh		25.9			24.1			14.6			14.3	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	24.6	4.8	10.8	7.3	23.0	7.5	8.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	18.0	4.0	16.0	5.0	19.0	6.0	14.0
Max Q Clear Time (g_c+I1), s	3.2	4.8	2.4	6.1	4.6	9.7	4.8	2.9
Green Ext Time (p_c), s	0.0	5.7	0.0	0.7	0.0	4.5	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	16.7
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	0	55	4	0	54	103	0	0	3	0	17
Future Vol, veh/h	0	0	55	4	0	54	103	0	0	3	0	17
Peak Hour Factor	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	7	7	7	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	69	5	0	68	129	0	0	4	0	21
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	7.6	8.3	7.2
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	15%	0%	34%	0%
Vol Thru, %	0%	93%	66%	0%
Vol Right, %	85%	7%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	20	59	157	2
LT Vol	3	0	54	0
Through Vol	0	55	103	0
RT Vol	17	4	0	2
Lane Flow Rate	25	74	196	2
Geometry Grp	1	1	1	1
Degree of Util (X)	0.028	0.085	0.224	0.003
Departure Headway (Hd)	4.047	4.172	4.106	4.77
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	890	853	873	755
Service Time	2.047	2.229	2.136	2.771
HCM Lane V/C Ratio	0.028	0.087	0.225	0.003
HCM Control Delay	7.2	7.6	8.3	7.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.3	0.9	0

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	0	0	2
Future Vol, veh/h	0	0	0	2
Peak Hour Factor	0.92	0.80	0.80	0.80
Heavy Vehicles, %	2	50	50	50
Mvmt Flow	0	0	0	3
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	7.8
HCM LOS	A

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	85	3	0	14	62	0	5	12
Future Vol, veh/h	0	85	3	0	14	62	0	5	12
Peak Hour Factor	0.92	0.91	0.91	0.92	0.91	0.91	0.92	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	9	9
Mvmt Flow	0	93	3	0	15	68	0	5	13
Number of Lanes	0	1	0	0	1	0	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.9	7	7.5
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	97%	29%
Vol Thru, %	18%	0%	71%
Vol Right, %	82%	3%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	76	88	17
LT Vol	0	85	5
Through Vol	14	0	12
RT Vol	62	3	0
Lane Flow Rate	84	97	19
Geometry Grp	1	1	1
Degree of Util (X)	0.084	0.115	0.023
Departure Headway (Hd)	3.628	4.284	4.346
Convergence, Y/N	Yes	Yes	Yes
Cap	976	836	816
Service Time	1.691	2.315	2.413
HCM Lane V/C Ratio	0.086	0.116	0.023
HCM Control Delay	7	7.9	7.5
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	0.4	0.1

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	26	13	7	0	52	16	0	0	18	78	49
Future Vol, veh/h	0	26	13	7	0	52	16	0	0	18	78	49
Peak Hour Factor	0.92	0.83	0.83	0.83	0.92	0.83	0.83	0.83	0.92	0.83	0.83	0.83
Heavy Vehicles, %	2	3	3	3	2	6	6	6	2	3	3	3
Mvmt Flow	0	31	16	8	0	63	19	0	0	22	94	59
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	8.8	9.5	8.6
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	12%	67%	0%	76%	0%	1%
Vol Thru, %	54%	33%	0%	24%	100%	74%
Vol Right, %	34%	0%	100%	0%	0%	24%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	145	39	7	68	0	141
LT Vol	18	26	0	52	0	2
Through Vol	78	13	0	16	0	105
RT Vol	49	0	7	0	0	34
Lane Flow Rate	175	47	8	82	0	170
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.212	0.075	0.011	0.133	0	0.212
Departure Headway (Hd)	4.362	5.761	4.719	5.83	5.444	4.5
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	823	621	756	614	0	798
Service Time	2.387	3.506	2.464	3.572	3.186	2.526
HCM Lane V/C Ratio	0.213	0.076	0.011	0.134	0	0.213
HCM Control Delay	8.6	9	7.5	9.5	8.2	8.7
HCM Lane LOS	A	A	A	A	N	A
HCM 95th-tile Q	0.8	0.2	0	0.5	0	0.8

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations			↕	
Traffic Vol, veh/h	0	2	105	34
Future Vol, veh/h	0	2	105	34
Peak Hour Factor	0.92	0.83	0.83	0.83
Heavy Vehicles, %	2	9	9	9
Mvmt Flow	0	2	127	41
Number of Lanes	0	0	1	0

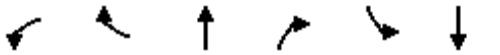
Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	8.7
HCM LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	0	210	0	0	0	188	478	6	0	656	83
Future Volume (veh/h)	47	0	210	0	0	0	188	478	6	0	656	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		1.00	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	1900	1776	1776	1900	1863	1900	1827	1827	1900	0	1810	1900
Adj Flow Rate, veh/h	52	0	233	0	0	0	209	531	7	0	729	92
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	0	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	7	7	7	2	2	2	4	4	4	0	5	5
Cap, veh/h	399	0	297	0	371	0	514	2307	30	0	1549	195
Arrive On Green	0.20	0.00	0.20	0.00	0.00	0.00	0.09	0.66	0.66	0.00	0.50	0.50
Sat Flow, veh/h	1332	0	1493	0	1863	0	1740	3508	46	0	3159	387
Grp Volume(v), veh/h	52	0	233	0	0	0	209	263	275	0	408	413
Grp Sat Flow(s),veh/h/ln	1332	0	1493	0	1863	0	1740	1736	1818	0	1719	1736
Q Serve(g_s), s	1.7	0.0	7.9	0.0	0.0	0.0	2.7	3.3	3.3	0.0	8.3	8.3
Cycle Q Clear(g_c), s	1.7	0.0	7.9	0.0	0.0	0.0	2.7	3.3	3.3	0.0	8.3	8.3
Prop In Lane	1.00		1.00	0.00		0.00	1.00		0.03	0.00		0.22
Lane Grp Cap(c), veh/h	399	0	297	0	371	0	514	1141	1196	0	868	876
V/C Ratio(X)	0.13	0.00	0.78	0.00	0.00	0.00	0.41	0.23	0.23	0.00	0.47	0.47
Avail Cap(c_a), veh/h	556	0	473	0	590	0	637	1141	1196	0	868	876
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	17.9	0.0	20.4	0.0	0.0	0.0	5.6	3.7	3.7	0.0	8.6	8.6
Incr Delay (d2), s/veh	0.2	0.0	6.4	0.0	0.0	0.0	0.5	0.5	0.4	0.0	1.8	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	0.7	0.0	3.8	0.0	0.0	0.0	1.3	1.7	1.8	0.0	4.3	4.3
LnGrp Delay(d),s/veh	18.1	0.0	26.8	0.0	0.0	0.0	6.2	4.2	4.2	0.0	10.5	10.4
LnGrp LOS	B		C				A	A	A		B	B
Approach Vol, veh/h		285			0			747			821	
Approach Delay, s/veh		25.2			0.0			4.7			10.5	
Approach LOS		C						A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		39.5		14.2	8.2	31.3		14.2
Change Period (Y+Rc), s		* 4.2		3.5	3.5	* 4.2		3.5
Max Green Setting (Gmax), s		* 35		17.0	8.5	* 23		17.0
Max Q Clear Time (g_c+I1), s		5.3		9.9	4.7	10.3		0.0
Green Ext Time (p_c), s		24.2		0.9	0.2	11.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	10.4
HCM 2010 LOS	B

Notes



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	516	91	581	300	110	818
Future Volume (veh/h)	516	91	581	300	110	818
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1845	1845	1810	1810
Adj Flow Rate, veh/h	593	105	668	0	126	940
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	3	3	5	5
Cap, veh/h	842	387	1509	675	159	2018
Arrive On Green	0.24	0.24	0.43	0.00	0.09	0.59
Sat Flow, veh/h	3442	1583	3597	1568	1723	3529
Grp Volume(v), veh/h	593	105	668	0	126	940
Grp Sat Flow(s),veh/h/ln	1721	1583	1752	1568	1723	1719
Q Serve(g_s), s	8.6	2.9	7.3	0.0	3.9	8.5
Cycle Q Clear(g_c), s	8.6	2.9	7.3	0.0	3.9	8.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	842	387	1509	675	159	2018
V/C Ratio(X)	0.70	0.27	0.44	0.00	0.79	0.47
Avail Cap(c_a), veh/h	1072	493	1573	704	183	2128
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	16.7	10.9	0.0	24.3	6.4
Incr Delay (d2), s/veh	2.6	0.8	0.9	0.0	18.5	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	4.3	1.3	3.7	0.0	2.7	4.1
LnGrp Delay(d),s/veh	21.4	17.5	11.9	0.0	42.8	7.2
LnGrp LOS	C	B	B		D	A
Approach Vol, veh/h	698		668			1066
Approach Delay, s/veh	20.8		11.9			11.4
Approach LOS	C		B			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.5	27.7				36.2		18.4
Change Period (Y+Rc), s	3.5	* 4.2				* 4.2		5.0
Max Green Setting (Gmax), s	5.8	* 25				* 34		17.0
Max Q Clear Time (g_c+I1), s	5.9	9.3				10.5		10.6
Green Ext Time (p_c), s	0.0	14.2				21.3		2.8

Intersection Summary	
HCM 2010 Ctrl Delay	14.2
HCM 2010 LOS	B

Notes

Intersection	
Int Delay, s/veh	14.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	2	6	97	185	10	9	111	31	125	0	0	0
Future Vol, veh/h	2	6	97	185	10	9	111	31	125	0	0	0
Conflicting Peds, #/hr	20	0	1	1	0	20	17	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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	6	6	6	2	2	2	2	2	2
Mvmt Flow	3	8	129	247	13	12	148	41	167	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	470	521	18	491	438	145	17	0	0
Stage 1	17	17	-	421	421	-	-	-	-
Stage 2	453	504	-	70	17	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.16	6.56	6.26	4.12	-	-
Critical Hdwy Stg 1	-	-	-	6.16	5.56	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.554	4.054	3.354	2.218	-	-
Pot Cap-1 Maneuver	504	460	1061	481	506	892	1600	-	-
Stage 1	-	-	-	602	582	-	-	-	-
Stage 2	586	541	-	-	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	440	405	1045	381	445	892	1599	-	-
Mov Cap-2 Maneuver	440	405	-	381	445	-	-	-	-
Stage 1	-	-	-	538	520	-	-	-	-
Stage 2	503	483	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	9.5	32.2	3.1
HCM LOS	A	D	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	1599	-	-	936	394
HCM Lane V/C Ratio	0.093	-	-	0.15	0.69
HCM Control Delay (s)	7.5	0	-	9.5	32.2
HCM Lane LOS	A	A	-	A	D
HCM 95th %tile Q(veh)	0.3	-	-	0.5	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	421	1	36	494	231	0	0	85	215
Future Volume (veh/h)	0	0	0	421	1	36	494	231	0	0	85	215
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.94
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1792	1792	1900	1845	0	0	1827	1900
Adj Flow Rate, veh/h				495	1	42	581	272	0	0	100	253
Adj No. of Lanes				0	1	1	0	1	0	0	1	0
Peak Hour Factor				0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %				6	6	6	3	3	0	0	4	4
Cap, veh/h				507	1	453	504	236	0	0	55	139
Arrive On Green				0.30	0.30	0.30	0.41	0.41	0.00	0.00	0.13	0.13
Sat Flow, veh/h				1704	3	1524	1215	569	0	0	438	1109
Grp Volume(v), veh/h				496	0	42	853	0	0	0	0	353
Grp Sat Flow(s),veh/h/ln				1707	0	1524	1784	0	0	0	0	1548
Q Serve(g_s), s				23.0	0.0	1.6	33.2	0.0	0.0	0.0	0.0	10.0
Cycle Q Clear(g_c), s				23.0	0.0	1.6	33.2	0.0	0.0	0.0	0.0	10.0
Prop In Lane				1.00		1.00	0.68		0.00	0.00		0.72
Lane Grp Cap(c), veh/h				508	0	453	740	0	0	0	0	193
V/C Ratio(X)				0.98	0.00	0.09	1.15	0.00	0.00	0.00	0.00	1.82
Avail Cap(c_a), veh/h				508	0	453	740	0	0	0	0	193
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				27.8	0.0	20.3	23.4	0.0	0.0	0.0	0.0	35.0
Incr Delay (d2), s/veh				33.9	0.0	0.1	83.6	0.0	0.0	0.0	0.0	390.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				15.5	0.0	0.7	33.4	0.0	0.0	0.0	0.0	25.2
LnGrp Delay(d),s/veh				61.7	0.0	20.4	107.0	0.0	0.0	0.0	0.0	425.6
LnGrp LOS				E		C	F					F
Approach Vol, veh/h					538			853			353	
Approach Delay, s/veh					58.5			107.0			425.6	
Approach LOS					E			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		37.8				14.2		28.0
Change Period (Y+Rc), s		4.6				4.2		4.2
Max Green Setting (Gmax), s		33.2				10.0		23.8
Max Q Clear Time (g_c+I1), s		35.2				12.0		25.0
Green Ext Time (p_c), s		0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	156.5
HCM 2010 LOS	F

Intersection	
Int Delay, s/veh	9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	135	1	313	0	0	0	0	590	295	27	479	0
Future Vol, veh/h	135	1	313	0	0	0	0	590	295	27	479	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	2	2	2	5	5	5	6	6	6
Mvmt Flow	147	1	340	0	0	0	0	641	321	29	521	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1220	1222	521	-	0	0	643	0	0
Stage 1	579	579	-	-	-	-	-	-	-
Stage 2	641	643	-	-	-	-	-	-	-
Critical Hdwy	6.43	6.53	6.23	-	-	-	4.16	-	-
Critical Hdwy Stg 1	5.43	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	-	-	-	2.254	-	-
Pot Cap-1 Maneuver	198	179	553	0	-	-	923	-	0
Stage 1	558	499	-	0	-	-	-	-	0
Stage 2	523	467	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	189	0	553	-	-	-	923	-	-
Mov Cap-2 Maneuver	189	0	-	-	-	-	-	-	-
Stage 1	533	0	-	-	-	-	-	-	-
Stage 2	523	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	36.3	0	0.5
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	189	553	923	-
HCM Lane V/C Ratio	-	-	0.782	0.615	0.032	-
HCM Control Delay (s)	-	-	70.5	21.4	9	0
HCM Lane LOS	-	-	F	C	A	A
HCM 95th %tile Q(veh)	-	-	5.3	4.1	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	397	176	199	729	348	413	406	181	313	373	89
Future Volume (veh/h)	138	397	176	199	729	348	413	406	181	313	373	89
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1863	1863	1863	1810	1810	1900
Adj Flow Rate, veh/h	159	456	202	229	838	400	475	467	208	360	429	102
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	2	2	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	4	4	4	4	4	4	2	2	2	5	5	5
Cap, veh/h	174	1135	506	167	1122	492	341	1082	476	373	877	207
Arrive On Green	0.10	0.33	0.33	0.10	0.32	0.32	0.10	0.31	0.31	0.11	0.32	0.32
Sat Flow, veh/h	1740	3471	1547	1740	3471	1523	3442	3539	1557	3343	2756	649
Grp Volume(v), veh/h	159	456	202	229	838	400	475	467	208	360	266	265
Grp Sat Flow(s),veh/h/ln	1740	1736	1547	1740	1736	1523	1721	1770	1557	1672	1719	1686
Q Serve(g_s), s	9.4	10.6	10.5	10.0	22.4	25.1	10.3	11.0	11.1	11.2	13.0	13.2
Cycle Q Clear(g_c), s	9.4	10.6	10.5	10.0	22.4	25.1	10.3	11.0	11.1	11.2	13.0	13.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	174	1135	506	167	1122	492	341	1082	476	373	547	537
V/C Ratio(X)	0.91	0.40	0.40	1.37	0.75	0.81	1.39	0.43	0.44	0.97	0.49	0.49
Avail Cap(c_a), veh/h	174	1168	521	167	1155	506	341	1082	476	373	547	537
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.4	27.1	27.1	47.0	31.4	32.3	46.9	28.9	28.9	46.0	28.6	28.7
Incr Delay (d2), s/veh	44.4	0.3	0.7	199.4	2.9	10.1	194.3	1.3	2.9	37.5	3.1	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	5.1	4.6	14.0	11.2	11.9	14.1	5.6	5.1	7.1	6.6	6.7
LnGrp Delay(d),s/veh	90.7	27.4	27.8	246.4	34.3	42.4	241.2	30.1	31.8	83.5	31.7	31.9
LnGrp LOS	F	C	C	F	C	D	F	C	C	F	C	C
Approach Vol, veh/h		817			1467			1150			891	
Approach Delay, s/veh		39.8			69.6			117.6			52.7	
Approach LOS		D			E			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.3	36.4	13.7	38.6	14.0	37.7	14.1	38.2
Change Period (Y+Rc), s	3.7	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Green Setting (Gmax), s	11.6	31.8	10.0	35.0	10.3	33.1	10.4	34.6
Max Q Clear Time (g_c+I1), s	13.2	13.1	12.0	12.6	12.3	15.2	11.4	27.1
Green Ext Time (p_c), s	0.0	9.5	0.0	15.9	0.0	9.3	0.0	6.4

Intersection Summary	
HCM 2010 Ctrl Delay	73.3
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	3.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	77	42	11	143	80	44
Future Vol, veh/h	77	42	11	143	80	44
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	84	46	12	155	87	48

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	129	0	286	107
Stage 1	-	-	-	-	107	-
Stage 2	-	-	-	-	179	-
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	-	-	1457	-	704	947
Stage 1	-	-	-	-	917	-
Stage 2	-	-	-	-	852	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1457	-	698	947
Mov Cap-2 Maneuver	-	-	-	-	698	-
Stage 1	-	-	-	-	917	-
Stage 2	-	-	-	-	844	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	10.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	770	-	-	1457	-
HCM Lane V/C Ratio	0.175	-	-	0.008	-
HCM Control Delay (s)	10.7	-	-	7.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	85	23	13	88	134	60
Future Vol, veh/h	85	23	13	88	134	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	92	25	14	96	146	65

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	302	178	211	0	-	0
Stage 1	178	-	-	-	-	-
Stage 2	124	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	690	865	1360	-	-	-
Stage 1	853	-	-	-	-	-
Stage 2	902	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	682	865	1360	-	-	-
Mov Cap-2 Maneuver	682	-	-	-	-	-
Stage 1	853	-	-	-	-	-
Stage 2	892	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11	1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1360	-	714	-	-
HCM Lane V/C Ratio	0.01	-	0.164	-	-
HCM Control Delay (s)	7.7	0	11	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.6	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	569	229	340	0	558	0	123	465	0	0	0
Future Volume (veh/h)	38	569	229	340	0	558	0	123	465	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1863	0	1863	0	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	43	639	257	382	0	627	0	138	522	0	0	0
Adj No. of Lanes	0	2	1	1	0	1	0	1	1	0	1	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	0	2	0	2	2	2	2	2
Cap, veh/h	70	1089	501	0	0	0	0	744	633	0	744	0
Arrive On Green	0.32	0.32	0.32	0.00	0.00	0.00	0.00	0.40	0.40	0.00	0.00	0.00
Sat Flow, veh/h	218	3403	1566		0		0	1863	1583	0	1863	0
Grp Volume(v), veh/h	365	317	257		0.0		0	138	522	0	0	0
Grp Sat Flow(s),veh/h/ln	1852	1770	1566				0	1863	1583	0	1863	0
Q Serve(g_s), s	5.6	5.0	4.5				0.0	1.6	10.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.6	5.0	4.5				0.0	1.6	10.0	0.0	0.0	0.0
Prop In Lane	0.12		1.00				0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	592	566	501				0	744	633	0	744	0
V/C Ratio(X)	0.62	0.56	0.51				0.00	0.19	0.83	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1296	1239	1096				0	2520	2142	0	2520	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	9.8	9.5	9.4				0.0	6.6	9.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.3	0.3				0.0	0.0	1.1	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
%ile BackOfQ(50%),veh/ln	2.9	2.4	2.0				0.0	0.8	4.4	0.0	0.0	0.0
LnGrp Delay(d),s/veh	10.1	9.9	9.7				0.0	6.6	10.2	0.0	0.0	0.0
LnGrp LOS	B	A	A					A	B			
Approach Vol, veh/h		939						660			0	
Approach Delay, s/veh		9.9						9.4			0.0	
Approach LOS		A						A				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		17.7		16.1		17.7		
Change Period (Y+Rc), s		* 4.2		5.3		* 4.2		
Max Green Setting (Gmax), s		* 46		23.7		* 46		
Max Q Clear Time (g_c+I1), s		12.0		7.6		0.0		
Green Ext Time (p_c), s		1.5		3.0		0.0		

Intersection Summary	
HCM 2010 Ctrl Delay	9.7
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	374	515	165	274	457	337	164	1058	390	312	814	277
Future Volume (veh/h)	374	515	165	274	457	337	164	1058	390	312	814	277
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	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	394	542	174	288	481	355	173	1114	411	328	857	292
Adj No. of Lanes	1	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	484	508	428	69	116	85	182	956	346	75	1130	504
Arrive On Green	0.27	0.27	0.27	0.16	0.16	0.16	0.10	0.38	0.38	0.04	0.32	0.32
Sat Flow, veh/h	1774	1863	1568	447	746	551	1774	2548	922	1774	3539	1580
Grp Volume(v), veh/h	394	542	174	1124	0	0	173	767	758	328	857	292
Grp Sat Flow(s),veh/h/ln	1774	1863	1568	1743	0	0	1774	1770	1700	1774	1770	1580
Q Serve(g_s), s	26.0	34.1	11.3	19.4	0.0	0.0	12.1	46.9	46.9	5.3	27.2	19.3
Cycle Q Clear(g_c), s	26.0	34.1	11.3	19.4	0.0	0.0	12.1	46.9	46.9	5.3	27.2	19.3
Prop In Lane	1.00		1.00	0.26		0.32	1.00		0.54	1.00		1.00
Lane Grp Cap(c), veh/h	484	508	428	271	0	0	182	664	638	75	1130	504
V/C Ratio(X)	0.81	1.07	0.41	4.15	0.00	0.00	0.95	1.16	1.19	4.36	0.76	0.58
Avail Cap(c_a), veh/h	484	508	428	271	0	0	182	664	638	75	1130	504
HCM Platoon Ratio	1.00	1.00	1.00	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	45.5	37.2	52.8	0.0	0.0	55.8	39.0	39.1	59.9	38.2	35.5
Incr Delay (d2), s/veh	10.3	58.9	0.6	1428.2	0.0	0.0	52.9	86.1	99.9	1542.7	3.1	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	14.1	25.8	5.0	116.7	0.0	0.0	8.6	38.8	39.7	34.8	13.7	8.7
LnGrp Delay(d),s/veh	52.8	104.3	37.8	1481.0	0.0	0.0	108.7	125.2	139.0	1602.5	41.4	37.4
LnGrp LOS	D	F	D	F			F	F	F	F	D	D
Approach Vol, veh/h		1110			1124			1698			1477	
Approach Delay, s/veh		75.6			1481.0			129.7			387.3	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	52.2		38.8	17.0	45.2		24.0
Change Period (Y+Rc), s	* 4.7	5.3		* 4.7	* 4.2	5.3		4.6
Max Green Setting (Gmax), s	* 5.3	46.9		* 34	* 13	39.9		19.4
Max Q Clear Time (g_c+I1), s	7.3	48.9		36.1	14.1	29.2		21.4
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	10.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	469.7
HCM 2010 LOS	F

Notes

Intersection	
Int Delay, s/veh	167.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	480	0	6	0	0	90	0	1042	13	0	868	370
Future Vol, veh/h	480	0	6	0	0	90	0	1042	13	0	868	370
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	1	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	0	-	-	0	-	-	-	-	-	75
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	511	0	6	0	0	96	0	1109	14	0	923	394

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1477	-	463	-	-	562	-	0	0	-	-	0
Stage 1	923	-	-	-	-	-	-	-	-	-	-	-
Stage 2	554	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.94	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.32	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	~ 88	0	546	0	0	470	0	-	-	0	-	0
Stage 1	~ 290	0	-	0	0	-	0	-	-	0	-	0
Stage 2	~ 484	0	-	0	0	-	0	-	-	0	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	~ 70	-	546	-	-	470	-	-	-	-	-	-
Mov Cap-2 Maneuver	~ 182	-	-	-	-	-	-	-	-	-	-	-
Stage 1	~ 290	-	-	-	-	-	-	-	-	-	-	-
Stage 2	~ 385	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 856.4	14.6	0	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	WBLn1	SBT
Capacity (veh/h)	-	-	182	546	470	-
HCM Lane V/C Ratio	-	-	2.806	0.012	0.204	-
HCM Control Delay (s)	-	-	$ 867	11.7	14.6	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	45.3	0	0.8	-

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

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	56	6	534	90	11	359
Future Vol, veh/h	56	6	534	90	11	359
Conflicting Peds, #/hr	0	2	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	6	6	2	2	4	4
Mvmt Flow	62	7	587	99	12	395

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	862	350	0	0	691	0
Stage 1	641	-	-	-	-	-
Stage 2	221	-	-	-	-	-
Critical Hdwy	6.92	7.02	-	-	4.18	-
Critical Hdwy Stg 1	5.92	-	-	-	-	-
Critical Hdwy Stg 2	5.92	-	-	-	-	-
Follow-up Hdwy	3.56	3.36	-	-	2.24	-
Pot Cap-1 Maneuver	287	635	-	-	886	-
Stage 1	476	-	-	-	-	-
Stage 2	783	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	281	631	-	-	885	-
Mov Cap-2 Maneuver	281	-	-	-	-	-
Stage 1	474	-	-	-	-	-
Stage 2	770	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.7	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	297	885	-
HCM Lane V/C Ratio	-	-	0.229	0.014	-
HCM Control Delay (s)	-	-	20.7	9.1	0.1
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.9	0	-

Intersection	
Intersection Delay, s/veh	49
Intersection LOS	E

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	159	330	11	0	135	376	46	0	29	150	139
Future Vol, veh/h	0	159	330	11	0	135	376	46	0	29	150	139
Peak Hour Factor	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	4	4	4	2	3	3	3	2	2	2	2
Mvmt Flow	0	175	363	12	0	148	413	51	0	32	165	153
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	42.2	85	19.4
HCM LOS	E	F	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	16%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	84%	0%	0%	97%	0%	89%	0%	50%
Vol Right, %	0%	100%	0%	3%	0%	11%	0%	50%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	179	139	159	341	135	422	62	250
LT Vol	29	0	159	0	135	0	62	0
Through Vol	150	0	0	330	0	376	0	126
RT Vol	0	139	0	11	0	46	0	124
Lane Flow Rate	197	153	175	375	148	464	68	275
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.504	0.357	0.439	0.897	0.38	1.111	0.182	0.665
Departure Headway (Hd)	9.652	8.833	9.462	8.917	9.221	8.622	10.026	9.138
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	376	409	383	408	392	422	360	398
Service Time	7.352	6.533	7.162	6.617	6.933	6.334	7.726	6.838
HCM Lane V/C Ratio	0.524	0.374	0.457	0.919	0.378	1.1	0.189	0.691
HCM Control Delay	21.8	16.4	19.4	52.8	17.5	106.6	14.9	28.2
HCM Lane LOS	C	C	C	F	C	F	B	D
HCM 95th-tile Q	2.7	1.6	2.2	9.3	1.7	16.4	0.7	4.6

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	62	126	124
Future Vol, veh/h	0	62	126	124
Peak Hour Factor	0.92	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	68	138	136
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	25.6
HCM LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	259	235	56	239	12	224	561	79	26	282	100
Future Volume (veh/h)	53	259	235	56	239	12	224	561	79	26	282	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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	1863	1863	1863	1863	1863	1900	1863	1863	1900	1845	1845	1900
Adj Flow Rate, veh/h	56	276	250	60	254	13	238	597	84	28	300	106
Adj No. of Lanes	1	1	1	1	2	0	2	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	3	3	3
Cap, veh/h	72	512	432	75	949	48	228	1197	168	44	874	303
Arrive On Green	0.04	0.28	0.28	0.04	0.28	0.28	0.07	0.38	0.38	0.02	0.34	0.34
Sat Flow, veh/h	1774	1863	1571	1774	3425	174	3442	3117	438	1757	2552	883
Grp Volume(v), veh/h	56	276	250	60	131	136	238	338	343	28	204	202
Grp Sat Flow(s),veh/h/ln	1774	1863	1571	1774	1770	1830	1721	1770	1786	1757	1752	1683
Q Serve(g_s), s	1.9	7.6	8.3	2.0	3.5	3.5	4.0	8.8	8.8	1.0	5.2	5.4
Cycle Q Clear(g_c), s	1.9	7.6	8.3	2.0	3.5	3.5	4.0	8.8	8.8	1.0	5.2	5.4
Prop In Lane	1.00		1.00	1.00		0.10	1.00		0.25	1.00		0.52
Lane Grp Cap(c), veh/h	72	512	432	75	490	507	228	680	686	44	600	577
V/C Ratio(X)	0.78	0.54	0.58	0.80	0.27	0.27	1.04	0.50	0.50	0.64	0.34	0.35
Avail Cap(c_a), veh/h	118	773	652	147	763	789	228	719	726	117	712	684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	18.6	18.8	28.6	17.0	17.0	28.1	14.1	14.2	29.1	14.7	14.8
Incr Delay (d2), s/veh	16.6	1.3	1.7	17.2	0.4	0.4	71.0	2.6	2.6	14.6	1.5	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	1.2	4.1	3.8	1.3	1.7	1.8	4.1	4.7	4.8	0.6	2.7	2.7
LnGrp Delay(d),s/veh	45.3	19.9	20.6	45.8	17.4	17.4	99.1	16.7	16.7	43.8	16.3	16.5
LnGrp LOS	D	B	C	D	B	B	F	B	B	D	B	B
Approach Vol, veh/h		582			327			919			434	
Approach Delay, s/veh		22.6			22.6			38.1			18.1	
Approach LOS		C			C			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.5	27.6	6.6	20.6	8.0	25.1	6.4	20.7
Change Period (Y+Rc), s	4.0	4.5	4.0	4.0	4.0	4.5	4.0	4.0
Max Green Setting (Gmax), s	4.0	24.5	5.0	25.0	4.0	24.5	4.0	26.0
Max Q Clear Time (g_c+I1), s	3.0	10.8	4.0	10.3	6.0	7.4	3.9	5.5
Green Ext Time (p_c), s	0.0	10.9	0.0	5.1	0.0	13.2	0.0	5.9

Intersection Summary	
HCM 2010 Ctrl Delay	28.0
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	5.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	99	51	797	165	60	479
Future Vol, veh/h	99	51	797	165	60	479
Conflicting Peds, #/hr	5	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	4	4
Mvmt Flow	102	53	822	170	62	494

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1284	497	0	0	993	0
Stage 1	908	-	-	-	-	-
Stage 2	376	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.18	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.24	-
Pot Cap-1 Maneuver	157	519	-	-	680	-
Stage 1	354	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	142	519	-	-	680	-
Mov Cap-2 Maneuver	142	-	-	-	-	-
Stage 1	354	-	-	-	-	-
Stage 2	601	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	55.5	0	1.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	142	519	680	-
HCM Lane V/C Ratio	-	-	0.719	0.101	0.091	-
HCM Control Delay (s)	-	-	77.5	12.7	10.8	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	4.2	0.3	0.3	-

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBU	SBL	SBR
Lane Configurations									
Traffic Vol, veh/h	0	39	240	0	209	31	0	44	81
Future Vol, veh/h	0	39	240	0	209	31	0	44	81
Peak Hour Factor	0.92	0.96	0.96	0.92	0.96	0.96	0.92	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	41	250	0	218	32	0	46	84
Number of Lanes	0	1	1	0	1	0	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	10.2	9.8	9
HCM LOS	B	A	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	35%
Vol Thru, %	0%	100%	87%	0%
Vol Right, %	0%	0%	13%	65%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	39	240	240	125
LT Vol	39	0	0	44
Through Vol	0	240	209	0
RT Vol	0	0	31	81
Lane Flow Rate	41	250	250	130
Geometry Grp	7	7	5	2
Degree of Util (X)	0.063	0.351	0.321	0.176
Departure Headway (Hd)	5.559	5.056	4.618	4.863
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	644	710	778	736
Service Time	3.3	2.797	2.658	2.908
HCM Lane V/C Ratio	0.064	0.352	0.321	0.177
HCM Control Delay	8.7	10.5	9.8	9
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.2	1.6	1.4	0.6

Intersection	
Intersection Delay, s/veh	14.2
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	46	148	32	0	132	132	188	0	35	51	139
Future Vol, veh/h	0	46	148	32	0	132	132	188	0	35	51	139
Peak Hour Factor	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	6	6	6	2	3	3	3	2	5	5	5
Mvmt Flow	0	49	159	34	0	142	142	202	0	38	55	149
Number of Lanes	0	1	1	0	0	1	1	0	0	0	1	1

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	2	2
HCM Control Delay	13.4	16.6	12
HCM LOS	B	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	41%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	59%	0%	0%	82%	0%	41%	0%	41%
Vol Right, %	0%	100%	0%	18%	0%	59%	0%	59%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	86	139	46	180	132	320	128	111
LT Vol	35	0	46	0	132	0	128	0
Through Vol	51	0	0	148	0	132	0	45
RT Vol	0	139	0	32	0	188	0	66
Lane Flow Rate	92	149	49	194	142	344	138	119
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.194	0.275	0.105	0.376	0.285	0.602	0.296	0.226
Departure Headway (Hd)	7.55	6.624	7.635	6.996	7.228	6.3	7.741	6.803
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	475	543	469	515	500	578	464	528
Service Time	5.295	4.369	5.378	4.739	4.928	4	5.486	4.547
HCM Lane V/C Ratio	0.194	0.274	0.104	0.377	0.284	0.595	0.297	0.225
HCM Control Delay	12.1	11.9	11.3	13.9	12.8	18.1	13.7	11.5
HCM Lane LOS	B	B	B	B	B	C	B	B
HCM 95th-tile Q	0.7	1.1	0.3	1.7	1.2	4	1.2	0.9

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	128	45	66
Future Vol, veh/h	0	128	45	66
Peak Hour Factor	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	138	48	71
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	12.7
HCM LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	87	197	15	50	44	281	796	44	40	402	136
Future Volume (veh/h)	131	87	197	15	50	44	281	796	44	40	402	136
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	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	1863	1863	1900	1863	1863	1863	1863	1863	1900	1845	1845	1900
Adj Flow Rate, veh/h	138	92	207	16	53	46	296	838	46	42	423	143
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	3	3	3
Cap, veh/h	178	118	266	28	280	238	266	1416	78	61	772	258
Arrive On Green	0.10	0.23	0.23	0.02	0.15	0.15	0.15	0.42	0.42	0.03	0.30	0.30
Sat Flow, veh/h	1774	504	1134	1774	1863	1583	1774	3411	187	1757	2574	861
Grp Volume(v), veh/h	138	0	299	16	53	46	296	435	449	42	287	279
Grp Sat Flow(s),veh/h/ln	1774	0	1638	1774	1863	1583	1774	1770	1829	1757	1752	1682
Q Serve(g_s), s	4.1	0.0	9.1	0.5	1.3	1.4	8.0	10.2	10.2	1.3	7.3	7.4
Cycle Q Clear(g_c), s	4.1	0.0	9.1	0.5	1.3	1.4	8.0	10.2	10.2	1.3	7.3	7.4
Prop In Lane	1.00		0.69	1.00		1.00	1.00		0.10	1.00		0.51
Lane Grp Cap(c), veh/h	178	0	384	28	280	238	266	734	759	61	525	504
V/C Ratio(X)	0.78	0.00	0.78	0.57	0.19	0.19	1.11	0.59	0.59	0.69	0.55	0.55
Avail Cap(c_a), veh/h	299	0	491	133	384	326	266	734	759	165	525	504
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.4	0.0	19.1	26.1	19.8	19.8	22.7	12.1	12.1	25.5	15.6	15.7
Incr Delay (d2), s/veh	7.1	0.0	6.0	16.9	0.3	0.4	88.9	3.5	3.4	12.9	4.0	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	4.7	0.4	0.7	0.6	10.4	5.7	5.8	0.8	4.1	4.0
LnGrp Delay(d),s/veh	30.5	0.0	25.1	43.0	20.2	20.2	111.6	15.6	15.5	38.4	19.7	20.0
LnGrp LOS	C		C	D	C	C	F	B	B	D	B	C
Approach Vol, veh/h		437			115			1180			608	
Approach Delay, s/veh		26.8			23.4			39.6			21.1	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.9	26.1	4.8	16.5	12.0	20.0	9.3	12.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	19.0	4.0	16.0	8.0	16.0	9.0	11.0
Max Q Clear Time (g_c+I1), s	3.3	12.2	2.5	11.1	10.0	9.4	6.1	3.4
Green Ext Time (p_c), s	0.0	4.5	0.0	1.0	0.0	4.4	0.1	1.4

Intersection Summary	
HCM 2010 Ctrl Delay	31.6
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	0	105	1	0	22	80	0	0	0	0	44
Future Vol, veh/h	0	0	105	1	0	22	80	0	0	0	0	44
Peak Hour Factor	0.92	0.84	0.84	0.84	0.92	0.84	0.84	0.84	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	11	11	11	2	3	3	3
Mvmt Flow	0	0	125	1	0	26	95	0	0	0	0	52
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	7.9	8.1	7.1
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	22%	100%
Vol Thru, %	0%	99%	78%	0%
Vol Right, %	100%	1%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	44	106	102	1
LT Vol	0	0	22	1
Through Vol	0	105	80	0
RT Vol	44	1	0	0
Lane Flow Rate	52	126	121	1
Geometry Grp	1	1	1	1
Degree of Util (X)	0.057	0.144	0.146	0.002
Departure Headway (Hd)	3.904	4.115	4.32	4.743
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	923	866	826	759
Service Time	1.904	2.169	2.37	2.745
HCM Lane V/C Ratio	0.056	0.145	0.146	0.001
HCM Control Delay	7.1	7.9	8.1	7.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.5	0.5	0

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	1	0	0
Future Vol, veh/h	0	1	0	0
Peak Hour Factor	0.92	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	1	0	0
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	7.8
HCM LOS	A

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	69	2	0	16	87	0	6	18
Future Vol, veh/h	0	69	2	0	16	87	0	6	18
Peak Hour Factor	0.92	0.86	0.86	0.92	0.86	0.86	0.92	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	80	2	0	19	101	0	7	21
Number of Lanes	0	1	0	0	1	0	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.9	7.1	7.4
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	97%	25%
Vol Thru, %	16%	0%	75%
Vol Right, %	84%	3%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	103	71	24
LT Vol	0	69	6
Through Vol	16	0	18
RT Vol	87	2	0
Lane Flow Rate	120	83	28
Geometry Grp	1	1	1
Degree of Util (X)	0.12	0.1	0.033
Departure Headway (Hd)	3.592	4.366	4.22
Convergence, Y/N	Yes	Yes	Yes
Cap	988	818	840
Service Time	1.652	2.408	2.286
HCM Lane V/C Ratio	0.121	0.101	0.033
HCM Control Delay	7.1	7.9	7.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.4	0.3	0.1

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	33	11	9	0	43	13	2	0	9	87	32
Future Vol, veh/h	0	33	11	9	0	43	13	2	0	9	87	32
Peak Hour Factor	0.92	0.97	0.97	0.97	0.92	0.97	0.97	0.97	0.92	0.97	0.97	0.97
Heavy Vehicles, %	2	3	3	3	2	5	5	5	2	7	7	7
Mvmt Flow	0	34	11	9	0	44	13	2	0	9	90	33
Number of Lanes	0	0	1	1	0	0	1	1	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	2
HCM Control Delay	8.5	8.8	8.2
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	7%	75%	0%	77%	0%	2%
Vol Thru, %	68%	25%	0%	23%	0%	77%
Vol Right, %	25%	0%	100%	0%	100%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	128	44	9	56	2	133
LT Vol	9	33	0	43	0	2
Through Vol	87	11	0	13	0	102
RT Vol	32	0	9	0	2	29
Lane Flow Rate	132	45	9	58	2	137
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.159	0.07	0.012	0.09	0.003	0.162
Departure Headway (Hd)	4.345	5.595	4.513	5.629	4.538	4.265
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	827	641	794	637	789	843
Service Time	2.36	3.32	2.237	3.355	2.263	2.28
HCM Lane V/C Ratio	0.16	0.07	0.011	0.091	0.003	0.163
HCM Control Delay	8.2	8.7	7.3	8.9	7.3	8.1
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.6	0.2	0	0.3	0	0.6

Intersection	
Intersection Delay, s/veh	
Intersection LOS	

Movement	SBU	SBL	SBT	SBR
Lane Configurations			↕	
Traffic Vol, veh/h	0	2	102	29
Future Vol, veh/h	0	2	102	29
Peak Hour Factor	0.92	0.97	0.97	0.97
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	2	105	30
Number of Lanes	0	0	1	0

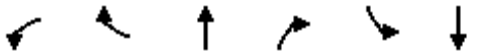
Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	8.1
HCM LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	0	249	1	0	1	145	1167	0	0	820	67
Future Volume (veh/h)	112	0	249	1	0	1	145	1167	0	0	820	67
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1267	1900	1863	1863	1900	0	1863	1900
Adj Flow Rate, veh/h	117	0	259	1	0	1	151	1216	0	0	854	70
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	0	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	50	50	50	2	2	2	0	2	2
Cap, veh/h	451	0	335	169	21	91	457	2280	0	0	1698	139
Arrive On Green	0.21	0.00	0.21	0.21	0.00	0.21	0.07	0.64	0.00	0.00	0.51	0.51
Sat Flow, veh/h	1487	0	1561	325	97	422	1774	3632	0	0	3401	271
Grp Volume(v), veh/h	117	0	259	2	0	0	151	1216	0	0	457	467
Grp Sat Flow(s),veh/h/ln	1487	0	1561	844	0	0	1774	1770	0	0	1770	1809
Q Serve(g_s), s	0.0	0.0	8.5	0.0	0.0	0.0	1.9	10.2	0.0	0.0	9.3	9.3
Cycle Q Clear(g_c), s	3.1	0.0	8.5	3.1	0.0	0.0	1.9	10.2	0.0	0.0	9.3	9.3
Prop In Lane	1.00		1.00	0.50		0.50	1.00		0.00	0.00		0.15
Lane Grp Cap(c), veh/h	451	0	335	280	0	0	457	2280	0	0	908	929
V/C Ratio(X)	0.26	0.00	0.77	0.01	0.00	0.00	0.33	0.53	0.00	0.00	0.50	0.50
Avail Cap(c_a), veh/h	588	0	489	367	0	0	582	2280	0	0	908	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	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	20.2	16.9	0.0	0.0	5.9	5.3	0.0	0.0	8.7	8.7
Incr Delay (d2), s/veh	0.4	0.0	6.0	0.0	0.0	0.0	0.4	0.9	0.0	0.0	2.0	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	1.5	0.0	4.2	0.0	0.0	0.0	0.9	5.2	0.0	0.0	4.9	5.0
LnGrp Delay(d),s/veh	18.5	0.0	26.2	16.9	0.0	0.0	6.4	6.2	0.0	0.0	10.7	10.7
LnGrp LOS	B		C	B			A	A			B	B
Approach Vol, veh/h		376			2			1367			924	
Approach Delay, s/veh		23.8			16.9			6.2			10.7	
Approach LOS		C			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		39.4		15.2	7.2	32.2		15.2
Change Period (Y+Rc), s		* 4.2		3.5	3.5	* 4.2		3.5
Max Green Setting (Gmax), s		* 35		17.1	7.5	* 24		17.1
Max Q Clear Time (g_c+I1), s		12.2		10.5	3.9	11.3		5.1
Green Ext Time (p_c), s		22.4		1.2	0.1	12.7		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	10.2
HCM 2010 LOS	B

Notes



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	509	93	1219	559	110	965
Future Volume (veh/h)	509	93	1219	559	110	965
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	519	95	1244	0	112	985
Adj No. of Lanes	2	1	2	1	1	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	779	358	1616	723	144	2133
Arrive On Green	0.23	0.23	0.46	0.00	0.08	0.60
Sat Flow, veh/h	3442	1583	3632	1583	1774	3632
Grp Volume(v), veh/h	519	95	1244	0	112	985
Grp Sat Flow(s),veh/h/ln	1721	1583	1770	1583	1774	1770
Q Serve(g_s), s	7.4	2.7	15.8	0.0	3.3	8.2
Cycle Q Clear(g_c), s	7.4	2.7	15.8	0.0	3.3	8.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	779	358	1616	723	144	2133
V/C Ratio(X)	0.67	0.27	0.77	0.00	0.78	0.46
Avail Cap(c_a), veh/h	1089	501	1616	723	215	2226
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	18.9	17.1	12.2	0.0	24.2	5.9
Incr Delay (d2), s/veh	2.1	0.8	3.6	0.0	10.1	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	3.7	1.2	8.4	0.0	2.0	4.2
LnGrp Delay(d),s/veh	21.1	18.0	15.8	0.0	34.3	6.6
LnGrp LOS	C	B	B		C	A
Approach Vol, veh/h	614		1244			1097
Approach Delay, s/veh	20.6		15.8			9.4
Approach LOS	C		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.8	28.7				36.6		17.2
Change Period (Y+Rc), s	3.5	* 4.2				* 4.2		5.0
Max Green Setting (Gmax), s	6.5	* 24				* 34		17.0
Max Q Clear Time (g_c+I1), s	5.3	17.8				10.2		9.4
Green Ext Time (p_c), s	0.0	5.9				22.1		2.8

Intersection Summary	
HCM 2010 Ctrl Delay	14.4
HCM 2010 LOS	B

Notes

Intersection	
Int Delay, s/veh	10.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	2	10	75	283	6	6	77	34	260	0	0	0
Future Vol, veh/h	2	10	75	283	6	6	77	34	260	0	0	0
Conflicting Peds, #/hr	25	0	0	0	0	25	25	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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	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	2	10	78	295	6	6	80	35	271	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	388	492	25	375	356	196	25	0	0
Stage 1	25	25	-	331	331	-	-	-	-
Stage 2	363	467	-	44	25	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1	-	-	-	6.12	5.52	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver	571	478	1051	582	570	845	1589	-	-
Stage 1	-	-	-	682	645	-	-	-	-
Stage 2	656	562	-	-	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	523	439	1029	503	523	845	1589	-	-
Mov Cap-2 Maneuver	523	439	-	503	523	-	-	-	-
Stage 1	-	-	-	639	604	-	-	-	-
Stage 2	604	527	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	9.6	22.3	1.5
HCM LOS	A	C	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	1589	-	-	874	508
HCM Lane V/C Ratio	0.05	-	-	0.104	0.605
HCM Control Delay (s)	7.4	0	-	9.6	22.3
HCM Lane LOS	A	A	-	A	C
HCM 95th %tile Q(veh)	0.2	-	-	0.3	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	402	3	21	493	350	0	0	111	290
Future Volume (veh/h)	0	0	0	402	3	21	493	350	0	0	111	290
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.95
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1900	1863	0	0	1863	1900
Adj Flow Rate, veh/h				414	3	22	508	361	0	0	114	299
Adj No. of Lanes				0	1	1	0	1	0	0	1	0
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				465	3	418	399	284	0	0	69	180
Arrive On Green				0.26	0.26	0.26	0.38	0.38	0.00	0.00	0.16	0.16
Sat Flow, veh/h				1762	13	1583	1058	752	0	0	439	1152
Grp Volume(v), veh/h				417	0	22	869	0	0	0	0	413
Grp Sat Flow(s),veh/h/ln				1775	0	1583	1810	0	0	0	0	1591
Q Serve(g_s), s				14.5	0.0	0.7	24.2	0.0	0.0	0.0	0.0	10.0
Cycle Q Clear(g_c), s				14.5	0.0	0.7	24.2	0.0	0.0	0.0	0.0	10.0
Prop In Lane				0.99		1.00	0.58		0.00	0.00		0.72
Lane Grp Cap(c), veh/h				468	0	418	683	0	0	0	0	248
V/C Ratio(X)				0.89	0.00	0.05	1.27	0.00	0.00	0.00	0.00	1.66
Avail Cap(c_a), veh/h				493	0	440	683	0	0	0	0	248
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				22.7	0.0	17.6	20.0	0.0	0.0	0.0	0.0	27.1
Incr Delay (d2), s/veh				17.8	0.0	0.1	133.6	0.0	0.0	0.0	0.0	316.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.4	0.0	0.3	37.3	0.0	0.0	0.0	0.0	26.1
LnGrp Delay(d),s/veh				40.5	0.0	17.7	153.6	0.0	0.0	0.0	0.0	343.1
LnGrp LOS				D		B	F					F
Approach Vol, veh/h					439			869			413	
Approach Delay, s/veh					39.4			153.6			343.1	
Approach LOS					D			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		28.8				14.2		21.1
Change Period (Y+Rc), s		4.6				4.2		4.2
Max Green Setting (Gmax), s		24.2				10.0		17.8
Max Q Clear Time (g_c+I1), s		26.2				12.0		16.5
Green Ext Time (p_c), s		0.0				0.0		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	169.9
HCM 2010 LOS	F

Intersection	
Int Delay, s/veh	22.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	193	16	434	0	0	0	0	650	720	23	490	0
Future Vol, veh/h	193	16	434	0	0	0	0	650	720	23	490	0
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	-	-	200	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	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	205	17	462	0	0	0	0	691	766	24	521	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1261	1261	521	-	0	0	691	0	0
Stage 1	570	570	-	-	-	-	-	-	-
Stage 2	691	691	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 188	170	555	0	-	-	904	-	0
Stage 1	566	505	-	0	-	-	-	-	0
Stage 2	497	446	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	~ 181	0	555	-	-	-	904	-	-
Mov Cap-2 Maneuver	~ 181	0	-	-	-	-	-	-	-
Stage 1	545	0	-	-	-	-	-	-	-
Stage 2	497	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	86.9	0	0.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	181	555	904	-
HCM Lane V/C Ratio	-	-	1.228	0.832	0.027	-
HCM Control Delay (s)	-	-	193.1	35.8	9.1	0
HCM Lane LOS	-	-	F	E	A	A
HCM 95th %tile Q(veh)	-	-	12.1	8.6	0.1	-

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	289	1162	444	306	597	470	289	576	307	309	422	83
Future Volume (veh/h)	289	1162	444	306	597	470	289	576	307	309	422	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	301	1210	462	319	622	490	301	600	320	322	440	86
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	313	1176	515	248	1046	458	311	1049	460	299	863	167
Arrive On Green	0.18	0.33	0.33	0.14	0.30	0.30	0.09	0.30	0.30	0.09	0.29	0.29
Sat Flow, veh/h	1774	3539	1552	1774	3539	1548	3442	3539	1553	3442	2944	571
Grp Volume(v), veh/h	301	1210	462	319	622	490	301	600	320	322	263	263
Grp Sat Flow(s),veh/h/ln	1774	1770	1552	1774	1770	1548	1721	1770	1553	1721	1770	1745
Q Serve(g_s), s	19.4	38.2	32.6	16.1	17.3	34.0	10.0	16.5	21.0	10.0	14.2	14.4
Cycle Q Clear(g_c), s	19.4	38.2	32.6	16.1	17.3	34.0	10.0	16.5	21.0	10.0	14.2	14.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	313	1176	515	248	1046	458	311	1049	460	299	519	511
V/C Ratio(X)	0.96	1.03	0.90	1.28	0.59	1.07	0.97	0.57	0.69	1.08	0.51	0.51
Avail Cap(c_a), veh/h	313	1176	515	248	1046	458	311	1049	460	299	519	511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	38.4	36.5	49.4	34.6	40.5	52.1	34.3	35.8	52.5	33.8	33.8
Incr Delay (d2), s/veh	40.4	34.0	18.5	155.0	1.1	62.2	42.0	2.3	8.4	73.7	3.5	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.0	24.2	16.6	18.6	8.6	22.4	6.6	8.4	10.0	7.8	7.4	7.5
LnGrp Delay(d),s/veh	87.3	72.4	55.0	204.5	35.7	102.7	94.1	36.5	44.2	126.2	37.3	37.5
LnGrp LOS	F	F	E	F	D	F	F	D	D	F	D	D
Approach Vol, veh/h		1973			1431			1221			848	
Approach Delay, s/veh		70.6			96.3			52.7			71.1	
Approach LOS		E			F			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	38.7	19.8	42.8	14.1	38.3	24.0	38.6
Change Period (Y+Rc), s	3.7	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Green Setting (Gmax), s	10.0	34.1	16.1	38.2	10.4	33.7	20.3	34.0
Max Q Clear Time (g_c+I1), s	12.0	23.0	18.1	40.2	12.0	16.4	21.4	36.0
Green Ext Time (p_c), s	0.0	7.6	0.0	0.0	0.0	10.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	73.4
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	203	81	46	180	56	23
Future Vol, veh/h	203	81	46	180	56	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	221	88	50	196	61	25

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	309	0	561	265
Stage 1	-	-	-	-	265	-
Stage 2	-	-	-	-	296	-
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	-	-	1252	-	489	774
Stage 1	-	-	-	-	779	-
Stage 2	-	-	-	-	755	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1252	-	467	774
Mov Cap-2 Maneuver	-	-	-	-	467	-
Stage 1	-	-	-	-	779	-
Stage 2	-	-	-	-	721	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	13.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	528	-	-	1252	-
HCM Lane V/C Ratio	0.163	-	-	0.04	-
HCM Control Delay (s)	13.1	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	72	17	25	153	117	92
Future Vol, veh/h	72	17	25	153	117	92
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	78	18	27	166	127	100

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	398	177	227	0	-	0
Stage 1	177	-	-	-	-	-
Stage 2	221	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	607	866	1341	-	-	-
Stage 1	854	-	-	-	-	-
Stage 2	816	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	594	866	1341	-	-	-
Mov Cap-2 Maneuver	594	-	-	-	-	-
Stage 1	854	-	-	-	-	-
Stage 2	798	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	1.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1341	-	632	-	-
HCM Lane V/C Ratio	0.02	-	0.153	-	-
HCM Control Delay (s)	7.7	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	125	132	243	0	298	0	69	200	17	26	0
Future Volume (veh/h)	29	125	132	243	0	298	0	69	200	17	26	0
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1845	1845	1845	0	1845	0	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	33	142	150	276	0	339	0	78	227	19	30	0
Adj No. of Lanes	0	2	1	1	0	1	0	1	1	0	1	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	0	3	0	6	6	2	2	2
Cap, veh/h	129	589	313	0	0	0	0	509	433	361	373	0
Arrive On Green	0.20	0.20	0.20	0.00	0.00	0.00	0.00	0.28	0.28	0.28	0.28	0.00
Sat Flow, veh/h	640	2925	1553		0		0	1792	1524	317	1312	0
Grp Volume(v), veh/h	93	82	150		0.0		0	78	227	49	0	0
Grp Sat Flow(s),veh/h/ln	1813	1752	1553				0	1792	1524	1628	0	0
Q Serve(g_s), s	0.8	0.7	1.6				0.0	0.6	2.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.7	1.6				0.0	0.6	2.3	0.4	0.0	0.0
Prop In Lane	0.35		1.00				0.00		1.00	0.39		0.00
Lane Grp Cap(c), veh/h	365	353	313				0	509	433	733	0	0
V/C Ratio(X)	0.26	0.23	0.48				0.00	0.15	0.52	0.07	0.00	0.00
Avail Cap(c_a), veh/h	2523	2439	2162				0	2796	2377	2579	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.2	6.2	6.5				0.0	4.9	5.6	4.9	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.4				0.0	0.1	0.4	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
%ile BackOfQ(50%),veh/ln	0.4	0.4	0.7				0.0	0.3	1.0	0.2	0.0	0.0
LnGrp Delay(d),s/veh	6.3	6.3	6.9				0.0	5.0	5.9	4.9	0.0	0.0
LnGrp LOS	A	A	A					A	A	A		
Approach Vol, veh/h		325						305			49	
Approach Delay, s/veh		6.6						5.7			4.9	
Approach LOS		A						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		9.4		9.0		9.4		
Change Period (Y+Rc), s		* 4.2		5.3		* 4.2		
Max Green Setting (Gmax), s		* 29		25.7		* 29		
Max Q Clear Time (g_c+I1), s		4.3		3.6		2.4		
Green Ext Time (p_c), s		0.9		0.8		0.9		

Intersection Summary	
HCM 2010 Ctrl Delay	6.1
HCM 2010 LOS	A

Notes

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	177	165	299	552	898	242
Future Volume (veh/h)	177	165	299	552	898	242
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	1845	1845	1827	1827
Adj Flow Rate, veh/h	195	181	329	607	987	266
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	3	3	4	4
Cap, veh/h	525	242	382	2507	1536	687
Arrive On Green	0.15	0.15	0.22	0.72	0.44	0.44
Sat Flow, veh/h	3442	1583	1757	3597	3563	1553
Grp Volume(v), veh/h	195	181	329	607	987	266
Grp Sat Flow(s),veh/h/ln	1721	1583	1757	1752	1736	1553
Q Serve(g_s), s	3.9	8.3	13.6	4.5	16.8	8.7
Cycle Q Clear(g_c), s	3.9	8.3	13.6	4.5	16.8	8.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	525	242	382	2507	1536	687
V/C Ratio(X)	0.37	0.75	0.86	0.24	0.64	0.39
Avail Cap(c_a), veh/h	1547	712	646	3354	1854	829
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	28.8	30.7	28.5	3.7	16.4	14.2
Incr Delay (d2), s/veh	0.4	4.6	6.2	0.1	0.6	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	7.3	7.2	2.1	8.1	3.8
LnGrp Delay(d),s/veh	29.2	35.3	34.7	3.8	17.1	14.6
LnGrp LOS	C	D	C	A	B	B
Approach Vol, veh/h	376			936	1253	
Approach Delay, s/veh	32.1			14.6	16.6	
Approach LOS	C			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		59.4		16.2	20.6	38.8		
Change Period (Y+Rc), s		5.3		* 4.7	* 4.2	5.3		
Max Green Setting (Gmax), s		72.4		* 34	* 28	40.4		
Max Q Clear Time (g_c+I1), s		6.5		10.3	15.6	18.8		
Green Ext Time (p_c), s		26.8		1.3	0.8	14.7		

Intersection Summary	
HCM 2010 Ctrl Delay	18.1
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	181	55	3	111	50	167	5	558	126	70	546	401
Future Volume (veh/h)	181	55	3	111	50	167	5	558	126	70	546	401
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1667	1667	1900	1863	1863	1863	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	193	59	0	118	53	178	5	594	134	74	581	0
Adj No. of Lanes	2	1	0	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	14	14	14	2	2	2	3	3	3	3	3	3
Cap, veh/h	298	297	0	151	310	263	9	937	211	94	1324	592
Arrive On Green	0.10	0.18	0.00	0.09	0.17	0.17	0.01	0.33	0.33	0.05	0.38	0.00
Sat Flow, veh/h	3079	1667	0	1774	1863	1583	1757	2842	640	1757	3505	1568
Grp Volume(v), veh/h	193	59	0	118	53	178	5	366	362	74	581	0
Grp Sat Flow(s),veh/h/ln	1540	1667	0	1774	1863	1583	1757	1752	1729	1757	1752	1568
Q Serve(g_s), s	2.7	1.4	0.0	3.0	1.1	4.8	0.1	8.0	8.0	1.9	5.6	0.0
Cycle Q Clear(g_c), s	2.7	1.4	0.0	3.0	1.1	4.8	0.1	8.0	8.0	1.9	5.6	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.37	1.00		1.00
Lane Grp Cap(c), veh/h	298	297	0	151	310	263	9	578	570	94	1324	592
V/C Ratio(X)	0.65	0.20	0.00	0.78	0.17	0.68	0.53	0.63	0.64	0.79	0.44	0.00
Avail Cap(c_a), veh/h	408	589	0	235	658	560	155	697	688	155	1394	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.7	15.8	0.0	20.3	16.2	17.7	22.5	12.9	12.9	21.2	10.5	0.0
Incr Delay (d2), s/veh	2.3	0.3	0.0	8.6	0.3	3.0	38.9	1.4	1.4	13.4	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	1.3	0.6	0.0	1.8	0.6	2.3	0.2	4.1	4.0	1.3	2.7	0.0
LnGrp Delay(d),s/veh	22.0	16.2	0.0	28.9	16.4	20.7	61.4	14.2	14.3	34.6	10.7	0.0
LnGrp LOS	C	B		C	B	C	E	B	B	C	B	
Approach Vol, veh/h		252			349			733			655	
Approach Delay, s/veh		20.7			22.9			14.6			13.4	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	18.9	7.8	12.1	4.2	21.1	8.4	11.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	18.0	6.0	16.0	4.0	18.0	6.0	16.0
Max Q Clear Time (g_c+I1), s	3.9	10.0	5.0	3.4	2.1	7.6	4.7	6.8
Green Ext Time (p_c), s	0.0	4.9	0.0	0.9	0.0	5.9	0.1	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	16.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	128	4	52	159	19	7	54	40	43	65	57
Future Volume (veh/h)	84	128	4	52	159	19	7	54	40	43	65	57
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.99	0.99		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	1624	1624	1900	1759	1759	1900	1900	1776	1776	1776	1776	1900
Adj Flow Rate, veh/h	98	149	5	60	185	22	8	63	47	50	76	66
Adj No. of Lanes	1	1	0	1	1	0	0	1	1	1	1	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	17	17	17	8	8	8	7	7	7	7	7	7
Cap, veh/h	120	438	15	90	396	47	168	358	323	491	189	165
Arrive On Green	0.08	0.28	0.28	0.05	0.26	0.26	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1547	1561	52	1675	1539	183	86	1646	1489	1205	872	757
Grp Volume(v), veh/h	98	0	154	60	0	207	71	0	47	50	0	142
Grp Sat Flow(s),veh/h/ln	1547	0	1613	1675	0	1722	1732	0	1489	1205	0	1630
Q Serve(g_s), s	1.7	0.0	2.0	0.9	0.0	2.7	0.0	0.0	0.7	0.9	0.0	2.0
Cycle Q Clear(g_c), s	1.7	0.0	2.0	0.9	0.0	2.7	0.9	0.0	0.7	1.8	0.0	2.0
Prop In Lane	1.00		0.03	1.00		0.11	0.11		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	120	0	453	90	0	443	526	0	323	491	0	354
V/C Ratio(X)	0.82	0.00	0.34	0.67	0.00	0.47	0.14	0.00	0.15	0.10	0.00	0.40
Avail Cap(c_a), veh/h	693	0	1386	375	0	1094	1352	0	1056	1085	0	1156
HCM Platoon Ratio	1.00	1.00	1.00	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	12.2	0.0	7.7	12.4	0.0	8.4	8.5	0.0	8.5	9.3	0.0	9.0
Incr Delay (d2), s/veh	12.8	0.0	0.4	8.2	0.0	0.8	0.1	0.0	0.2	0.1	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.0	0.6	0.0	1.4	0.4	0.0	0.3	0.3	0.0	0.9
LnGrp Delay(d),s/veh	24.9	0.0	8.1	20.6	0.0	9.2	8.7	0.0	8.7	9.4	0.0	9.7
LnGrp LOS	C		A	C		A	A		A	A		A
Approach Vol, veh/h		252			267			118			192	
Approach Delay, s/veh		14.6			11.7			8.7			9.6	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		9.8	5.4	11.5		9.8	6.1	10.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		19.0	6.0	23.0		19.0	12.0	17.0
Max Q Clear Time (g_c+I1), s		2.9	2.9	4.0		4.0	3.7	4.7
Green Ext Time (p_c), s		1.4	0.0	2.0		1.3	0.1	1.7

Intersection Summary	
HCM 2010 Ctrl Delay	11.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	3.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	143	24	322	60	57	584
Future Vol, veh/h	143	24	322	60	57	584
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	9	9	7	7
Mvmt Flow	163	27	366	68	65	664

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	863	219	0	0	436	0
Stage 1	402	-	-	-	-	-
Stage 2	461	-	-	-	-	-
Critical Hdwy	7.54	6.94	-	-	4.24	-
Critical Hdwy Stg 1	6.54	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.27	-
Pot Cap-1 Maneuver	248	785	-	-	1085	-
Stage 1	596	-	-	-	-	-
Stage 2	550	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	236	784	-	-	1085	-
Mov Cap-2 Maneuver	359	-	-	-	-	-
Stage 1	596	-	-	-	-	-
Stage 2	517	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.2	0	0.8
HCM LOS	C		

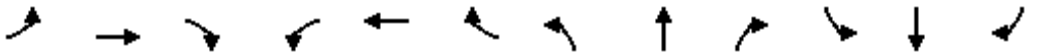
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	359	784	1085	-
HCM Lane V/C Ratio	-	-	0.453	0.035	0.06	-
HCM Control Delay (s)	-	-	23.1	9.8	8.5	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	2.3	0.1	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	421	1	36	494	231	0	0	85	215
Future Volume (veh/h)	0	0	0	421	1	36	494	231	0	0	85	215
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.95
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1792	1792	1845	1845	0	0	1827	1827
Adj Flow Rate, veh/h				495	1	42	426	488	0	0	100	253
Adj No. of Lanes				0	1	1	1	1	0	0	1	1
Peak Hour Factor				0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %				6	6	6	3	3	0	0	4	4
Cap, veh/h				566	1	506	547	574	0	0	283	229
Arrive On Green				0.33	0.33	0.33	0.31	0.31	0.00	0.00	0.16	0.16
Sat Flow, veh/h				1704	3	1524	1757	1845	0	0	1827	1478
Grp Volume(v), veh/h				496	0	42	426	488	0	0	100	253
Grp Sat Flow(s),veh/h/ln				1707	0	1524	1757	1845	0	0	1827	1478
Q Serve(g_s), s				17.6	0.0	1.2	14.2	16.0	0.0	0.0	3.2	10.0
Cycle Q Clear(g_c), s				17.6	0.0	1.2	14.2	16.0	0.0	0.0	3.2	10.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				567	0	506	547	574	0	0	283	229
V/C Ratio(X)				0.88	0.00	0.08	0.78	0.85	0.00	0.00	0.35	1.10
Avail Cap(c_a), veh/h				657	0	586	605	635	0	0	283	229
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				20.3	0.0	14.8	20.2	20.8	0.0	0.0	24.3	27.2
Incr Delay (d2), s/veh				11.8	0.0	0.1	6.1	10.1	0.0	0.0	0.9	90.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				10.1	0.0	0.5	7.8	9.8	0.0	0.0	1.7	9.7
LnGrp Delay(d),s/veh				32.0	0.0	14.9	26.3	30.9	0.0	0.0	25.2	117.2
LnGrp LOS				C		B	C	C			C	F
Approach Vol, veh/h					538			914			353	
Approach Delay, s/veh					30.7			28.8			91.1	
Approach LOS					C			C			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		24.7				14.2		25.6
Change Period (Y+Rc), s		4.6				4.2		4.2
Max Green Setting (Gmax), s		22.2				10.0		24.8
Max Q Clear Time (g_c+I1), s		18.0				12.0		19.6
Green Ext Time (p_c), s		2.1				0.0		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	41.6
HCM 2010 LOS	D

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	1	313	0	0	0	0	590	295	27	479	0
Future Volume (vph)	135	1	313	0	0	0	0	590	295	27	479	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00	1.00					1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1757	1568					1810	1506	1703	1792	
Flt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1757	1568					1810	1506	1703	1792	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	147	1	340	0	0	0	0	641	321	29	521	0
RTOR Reduction (vph)	0	0	262	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	148	78	0	0	0	0	641	321	29	521	0
Confl. Peds. (#/hr)									2	2		
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	5%	5%	5%	6%	6%	6%
Turn Type	Perm	NA	Perm					NA	Free	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						Free			
Actuated Green, G (s)		10.2	10.2					21.3	44.7	1.2	26.5	
Effective Green, g (s)		10.2	10.2					21.3	44.7	1.2	26.5	
Actuated g/C Ratio		0.23	0.23					0.48	1.00	0.03	0.59	
Clearance Time (s)		4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)		400	357					862	1506	45	1062	
v/s Ratio Prot								c0.35		0.02	c0.29	
v/s Ratio Perm		0.08	0.05						0.21			
v/c Ratio		0.37	0.22					0.74	0.21	0.64	0.49	
Uniform Delay, d1		14.5	14.0					9.5	0.0	21.5	5.2	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.6	0.3					3.5	0.3	27.5	0.4	
Delay (s)		15.1	14.3					13.0	0.3	49.0	5.6	
Level of Service		B	B					B	A	D	A	
Approach Delay (s)		14.6			0.0			8.8			7.9	
Approach LOS		B			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	44.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	89.3%	ICU Level of Service	E
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)	138	397	176	199	729	348	413	406	181	313	373	89
Future Volume (veh/h)	138	397	176	199	729	348	413	406	181	313	373	89
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1863	1863	1863	1810	1810	1900
Adj Flow Rate, veh/h	159	456	202	229	838	400	475	467	208	360	429	102
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	2	2	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	4	4	4	4	4	4	2	2	2	5	5	5
Cap, veh/h	187	976	648	230	1061	660	473	1103	694	421	827	195
Arrive On Green	0.11	0.28	0.28	0.13	0.31	0.31	0.14	0.31	0.31	0.13	0.30	0.30
Sat Flow, veh/h	1740	3471	1546	1740	3471	1521	3442	3539	1557	3343	2755	649
Grp Volume(v), veh/h	159	456	202	229	838	400	475	467	208	360	266	265
Grp Sat Flow(s),veh/h/ln	1740	1736	1546	1740	1736	1521	1721	1770	1557	1672	1719	1686
Q Serve(g_s), s	10.0	12.1	9.7	14.6	24.6	22.6	15.3	11.6	9.5	11.7	14.3	14.5
Cycle Q Clear(g_c), s	10.0	12.1	9.7	14.6	24.6	22.6	15.3	11.6	9.5	11.7	14.3	14.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	187	976	648	230	1061	660	473	1103	694	421	516	506
V/C Ratio(X)	0.85	0.47	0.31	1.00	0.79	0.61	1.00	0.42	0.30	0.85	0.52	0.52
Avail Cap(c_a), veh/h	222	1092	700	230	1107	681	473	1103	694	472	516	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.8	33.1	21.6	48.3	35.4	24.4	48.0	30.4	19.9	47.6	32.3	32.3
Incr Delay (d2), s/veh	22.5	0.5	0.4	58.3	4.1	1.8	42.4	1.2	1.1	13.2	3.7	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	5.8	4.2	10.7	12.4	9.8	10.0	5.9	4.3	6.2	7.3	7.3
LnGrp Delay(d),s/veh	71.3	33.6	22.0	106.6	39.4	26.2	90.4	31.6	21.0	60.8	35.9	36.2
LnGrp LOS	E	C	C	F	D	C	F	C	C	E	D	D
Approach Vol, veh/h		817			1467			1150			891	
Approach Delay, s/veh		38.1			46.3			54.0			46.1	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.7	39.3	18.4	35.9	19.0	38.0	15.7	38.6
Change Period (Y+Rc), s	3.7	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Green Setting (Gmax), s	15.7	33.0	14.7	35.0	15.3	33.4	14.2	35.5
Max Q Clear Time (g_c+I1), s	13.7	13.6	16.6	14.1	17.3	16.5	12.0	26.6
Green Ext Time (p_c), s	0.3	9.7	0.0	15.1	0.0	9.0	0.1	7.4

Intersection Summary	
HCM 2010 Ctrl Delay	46.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	284	229	340	0	271	0	123	465	0	0	0
Future Volume (veh/h)	38	284	229	340	0	271	0	123	465	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	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		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	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	1863	0	1863	0	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	43	319	257	382	0	304	0	138	522	0	0	0
Adj No. of Lanes	0	2	1	1	0	1	0	1	1	0	1	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	0	2	0	2	2	2	2	2
Cap, veh/h	112	876	428	0	0	0	0	761	647	0	761	0
Arrive On Green	0.27	0.27	0.27	0.00	0.00	0.00	0.00	0.41	0.41	0.00	0.00	0.00
Sat Flow, veh/h	410	3202	1563		0		0	1863	1583	0	1863	0
Grp Volume(v), veh/h	193	169	257		0.0		0	138	522	0	0	0
Grp Sat Flow(s),veh/h/ln	1842	1770	1563				0	1863	1583	0	1863	0
Q Serve(g_s), s	2.5	2.3	4.3				0.0	1.4	8.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.5	2.3	4.3				0.0	1.4	8.7	0.0	0.0	0.0
Prop In Lane	0.22		1.00				0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	504	484	428				0	761	647	0	761	0
V/C Ratio(X)	0.38	0.35	0.60				0.00	0.18	0.81	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1460	1402	1239				0	2852	2425	0	2852	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	8.8	8.7	9.4				0.0	5.6	7.8	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.2	0.5				0.0	0.0	0.9	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
%ile BackOfQ(50%),veh/ln	1.3	1.1	1.8				0.0	0.7	3.8	0.0	0.0	0.0
LnGrp Delay(d),s/veh	9.0	8.9	10.0				0.0	5.7	8.7	0.0	0.0	0.0
LnGrp LOS	A	A	A					A	A			
Approach Vol, veh/h		619						660			0	
Approach Delay, s/veh		9.4						8.1			0.0	
Approach LOS		A						A				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		16.4		13.5		16.4		
Change Period (Y+Rc), s		* 4.2		5.3		* 4.2		
Max Green Setting (Gmax), s		* 46		23.7		* 46		
Max Q Clear Time (g_c+I1), s		10.7		6.3		0.0		
Green Ext Time (p_c), s		1.5		1.7		0.0		

Intersection Summary	
HCM 2010 Ctrl Delay	8.7
HCM 2010 LOS	A

Notes

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	449	320	334	1058	814	337
Future Volume (veh/h)	449	320	334	1058	814	337
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	473	337	352	1114	857	355
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	860	396	396	2288	1344	600
Arrive On Green	0.25	0.25	0.22	0.65	0.38	0.38
Sat Flow, veh/h	3442	1583	1774	3632	3632	1579
Grp Volume(v), veh/h	473	337	352	1114	857	355
Grp Sat Flow(s),veh/h/ln	1721	1583	1774	1770	1770	1579
Q Serve(g_s), s	11.5	19.6	18.6	15.7	19.1	17.4
Cycle Q Clear(g_c), s	11.5	19.6	18.6	15.7	19.1	17.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	860	396	396	2288	1344	600
V/C Ratio(X)	0.55	0.85	0.89	0.49	0.64	0.59
Avail Cap(c_a), veh/h	1212	558	676	2970	1466	654
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	31.5	34.5	36.3	8.8	24.5	23.9
Incr Delay (d2), s/veh	0.6	8.8	7.8	0.2	0.9	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	5.5	16.7	10.0	7.6	9.5	7.7
LnGrp Delay(d),s/veh	32.0	43.3	44.2	9.0	25.4	25.3
LnGrp LOS	C	D	D	A	C	C
Approach Vol, veh/h	810			1466	1212	
Approach Delay, s/veh	36.7			17.4	25.4	
Approach LOS	D			B	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		67.7		28.8	25.7	42.0		
Change Period (Y+Rc), s		5.3		* 4.7	* 4.2	5.3		
Max Green Setting (Gmax), s		81.0		* 34	* 37	40.0		
Max Q Clear Time (g_c+I1), s		17.7		21.6	20.6	21.1		
Green Ext Time (p_c), s		37.4		2.5	1.0	15.5		

Intersection Summary	
HCM 2010 Ctrl Delay	24.7
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	350	130	6	184	90	200	3	1042	13	155	868	370
Future Volume (veh/h)	350	130	6	184	90	200	3	1042	13	155	868	370
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	372	138	0	196	96	213	3	1109	14	165	923	0
Adj No. of Lanes	2	1	0	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	491	274	0	241	261	222	6	1356	17	203	1735	776
Arrive On Green	0.14	0.15	0.00	0.14	0.14	0.14	0.00	0.38	0.38	0.11	0.49	0.00
Sat Flow, veh/h	3442	1863	0	1774	1863	1583	1774	3579	45	1774	3539	1583
Grp Volume(v), veh/h	372	138	0	196	96	213	3	548	575	165	923	0
Grp Sat Flow(s),veh/h/ln	1721	1863	0	1774	1863	1583	1774	1770	1855	1774	1770	1583
Q Serve(g_s), s	7.4	4.9	0.0	7.7	3.3	9.5	0.1	19.9	19.9	6.5	12.8	0.0
Cycle Q Clear(g_c), s	7.4	4.9	0.0	7.7	3.3	9.5	0.1	19.9	19.9	6.5	12.8	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	491	274	0	241	261	222	6	670	702	203	1735	776
V/C Ratio(X)	0.76	0.50	0.00	0.81	0.37	0.96	0.52	0.82	0.82	0.81	0.53	0.00
Avail Cap(c_a), veh/h	771	417	0	248	261	222	99	719	753	224	1735	776
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.4	28.1	0.0	30.0	27.8	30.5	35.5	20.0	20.0	30.9	12.6	0.0
Incr Delay (d2), s/veh	2.4	1.4	0.0	18.1	0.9	49.2	58.3	7.0	6.7	18.5	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	2.6	0.0	5.0	1.8	7.2	0.2	10.9	11.4	4.2	6.4	0.0
LnGrp Delay(d),s/veh	31.9	29.5	0.0	48.1	28.7	79.7	93.8	27.0	26.7	49.3	12.9	0.0
LnGrp LOS	C	C		D	C	E	F	C	C	D	B	
Approach Vol, veh/h		510			505			1126			1088	
Approach Delay, s/veh		31.2			57.7			27.0			18.4	
Approach LOS		C			E			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	31.0	13.7	14.5	4.2	39.0	14.2	14.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	29.0	10.0	16.0	4.0	34.0	16.0	10.0
Max Q Clear Time (g_c+I1), s	8.5	21.9	9.7	6.9	2.1	14.8	9.4	11.5
Green Ext Time (p_c), s	0.0	5.1	0.0	1.4	0.0	13.5	0.8	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	29.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	330	11	135	376	46	29	150	139	62	126	124
Future Volume (veh/h)	159	330	11	135	376	46	29	150	139	62	126	124
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.99	0.99		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	1827	1827	1900	1845	1845	1900	1900	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	175	363	12	148	413	51	32	165	153	68	138	136
Adj No. of Lanes	1	1	0	1	1	0	0	1	1	1	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	4	4	4	3	3	3	2	2	2	2	2	2
Cap, veh/h	221	619	20	189	534	66	128	465	453	301	248	245
Arrive On Green	0.13	0.35	0.35	0.11	0.33	0.33	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1740	1757	58	1757	1604	198	139	1605	1561	1050	856	844
Grp Volume(v), veh/h	175	0	375	148	0	464	197	0	153	68	0	274
Grp Sat Flow(s),veh/h/ln	1740	0	1815	1757	0	1802	1744	0	1561	1050	0	1700
Q Serve(g_s), s	4.7	0.0	8.1	3.9	0.0	11.1	0.0	0.0	3.7	2.8	0.0	6.5
Cycle Q Clear(g_c), s	4.7	0.0	8.1	3.9	0.0	11.1	6.8	0.0	3.7	9.9	0.0	6.5
Prop In Lane	1.00		0.03	1.00		0.11	0.16		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	221	0	639	189	0	600	593	0	453	301	0	493
V/C Ratio(X)	0.79	0.00	0.59	0.78	0.00	0.77	0.33	0.00	0.34	0.23	0.00	0.56
Avail Cap(c_a), veh/h	363	0	758	367	0	753	737	0	587	391	0	639
HCM Platoon Ratio	1.00	1.00	1.00	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	20.3	0.0	12.7	20.8	0.0	14.4	13.5	0.0	13.4	18.8	0.0	14.4
Incr Delay (d2), s/veh	6.3	0.0	0.9	7.0	0.0	3.9	0.3	0.0	0.4	0.4	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	4.1	2.3	0.0	6.1	2.1	0.0	1.6	0.8	0.0	3.2
LnGrp Delay(d),s/veh	26.6	0.0	13.5	27.8	0.0	18.3	13.8	0.0	13.8	19.2	0.0	15.4
LnGrp LOS	C		B	C		B	B		B	B		B
Approach Vol, veh/h		550			612			350			342	
Approach Delay, s/veh		17.7			20.6			13.8			16.1	
Approach LOS		B			C			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		18.0	9.2	20.9		18.0	10.1	20.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		18.0	10.0	20.0		18.0	10.0	20.0
Max Q Clear Time (g_c+I1), s		8.8	5.9	10.1		11.9	6.7	13.1
Green Ext Time (p_c), s		2.6	0.1	3.8		2.0	0.1	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.6
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	99	51	797	165	60	479
Future Vol, veh/h	99	51	797	165	60	479
Conflicting Peds, #/hr	5	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	4	4
Mvmt Flow	102	53	822	170	62	494

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1284	497	0	0	993	0
Stage 1	908	-	-	-	-	-
Stage 2	376	-	-	-	-	-
Critical Hdwy	7.54	6.94	-	-	4.18	-
Critical Hdwy Stg 1	6.54	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.24	-
Pot Cap-1 Maneuver	122	519	-	-	680	-
Stage 1	296	-	-	-	-	-
Stage 2	617	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	113	519	-	-	680	-
Mov Cap-2 Maneuver	222	-	-	-	-	-
Stage 1	296	-	-	-	-	-
Stage 2	558	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27	0	1.2
HCM LOS	D		

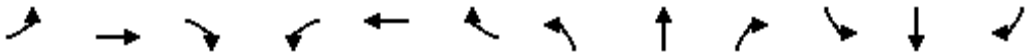
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	222	519	680	-
HCM Lane V/C Ratio	-	-	0.46	0.101	0.091	-
HCM Control Delay (s)	-	-	34.3	12.7	10.8	-
HCM Lane LOS	-	-	D	B	B	-
HCM 95th %tile Q(veh)	-	-	2.2	0.3	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	402	3	21	493	350	0	0	111	290
Future Volume (veh/h)	0	0	0	402	3	21	493	350	0	0	111	290
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.96
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				414	3	22	434	464	0	0	114	299
Adj No. of Lanes				0	1	1	1	1	0	0	1	1
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				488	4	438	542	569	0	0	338	275
Arrive On Green				0.28	0.28	0.28	0.31	0.31	0.00	0.00	0.18	0.18
Sat Flow, veh/h				1762	13	1583	1774	1863	0	0	1863	1518
Grp Volume(v), veh/h				417	0	22	434	464	0	0	114	299
Grp Sat Flow(s),veh/h/ln				1775	0	1583	1774	1863	0	0	1863	1518
Q Serve(g_s), s				12.2	0.0	0.6	12.4	12.7	0.0	0.0	2.9	10.0
Cycle Q Clear(g_c), s				12.2	0.0	0.6	12.4	12.7	0.0	0.0	2.9	10.0
Prop In Lane				0.99		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				491	0	438	542	569	0	0	338	275
V/C Ratio(X)				0.85	0.00	0.05	0.80	0.81	0.00	0.00	0.34	1.09
Avail Cap(c_a), veh/h				573	0	512	618	649	0	0	338	275
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				18.8	0.0	14.6	17.6	17.7	0.0	0.0	19.7	22.5
Incr Delay (d2), s/veh				10.6	0.0	0.1	6.9	7.4	0.0	0.0	0.7	78.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.4	0.0	0.3	7.1	7.6	0.0	0.0	1.6	10.2
LnGrp Delay(d),s/veh				29.4	0.0	14.7	24.5	25.1	0.0	0.0	20.4	101.4
LnGrp LOS				C		B	C	C			C	F
Approach Vol, veh/h					439			898			413	
Approach Delay, s/veh					28.7			24.8			79.0	
Approach LOS					C			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		21.4				14.2		19.5
Change Period (Y+Rc), s		4.6				4.2		4.2
Max Green Setting (Gmax), s		19.2				10.0		17.8
Max Q Clear Time (g_c+I1), s		14.7				12.0		14.2
Green Ext Time (p_c), s		2.2				0.0		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	38.6
HCM 2010 LOS	D

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	193	16	434	0	0	0	0	650	720	23	490	0
Future Volume (vph)	193	16	434	0	0	0	0	650	720	23	490	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1781	1583					1863	1583	1770	1863	
Flt Permitted		0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1781	1583					1863	1583	1770	1863	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	205	17	462	0	0	0	0	691	766	24	521	0
RTOR Reduction (vph)	0	0	262	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	222	200	0	0	0	0	691	766	24	521	0
Turn Type	Perm	NA	Perm					NA	Free	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						Free			
Actuated Green, G (s)		12.2	12.2					21.6	47.0	1.2	26.8	
Effective Green, g (s)		12.2	12.2					21.6	47.0	1.2	26.8	
Actuated g/C Ratio		0.26	0.26					0.46	1.00	0.03	0.57	
Clearance Time (s)		4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)		462	410					856	1583	45	1062	
v/s Ratio Prot								c0.37		0.01	0.28	
v/s Ratio Perm		0.12	0.13						c0.48			
v/c Ratio		0.48	0.49					0.81	0.48	0.53	0.49	
Uniform Delay, d1		14.7	14.8					10.9	0.0	22.6	6.0	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.8	0.9					5.6	1.1	11.6	0.4	
Delay (s)		15.5	15.7					16.5	1.1	34.2	6.4	
Level of Service		B	B					B	A	C	A	
Approach Delay (s)		15.6			0.0			8.4			7.6	
Approach LOS		B			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	47.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	103.6%	ICU Level of Service	G
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)	289	1162	444	306	597	470	289	576	307	309	422	83
Future Volume (veh/h)	289	1162	444	306	597	470	289	576	307	309	422	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	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	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	301	1210	462	319	622	490	301	600	320	322	440	86
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	328	1169	661	314	1141	665	322	906	676	358	784	152
Arrive On Green	0.18	0.33	0.33	0.18	0.32	0.32	0.09	0.26	0.26	0.10	0.27	0.27
Sat Flow, veh/h	1774	3539	1552	1774	3539	1551	3442	3539	1548	3442	2943	570
Grp Volume(v), veh/h	301	1210	462	319	622	490	301	600	320	322	263	263
Grp Sat Flow(s),veh/h/ln	1774	1770	1552	1774	1770	1551	1721	1770	1548	1721	1770	1743
Q Serve(g_s), s	20.8	41.3	30.5	22.1	18.1	33.1	10.9	19.0	18.5	11.6	16.0	16.3
Cycle Q Clear(g_c), s	20.8	41.3	30.5	22.1	18.1	33.1	10.9	19.0	18.5	11.6	16.0	16.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	328	1169	661	314	1141	665	322	906	676	358	471	464
V/C Ratio(X)	0.92	1.03	0.70	1.02	0.55	0.74	0.93	0.66	0.47	0.90	0.56	0.57
Avail Cap(c_a), veh/h	368	1169	661	314	1141	665	322	906	676	358	471	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	41.9	29.5	51.5	34.8	30.1	56.3	41.7	25.3	55.4	39.5	39.6
Incr Delay (d2), s/veh	25.8	35.7	3.6	55.2	0.7	4.7	33.5	3.8	2.4	24.6	4.7	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.6	25.9	13.8	15.6	8.9	15.0	6.7	9.7	8.3	6.7	8.4	8.4
LnGrp Delay(d),s/veh	75.9	77.6	33.1	106.8	35.5	34.7	89.7	45.5	27.7	79.9	44.2	44.5
LnGrp LOS	E	F	C	F	D	C	F	D	C	E	D	D
Approach Vol, veh/h		1973			1431			1221			848	
Approach Delay, s/veh		66.9			51.1			51.7			57.9	
Approach LOS		E			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.7	36.6	25.8	45.9	15.4	37.9	26.8	44.9
Change Period (Y+Rc), s	3.7	4.6	3.7	4.6	3.7	4.6	3.7	4.6
Max Green Setting (Gmax), s	13.0	32.0	22.1	41.3	11.7	33.3	25.9	37.5
Max Q Clear Time (g_c+I1), s	13.6	21.0	24.1	43.3	12.9	18.3	22.8	35.1
Green Ext Time (p_c), s	0.0	7.6	0.0	0.0	0.0	9.6	0.3	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	58.0
HCM 2010 LOS	E

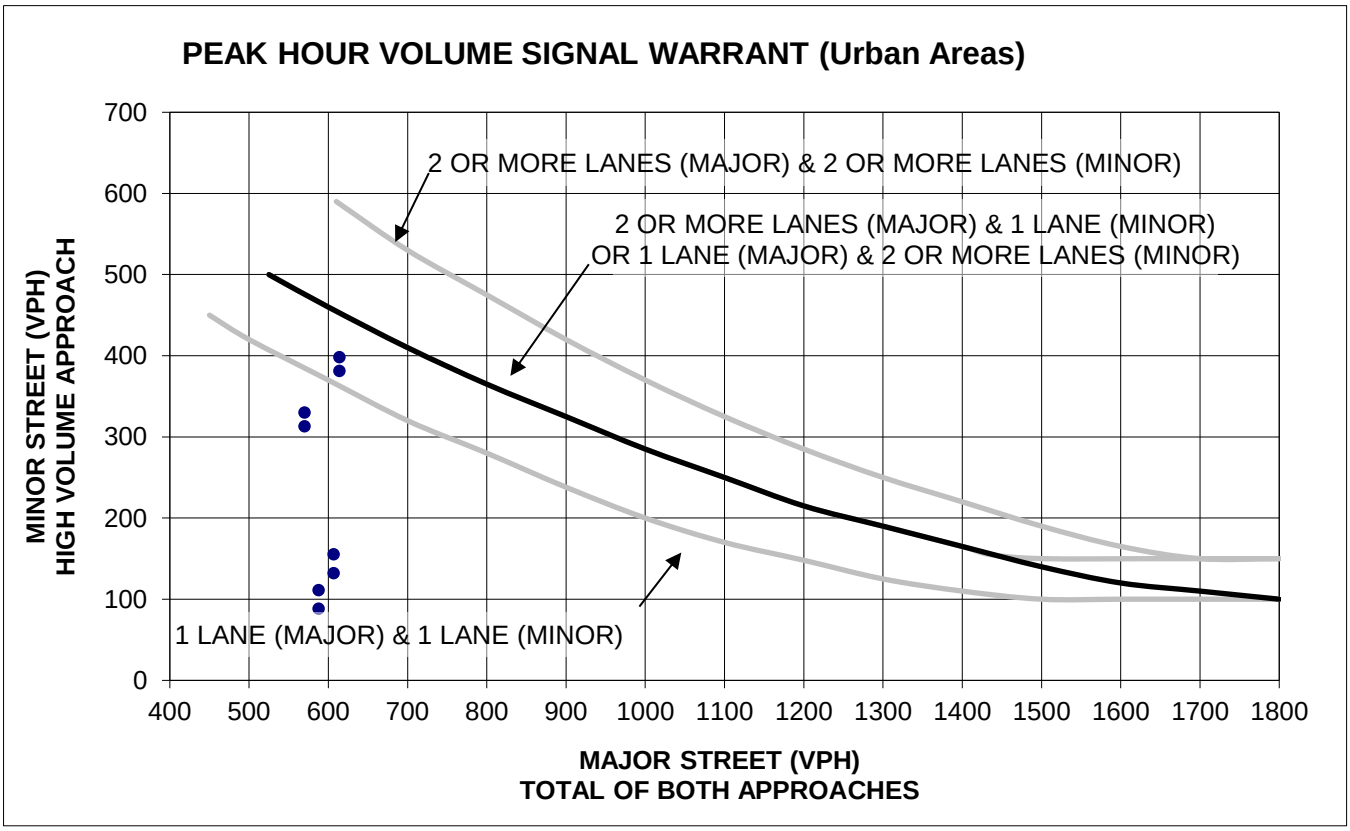
Appendix I

Warrant
Worksheets

Warrant 3A - Peak Hour Warrant

Intersection #3 -

Fremont Boulevard /Del Monte Boulevard - Military Avenue



Scenario	Fremont North/South	Del Monte East/West	Warrant Met?
A. Exisitng AM	588	88	No
B. Existing PM	570	313	No
C. Ex+Pro AM	588	111	No
D. Ex+Pro PM	570	330	No
E. Bkgnd AM	607	132	No
F. Bkgnd PM	614	381	No
G. Bk+Pro AM	607	155	No
H. Bk+Pro PM	614	398	No
I. Cumult AM	657	239	No
J. Cumult PM	868	486	No

Notes:

1. 150 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 100 VPH applies as the lower threshold volume for a minor street approaching with one lane.
2. Bold line applies to intersection geometry.
3. As recommeded improvement is a half-signal, controlling only the southbound and eastbound approaches, only those approaches are incorporated into this warrant analysis.

Warrant 3 (Part B) - Peak Hour Delay
#7 - Fremont Boulevard / Del Monte Boulevard - Military Avenue

Number of Approaches to Intersection: 3 approaches **Minimum Entering Vehicles: 650 vehicles**

Total Entering Volumes:

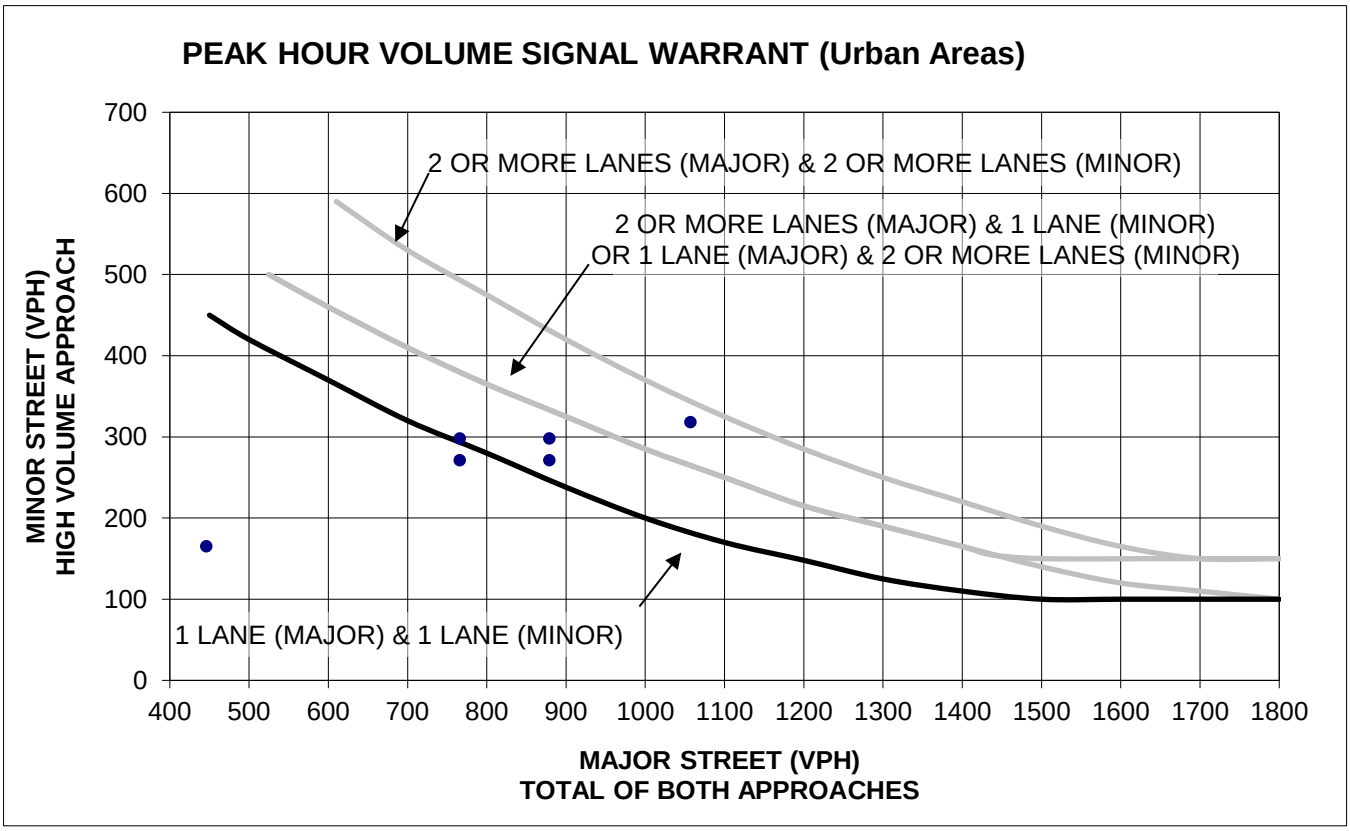
Existing AM:	676 vehicles	Bk+Pro AM:	762 vehicles
Existing PM:	883 vehicles	Bk+Pro PM:	1012 vehicles
Ex+Pro AM:	699 vehicles	Cumult AM:	896 vehicles
Ex+Pro PM:	900 vehicles	Cumult PM:	1354 vehicles
Bkgnd AM:	739 vehicles		
Bkgnd PM:	995 vehicles		

Street	Direction	Scenario	Peak Hour	No. of Stopped Vehicles	Average Vehicle Delay (sec)	Total Vehicle Delay (sec)	Total Delay (hours)	Min. 4 Veh-Hrs of Delay? (Approach)	At least 100 Veh? (Approach)	At least 650 Veh? (Intersection)	Warrant Met?
Del Monte	EB	Existing	AM	88	20.9	1,839.2	0.51	NO	NO	Yes	**NO**
Del Monte	EB	Existing	PM	313	141.4	44,258.2	12.29	Yes	Yes	Yes	**Yes**
Del Monte	EB	Ex+Pro	AM	111	22.9	2,541.9	0.71	NO	Yes	Yes	**NO**
Del Monte	EB	Ex+Pro	PM	330	164.2	54,186.0	15.05	Yes	Yes	Yes	**Yes**
Del Monte	EB	Bkgnd	AM	132	26.2	3,458.4	0.96	NO	Yes	Yes	**NO**
Del Monte	EB	Bkgnd	PM	381	284.4	108,356.4	30.10	Yes	Yes	Yes	**Yes**
Del Monte	EB	Bk+Pro	AM	155	29.6	4,588.0	1.27	NO	Yes	Yes	**NO**
Del Monte	EB	Bk+Pro	PM	398	313.3	124,693.4	34.64	Yes	Yes	Yes	**Yes**
Del Monte	EB	Cumult	AM	239	92.6	22,131.4	6.15	Yes	Yes	Yes	**Yes**
Del Monte	EB	Cumult	PM	486	856.4	416,210.4	115.61	Yes	Yes	Yes	**Yes**

Notes:
1. Warrant based on level of service calculations.
2. NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound.
3. Ex+Pro, Bkgnd, Bk+Pro, Cumult = Existing Plus Project, Background, Background Plus Project, Cumulative.
4. As recommeded improvement is a half-signal, controlling only the southbound and eastbound approaches, only those approaches are incorporated into this warrant analysis.

Warrant 3A - Peak Hour Warrant

Intersection #5 -
California Avenue / Playa Avenue



Scenario	Playa East/West	California North/South	Warrant Met?
A. Existing AM	271	105	No
B. Existing PM	766	271	No
C. Ex+Pro AM	271	125	No
D. Ex+Pro PM	766	298	Yes
E. Bkgnd AM	347	130	No
F. Bkgnd PM	879	271	Yes
G. Bk+Pro AM	347	150	No
H. Bk+Pro PM	879	298	Yes
I. Cumult AM	446	165	No
J. Cumult PM	1057	318	Yes

Notes:

1. 150 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 100 VPH applies as the lower threshold volume for a minor street approaching with one lane.

2. Bold line applies to intersection geometry.

Warrant 3 (Part B) - Peak Hour Delay
#5 - California Avenue / Playa Avenue

Number of Approaches to Intersection: 4 approaches **Minimum Entering Vehicles: 800 vehicles**

Total Entering Volumes:

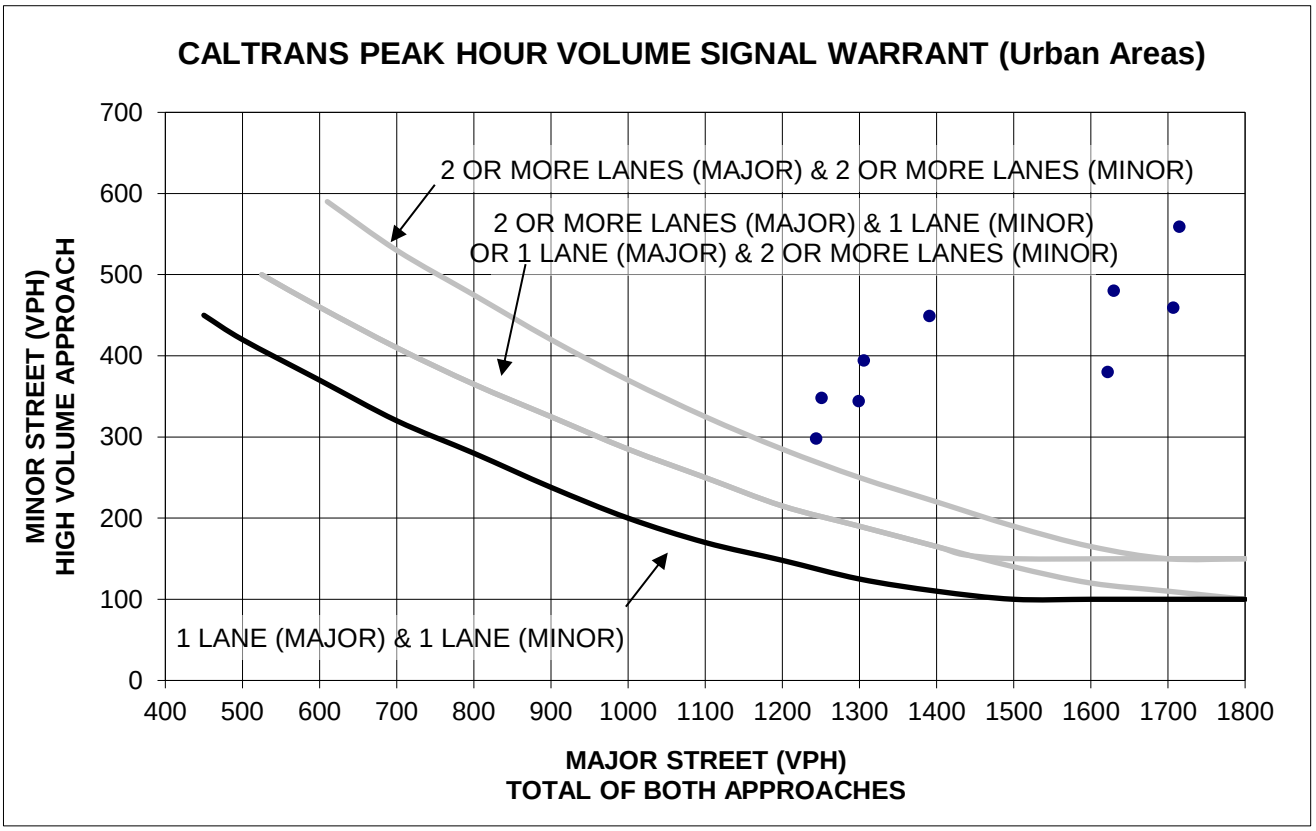
Existing AM:	433 vehicles	Bk+Pro AM:	591 vehicles
Existing PM:	1,222 vehicles	Bk+Pro PM:	1,434 vehicles
Ex+Pro AM:	490 vehicles	Cumult AM:	712 vehicles
Ex+Pro PM:	1,288 vehicles	Cumult PM:	1,687 vehicles
Bkgnd AM:	534 vehicles		
Bkgnd PM:	1,368 vehicles		

Street	Direction	Scenario	Peak Hour	No. of Stopped Vehicles	Average Vehicle Delay (sec)	Total Vehicle Delay (sec)	Total Delay (hours)	Min. 4 Veh-Hrs of Delay? (Approach)	At least 100 Veh? (Approach)	At least 800 Veh? (Intersection)	Warrant Met?
California	NB	Existing	AM	57	9.1	518.7	0.14	NO	NO	NO	**NO**
California	SB	Existing	AM	105	9.1	955.5	0.27	NO	Yes	NO	**NO**
California	NB	Existing	PM	271	13.5	3,658.5	1.02	NO	Yes	Yes	**NO**
California	SB	Existing	PM	185	13.2	2,442.0	0.68	NO	Yes	Yes	**NO**
California	NB	Ex+Pro	AM	94	8.7	817.8	0.23	NO	NO	NO	**NO**
California	SB	Ex+Pro	AM	125	9.2	1,150.0	0.32	NO	Yes	NO	**NO**
California	NB	Ex+Pro	PM	298	14.9	4,440.2	1.23	NO	Yes	Yes	**NO**
California	SB	Ex+Pro	PM	224	15.0	3,360.0	0.93	NO	Yes	Yes	**NO**
California	NB	Bkgnd	AM	57	8.6	490.2	0.14	NO	NO	NO	**NO**
California	SB	Bkgnd	AM	130	9.3	1,209.0	0.34	NO	Yes	NO	**NO**
California	NB	Bkgnd	PM	271	14.7	3,983.7	1.11	NO	Yes	Yes	**NO**
California	SB	Bkgnd	PM	218	15.1	3,291.8	0.91	NO	Yes	Yes	**NO**
California	NB	Bk+Pro	AM	94	9.1	855.4	0.24	NO	NO	NO	**NO**
California	SB	Bk+Pro	AM	150	9.7	1,455.0	0.40	NO	Yes	NO	**NO**
California	NB	Bk+Pro	PM	298	16.6	4,946.8	1.37	NO	Yes	Yes	**NO**
California	SB	Bk+Pro	PM	257	18.0	4,626.0	1.29	NO	Yes	NO	**NO**
California	NB	Cumult	AM	101	9.7	979.7	0.27	NO	Yes	NO	**NO**
California	SB	Cumult	AM	165	10.4	1,716.0	0.48	NO	Yes	NO	**NO**
California	NB	Cumult	PM	318	19.4	6,169.2	1.71	NO	Yes	Yes	**NO**
California	SB	Cumult	PM	312	25.6	7,987.2	2.22	NO	Yes	Yes	**NO**

Notes:
1. Warrant based on level of service calculations.
2. NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound.
3. Ex+Pro, Bkgnd, Bk+Pro, Cumult = Existing Plus Project, Background, Background Plus Project, Cumulative.

Warrant 3A - Peak Hour Warrant

Intersection #189 - Canyon Del Rey Boulevard (SR 218) / Northbound SR 1 Ramps



Scenario	CDR North/South	NB SR1 Rp East/West	Warrant Met?
A. Existing AM	1244	298	Yes
B. Existing PM	1622	380	Yes
C. Ex+Pro AM	1251	348	Yes
D. Ex+Pro PM	1630	480	Yes
E. Bkgnd AM	1299	344	Yes
F. Bkgnd PM	1707	459	Yes
G. Bk+Pro AM	1306	394	Yes
H. Bk+Pro PM	1715	559	Yes
I. Cumult AM	1391	449	Yes
J. Cumult PM	1883	643	Yes

Notes:

1. 150 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 100 VPH applies as the lower threshold volume for a minor street approaching with one lane.

2. Bold line applies to intersection geometry.

Warrant 3 (Part B) - Peak Hour Delay
#18 - Canyon Del Rey Boulevard (SR 218) / Northbound SR 1 Ramps

Number of Approaches to Intersection:		3 approaches	**Minimum Entering Vehicles:**	**650**	
Total Entering Volumes:	Existing AM:	1,542 vehicles	Bk+Pro AM:	1,700	vehicles
	Existing PM:	2,002 vehicles	Bk+Pro PM:	2,274	vehicles
	Ex+Pro AM:	1,599 vehicles	Cumult AM:	1,840	vehicles
	Ex+Pro PM:	2,110 vehicles	Cumult PM:	2,526	vehicles
	Bkgnd AM:	1,643 vehicles			
	Bkgnd PM:	2,166 vehicles			

Street	Direction	Scenario	Peak Hour	No. of Stopped Vehicles	Average Vehicle Delay (sec)	Total Vehicle Delay (sec)	Total Delay (hours)	Min. 4 Veh-Hrs of Delay? (Approach)	At least 100 Veh? (Approach)	At least 650 Veh? (Intersection)	Warrant Met?
NB SR 1 Ramps	EB	Existing	AM	298	18.1	5,394	1.50	NO	Yes	Yes	**NO**
NB SR 1 Ramps	EB	Existing	PM	380	19.6	7,448	2.07	NO	Yes	Yes	**NO**
NB SR 1 Ramps	EB	Ex+Pro	AM	348	22	7,656	2.13	NO	Yes	Yes	**NO**
NB SR 1 Ramps	EB	Ex+Pro	PM	480	28.7	13,776	3.83	NO	Yes	Yes	**NO**
NB SR 1 Ramps	EB	Bkgnd	AM	344	21.1	7,258	2.02	NO	Yes	Yes	**NO**
NB SR 1 Ramps	EB	Bkgnd	PM	459	25.6	11,750	3.26	NO	Yes	Yes	**NO**
NB SR 1 Ramps	EB	Bk+Pro	AM	394	28.2	11,111	3.09	NO	Yes	Yes	**NO**
NB SR 1 Ramps	EB	Bk+Pro	PM	559	47.1	26,329	7.31	Yes	Yes	Yes	**Yes**
NB SR 1 Ramps	EB	Cumult	AM	449	36.3	16,299	4.53	Yes	Yes	Yes	**Yes**
NB SR 1 Ramps	EB	Cumult	PM	643	86.9	55,877	15.52	Yes	Yes	Yes	**Yes**

Notes:
1. Warrant based on level of service calculations.
2. NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound.
3. Ex+Pro, Bkgnd, Bk+Pro, Cum = Existing Plus Project, Background, Background Plus Project, Cumulative.